

# The Revised Protocol on Shared Watercourses and the Management of Water Resources in SADC

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## Introduction

**W**ater is one of the most important resources needed for the development of a country or region. Every aspect of development, from the growing of foodstuffs to the production of industrial goods and hydroelectricity, depends on the reliable availability of sufficient supplies of clean fresh water. Nevertheless, another equally important consideration is the availability of so-called second-order planning; the institutional and social structures needed for the mobilisation and proper management of water resources. These are represented at the national level by state laws, which regulate the different aspects of surface and sub-surface water resources. At the regional and global levels matters are more complicated, as different state and non-state actors are involved. At this level of politics, intergovernmental organisations (IGOs) normally devise and implement regulatory mechanisms or regimes. Within Southern Africa, one such IGO is the Southern African Development Community (SADC), which has drawn up two protocols on shared watercourses.

This article starts with a description of the spatial, climatic and temporal distribution of water resources within the SADC region. It then looks at the original and revised protocols on shared watercourses and the process of development from the one to the other. The third part provides an overview of water resources management in SADC as related to the Revised Protocol on Shared Watercourses.

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Spatial, climatic and temporal distribution  
of water resources in SADC

SADC's landmass is about 9.38 million square kilometres, excluding Mauritius. Across this vast area flow 15 transboundary rivers, whose basins are shared by two or more states (see table).<sup>2</sup>

Location of river basins and basin states		
<i>River basin</i>	<u><i>Number of states</i></u>	<i>Basin states</i>
Buzi		<u>Mozambique, Zimbabwe</u>
Congo		Angola, Cameroon, Central African Republic, Congo, Democratic Republic of Congo (DRC), Burundi, Rwanda, Tanzania, Zambia
Cuvelai		<u>Angola, Namibia</u>
Incomati		<u>Mozambique, South Africa, Swaziland</u>
Kunene		<u>Angola, Namibia</u>
Limpopo		Botswana, Mozambique, South Africa, Zimbabwe
<u>Maputo</u>		<u>Mozambique, South Africa, Swaziland</u>
Nile	10	Burundi, DRC, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, Uganda
<u>Okavango</u>		<u>Angola, Botswana, Namibia</u>
<u>Orange</u>		Botswana, Lesotho, Namibia, South Africa
<u>Pungu6</u>		<u>Mozambique, Zimbabwe</u>
Rovuma		<u>Malawi, Mozambique, Tanzania</u>
Save		<u>Mozambique, Zimbabwe</u>
Usutu		<u>Mozambique, South Africa, Swaziland</u>
Zambezi		Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia, Zimbabwe

The physical character of a region determines the distribution of river basins between countries, and of their size relative to each other. For instance, areas that are deficient in moisture, such as Botswana, Namibia and the western parts of South Africa, are not well endowed with large river systems, except for those that flow from a well-watered region into arid parts, like the Kunene, Okavango and Orange rivers.<sup>^</sup> There is an uneven distribution of water resources within SADC. Annual rainfall decreases from north to south and from east to west over the region. This is also evident in the differences in mean annual run-off (MAR) between

Heyns P. "Water resources management in Southern Africa", in Nakayama, M (ed.), *International Waters in Southern Africa*. Tokyo: United Nations University Press, 2003, p.7.

Stutz FP & AR de Souza, *The World Economy: Resources, Location, Trade, and Development*. Upper Saddle River, New Jersey: Prentice Hall, 1998. See also Meissner R, 'Interaction and existing constraints in international river basins', in Nakayama M, (ed.), *ibid.*, p.249.

rivers situated in areas with a higher rainfall and those located in drier parts.

Not only is there an uneven distribution of water between geographic regions, but the same holds true of access to clean water. Droughts and floods are recurrent events within the region, due to the extreme spatial and temporal variability of rainfall. Approximately 7% of SADC is desert, with less than 100 millimetres (mm) of rain per year, A third of the region is arid or semi-arid, with a rainfall of 100-600 mm per year. Overall, the whole area is prone to devastating droughts, but these alternate with equally destructive floods.<sup>^</sup> For instance, in February 2004 UN agencies warned that Southern Africa was facing famine because of drought and insufficient funds contributed by donor agencies to alleviate the situation. Similar warnings were issued in 2002 and 2003. About 6.5 million people in Lesotho, Malawi, Mozambique, Swaziland, Zambia and Zimbabwe<sup>^</sup> are at risk, with another 1.9 million people in parts of Tanzania in need of food aid owing to drought.<sup>®</sup>

The original and revised SADC Protocols on Shared Watercourses

The SADC Treaty concluded on 17 August 1992 formalised the status of SADC as an international organisation, and instituted a comprehensive framework for co-operation among SADC member countries. It also included enabling provisions that allowed other co-operative legal instruments to be created among SADC members. The two protocols on shared watercourses for the region were concluded within the context of these provisions."<sup>^</sup>

In 1995, 10 of the 11 SADC members agreed on the first protocol in Johannesburg.<sup>®</sup> In August 1996 the dedicated Water Sector Co-ordination Unit (SADC-WSCU now the SADC Water Division WD) was established.<sup>^</sup> This important step towards regional water resources management was a

Salman SMA, 'Legal regime for use and protection of international watercourses in the Southern African region; Evolution and context', *Natural Resources Journal*, 41, 4, Fall 2001, p.985.

Schlein L, 'Southern Africa faces famine, warns UN', *Voice of America*, 29 February 2004. [www.voanews.com](http://www.voanews.com). See also Meissner R, 'Regional food security and virtual water: Some natural, political and economic implications, in Hoekstra AY (ed.), *Virtual Water Trade: Proceedings of the Expert Meeting on Virtual Water Trade*. Delft, the Netherlands: IHE, 2002.

Tanzania: Millions face food shortages before end of May\*, *The Ghanaian Chronicle*, 11 March 2004.

Salman SMA, *op. cit.*, p.994.

*Ibid.*, p.998.

Ramoeli P, The SADC Protocol on Shared Watercourses: History and current status', in Turton T & R Henwood (eds). *Hydropolitics in the Developing World: A Southern African Perspective*. Pretoria: African Water Issues Research Unit, 2002, p. 105.

landmark event within SADC, if not the world. The SADC Protocol on Shared Watercourse Systems was the first sectoral protocol to be developed by SADC,io another indication of the salience given by the member states to transboundary water resources in the socio-economic development of the region. The SADC-WD, together with various national water agencies or departments, is responsible for the implementation of the protocol and for other water matters in the region.

Revision of the protocol started after some countries had expressed dissatisfaction with the contents of the 1995 agreement. The dissatisfaction stemmed from the fact that environmental protection was not adequately addressed. Countries that are downstream riparians in international river basins, like Mozambique, were the most active of all the SADC members in advocating its incorporation into the revised protocol. In 1996, the SADC summit approved a process of consultation and negotiations, followed by a number of 'water week workshops', in which the protocol was the main point of discussion. These workshops brought about an understanding of the provisions and contents of the protocol, as well as better knowledge of what implementation was required.

Developments in the area of international water law, and particularly the adoption by the UN of the Convention on the Law of Non-Navigational Uses of International Watercourses, in April 1997, were also influential. The SADC-WSCU commissioned a study aimed at identifying areas of conflict and disharmony between the Protocol and the UN Watercourse Convention with the objective of aligning the former with the latter. The result is evident in the inclusion of certain provisions that are contained in the convention within the Protocol, for instance environmental protection, planned measures, and compensation for harm caused.'''^

On 7 August 2000, all SADC members (excluding the DRC) signed the Revised Protocol on Shared Watercourses in the Namibian capital, i\*\* By 10 March 2004, eight SADC members had ratified the Revised Protocol: Botswana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa and Tanzania, According to *SADC Today*, the Revised Protocol came into force in October 2003.

<sup>10</sup> *Ibid.*, p.105.

<sup>11</sup> Mohamed AE, 'Joint development and co-operation in international water resources', in Nakayama, M (ed.), *op. cit.*, p.215.

Ramoeli P, *op. cit.*, p. 106.

<sup>13</sup> *Ibid.*, p. 106.

*Revised Protocol on Shared Watercourses*, Windhoek, Namibia, 7 August 2000.

<sup>15</sup> Personal communication with Kenyatta Nyirenda, SADC Legal Unit.

Mafuta C, 'SADC aligns water protocol with international law', *SADC Today*, 6, 5, p.3.

### Water management in SADC in terms of the Revised Protocol

The revised protocol, in contrast to the original, expressly sets out its overall objectives as fostering closer co-operation among members for the judicious, sustainable and co-ordinated management, protection and utilisation of shared watercourses, and advancing SADC's agenda of regional integration and poverty alleviation. The revised version also includes clearly defined objectives that take due cognisance of the provisions of the SADC Treaty. These are most notably to promote;

- the establishment of shared watercourse agreements and institutions for the management of shared watercourses;
- the sustainable, equitable and reasonable utilisation of shared watercourses;
- the co-ordinated and integrated, environmentally sound, development and management of shared watercourses;
- the harmonisation and monitoring of legislation and policies for planning, development, conservation, the protection of shared watercourses and the allocation of their resources; and
- research and technology development, information exchange, capacity building and the application of appropriate technologies in shared watercourses.

As already mentioned, the revision of the protocol was driven by factors internal and external to SADC, including the patterns of water shortages and excess that have often afflicted the region in the past, and are likely to be repeated in the future. Accordingly, the revised protocol addresses a number of issues not provided for in the original. These include the following;

- alignment of its provisions with those of the UN Convention on the Law of the Non-Navigational Uses of Shared Watercourses;
- definition of terms and concepts to minimise misinterpretation;
- provision for the environment to be regarded as a legitimate user of water resources, and the inclusion of a new definition of 'environmental use';
- clarification of the role of river basin institutions and their relationship to SADC structures; and
- delineation of downstream and upstream rights, roles and responsibilities, especially in emergency situations (a new concept).

Despite this institutional progress, the overall challenges still facing SADC in the water sector are immense. These include:

Ramoeli P, *op. cit.*, p. 110.

- to improve the legal and regulatory framework at national and regional levels, to ensure harmonised policies and legislation, and consistency with international water principles;
- to strengthen shared watercourse institutions in order to facilitate the development of comprehensive, integrated basin-wide plans;
- to build the capacity to develop sustainable policies that provide for monetary incentives to encourage the conservation and sustainable use of water resources;
- to enhance the knowledge base on water resources through improvements in information acquisition, management and dissemination, and through the development of research and technology;
- to promote awareness, educate and train the public on responsible water usage and related economic, social, environmental and management issues;
- to encourage public participation in policy and programme formulation and implementation; and
- to develop strategic water infrastructure.

Full regional co-operation and co-ordination has not been achieved in practice. One of the most important obstacles to realising the objectives of the revised protocol is the institutional weakness of SADC as an organisation. Another threat involves the total lack of policies and strategies.

Given the priority attached to poverty alleviation and economic integration by SADC, dams and water infrastructure (such as pipelines) should be considered an integral aspect of water resources management. However, the revised protocol does not provide for strategies to deal with future dam projects. This is an omission that should be rectified by initiating a process to identify weaknesses and strengths in dam development practice within SADC.<sup>20</sup> In future, water resources planning should be based on more comprehensive strategies for integrated water resources management in accordance with SADC's aim of improving the socio-economic status of its member states.

The slow pace at which integrated water resources management is being implemented at subregional level, in spite of the commitment expressed in the SADC Protocol, is partly due to limited cross-sectoral and financial commitment.<sup>20</sup> The revised protocol stresses the integrative

SADC-WSCU, *Regional Strategic Action Plan for Integrated Water Resources Development and Management in the SADC Countries (1999-2004)*. Maseru: SADC Water Sector Co-ordination Unit (WSCU), 1999, p. 18.

First meeting of the UNEP 'Dams and Development Project' forum held in Nairobi, 29 September 2003.

<sup>20</sup> Granit, J, 'Swedish experiences from transboundary water resources management in Southern Africa'. Paper prepared for a conference on 'Building a Global Alliance on

nature of water resources management, but so far key sector ministries such as foreign affairs and finance in some SADC countries have shown limited involvement. A stronger engagement of diplomatic instruments and channels, in addition to the members' ministries of water affairs, would make the planning and implementation of projects with regional dimensions much more effective. Political commitment at the highest national level is needed for proper water management, both at the national and subregional levels.

Although challenges remain for the full implementation of the provisions of the protocol, some shortcomings have been identified, and some progress has already been made. A project specifically focusing on the difficulties of carrying out the conditions set by the protocol has been initiated by SADC.<sup>21</sup> Its aims are to fulfil all outstanding obligations and to lay down sound foundations for effective compliance with the protocol's provisions through:

- developing legal and institutional frameworks for the establishment and functioning of river basin organisations;
- establishing multilevel alternative dispute resolution mechanisms and forums for shared natural resources under the SADC Tribunal; and
- harmonising national legislation with the Protocol and other international water law.

The project has published a status report containing recommendations for improving the implementation of the Protocol.<sup>22</sup> In summary, this project aims to create an appropriate intellectual environment that will enable SADC to develop a regional regulatory framework which not only articulates SADC's unique characteristics but is sufficiently informed of current international thinking on water resources management. In responding positively to global as well as regional needs to use limited water resources more sustainably, SADC is leading the way in Africa.<sup>23</sup>

Furthermore, a number of other positive developments have occurred during 2003/04, and include the signing of co-operative agreements among several countries sharing river basins. These include the Limpopo Basin Commission in November 2003, the finalisation of negotiations to appoint the Zambezi Watercourse Commission in March 2004, and feasibility studies preparatory to the establishment of secretariats to serve the basin states.<sup>24</sup>

Water: Problems and Prospects for Co-operation on Transboundary Water Issues', 15-16 June 2000, Washington DC, p. 11.

<sup>21</sup> Ramoeli P, *op. cit.*, p. 110.

<sup>22</sup> Personal communication with Phera Ramoeli, SADC Water Division.

<sup>23</sup> *20 Years of Development in Southern Africa*. The Regional Economic Development and Integration (REDI) programme. Harare: SARDC, 2001, p.6.

<sup>24</sup> *Ibid.*, p.6.

The Permanent Okavango River Basin Water Commission (OKACOM) is busy with such a study as are the Orange-Senqu River Commission, and the Limpopo Basin Commission, while a secretariat for the Zambezi Watercourse Commission was established in 2004 . An initiative has been started between Angola and Namibia to set up a Kunene/Cuvelai River basin secretariat. Swaziland and Mozambique will conduct a joint study on the Umbuluzi River under a secretariat responsible for administering the study.<sup>25</sup>

Three river basin organisations (RBOs) have also been created and two are in the process of being formed. Work has been initiated on five others.

Since there is no long-term strategy for the development and management of water resources, the protocol is being put into effect through a Regional Strategic Action Plan (RSAP) for Integrated Water Resources Management and Development in SADC. This Plan, which covers the period 1999-2004, identifies seven key priorities to be addressed:

- improving the legal and regulatory framework;
- strengthening institutions;
- implementing sustainable development policies at national level;
- promoting information acquisition, management and dissemination;
- building awareness and providing education and training;
- encouraging public participation; and
- developing water-related infrastructure.<sup>26</sup>

The SADC-WD has collaborated with a number of non-governmental organisations (NGOs) in devising activities appropriate to shared watercourses. NGOs and interest groups include, the World Conservation Union (IUCN); Global Water Partnership (GWP), Southern Africa; the International Water Management Institute (IWMI), the Namibian-based Desert Research Foundation (DRFN); and the Group for Environmental Monitoring (GEM), an interest group based in Johannesburg. The Unit is also continuously engaging NGOs on regional issues relating to cross-state watercourses. Examples are country partnership initiatives, mobilisation of grassroots' participation in water resource management, and specialised research initiatives on particular aspects, like the management of wetlands.<sup>27</sup> Most non-state actors have a comparative advantage, in terms of expertise and skills, that extends to agriculture and food security; community-based natural resource management and conservation; education and vocational training; gender issues; and

<sup>25</sup>Personal communication with Thomas Shiramba, SADC Water Division.

<sup>26</sup>SADC-WSCU, *op. cit.*, p. 13.

Personal communication with Phera Ramoeli, SADC Water Division. Personal communication with Thomas Shiramba, SADC Water Division.

combating HIV/Aids. These are all matters that have a direct or indirect impact on water resource management and development. Collaboration between SADC and its members and civil society groups will be a great advantage to integrated water resource management because the pooling of resources will lead to a deeper understanding of the problems faced by SADC in controlling its water resources.

#### Conclusion

SADC acknowledges water as a primary area of focus in the process of regional integration and development, as is evident in the signing of the original and revised protocols on shared watercourses, and the establishment of the SADC-WD. Nevertheless, more co-operation is needed between SADC, member countries and civil society. What is encouraging, though, is that the SADC-WD has already initiated programmes, projects and actual collaborative endeavours with NGOs, interest groups and the epistemic community.