АКТУАЛЬНЫЕ ВОПРОСЫ МЕЖДУНАРОДНОГО ПРАВА

INTERNATIONAL LEGAL COOPERATION IN THE MANAGEMENT OF THE TRANSBOUNDARY RIVERS: ZAMBEZI RIVER CASE

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Transboundary watercourses constitute an important reservoir providing perhaps the most critical natural resource essential to support life all over the world. Many governments depend on rivers straddling two or more countries to provide not only freshwater for their populations, but also hydro-electric power sources, recreation and other forms of socio-economic sustenance. The article is focused on the international legal regulation of the Zambezi River as one of the most significant international watercourse. Being the forth longest river in Africa, the Zambezi is shared by eight Southern African States and evaluates a quarter of a century of close cooperation in order to realize the Southern African Development Community (SADC) founding principles.

Key words: international law, international environmental law, transboundary rivers, riparian states, sustainable management, Zambezi river, SADC.

Freshwater is the most valuable and fragile source of human life. River courses as the most easily accessible sources of water flow through national boundaries of many countries. Consequently, there are a number of mechanisms ever developed to manage transboundary river basins. Such legally binding instruments as bilateral and multilateral treaties [14] are signed to ensure the harmonious and equitable exploitation of these river basins. While some researchers assert that a lot has been done in international rivers` regulation, others consider the international law to be inadequate in defending the equal use of shared water sources in certain parts of the world. Water has been a cause of political tensions and occasional fire exchanges between Arabs and Israelis, Indians and Pakistanis, and Americans and Mexicans and among all ten riparian Nile River States. Water is one of the few scarce resources without substitutes, which is in constant and immediate need. There are many examples of within-nations internal water conflicts, ranging from inter-State violence and death along the Cauvery River in India to the United States, where California farmers blew up a pipeline meant for Los Angeles to intertribal bloodshed between Maasai herdsmen and

Kikuyu farmers in Kenya. The inland desert U.S state of Arizona even commissioned a navy (made up of one ferryboat) and sent its state militia to stop a dam and diversion on the Colorado River in 1934. Recent research on internal disputes suggests likelihood the geographical scale drops of violence rises and intensity [6. P. 1].

The discourse surrounding the issue of transboundary watercourses is complicated by hydro-political and social aspects intertwined therewith: nineteen basins are shared by 5 or more riparian countries; the Danube has 17 riparian nations; the Congo, Niger, Nile, Rhine and the Zambezy, each shared by between 8 and 11 countries; and 13 basins — the Amazon, Ganges-Brahmaputra-Meghna, lake Chad, Tarim, Aral Sea, Jordan, Kura-Araks, Mekong, Tigres-Euprates, Volga, La Plata, Neman and Vistula (Wilsa)- have between 5 and 8 riparian countries. Likewise, the large States of the world like Russia [15], United States, Canada, China, India, Mexico, Nigeria and Brazil, include states or provinces within which boundaries rivers flow. There are currently 263 rivers that either cut across or demarcate international political boundaries. Europe has the largest number of international basins (69), followed by Africa (59), Asia (57), North America (40) and South America (38).

Altogether transboundary watercourses cover approximately one-half of the world's land surface. International rivers have traditionally been discussed in the context of territorial sovereignty as much as its national rivers, mountains and valleys. It will be reckoned that the advent of colonialism brought with it the demarcation of geographical space into separate states which had hitherto existed homogenously without much rivalry in the exploitation of river basins shared among them. The situation is further complicated by the subsequent disappearance of the colonial establishments and the emergence of an increased number of independent riparian countries. As reflected on the etymology of the term rival, the root for the term *rival* is derived from the same Latin term *rivals*, which means using the same river (*rivus*) [2. P. 18].

The complex of physical, political, and human interactions within international river basins can make the management of these shared water systems especially difficult. The issue of increasing water scarcity, degrading water quality, rapid population growth, unilateral water development, and uneven levels of economic development are commonly cited as potentially disruptive factors in co-riparian water relations. Analysts suppose that water will be one of the most contentious subjects in the XXI century around which shots can be fired without strong preventive measures. As has been observed, water conflicts arise from the fact that under the conditions of increasing scarcity competition levels also increase.

Conflict may be further exacerbated as water demand increases due to such issues as population growth, increasing industrial and mining development, enlarged irrigated food production, and the need for a higher standard of living of the population.

In post-colonial Africa, the situation was complicated by the fact that the member-states fell under the colonial hegemony of different powers with totally different legal systems, development models and divergent systems of administration.

Thomashausen indicates, that legal fragmentation in SADC is particularly severe [11. P. 31]. The author notes various legal systems applicable in the 14 different SADC member-states. These include, *inter alia*, domicile and national countries; common law, Belgian, Portuguese, and Roman-Dutch law orientated legal systems; and countries that have followed socialist law reforms. Different legal systems arguably lead to different approaches to sustainable water resource management, be it domestic or transboundary water resources. There is a need for the legal interaction form in such situations, such as legal cooperation and ultimately legal harmonization.

Apart from the fundamental principles enshrined in various national legislations and customary international law, there is a range of legal instruments, which regulate the legal relationship among riparian states regarding management of international rivers, especially in the basic principles of ecology, conservation, stewardship, responsibility and sustainability. Therefore, as noted by Biswas, 'with properly conceived frameworks, management and use of transboundary water bodies … should result in a 'win-win' situation for all concerned' [2. P. 18].

In order to prevent pollution of freshwater resources (including rivers, lakes, ground water and reservoirs) on general level the well-developed international body adopts bilateral and multilateral treaties and non-legally binding guidelines. In 1997, a global framework Convention on the Law of Non-Navigational Uses of International Watercourses was adopted, but still didn`t enter into force [8. P. 310].

Professor Ph. Sands notes that the rules of international environmental law on the protection of freshwater resources, including international watercourses, from pollution and over-use, are mainly reflected in piecemeal and ad hoc responses to problems with particular rivers, lakes and freshwater ecosystems.

In addition to the mechanisms mentioned elsewhere in this article, there are various legal instruments that form the basis of international fresh water sources regulation notably the findings of the PCIJ [3], the Helsinki rules [9], and the Convention on the Law of the Non-navigational Uses of International Watercourses 1997' [4]. The following core normative principles of international environmental law play an important role in the management of international river systems to preempt conflicts as well as resolve existing disputes: 1) the avoidance of, and liability/responsibility for significant domestic or transboundary environmental damage; 2) the principle of international equity/equitable use; 3) sovereign equality and territorial integrity; 4) information exchange; 5) consultation with other riparian states; 6) environmental protection and; 7) peaceful disputes settlement.

Southern African Development Community (SADC) was established as a result of the transformation of its predecessor, the Southern African Development Coordination Conference, which formed in Lusaka in 1980. On 17 August 1992, the Coordinating Conference became the Development Community as it is known today. Member-States of SADC currently include Angola, Botswana, the Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, the United Republic of Tanzania, Zambia, and Zimbabwe.

Zambezi River Basin

The objectives of SADC concerning environmental issues are to: achieve development and economic growth, alleviate poverty, enhance the standard and quality of life of the people of Southern Africa, and support the socially disadvantaged through regional integration; promote and maximize productive employment and utilization of resources of the region; and achieve sustainable utilization of natural resources and effective environmental protection.

The activities of the SADC cover various sectors (energy, tourism, mining, employment and labour, culture, information, sport, transport, communications etc.), but one of the specific focus points of SADC is the environment, including land management, agriculture, and natural resources management — plus, decidedly important and relevant for the present discussion, — water governance. The SADC Programme of Action (SPA) was designed to realize the overall goals and objectives of the programmes emanating from the above sectors.

There are several motivations for the establishment of the current shared watercourse governance regime in SADC. For instance, Africa has 60 transboundary rivers and it remains the continent, where the most watercourses are shared between more than two countries. In Southern Africa, the Limpopo Basin is shared by 4 States (South Africa, Mozambique, Botswana, Zimbabwe); the Orange Basin — by 4 States (South Africa, Namibia, Botswana, Lesotho); the Zambezi Basin by 9 States (Zambia, Angola, Zimbabwe, Mozambique, Malawi, Tanzania, Botswana, Namibia, DRC); and the Congo Basin — by 11 States (DRC, Central African Republic, Angola, Republic of Congo, Zambia, Tanzania, Cameroon, Burundi, Rwanda, Gabon, Malawi). In the absence of a protocol, it will be difficult to facilitate harmony, cooperation and sustainable use of watercourses given the number of States and different jurisdictions that need co-existence and to be shared transboundary rivers in a mutually beneficial way.

Apart from that, international co-operation and harmonization are usually achieved by the way of international law instruments such as treaties and protocols, for instance the SADC protocols. As such, the protocols may provide an opportunity to address inadequate co-operation and to preempt conflicts between riparian States. In addition, the ever-increasing demand on shared watercourses for agricultural, urban, and industrial activities requires a strategy that may be used to achieve sustainable resource utilization, mainly by not allowing unequal utilization and overexploitation of these resources by different riparian countries. Moreover, an integrated and uniform set of legal rules for shared watercourse governance may be successfully employed as a conflict resolution mechanism in the event that conflict arises between States over the use of shared watercourses. Environmental, social, and economic characteristics that are unique to a specific region will also determine the need for and the nature of a regional instrument to govern a shared watercourse.

Apart from this there are various emerging regional problems including water scarcity, drought, watershed degradation, and aquatic ecosystem degradation, which are the concern of most countries in the region, which underline the need for a mechanism to address shared watercourses governance in SADC.

The Zambezi River is the 4th longest river in Africa (after the Congo, Nile and Niger), which lies within the territories of the following eight Southern African countries: Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia and Zimbabwe before it empties into the Indian Ocean in the east coast of Mozambique. The total population within the river basin is estimated around 40 million [10. P. 1–4]

The Zambezi River was identified among transboundary river basins which, among other things, had potential for conflict in Southern Africa. Other rivers included in this category were the Limpopo, Okavango, Incomati, Kunene and Orange. They were both classified as Basins at risk. Apart from a number of smaller lakes on the Zambezi river, the most significant natural lake is Lake Malawi, but there are also two major artificial lakes– namely, Kariba and Cahora Bassa. Other reservoirs with large surface areas are the Kafue Dam and the Ithezithezi Dam. At least 28 dams have been built for domestic, industrial, and mining water supply and for irrigation and power generation. The countries with dams are Malawi (1), Mozambique (1), Zambia (4) and Zimbabwe (21), plus Kariba, which lies between Zambia and Zimbabwe. At present there are at least 12 established hydropower facilities in the Zambezi basin, with the major ones is situated at Victoria Falls, Kafue Gorge, Kariba, and Cahora Bassa.

Emanating from the complexities involved in the exploitation of the Zambezi river system, legally binding mechanisms elaboration is developed to regulate the activities of the co-riparians in line with the principles of international environmental law. These mechanisms demonstrate the decades-old cooperation and peaceful coexistence in the exploitation of the Zambezi river within SADC.

SADC has developed various legal instruments to facilitate governance of its affairs and achievement of its stated aims. These include treaties, protocols, memoranda of understanding, declarations, and charters, among others.

Transboundary watercourses are mainly regulated by the way of protocols in SADC. These Protocols are not just confined to the Zambezi but apply to all transboundary basins in the 12 Southern African States. Transboundary watercourse regulation in the Zambezi basin started in the 1980s, culminating in the adoption by the Southern African Development Coordinating Conference of the *Zambezi River Action Plan* (ZACPLAN) under the auspices of the United Nations Environment Program (UNEP) [12]. The Plan was adopted in 1987 by the riparian countries and it became SADC working document in the same year, which was launched as a comprehensive programme on the environmentally sound management of inland water (EMINWA) to assist governments in the integration of environmental concerns related to the water resources management. It is saliently stated, that aims are to develop regional cooperation *inter alia,* based on environmentally sound water resources management of the common Zambezi river system and to strengthen their regional sustainable development co-operation [12].

However, it should be mentioned that ZACPLAN was never fully implemented most probably due to financial constraints. Consequently, SADC later adopted the *Protocol on Shared Watercourse Systems* in *1995* and the *Revised Protocol on Shared Watercourse Systems in Southern Africa*, in *2000*. The 1995 Protocol is governed mainly by the SADC Water Sector, which is currently based in Lesotho. The 1995 Protocol was extensively revised in 2000, partly because of the necessity to encompass the provisions of the UN Convention of the Law of Non-navigational Uses of International Watercourses. Both the 1995 and 2000 Protocols indicate a move from State interests towards common interests in the area of sustainable, reasonable, and equitable utilisation of shared watercourses [5. P. 67].

This Revised Protocol 2000 was signed by all SADC member-states except the Democratic Republic of Congo. It is considered as the pillar for setting up an enabling environment in the equitable allocation and management of water resources in the shared basins within SADC. The 2000 Revised Protocol currently constitutes the primary mechanism in the region for shared watercourse governance [7].

On July 13, 2004 the Zambezi basin States gathered to sign the Agreement on the establishing *the Zambezi Water Commission* (ZAMCOM) [1]. The Agreement was signed in Kasane (Botswana) by 7 of the 8 Zambezi riparian States. The ZAMCOM Agreement has since come into force following its ratification by the required two-thirds majority. ZAMCOM is intended to enable more effective participation and management of basin resources. The objective of the Commission «is to promote the equitable and reasonable utilization of the water resources of the Zambezi Watercourse as well as the efficient management and sustainable development thereof».

ZAMCOM is designed to operate according to the guidelines set forward by the SADC Protocol. The Interim ZAMCOM Secretariat (IZS) was established in May 2011. It is hosted in Gaborone (Botswana). The IZS, headed by the Executive Secretary, reports to the Transitional Advisory Group (TAG) through the Technical Committee (TEC) which includes Heads of Water Departments in the respective Riparian

States. The Commission is carrying out its activities through a number of projects including: Dam Synchronisation and Flood Release in the Zambezi River Basin; International Training programme on Integrated Water Resources Management; Joint Zambezi River Basin Environmental Flows Programme; River Basin Dialogue (RBD); Water Resources Management in Zambezi river basin; Zambezi River Basin Initiative.

Bilateral attempts for an international management of the Zambezi stretch between Zambia and Zimbabwe have proved to be more successful. Faced with electricity shortages after the World War II, North and South Rhodesia felt the urgent need for a coordinated development of the common water resources leading to the construction of the massive Kariba Dam between 1955 and 1976. The dam spans across the river, taking up pieces of land in both countries. After the end of the federation (the Federation of Rhodesia and Nyasaland) in 1963, the two countries established the Central African Power Corporation (CAPCO) to allow continued operation of the Kariba Dam. In 1987, Zambia and Zimbabwe decided to replace the CAPCPO with the Zambezi River Authority (ZRA) to obtain economic, industrial, and social development of the two countries, the greatest possible benefit from the natural advantages offered by the waters of the Zambezi River and to improve and intensify the utilization of the waters for the production of energy and for any other purpose beneficial to the two countries. The focus of the ZRA remains on the operation of the Kariba Dam but is extended to additional river development projects and environmental measures to combat the increasing common waters pollution of both countries.

The creation of the Zambezi River Authority is undoubtedly one of the most significant undertakings in addressing the transboundary challenges of harnessing the hydropower potential of the Zambezi River by the two countries. According to the ZRA Act, both political and technical avenues of cooperation between nations have been pooled together for the common good.

It can be postulated, that such agreements signed and implemented in accordance with their letter and spirit by riparian's States may provide cooperation and prevention of possible conflict situations and can be concrete platform for environmentally sustainable and equitable exploitation of transboundary river systems like the Zambezi River basin.

Consequently, it can be concluded that SADC countries have devoted considerable attention and resources to devising mechanisms for cooperation in the arena of sustainable, equitable and harmonious utilization of water resources. Such cooperation provides the right framework to stimulate socio-economic development and regional integration. In light of such factors as population growth, climate change and increased water use, it is necessary to set up agreeable and feasible water allocation rules within the next few years to preempt potentially serious international conflicts over the shared exploitation of the Zambezi river basin.

Furthermore, it should be noted that all bilateral and multilateral treaties cited above have not saliently given provision to the sustainable management of groundwater. Attention has been largely, if not absolutely, devoted to the regulation of the use

of surface water. Despite the fact that groundwater is of paramount importance to innumerable segments of the population in many countries, the pollution will last for centuries [13]. It is obvious that the sustainable management of groundwater offers immense benefits to the society and will consequently contribute to the achievement of the objectives set out by SADC and the UN Millennium Development Goals. Going forward, the need to incorporate and harmonize legislation pertaining to the allocation, use and protection of groundwater from pollution cannot be overemphasized. Riparian countries should therefore devise coordinated legal mechanisms to mitigate the likelihood of violent disruptive conflict in this area and to maximize the socio-economic benefits presented by harnessing groundwater. Apart from the need for a holistic integrated approach to the issues surrounding the management of all watercourses as one resource, i.e. both surface and ground water, it is incumbent upon state parties to include public participation from the grassroots level in order to ensure effective management of water resources. Communities, as stakeholders, should be conscientised to take the leading role in the sustainable management, protection and preservation of ecosystems.

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МЕЖДУНАРОДНОЕ СОТРУДНИЧЕСТВО В СФЕРЕ УПРАВЛЕНИЯ ТРАНСГРАНИЧНЫМИ ВОДОТОКАМИ НА ПРИМЕРЕ РЕКИ ЗАМБЕЗИ

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В рамках статьи рассматриваются проблемы международного сотрудничества в области совместного использования трансграничных водотоков. Особое внимание уделяется международно-правовому регулированию совместного использования вод реки Замбези, которое активно развивается в рамках Сообщества развития Юга Африки (САДК).

Ключевые слова: международное право, трансграничные водотоки, устойчивое управление, Замбези, САДК.