



The Limpopo River flowing through Mozambique.

Database Helps SA Keep Pledges to Neighbours

For the first time in South Africa, a central database has been created for the country's agreements with its neighbours regarding the management of its transboundary rivers.

The easy-to-access database stemmed from a Water Research Commission (WRC) funded project into South Africa's cross-border freshwater agreements. The project was undertaken jointly by CSIR and the African Water Issues Research Unit (AWIRU).

South Africa has signed and ratified the United Nations (UN) Convention on the Law of the Non-Navigational Uses of International Watercourses, which promotes the principles of equitable and reasonable utilisation and the obligation not to cause significant harm (to downstream states).

Additionally, the convention calls for the establishment of a framework for the exchange of data and information, the protection and preservation of shared water bodies, the creation of joint management mechanisms, and the settlement of disputes.

South Africa shares four main international resources with its neighbours, namely the Incomati, Orange, Limpopo and Maputo rivers. The country has a long and rich history of entering into agreements with other states regarding its shared water resources, and agreements regarding all of its shared resources have been signed.

However, prior to this project, there was no central repository for these agreements, with some being housed at the Department of Water Affairs & Forestry, and others at the Department of Foreign Affairs. Some agreements pertaining to international freshwaters were found not be on record with either the two government departments.

If these agreements are the primary tools to promote cooperation between basin states over shared water resources, any oversights or omissions can impact negatively on the ability of South Africa and the region



The Katse Dam, in Lesotho, one of the main features of the Lesotho Highlands Water Project.

SOUTHERN AFRICAN SHARED RIVER BASINS		
	Area of Basin in Country	
Countries	km ²	%
Incomati		
South Africa	29 200	62,47
Mozambique	14 600	31,20
Swaziland	3 000	6,33
Limpopo		
South Africa	183 500	44,25
Mozambique	87 200	21,02
Botswana	81 500	19,65
Zimbabwe	62 600	15,08
Maputo		
South Africa	18 500	60,31
Swaziland	10 600	34,71
Mozambique	1 500	4,98
Orange		
South Africa	563 900	59,65
Namibia	240 200	25,40
Botswana	121 400	12,85
Lesotho	19 900	2,10

Source: *Atlas of International Freshwater Agreements*

to uphold the objectives of the UN Convention. If the government is unaware of its commitments and the ramifications because these agreements are not readily available, it will

not be able to carry out any duties that might be stipulated under those agreements.

Regional cooperation and security will be enhanced if the most powerful state in the area is seen to act promptly and equitably in accordance with such agreements. South Africa will then be in a position to fully utilise its equitable share of the region's freshwater resources for the development of the country, secure in the knowledge that it is upholding the spirit as well as the letter of the UN Convention.

Some of these agreements studied date as far back as the days when South Africa was still an English colony. The degree of predictability that agreements provide contributes to a spirit of cooperation and collaboration over shared water resources. However, the long-term effectiveness of these agreements depends on their regular upkeep; in this case ensuring that they are readily accessible to present day decision-makers, planners and managers. Apart from creating this central database, the WRC project also looked at the effectiveness of the present agreements.

CENTRAL DATABASE

The database contains 59 records or agreements that South Africa entered into up to 2004 which are related to international (shared) water resources. Only agreements entered into after 1910 (when the Union of South Africa was formed) were included in the database.

The list is not intended to be an exhaustive record. Rather it lists only those agreements that play a direct role in the definition and management of those international water resources that South Africa shares with its neighbours. So, for example, agreements entered into with former homelands have not been included as these now form part of South Africa.

The earliest agreement included in the database is the Agreement between the Union of South Africa and the Province of Mozambique, which was signed on 8 February, 1926. In turn, the most recent agreement is that signed between the governments of South Africa and Swaziland regarding the Lavumisa Government Water Supply Scheme, signed in 2004.

Most agreements were signed in the 1990s after South Africa's first democratic elections. Of the 20 agreements signed since 1990, 12 have been bilateral agreements that focus on a range of issues, such as the establishment of commission of cooperation and the utilisation of water. There are also several agreements with the Kingdom of Lesotho regarding the Lesotho Highlands Water Project. The remaining eight are multilateral agreements and international treaties.

Interestingly, the database also includes all the treaties and agreements related to water resources shared by South West Africa (now Namibia) and its neighbouring

territories which South African authorities entered into while they administered the country.

Users of the database are able to search for agreements using keywords, among others, countries, rivers, issues, areas or allocation mechanisms. At the time of writing, AWIRU had offered to host a live version of the database on its website and to make periodic updates of the database as needed. Meanwhile, the database is available on CD-Rom.

FORGOTTEN BUT STILL VALID

While digging up the agreements the researchers came to some interesting realisations. For example, it was revealed that the rate at which South Africa enters into agreements with other countries is increasing. This is linked partly to the normalisation of the country's relationship with the international community and partly to the global trend of concluding more multilateral treaties on water resources and management.

In addition, it was found that older agreements that were entered into while South Africa was still a British colony, or with other colonial powers prior to those territories gaining independence, are still valid and their provisions – both rights and responsibilities – are still in place, unless they have been specifically provoked by the country concerned after independence. The study also revealed the intricacy of international agreements – both in terms of the domestic ratification process that must be followed, and on an international level with other states.

Two key agreements of regional importance to which South Africa is a party were analysed. They are the Tripartite Interim Agreement between the Republic of Mozambique, the Republic of South Africa and the Republic of Swaziland for Cooperation

TRANSBOUNDARY RIVERS IN THE WORLD

There are at least 263 rivers in the world that either cross or demarcate international political boundaries. These international river basins account for nearly half



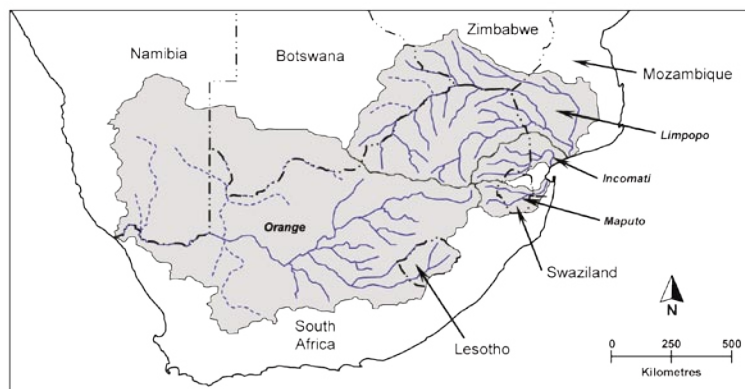
of the earth's land surface, generate roughly 60% of global freshwater flow, and are home to about 40% of the world's population. A total of 145 countries contribute territory to international basins. Geographically, Europe has the largest number of international basins (69), followed by Africa (59), Asia (57), North America (40) and South America (38).

The physical, economic and social disparities between riparian nations that share river basins

make their management complex. Yet, co-riparian states have demonstrated a remarkable ability to cooperate over their shared water supplies. International treaties and agree-

ments serve to provide structure to allow nations to address these disparities within a legal framework. This structure may provide for joint management and monitoring of the resources to support sustainable development of the water resources, including management of water flow, water quality and infrastructure development.

Source: *Atlas of International Freshwater Agreements*



The positions of the four river basins that South Africa shares with its six neighbours.

on the Protection and Sustainable Utilisation of Water Resources of the Incomati and Maputo Watercourses (signed in 2002), and the Treaty on the Lesotho Highlands Water Project Between the Government of the Republic of South Africa and the Government of the Kingdom of Lesotho (signed in 1986).

The analysis showed that these two agreements meet the requirements for effective cooperation. While the Lesotho Highlands Water Project Treaty contains important elements of 'modern' international water law,

the Incomati Agreement reflects the developments of international water law to a higher degree. With its comprehensive basin-wide management regime, the latter agreement is well suited to function as a model agreement for other, future, basin-wide water agreements that may be considered by the Southern African Development Community.

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