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Orange River Integrated Water Resources Management Plan

Legislation and Legal Issues Surrounding the Orange River Catchment



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in association**



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Report Title: Legislation and Legal Issues Surrounding the Orange River Catchment

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1 OBJECTIVE AND PURPOSE

The present report forms part of a broader study about the eventual development and adoption of an Integrated Water Resources Management Plan (IWRMP) for the Orange River. It deals with certain international agreements on shared water usage and with water-related legislation in the four states (Lesotho, South Africa, Botswana and Namibia) that are party to ORASECOM.

The task description states the objectives with respect to this part of the study as: Review of all legislation to determine how each set relates to water resource usage, their compatibility with each other and with possible developments; review of international agreements regarding their compatibility with each other and with the relevant national legislation, with particular emphasis on the Revised SADC Protocol on Shared Watercourses. Recommendations have to be made on “further actions to solve problem areas that will be identified”.

This requires a general discussion and overview of water-related legislation in the mentioned countries and of the applicable international legal instruments. The aim is to discuss their provisions with regard to water resource usage and to determine their compatibility with each other. “**Water resource usage**” becomes the umbrella concept and a source of the criteria for whatever recommendations will be proposed. Findings and recommendations will be made in the context of the topic under discussion, namely the development of an **Integrated Resources Management Plan (IWRMP)** for the Orange River basin.

The proposed IWRMP can only be implemented if the existence of **separate jurisdictions** in the four states is taken into account and suitable **international** arrangements are put in place. All four countries were visited, discussions with officials were conducted and national legislation (including related official documentation) and international legal instruments were collected.

2 BACKGROUND

2.1 The Function Of The Law

When states have to cooperate in the management of a shared resource such as the Orange River, the obvious way for doing so is by concluding international agreements. This is an act of sovereignty and allows independent states to reconcile national legal and jurisdictional aspects with political and geographical reality. It will not be possible to develop an effective and comprehensive IWRMP without the necessary overall plan being in place. All required legal and other arrangements can then be agreed upon to provide for the required framework, principles, powers, monitoring, compliance and institutions.

International institutions can only do what they are empowered to do through the agreements that create them. It is important to provide them with all the required powers to be effective. The mere existence of an international organization is of formal nature only; its real powers will determine its success. This also involves domestic legislation and the exercise of state power.

It is not possible to have an IWRMP without objectives and legal arrangements first being agreed upon. Are the parties serious about the outcomes? Do they want effective implementation or vague promises? Even the development of such a plan requires legal certainty. The objectives of the proposed project will provide an important indication of what has to be covered. This is necessary in order to execute the tasks at hand.

National legal instruments (legislation) are also part of the overall legal scheme. They are predominantly the statutes and domestic regulations in place in the member states. However, this area of the law (regulating the utilization of regional watercourses) has to be updated and developed as new needs arise. The four countries are not on the same level and have not proceeded at the same pace with the task of legislative reform.

This study will hopefully shed some light on the domestic and regional needs on law reform and the technical capacity to be established. If a regional institution becomes the logical instrument to steer the implementation of an IWRMP, its powers and capacity should also be adequate. It should be a logical part of the overall scheme of things.

The most important inter-state or international legal instruments to be studied are the SADC Revised Protocol on Shared Watercourses, the United Nations Convention on the Law of Non-navigational Uses of International Watercourses of 1997 and the Agreement

between Botswana, Lesotho, Namibia and South Africa on the establishment of the Orange-Senqu River Commission (ORASECOM). International organizations normally have their own organs, enjoying certain competencies. The bilateral agreement between Lesotho and South Africa on the Lesotho Highlands Water Project will be discussed together with the legislation of these two states. We will also mention the proposed bilateral agreement between the RSA and Namibia on the “Utilization of the Water Resources along the Lower Orange River.”

The **incorporation** of international legal norms and obligations into the municipal law of the relevant states has to be mentioned. If it is for example decided to adopt a set of uniform international norms to be implemented by the states involved, then the incorporation of such norms becomes an important aspect. Incorporation can happen in several ways. It can start with an international institution with powers to take the necessary decisions and develop detailed tasks, which the member states then have to implement. Another possibility is to adopt an international framework and then to leave it to the member states to implement it through their own legislation. In both instances adequate national legislation, executive powers and institutions must be in place. There must also be the necessary skills and technical capacity to ensure effective domestic implementation of regional plans on joint cooperation.

National constitutions often contain provisions on the approval, ratification and incorporation of international agreements.¹ They have to be kept in mind in order to provide for the effective, simultaneous and harmonized implementation of agreements in all the state parties.

Legal arrangements involving more than one state must be sufficiently clear and detailed in order to provide for certainty and predictability, a clear rules-based dispensation and even remedies in instances where that will be necessary. Subsequent monitoring of national activities will in all probability be required, necessitating suitable institutional arrangements. These considerations constitute some of the criteria in terms of which existing and future legal instruments can be evaluated.

We are also guided by the fact that an important implication has already been identified, namely that: “To facilitate the integrated development and management of the water

¹

See e.g. sections 231 and 239 of the South African Constitution.

resources of the Orange River, jointly by the four countries, it is essential that common ground exists among the basin countries with respect to the principles and objective salient to the joint management, and that appropriate strategies and plans be developed to achieve this. The key component and common reference base being the development of an Integrated Water Resources Management Plan for the Orange River Basin.” (*Final Draft – Scope of Services, p.1.*)

A certain “urgency” may exist in the sense that extensive developments have already taken place with respect to the water resource infrastructure and utilization of the Orange River, both within the states involved and through international arrangements involving some of the states. The further utilization of this resource must take the existing arrangements into account. It is not impossible to integrate existing arrangements into new plans and agreements; provided the states involved develop the necessary instruments. There should eventually be a harmonized legal regime for the Orange River in which the revised SADC Protocol, the ORASECOM Agreement and the national legislative arrangements in the four countries fit logically together. They should provide for effective cooperation and the achievement of the same goals and outcomes.

2.2 The International Legal Instruments

The most important international agreements to be analyzed for present purposes are the SADC Revised Protocol on Shared Watercourses of 2000 (hereinafter referred to as the SADC Revised Protocol), the agreement of 2000 between Botswana, Lesotho, Namibia and South Africa establishing ORASECOM and the United Nations Convention on the Law of the Non-navigational uses of international watercourses of 1997.

The **UN Convention of 1997** codified international water law. It is in itself a framework agreement, which allows for ad hoc watercourse agreements to be adopted for specific international watercourses. It defines a **watercourse** as a “system of surface waters and groundwaters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus.” Article 3 provides that watercourse states may enter into one or more agreements, called “**watercourse agreements**”, which apply and adjust the provisions of the Convention to the characteristics and uses of a particular international watercourse or part thereof.

The UN Convention then contains, in article 5, the foundational provision with respect to “**equitable and reasonable utilization and participation.**” Article 6 explains in more detail the factors relevant to equitable and reasonable utilization.

The **substantive** obligations are: watercourse states may utilize an international watercourse in an equitable and reasonable manner; they should not cause significant harm to other states using the same watercourse; and they have to protect international watercourses and their ecosystems.

When is utilization equitable? Practical needs are to be considered and the guidelines of article 6 have to be taken into account. Ideally the states in question should negotiate and agree on the utilization of the watercourse under discussion. In the absence of an agreement, a watercourse state must apply the relevant legal principles to demonstrate to others that it has respected the law. It is now customary international law that other watercourse states should not be deprived of their equitable benefits of an international watercourse.²

The Convention also contains **procedural** obligations. The very nature of the substantive obligations requires **cooperation** between the watercourse states involved. In order to respect obligations vis-à-vis each other and on the protection of ecosystems, watercourse states should interact with each other, coordinate their policies and activities and act jointly. One commentator observes that “...*cooperation between states in relation to international watercourses is not only necessary, but probably required by general international law.*”³ This is a significant conclusion with particular relevance for the present study.

The UN Convention, as well as the SADC Revised Protocol, contains a number of provisions detailing these procedural aspects. Compliance with substantive duties often entails a process in itself. The obligation not to cause significant harm through usage in a particular state or regarding the protection of ecosystems, will, for example, require prior cooperation and consultation. Another advantage is that conflicts can be avoided in this manner.

² See in this regard the comment by Tanzi and Acari *The United Nations Convention on the Law of International Watercourses – A Framework for Sharing*, Kluwer International Law, 2001 at 89.
³ Stephen C. McCaffrey *The Law of International watercourses – Non-Navigational Uses*, OUP, 2001 at 404.

The procedural obligations contain a general duty to cooperate, an obligation to exchange data, the requirement of prior notification and the obligation to consult.

This convention is not in force yet since the required number of ratifications has not been deposited. (The latest information as per the UN website is of October 2005.) Some of its provisions are binding as customary international law. The SADC Revised Protocol gives effect to some most of its principles.

2.3 The SADC Revised Water Protocol

SADC is a regional organization and has adopted a number of protocols to promote cooperation between the 14 member states⁴ of the region. The first SADC Protocol on Shared Watercourse Systems was signed in 1995 as part of the broader objective of implementing the SADC Treaty. This 1995 Protocol entered into force in 1998 but then, following certain other developments, was revised and the new one was signed by the SADC leaders on 7 August 2000.

The 1995 Protocol was for all practical purposes based on the Helsinki Rules while the present one reflects the UN Convention of 1997, which has taken the development of international water law substantially further and has refined many of the principles. The SADC Revised Protocol came into force in October 2004 following ratification by two-thirds of the signatory states.⁵

According to the Botswana-based SADC Water Division, the main differences between the old and revised protocols are the following:

- The 1995 Protocol reflected the Helsinki Rules while the revised one takes into account the provisions of the new UN Convention of 1997.
- The 1995 Protocol does not set out clear objectives, while the Revised Protocol states expressly the objectives of fostering closer cooperation in order to achieve sustainable and coordinated management, protection and utilization of shared watercourses and to advance the SADC Agenda of Regional Integration and poverty alleviation.

⁴ Madagascar is joining SADC and this will bring membership up to 14 again.

⁵ Clever Mafuta "SADC Aligns Water Protocol with International Law" REDI News Features, redi@sardc.net.

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- Both protocols contain articles dealing with general principles. The 1995 Protocol stressed territorial sovereignty of a watercourse state, whereas the Revised Protocol puts the emphasis on the unity and coherence of each shared watercourse.
 - Whereas the 1995 Protocol creates a general regulatory framework, the Revised Protocol, in article 6 thereof, creates the liberty for watercourse states to enter agreements with respect to entire shared watercourse or a part thereof or a particular project, programme or use. This is also the approach of the 1997 UN Convention. (This provides for more flexibility and allows for ad hoc arrangements with respect to a specific international watercourse such as the Orange River.)
 - Unlike the 1995 Protocol the Revised Protocol provides specifically for matters such as planned measures, environmental protection, management of shared watercourses, prevention and mitigation of harmful conditions and emergency situations.

Southern Africa is a dry area and there are already a number of dams straddling international boundaries. The proposed IWRMP for the Orange River will fit in quite logically with the approach provided for in the SADC Revised Protocol. This document provides a suitable basis for such an exercise. It contains a number of specific provisions, which merit further clarification and emphasis.

The entry into force of the Revised Protocol also means that the previous SADC Protocol has been repealed.⁶ The Revised Protocol is the source of applicable treaty law for the four states bordering the Orange River (they have all ratified this instrument). The Orange River is an international watercourse in terms of definition thereof in this Protocol.⁷

The SADC Revised Protocol follows a particular pattern. It starts with a definitional clause and defines a watercourse as “a system of surface waters and ground waters constituting by virtue of their physical relationship a unitary whole normally flowing into a common terminus such as the sea, lake or aquifer.” A watercourse state is a state “in whose territory part of the watercourse is situated.” In terms hereof Lesotho, South Africa, Namibia and Botswana are all watercourse states with respect to the Orange River.

⁶ Article 16, Revised Protocol.
⁷ See the definition mentioned below.

Then it contains **general principles** in article 3, **specific provisions** in article 4, a **detailed institutional framework for implementation** in article 5, **provisions on shared watercourse agreements** in article 6 and a **provision on dispute settlement** in article 7. The overall objective (article 2) is to foster closer cooperation for judicious, sustainable and coordinated management, protection and utilization of shared watercourses and to advance the SADC Agenda of regional integration and poverty alleviation. In particular, the Protocol wants to promote the establishment of shared watercourse agreements and institutions, to advance sustainable, equitable and reasonable utilization, sound environmental management, harmonization and monitoring of legislation of the states involved and the promotion of research, technology development, information exchange and capacity building.

The **general principles** of the Revised Protocol are found in article 3 thereof. The most important principle is contained in article 3(1). It reads: *“The State Parties recognize the principle of the **unity and coherence** of each shared watercourse and in accordance with this principle, undertake to harmonize the water uses in the shared watercourses and to ensure that all necessary interventions are consistent with the sustainable development of all Watercourse States and observe the objectives of regional integration and harmonization of their socio-economic policies and plans.”* (Emphasis added.)

It is further stated that the state parties should cooperate closely with regard to the study and execution of all projects likely to have an effect of the regime of the shared watercourse, and generally equitable and reasonable utilization is to be respected and adopted. What exactly equitable and reasonable utilization is is spelt out in article 3(8) and the approach largely mirrors that of the UN Convention.

How is the duty “to harmonise the water uses in the shared watercourses” contained in article 3(1) to be carried out? The optimal solution is provided for in article 6, which is in its totality devoted to different aspects of **“Shared Watercourse Agreements.”** Article 6(3) reads: *“Watercourse States may enter into agreements, which apply the provisions of this Protocol to the characteristics and uses of a particular shared watercourse or part thereof.”* It should also be pointed out that article 2 provides that in order to achieve the objective of *“closer cooperation for judicious, sustainable and co-ordinated management, protection and utilization of shared watercourses...this Protocol seeks to promote and facilitate the establishment of shared watercourse agreements and Shared Watercourse Institutions for the management of shared watercourses.”*

To such agreements can be added the “Shared Watercourse Institutions” provided for in article 5(3) and the “joint management mechanisms” of article 4(3).

Read together, these provisions provide a clear basis for an IWRMP for the Orange River, with the possibility of different institutional arrangements.

Article 4 provides in detailed fashion for “*specific provisions*” on planned measures, **notification** thereof, environmental protection and preservation, management of shared watercourses, prevention and mitigation of harmful conditions, and emergencies. What exactly “planned measures” are is not explained but the obligation is that states “shall **exchange information** and consult each other and, if necessary, **negotiate** the possible effects of planned measures on the condition of a shared watercourse. Timely **notification** must be given to other watercourse states if a particular Party implements or permits the implementation of planned measures which may have a significant adverse effect on a particular watercourse state or states. The duty to **notify** is accompanied by the further obligation to allow a state that has been notified a period of six months within which to study and evaluate the possible effects of the planned measures and to **communicate** the findings. (Article 4(1)(c)). During this period the notifying state “shall not implement or permit the implementation of the planned measures without the consent of the notified States.” (Article 4(1) (d)). Information and technical data must also be exchanged. (Art. 3(6).)

Article 4(3) deals with “management of shared watercourses.” In terms of this provision watercourse states shall, at the request of any of them, “enter into **consultations** concerning the management of a shared watercourse, which may include the establishment of a joint management mechanism.” (Article 4(3)(a)). Watercourse states shall also within their own territories employ their best efforts to maintain and protect installations, facilities and other works related to shared watercourses.

The provisions in article 4 are clearly reminiscent of the **procedural** obligations mentioned above when the UN Convention was discussed.

Article 5 provides for an “institutional framework for implementation” on the SADC level. SADC now has a Water Sector and this comprises of a number of organs, such as the Committee of Water Ministers, The Committee of Water Senior Officials etc. Article 5(3) provides for “shared watercourse institutions.” Watercourse states “undertake to establish

appropriate institution such as **watercourse commissions** or authorities or boards that may be determined.” (Emphasis added.)

One of the Revised Protocol’s stated objectives is the promotion of **regional integration**. What does it entail? It is one of SADC’s overall objectives and is a process in terms of which the harsh effects, duplication, costs and fragmentation of maintaining strict jurisdictional separation between states are built down. It requires focused cooperation, joint decision-making and suitable institutional arrangements between states. When sharing the utilization of a single watercourse such as the Orange River integration seems unavoidable. The Revised Protocol provides the necessary framework; to be fleshed out in a specific arrangement between the states involved.

Does the Revised Protocol provide an adequate framework for an IWRMP for the Orange River? It is the most recent regional agreement of this kind and its objectives are modern, detailed and flexible. However, it is a framework agreement and does not itself contain such a model plan. It is not conceived to do so; it allows for ad hoc agreements for the different shared watercourses of the region. The best option might be to do two related things; create a suitable and properly equipped inter-state Institution for the Orange River, and devise an IWRMP for it.

The latter can be undertaken by a special task team consisting of representatives of all the states, assisted by technical expertise. It can be adopted as part of or an addendum to the agreement establishing the Institution for the Orange River. What is in effect proposed is the implementation of article 6 of the Revised Protocol, namely the conclusion of a Shared Watercourse Agreement for the Orange River, with the necessary Institution as discussed above.

This Institution should then implement the IWRMP for the Orange River and monitor its subsequent implementation. For this purpose the necessary funds, expertise and technical capacity should be made available on both the Institutional and state levels. The organs of such an Institution should enjoy international legal status (as ORASECOM has) and all the powers required for effective implementation. National laws should be closely aligned in order to ensure cohesion and harmonized implementation. Where required, special capacity building activities and training programmes can be implemented.

Dispute resolution should involve a specialized panel procedure (of which there are examples in the SADC Trade Protocol and in the WTO). It is cheaper than a permanent

tribunal and can provide for expert panelists. Once the SADC Tribunal is in place, its role can become involved via an appeal procedure or as required by the Protocol on the SADC Tribunal. (We have learned that the SADC Tribunal has opened its doors in Windhoek at the end of 2005.)

2.4 The ORASECOM Agreement

This agreement was concluded in November 2000 and is not expressly based on the Revised SADC Protocol (signed in August of the same year) or the principles contained therein.⁸ A study of its content will show that it does not directly aim at facilitating or implementing the concepts underpinning the management of a shared watercourse as found in the Revised Protocol. In its present format it does not seem to be entirely suitable and sufficiently equipped to function as the instrument for accommodating an IWRMP for the Orange River. It does not contain a definitional clause.

Its Preamble is inspired by wide-ranging sources such as the Helsinki Rules (with its acceptance of sovereignty), the 1997 UN Convention and the first SADC Water Protocol. Its basic objective seems to be to “extend and consolidate the existing tradition of good neighbourliness and friendly relations between the Parties by promoting close and co-ordinated co-operation in the development of the resources of the River System.” It does not invoke the principles of “judicious, sustainable and co-ordinated management, protection and utilization of shared watercourses” or the “unity and coherence of each shared watercourse” on which the Revised Protocol is based.

The main result is the establishment of ORASECOM as an international organization with legal personality and certain institutions and powers. But nothing “shall affect the prerogative of any number of the Parties to establish among themselves river commissions with regard to any part of the River System”. Such commissions will then be subordinate to ORASECOM.⁹

The Council serves as the technical advisor to the Parties. It has both “functions” and “powers”. The former are about advice and recommendations to the Parties; the latter

⁸ See however the strange reference to the Revised SADC Protocol in article 7.3, ORASECOM Agreement. No such reference appears in its Preamble.
⁹ Art.1.4.

about appointment of technical experts, ensuring the implementation of the functions and regulating costs.

Article 7 lists the obligations of the Parties. These are about the manner in which the resources of the River System are utilized “in their respective territories”. This should happen “with a view to attaining optimal and sustainable utilization thereof, and benefits therefrom, consistent with adequate protection of the River System.” An interesting rider is provided in that “equitable and reasonable” shall be interpreted in line with the Revised Protocol on Shared Watercourses” of SADC. The latter elaborates on “equitable and reasonable” in article 3(7). The same approach is adopted with respect to the meaning of “significant harm”. Notification and communication duties are also included.

The task description requires that we review international agreements “regarding their compatibility with each other and in particular the Revised SADC Protocol on Shared Watercourses.” So what is the verdict on the ORASECOM Agreement? As stated above (in paragraph 5.1) it is not sufficiently compatible, despite scant references, with the Revised Protocol. It is also not conceptually consistent and invokes other international agreements that have replaced each other or are based on different concepts. The fact that express provision is made to the Revised Protocol in only 2 paragraphs of article 7, and not at all in the Preamble (where the first SADC Water Protocol is referred to), confirms this impression quite directly.

If ORASECOM or an ORASECOM type institution, has to become the vehicle for giving effect to the objectives of the Revised Protocol, we recommend that the necessary effort is made and a suitable body be established, complete with the required powers to implement all the objectives of the revised Protocol. This latter document was adopted with the explicit objective to replace and repeal the former one and it has now entered into force.

It may even be argued that since it entered into force there is now an obligation on the member states to implement the Revised Protocol by ensuring that inconsistencies are addressed. This will entail bringing the ORASECOM Agreement in line therewith, a possibility provided for in article 6(2) of the Revised Protocol. Another possibility is to amend the ORASECOM Agreement in terms of its article 11.2. The best option might be to do a proper job and draft a new and comprehensive agreement, which can then accommodate all the additional aspects of an IWRMP for the Orange River.

We have been informed that Namibia and South Africa have started negotiations on a bilateral agreement on the “Utilization of the Water Resources along the Lower Orange River.” This has apparently not resulted in a final agreement yet. It is based on article 1.4 of the ORASECOM Agreement, which provides for this type of “follow-up” arrangement. It may not be wise to proceed with these plans if the intention is to adopt an IWRMP for the whole Orange River. Such a plan, especially if implemented along the lines suggested above in 4.17 to 4.19, should provide for one integrated arrangement for the whole river. Fragmentation should be prevented. Once this overall plan is discussed, the special needs and conditions of the Lower Orange can also be accommodated; or it can be mandated as a special task for the proposed Institution for this river.

Shared watercourse agreements are flexible and “ may be entered into with respect to an entire shared watercourse or any part thereof or a particular project, programme or use except insofar as the agreement adversely affects, to a significant extent, the use by one or more other Watercourse States of the waters of the watercourse, without their express consent.” (Article 6(4), Revised Protocol.) A special watercourse agreement for the Lower Orange is permissible in terms of the Revised Protocol, but then it should be based on all its applicable requirements.

3 NAMIBIA

3.1 Background

Since independence in 1990 Namibia has adopted a number of important water reforms. The first one was the approval by Cabinet in 1993 of a Water Supply and Sanitation Sector Policy. A new National Water Policy White Paper was adopted in August 2000. The latter has been developed into a new and comprehensive Act. Water resources are now national assets and ownership thereof is vested in the state on behalf of society as a whole. This Act is not yet in force but once that is the position Namibia will have quite a comprehensive and modern legal framework for managing water resources.

This Act displays many similarities when compared to the South African National Water Act of 1998. It provides for a future integrated water management and planning system. It also states that Namibia shall start to promote the equitable and beneficial use of international watercourses, based on general accepted principles and practices of international law.

Access to the water of the Orange and Okavango Rivers is a critical matter for Namibia. This state has a considerable interest in an integrated regional management plan for these particular watercourses. A legal framework has been developed in order to allow for such developments but that the new Water Act still has to be implemented.

The technical capacity to implement the ensuing policies and measures will require deliberate effort.

3.2 Transboundary arrangements

Namibia has become a party to several regional **institutional** arrangements with respect to shared watercourses of Southern Africa. Examples are the following:

- The Permanent Joint Technical Commission (JPTC) between Angola and Namibia on the Cunene River (1990).
- The Permanent Water Commission (PWC) between South Africa and Namibia on the lower Orange River (1992).
- The Agreement on the Establishment of the Vioolsdrift and Noordoewer Joint Irrigation Scheme on the lower Orange River (1992).

- The Permanent Okavango River Basin Water Commission (OKACOM) between Angola, Botswana and Namibia (1994).
- The Joint Permanent Water Commission (JPWC) between Botswana and Namibia (1990).
- The Orange-Senqu River Commission (ORASECOM) between Botswana, Lesotho, Namibia and South Africa (2000).

Namibia has ratified the Revised SADC Protocol on Shared Watercourses and the 1997 United Nations Convention on the Non-Navigational Use of International Watercourses.

This picture may indicate a general willingness to cooperate via international instruments. However, international agreements require further legislative incorporation before they are domestically effective in Namibia. It means that the coherent implementation of these agreements does not happen automatically once the international agreements are in force; follow up action is required. This is generally true of all four states under discussion. Another implication is that technical capacity, already a scarce commodity, may become thinly spread. Care should be taken not to duplicate instruments or to adopt overlapping agreements. This consideration applies to the region as a whole.

3.3 Specific domestic arrangements

The new Water Act contains a set of “fundamental” principles for water management, such as access to water, harmonization of water needs and the protection of ecosystems. It is based on the acceptance of integrated planning and management, transparency and sustainable development; while meeting Namibia’s international obligations and “promoting respect for Namibia’s rights with regard to internationally shared watercourses”. Ownership of water below and above the surface of the land belongs to the state. Several new institutions have to be established in terms of the new Water Act. They include a Water Advisory Council, Basin Management Committee, Water Regulatory Board and a Water Tribunal.

Part X of the Act is devoted to “international water resources”. This may be of particular importance and provides a basis for integrating Namibia’s arrangements with the future activities of regional institutions.

The collection of “data considering international shared watercourses” is dealt with in section 55. This is a detailed provision and covers a wide variety of areas and the relevant minister must collect and analyze data, including usage and pollution.

There are a number of other policies and legislative instruments that deal with the management of wetlands and the protection of the environment. They will not be discussed here in any detail, save to mention that an “Environmental Management Bill” was drafted in 2002 and provides for a comprehensive arrangement with respect to environmental matters.

Until the new Water Act is finally commenced the legal position is still as governed by the old Water Act, 54 of 1956, inherited from South Africa. This instrument is outdated and will not provide the required legal and institutional basis that will allow Namibia to face the present challenges.

Namibia also has a Water Corporation Act (Act 12 of 1997), which stipulates that the primary business of the Corporation is to supply water to customers.

Another legal instrument is the Mountain Catchment Areas Act, 63 of 1970, which is also based on the South African position. This has been amended a number of times and is not of direct significance for the purposes of the present study.

3.4 Conclusion

Namibia has, in principle, a modern legal and institutional framework. But this is only a starting point which should allow it to cooperate in the further development and implementation of its own water policies and in cooperating with other governments in the region regarding the utilization of shared watercourses. It does, however, face serious technical and capacity constraints.

4 BOTSWANA

4.1 Background

Botswana is a dry country. The management of water resources and the protection of the environment are important and the Government pursues these objectives through several executive measures. Its legislation on shared water usage needs updating; as does the incorporation of the applicable international instruments. Botswana is party to a number of international environmental agreements, such as the RAMSAR Convention and also of the ORASECOM and OKACOM Agreements, the Revised SADC Protocol on Shared Watercourses.

4.2 Transboundary arrangements

Transboundary national resources management (TBNRM) is said to be still in its infancy in Botswana, despite some activity in this area. There is room for the development and adoption of a formal and proper TBNRM policy framework. The different stakeholders could become more involved. The government of Botswana is aware of these needs and the further development of formal instruments.¹⁰ Policy reform deserves more attention.

It may be an opportune time now to combine reforms in the water sector in Botswana with a proper IWRMP for the Orange River.

4.3 Specific domestic arrangements

Botswana has legislation on Water Works (date of commencement: 5 March 1962), a Water Utilities Cooperation (date of commencement: 30 June 1970), a Boreholes Act (date of commencement: 19 October 1956), and a Water Works Act (date of commencement: 5 March 1962), as well as a "Water Act" (date of commencement: 9 February 1968). Most of these are, although amended from time to time, not adequate with respect to all the new policy challenges that will have to be met with respect to an Integrated Water Resources Management Plan for the watercourse states of the Orange River.

¹⁰ See for example "Review of Water Policies Synthesis Report" SADC and GTZ, 24 April 2003.

4.4 Conclusion

Botswana is a party to the ORASECOM Agreement and it is important that it cooperates directly and effectively with the other State Parties in all efforts to adopt a proper IWRMP for the Orange River. It is also the host nation for the SADC Secretariat, where the SADC Water Division is located. Its legislation needs updating in order to provide for the required bases for domestic and regional water usage plans. On the executive side there seems to be some expertise in place. There is a positive inclination among officials regarding transboundary cooperation on regional water usage.

5 SOUTH AFRICA

5.1 Background

The existing Water Act of 1956 was replaced by 2 new acts, **the Water Services Act** in 1997 and the **National Water Act** in 1998. Water resources and international arrangements are contained in the National Water Act.

5.2 Transboundary arrangements

South Africa is party to many regional institutional arrangements. Examples are

- Treaty on the Lesotho Highlands Water Project with Lesotho (1986)
- The Permanent Water Commission between SA and Namibia (1992)
- The Development and Utilisation of the Komati River Basin (KOBWA) with Swaziland (1992)
- Joint Water Commission with Swaziland (1992)
- The ORASECOM Agreement with Lesotho, Namibia and Botswana (2000)
- Tripartite Interim Agreement on the Incomati and Maputo watercourses with Swaziland and Mozambique (2002)

South Africa has ratified both the UN Convention and the Revised SADC Protocol.

Chapter 10 of the National Water Act, 1998 deals with “International Water Management” and provides for bi-national or multi-national bodies to implement international agreements in respect of the management and development of water resources shared with neighbouring countries and on regional co-operation over water resources. These bodies may perform their functions outside SA. The Minister may establish such a body by publication in the Government Gazette. These are important provisions enabling SA to comply with its obligations under international agreements

5.3 Specific domestic arrangements

The **National Water Act, 1998** contains fundamental principles for water management and has comprehensive provisions for water management strategies and the protection of water resources. The national government is the public trustee of the nation’s water

resources and must ensure that water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner.

All water rights are limited in time and are granted by the state (or its authorised representative bodies) in terms of licences and general authorizations.

The responsible government department, the Department of Water Affairs and Forestry (DWAF), has been very active in producing white papers and policy documents on various aspects of water resource management. The most important document is the National Water Resource Strategy 2004, which became operative in January 2005.

The implementation of the new legislation appears to have created problems for DWAF. Some of these problems already existed under the old legislation, but do not appear to have been solved by the new act. There are concerns that the system may be too ambitious and complex. Dealing with existing rights is a massive and expensive exercise. The licencing system is still in the early stages but already appears to be too bureaucratic and costly. All this leads to questions about the capacity to administer the system and the costs. These are probably an important reason for the failure to make progress with the catchment management authorities (CMA's).

5.4 Conclusions

South Africa's new legislation is very comprehensive and appears to fully support the objects of the IWRMP. It can also support any institutions to be created for the implementation of specific projects. There is however a question mark regarding the implementation of the act.

Namibia is about to adopt a new water act which is very similar to the SA National Water Act. Whilst this will no doubt facilitate the harmonisation of the domestic water legislation for the IWRMP, Namibia would do well to take note of South Africa's problems in the implementation of the legislation. Lesotho and Botswana are also in the process of revising their water legislation and would be well advised to do the same and perhaps look for a less complicated system.

6 LESOTHO

6.1 Background

Although Lesotho is blessed with abundant water, most of the population and industry is situated in the lowlands which experience frequent water shortages. Emergency releases have already been made from the LHWP and new schemes are being studied for the lowlands.

6.2 Transboundary arrangements

Lesotho is a party to 3 international institutional agreements:

- Treaty on the Lesotho Highlands Water Project (LHWP) with South Africa (1986)
- The Revised SADC Protocol (2000)
- The ORASECOM Agreement with South Africa, Namibia and Botswana (2000)

Development plans for the lowlands may include joint development of the Caledon River with SA. A further phase for the LHWP is at present the subject of a feasibility study.

6.3 Specific domestic arrangements

The only act relevant to this study is the **Water Resources Act, 22 of 1978**. The act requires a water permit for all water uses, except for domestic purposes. Permits are granted for a limited period not exceeding 5 years and may be renewed for a period not exceeding 3 years. The system is therefore strongly administrative in nature.

The ownership of all water within Lesotho is vested in the Basotho Nation.

The act has no provisions for the development of water resources. It gives domestic uses and the supply of water to population centres priority over all other uses. There is very little irrigation practiced in Lesotho.

The Minister of Natural Resources has the power to impose water restrictions and in the case of a serious shortage of water for domestic purposes, the Minister may even direct that any person who has a supply of water in excess of his domestic needs, shall make the surplus water available as the Minister may specify.

6.4 Conclusion

The 1978 Water Resources Act is limited in scope, is already 27 years old and in need of drastic revision or replacement. This is made more urgent by South Africa (in 1998) and Namibia (imminent) adopting new legislation.

The Lesotho authorities are well aware of this and have commissioned several studies. The latest of these is the Lesotho Water Sector Improvement Project, sponsored by the World Bank, which is still in progress and which includes a revision of the Water Resources Act. It also provides for a new Water and Sanitation Act.

This study presents a golden opportunity for Lesotho to initiate harmonisation of its legislation with both the Revised SADC Protocol, the ORASECOM Treaty and, as far as possible, with the new South African and Namibian legislation.

7 THE TREATY ON THE LESOTHO HIGHLANDS WATER PROJECT

7.1 Provisions of the Treaty

The Treaty on the Lesotho Highlands Water Project between South Africa and Lesotho dates from 1986 and has had the greatest impact on the water usage of the Orange River.

The Treaty has been augmented by 6 Protocols (Annexures and Amendments), the latest of which (Protocol VI) was signed in 1999 and deals with changes to the Governance of the Project.

The purpose of the Treaty is to eventually deliver up to 70 cubic metres of water from the headwaters of the Orange/Senqu in Lesotho to the Vaal River System in South Africa via dams and tunnels. At the same time the delivery system is utilised to generate hydro-electric power in Lesotho.

The water transferred to South Africa is water that South Africa is entitled to abstract from the Orange River in any case, but which is taken out at a more convenient point. It is therefore incorrect to refer to a "sale" of water by Lesotho to South Africa. South Africa carried the total cost of the water delivery system and pays Lesotho royalties based on a percentage of the benefit, calculated to reflect the saving to South Africa expected to be achieved by the Project in comparison to a similar scheme built entirely within South Africa.

The Treaty provides for the Project to be built in 5 or more phases. The 2 parties committed themselves only to build Phase I which has now been completed. The parties have recently commissioned a feasibility study for a possible Phase II.

The Treaty has few provisions dealing with water resource management. These are:

Article 6(15) - measures to prevent or abate water pollution.

Article 7(9) - minimum rates of flow to be maintained in the river beds below Katse and Mohale Dam. The Treaty only requires releases of 500 litres/second(Katse) and 300 litres/second (Mohale) but provides for subsequent adjustments. These have now been upgraded in line with more recent IFR requirements.

Article 7(11) - minimum flow rates for further phases to be agreed before such phase is implemented.

Article 7(12) - the parties must agree from time to time on the minimum rate of flow in the Orange/Senqu on the border between the countries.

Article 7(13) and 7(14) - although the water stored in the reservoirs built for the Project is intended for delivery to South Africa, the parties may agree to release water either downstream of a reservoir or at abstraction points for use in Lesotho. There are financial implications for such releases.

7.2 Compatibility with International Conventions and other International Agreements

The main relevant regional instruments are the Revised SADC Protocol and the ORASECOM Treaty. Both recognise prior agreements such as the LHWP Treaty and they do not invalidate anything contained in the prior agreement which may be in conflict with the later agreements. Both also emphasise that a prior agreement may be harmonised with the newer agreements.

The LHWP Treaty is project orientated and is generally not in conflict with the provisions of the regional treaties (Revised SADC Protocol and ORASECOM agreement). The environmental aspects, such as IFR releases, are not in line with modern requirements, but these have already been updated. The scope for further upward adjustments is probably limited because they will affect the economy of the Project and may even prevent construction of further phases. The two parties did not really involve the other watercourse states in the establishment of the Treaty although they did obtain a no objection from Namibia to Phase I. Article 8 of the Revised Protocol and Article 7 of the ORASECOM Treaty require that Lesotho and the RSA involve ORASECOM and the other watercourse states in any decision on the construction of a further phase.

As pointed out above, although the LHWP Treaty provides for a project in 5 phases, Lesotho and South Africa had only committed themselves to the first phase which has now been implemented. Both countries have already indicated that they consider themselves bound by the Revised SADC Protocol and the ORASECOM agreement in the implementation of further phases. It is expected that the feasibility study now being undertaken for a possible Phase II will deal with the implications of this for the negotiations between Lesotho and South Africa, in particular the relations with Namibia and Botswana and the role of SADC and ORASECOM. In addition, it is expected that the recommendations of the feasibility study will require further changes to the original treaty

and there may be an opportunity to effect a higher degree of harmonisation with the regional treaties.

8 CONCLUSIONS

The adoption and implementation of an Integrated Water Resources Management Plan for the Orange River still requires a substantial amount of work in order to bring all four these states on the same level and committed to such a strategy. This will involve both the national (within the four states) and on the inter-state levels. The latter will need a suitable international legal instrument. The ORASECOM Agreement may be a starting point for cooperation on the Orange River but is not adequate for the stated purpose.

An IWRMP for the Orange will have to be conceptually sound. There should be prior agreement on the content for the whole scheme and how it will be implemented on both the inter-state (regional) and intra state levels. The intra state dimension will require national legislation which will pursue the same objectives and be fully in line with the international plan. The outcomes should be complementary and in harmony. National measures should be fitted into the regional plan and jurisdictional issues should be synchronized. This will require that all national legislation speak the same language on the principles involved.

There should also be provision for technical capacity and a joint plan, with financial arrangements, should be worked out. This should happen within these states and on the regional level.

At present the national water legislation of the four states display considerable differences. In two instances (Namibia and South Africa) the legislation on water usage has been updated and is geared to modern trends. In the other two cases there are plans in the pipeline to do the same. When this happens express provision should be made for an IWRMP; going beyond national jurisdiction and creating a basis for a regional plan.

We have been asked to comment on existing gaps in the national legislation of these four states and to compare them. Gaps in terms of what criteria? It is conceptually difficult to compare four different national systems that are under no obligation to adopt similar systems or even to cooperate directly. Not even their existing international obligations regarding the Orange River require this. This is a demonstration of the bigger needs still to be addressed. The whole exercise should probably start with a proper regional plan in which the national dimension is simultaneously addressed.

New domestic laws will not be sufficient. A deliberate effort will also be required to put structures (with technical and institutional capacity) in place in order to ensure effective

and harmonized implementation and outcomes. They should be devised with a joint plan in mind.

The four states display different levels of technical expertise and of policy and legal frameworks. South Africa has, since 1998, a comprehensive and modern national water act in place but it still faces considerable challenges and will have to cooperate with the other three states in the management of the resources of the Orange River. Despite this new framework there is still considerable need for more effective cooperation with the other watercourse states in the region. The latter will not happen without clear international commitments to that effect. In Namibia the new Water Bill is also a modern and comprehensive document and will hopefully be implemented soon. Technical constraints there will, however, have to be recognized. In Lesotho and Botswana the legislative frameworks are not yet on the required levels. These governments have recognized the need for remedial action. It may make sense to coordinate their efforts in legislative reform.

How should policy and legislative reforms be undertaken and which criteria should be followed in order to ensure harmonized outcomes? Timing and sequence are important. It is more logical to adopt a single action plan for this purpose; agree on the IWRMP and ensure that the same national instruments are put in place to give effect to such a plan. There is no such plan in place at present; as demonstrated by the fact that four different national water regimes impact on the usage of the Orange.

The international (regional) legal instruments in existence are also not adequate. The Revised SADC Water Protocol and the ORASECOM Agreement bind all four states and have to be considered. The Revised SADC Protocol is a progressive document and is based on the 1997 United Nations Convention. It is the most suitable instrument for this purpose although it contains general principle but no model action plan for specific watercourses. It provides for subsequent agreements pertaining to a specific watercourse such as the Orange River. But this means that the states involved will have to negotiate and adopt an agreement dealing with the integrated use of the water resources of the Orange River.

The ORASECOM Agreement creates an important forum for cooperation between the four states but it is not fully in line with the principles of the Revised SADC Water Protocol. The deficiencies and differences have been mentioned above and this factor poses a problem to be addressed.

An integrated water resources management plan differs from a general instrument aimed at achieving broad-based outcomes. Such a plan should be focused, specific and sufficiently detailed. Provision should be made for an institutional dimension with the necessary organs, with adequate powers; effective cooperation, financing, technical capacity, monitoring and compliance. It can only come about through a deliberate effort by the states involved to negotiate and adopt such an instrument.

ORASECOM is not geared for this purpose and is not a complete answer. If it is to be used as the instrument for an IWRMP, it will have to be restructured. The ORASECOM Agreement was not adopted with the aim of an integrated water resources management plan in mind.

9 RECOMMENDATIONS FOR PHASE 2

9.1 Detailed investigations of key legal problem areas

It is recommended that the legal problem areas identified in this study be investigated and analysed in detail in all four countries in order to propose suitable legislation or government action to address the problems.

This will entail *inter alia* the following:

South Africa

- Analyse the legislation in detail for any shortcomings or problems for the establishment of a Water Resources Management Plan for the Orange River;
- Identify practical problems experienced since 1998 in legislation, application and capacity.

Namibia

- Analyse the new legislation on the same basis as for South Africa;
- Identify practical problems experienced in putting the new legislation into operation, including possible capacity problems.

Botswana

- Analyse existing legislation in detail to establish main problem areas for the implementation of an Orange River WRMP;
- Establish what new legislation is envisaged and propose new legislative provisions specifically aimed at enabling the implementation of an Orange River WRMP;
- Propose possible interim legislation for this purpose.

Lesotho

- As for Botswana

The fact that South Africa and Namibia now have new legislation on very similar principles and that both Botswana and Lesotho have very old legislation which must now be replaced, makes this the ideal time to try and co-ordinate the legal provisions of all 4

countries. The fact that South Africa has had 8 years' experience of applying the new legislation can be used to assist the other countries to avoid possible practical problems.

9.2 Establish Options for the optimum implementation of a Water Resources Management Plan for the Orange River

9.2.1 International / regional

- Investigate what powers and duties regional ORASECOM institution(s) need for the successful implementation of an Orange River WRMP;
- Make recommendations for the best balance between regional and national powers and duties;
- Alternatively, give options for ORASECOM and the 4 countries to decide;
- Make recommendations whether the existing ORASECOM agreement should be adapted and upgraded or whether a new Treaty is required;
- Investigate in detail all existing international, regional and bilateral agreements for compatibility with the proposed powers and duties of ORASECOM institutions.

9.2.2 National

- Analyse the shortcomings in each country, as identified in par 11.1 above, with specific reference to the proposed powers and duties at regional and national level;
- Establish a list of legislative provisions each country requires, again with specific reference to the proposed powers and duties of the ORASECOM institutions.

9.2.3 International problems in the region

Investigate international problems that can negatively impact on the successful implementation of a WRMP for the Orange River. Some examples already identified are:

Namibia Border

- The question of the boundary between South Africa and Namibia along the Northern bank of the Orange River is still unsolved and can have a major impact on the water rights of Namibia. As long as this is still in dispute, all ORASECOM activities will be affected and no final decisions can be taken. This issue requires

investigation and a recommendation for further action and on the effect on a WRMP.

In-stream Flow Requirements

- The question of In-stream Flow Requirements (IFR's) requires legal investigation because different countries have different requirements in their legislation. In addition, the LHWP Treaty has its own requirements. This could be a major stumbling block since the requirements of upstream and downstream countries are not identical.

9.3 Co-ordination with other consultants

The consultants for Phase 2 will have to co-ordinate their work very closely with other consultants doing studies on the Orange River. Some studies are already in progress and others are being planned. In particular, the consultants will have to co-operate with the consultants for the LHWP Phase II Feasibility Study which is in progress to ensure that the recommendations by them are compatible with existing and proposed legislation and above all with the possible proposals for ORASECOM institutions, their powers and duties. This lends a high degree of urgency to the Phase 2 ORASECOM study.

10 APPENDIX A: LIST OF DOCUMENTS COLLECTED

10.1 SOUTH AFRICA

LEGISLATION

- Water Services Act 1997, with amendments
- National Water Act 1998, with amendments
- The Constitution of the Republic of South Africa 1996

WATER POLICY

- National Water Resource Strategy - first edition, September 2004 effective as from 26 January 2005

10.2 LESOTHO

LEGISLATION

- Water Resources Act 1978
- Water Resources Regulations 1980
- Lesotho Highlands Development Authority Order 1986
- Lesotho Highlands Development Authority (Amendment) Act 2000

WATER POLICY

- National Water Resources Management Policy 1999

10.3 BOTSWANA

LEGISLATION

- Waterworks Act 1962
- Water Act 1968
- Boreholes Act 1974
- Water Utilities Corporation Act 1976

WATER POLICY

- National Development Plan 9 (2003/4 – 2008/9) Chapter 9: Water Resources
- Botswana National Conservation Strategy; Government Paper No 1 of 1990 (National Water Master Plan)

- Assessment of the Status of Transboundary Natural Resources Activities in Botswana - IUCN Botswana 2003

10.4 NAMIBIA

LEGISLATION

- Water Act 1956 (old act, basically the old RSA act)
- Water Resources Management Act no. 24 of 2004 (new draft legislation to replace the old Water Act). Close to final adoption.

WATER POLICY

- National Water Policy White Paper, August 2000 (this laid the basis for the new Water Resources Management Act).

10.5 INTERNATIONAL CONVENTIONS AND TREATIES

- United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses, 1997 (has not yet entered into force)
- SADC Protocol on Shared Watercourses 1995
- SADC Revised Protocol on Shared Watercourses 2000 (has now entered into force)
- Treaty on the Lesotho Highlands Water Project , 24 October 1986 with 6 Protocols
- Agreement between Botswana and Namibia on the establishment of a Joint Permanent Water Commission (JWPC) 13 November 1990
- Agreement between South Africa and Namibia on the establishment of a Permanent Water Commission 14 September 1992
- Agreement between South Africa and Namibia on the Vioolsdrift and Noordoewer Irrigation Scheme 14 September 1992
- Agreement between Angola, Botswana and Namibia on the establishment of a Permanent Okavango River Basin Water Commission (OKACOM) 15 September 1994
- Agreement between South Africa, Botswana, Lesotho and Namibia on the establishment of the Orange-Senqu River Commission (ORASECOM)