ABSTRACT

The current global climate change pattern seems set to augur in progressively drier climates in most developing countries, especially in Africa. This, coupled with the population explosion in the developing countries, is bound to cause increasing water shortages in countries such as Botswana, a country that has always experienced water deficit for use by its people, agriculture, wildlife and the environment.

The reliance of countries on shared transboundary waters increases as water becomes scarcer within the country. In a situation where water scarcity is a regional problem, such as what might be expected as an outcome of the current global climate change, sharing arrangements of transboundary water ways are likely to lead to tensions among the riparian states as the concerned states experience growing inadequacy of water. Problems of water shortage are only one aspect of a wider problem of decreased ecosystem services which comes with over exploitation of other natural resources such as grazing and other forms of land use that result from a drier climate. This will require sound planning of water use in a comprehensive manner at various levels, national and regional (botswana government, 2013). Yet Africa has had mixed results in its past efforts to plan and manage shared transboundary waters. At the centre of problems of lack of collaboration have been conflicts arising from inappropriate methods of allocating shared water ways i.e. a situation whereby some riparian states insisted upon dividing water resources instead of strategically sharing the resource. More often than not, riparian states have not shared their development plans, nor have they put in place well thought out agreements for managing transboundary water resources.

A lot has been written about transboundary waters. What has not been featured is a comparison of successful and unsuccessful transboundary water resource agreements. Accordingly, this paper presents the basin of the nile river as a case where problems have been experienced in the sharing of transboundary waters on the one hand, the water project based in lesotho highlands, as a case of a successful treaty governing the sharing of transboundary waters, and finally the okavango river basin as a case study with even more positive results in the sharing of a major regional water resource. The latter, given its strategic regional planning and management committee, is projected as a case where the use of a common resource unites rather than divide the riparian states. Hence, the case is put forward as one that has lessons that the continent can use as a model.

KEY WORDS

Transboundary waterways, politics, regional integration, shared resources, regional development, regional agreements

1. Introduction

Two of the phenomena currently facing the world are population explosion and global change. The world population now stands at 7.4 billion, up from 6 billion in 1999 [1]. The fastest population growth takes place in the developing countries [1]. Coincidentally, water scarcity and floods resulting from global change are also to be found in the developing countries. The impact of the combined effects of population explosion and drought in the developing countries is increased water scarcity, a phenomenon that calls for more concerted efforts in how we plan and manage Transboundary water resources.

Water is the source of all life, sustaining people, the economy, agriculture, natural resources and the environment generally. More often than not, it is an international resource which knows no boundaries but traverses countries in various forms such as lakes, for example Lake Victoria, or the rivers such as the Nile and the Okavango that are discussed in this paper. For example, currently, it is estimated that the share of the world population that is found within the river basins of internationally shared waters is around 55 percent [2]. Unless legally enforceable water agreements are in place, it can be expected that tensions will rise among riparian states once water becomes scarce. Thus, shared waters have a potential to be a source of conflict. Indeed there have, over time, been a number of conflicts among
riparian states over the use of internationally shared waters. Often, upstream – downstream relations as well as relations of states on either side of the river have been sour, mainly due to perceptions that water use within the river basin was inequitable. This paper looks at such conflicts in the world’s longest river, the Nile. It then interrogates the Lesotho Highlands Water Project (LHWP) and the Permanent Okavango River Basin Water Commission (OKACOM) [3], and presents the latter as a model of a successful and effective international water sharing agreement that countries might wish to emulate. With the respect to the Nile River, the paper does not delve into the details of the disputes. Rather, it highlights the salient issues about the causes of such disputes and gives space to how solutions, based upon the OKACOM, can be worked out, going forward [3].

2. The Nile River

With the entire area of its river basin totalling 3,349,000 square kilometres spread across eleven states, the River Nile is normally assumed to be longest river in the whole world. The number of people that live within its basin is very high at 160 million. An estimated 300 million people live in the 11 countries through which it passes [4].

Of the 11 countries that constitute the Nile river basin, Egypt, Ethiopia and Uganda have been the key areas in which discontent has been based. In 1829, Britain passed legislation to the effect that no riparian state could dam the Nile without Egypt’s consent, since Egypt’s agriculture and economy depends very heavily on the waters of the Nile river. This is because the Nile River supplies 70 per cent of Egypt’s water. In spite of that legislation, there have been conflicts between upstream and downstream users of the waters of the Nile, over the decades. Initially, Egypt had disagreements with the upstream countries of Uganda and the great lakes. And up to now, Egypt is threatening violence against Ethiopia which wants to construct the Grand Ethiopia Renaissance Dam across the Nile. Ethiopia hopes to generate electricity for the country’s growing economy and then export some of it to the neighbouring countries. Ethiopia, which considers itself a key player by virtue of it supplying the highest volume of the total volume of the waters of the Nile river (a staggering 85%), has gone ahead to construct the dam and has rejected Egypt’s offer for financial assistance, a move that would make the two countries co-owners of the dam.

For years, the upstream countries were too poor to dam the river. This has since changed, as shown by Ethiopia’s ability to finance the dam out of its resources. Seeing that development, Egypt tried to stop the construction of the dam but failed. Subsequently, it is now taking a more diplomatic move and is increasing its trade with Ethiopia in a bid to soften the country’s hard stance on the construction of the dam. But more importantly, there is up to now no resolution of the dispute between Egypt and Ethiopia over the building of Ethiopia’s Grand Renaissance Dam.

This dam project in Ethiopia is not the conflict that Egypt has had with countries along the Nile river basin. There have, in the past, been conflicts between Egypt and the other states in the basin of the Nile. To try to solve the conflicts, all the 11 countries came together to launch what is commonly known as the Nile Basin Initiative (NBI). That was in the year 1999. The NBI was a joint programme of action meant to facilitate ways in which the countries could cooperate and also integrate their economies and develop their resources in a more sustainable manner, while also enhancing their regional security. This was a temporary measure to quell conflicts pending a more permanent accord [5].

Even then, this was not the first attempt by the riparian states of the Nile river to reach some working relationship among themselves. In 1993, a committee was set up to look into the environmental protection as well as the overall development across the Nile river basin. Two years later, the efforts resulted in the design of what was referred to as the Action Plan for the Nile River Basin. But given that the relations did not appear cordial among the riparian states, three development agencies, namely the Canadian International Development Agency (CIDA) worked jointly with the UNDP and the World Bank in 1997 to attempt to get the riparian states to dialogue, in a bid to make the Action Plan operational [6]. All the countries entered into talks the following year, in 1998, but without Eritrea, which did not come to the table. The efforts of the UNDP, CIDA and the World Bank has borne fruit because the aim of the discussions was to work out an amicable partnership at the regional level for better management of the Nile Basin. The discussions culminated in the inauguration in February 1999 in Dar Es Salaam, of a mechanism for cooperation, signed by the Ministers responsible for water among the riparian states. At this point, the agreement was merely transitional and it was known as the Nile-COM, which graduated into the more permanent Nile Basin Initiative (NBI). Three years down the line, in 2002, the World Bank provided financial assistance to establish a Secretariat for the NBI in Entebbe (Wondwosen, 2008).

As is the case with similar organisations (see for instance the OKACOM later in this paper) [8], the Executive Secretary heads the Secretariat of the Nile Basin Initiative. Usually, raising funds is one of the key tasks of the Secretariat. Almost without exception, water management secretariats in developing countries depend on the industrialised countries of the North for funding their operations. In that vein, the NBI secretariat approached the international donors attending the International Consortium for Cooperation on the Nile in Geneva in June 2001. The NBI secretariat had required the sum of 180 million US dollars. However, only US$ 85 million was pledged at the conference in Geneva, Switzerland in 2001, most of this going into the Trust
Fund maintained by the World Bank \[7\]. This development encouraged riparian states to take the NBI seriously so much so that the parliament of Uganda passed legislation in 20013 in which it recognised the NBI secretariat as having international legal status. Eventually, there was a Nile Team, made up of a number of partners that included countries of the North such as G8 member countries and major financial bodies like the African Development Bank \[7\].

All these positive developments which saw the NBI rising to the stage at which it was now able to implement a programme with so much financial backing from the industrialised countries, the overall goal of a harmonious and equitable sharing formula of the waters of the Nile river has not been achieved. To date, conflicts over the use of the Nile river waters persist among the riparian states. Riparian countries upstream and mid way such as Uganda, Sudan and Ethiopia still complain about the fact that they see Egypt dominating the use of the Nile river basin waters. A clear indication of their discontent was evidenced when Tanzania and Rwanda, which had both not been actively complaining about Egypt’s share of the water joined Uganda and Ethiopia in signing a post NBI agreement at Entebbe, on more equitable ways of sharing the Nile river waters, notwithstanding strong resentment from Sudan and Egypt (Alebel Abebe Belay \textit{et al} 2010).

3. \textbf{The Case of The Lesotho Highlands Water Project Treaty (LHWP)}

Lesotho regards the LHWP to be a successful agreement of transboundary water sharing \[8\]. The treaty was entered into by the two countries after discussions by both parties. It was signed by the foreign ministers of both countries in Maseru, Lesotho on 24 October, 1986.

As a contractual agreement, the Treaty governs several aspects that include the designing, building and running of the project, together with its maintenance. The parties were careful to word the document such that it upheld the interests of both parties to the agreement. Generally, such aspects are amount of water that should be supplied to South Africa, based upon a clearly specified formula for sharing the benefits that include the royalties due to the Lesotho government.

Furthermore, the financial obligations of each country are reflected. It is stated that all costs related to water transfer from Lesotho to South Africa, together with the costs associated with the maintenance of the facilities that are used for such transfer, will be borne by South Africa. The Treaty recognizes that in the course of implementing the agreement, some people would be displaced. The compensation of such displacements, it says, will also be the responsibility of South Africa. For its part, Lesotho was given the responsibility of funding the costs of providing the power required by the project. All the provisions of the Treaty are captured in a handbook. It was deemed important to produce such a booklet because the project is generally regarded as the largest of its kind throughout Africa. Whereas the NBI was funded by a consortium of developed countries and international funding organisations such as the World Bank, in the case of the Lesotho Highlands Project, funding came from the World Bank, which also mediated its agreement.

The Treaty was not seen as a fixed and inflexible document. Quite naturally, changes became necessary in the governance of the Treaty in the course of its implementation. Eventually, some six protocols were added to it, three of them having been envisaged at the time when the Treaty was drawn. The Treaty is considered successful over a number of issues. First, it is considered to have made the socio-political climate of the region more stable. Such stability then stimulated the economy of Lesotho, something that created more social benefits for the country’s population \[8\].

The Treaty contains within it a dispute resolution mechanism. The fact that this has never been evoked so far is taken to be another sign of the success of the Treaty. Nor has the Treaty ever needed to be adjusted since it was signed. Instead, it is commonly agreed that it has put to rest the political tensions that were known to characterize Lesotho and South Africa before it was signed. The tensions resulted from the geopolitical climate of a small state opposed to the racial policies of the larger and more economically developed regional power that completely surrounds it, and on which Lesotho depends for its own economic survival and access to the outside world. Notwithstanding their socio-economic inequity, the two states still need one another, which is why they entered into this agreement. The Orange River, a major source of water inside South Africa, originates from Lesotho, and flows westwards across South Africa into Namibia, creating a situation almost similar to that of the Nile which has 85 per cent of its water originating from Ethiopia. South Africa’s agriculture and industry needs a lot of water for its growth and further development. On the other hand, Lesotho is under developed and it badly needs economic support from South Africa, even in the form of economic aid. In particular, Lesotho needed electric power to build its industry but lacked the necessary resources to develop that on its own. Even the development of Lesotho water resources required funding that the kingdom did not have. It therefore found itself heavily reliant upon South Africa, a country that held it to ransom since it completely surrounded it \[8\].

A point of strength for Lesotho is that with its surface water standing at 4.73 cubic meters per annum and with its precipitation being higher than that of South Africa, the country’s water resources exceed its demands. Lesotho therefore has capacity to supply South Africa with water in accordance with the Treaty. It is for that
reason that the country has agreed to supply South Africa with some 2.207 billion cubic meters of water per year when the project terminates in 2020. One other section f the Treaty which shows that the project has a strong developmental angle in favour of Lesotho is that before the water from Lesotho reaches South Africa, it is used to generate electricity, some 72 MW, which Lesotho needs [8].

Lesotho’s position as a country with the ability to supply water to others outside its borders is giving the country recognition across the region. Currently, Botswana, which is a water deficit country, has just entered into discussions with Lesotho, also exploring the possibilities of purchasing water from Lesotho [9].

As indicated earlier, the LHWP Treaty presents a successful transboundary water sharing arrangement since the two countries, Lesotho and South Africa, worked out an equitable water sharing formula, that was legally binding and was dictated by the actual broader economic needs of the two states. South Africa’s Gauteng Province is the heavily industrialised economic heartland of the country which contributes 45 per cent of the country’s Gross Domestic Product [10]. It has an ever growing population, which rose from 9,388,854 people in 2001 to 12,272,263 in 2011 [10], resulting largely from the combined effects of rural-urban migration within the country and the mass exodus of job seekers from the neighbouring countries, most of which have depressed economies [10]. But the fact that Lesotho can also receive a cash inflow of US$46 million per annum from the project [8] does mean that the Treaty goes some way to meet national needs.

4. The Permanent Okavango River Basin Water Commission (OKACOM)

The Lesotho Highlands Water Project is a successful treaty in that it satisfies both parties and is entered into without undue pressure, notwithstanding the political differences between Lesotho and South Africa as well as the huge inequity in the sizes of the economies of the two countries and the disparities in the levels of development between the two countries. The third case, namely that of the Permanent Okavango River Basin Water Commission (OKACOM), highlights an even better water sharing agreement because the agreement is among three countries with relatively equal economic power [3]. As was the case with the LHWP, the OKACOM agreement was a collective effort among the stakeholder countries and it was reached by consensus. It has since worked smoothly without any dispute [3].

Although southern Africa is a generally drought prone region, and whereas dry spells have been increasing in their frequency and intensity [11], drought spells have always been common occurrences in Namibia and Botswana. Both countries depend very much on tourism [3]. Tourism is the second contributor to Botswana’s GDP [12]. And the Okavango river is the anchor of tourism in both Botswana and Namibia as water based tourism is centred around the Okavango delta. Therefore, the Okavango river plays a critical role in the economic livelihoods of people who live in its basin and also at the national level. The delta forms quite a great deal of the river system. Also, there are half a million people who depend upon the water, the flora and the fauna of the Okavango river. The three countries make the delta an international resource. For this reason, the Okavango delta was declared a RAMSAR site, in recognition of its importance as a resource that exists not only at the regional level but also at the international [3].

The overarching objective in Botswana, Namibia and Angola signing the Permanent Okavango River Basin Water Commission (OKACOM) Agreement was to manage the entire basin of this river as one piece. The Agreement was signed in Windhoek, Namibia, in 1994 [3]. In terms of its mandate, OKACOM exists to continuously review the environment and the development policies of the three riparian states and then provide appropriate advice to these states on the optimal utilisation of the resources of the river basin and its natural resources [3].

Unlike the NBI which does not seem binding to the riparian states of the Nile Basin, the OKACOM Agreement is legally binding to the three countries that constitute the Okavango delta. Through the agreement, the three countries have committed themselves to work in such a way that will ensure equitable use of their transboundary water in a manner that also conserves the physical environmental in which the delta is set. The agreement goes further to bring into perspective the broader national development goals of the riparian states in its implementation. Again unlike similar agreements, consideration is given to whatever activities take place upstream as these might have effect and impact on the water inside the delta. A very good thing about the Okavango, something that is not the case with the Nile river basin, is that there are not much developments along quite some length of the Okavango river. This leaves the river basin in what can be referred to as a pristine condition, something that adds much to its value both nationally and internationally [3]. Quite clearly, this pristine condition of the delta must have been one of the factors that were taken into account when it was declared a RAMSAR site.

As indicated earlier, the OKACOM Agreement was entered into based in part on the experiences of the design and implementation of similar transboundary water agreements in other parts of Africa. Consequently, its mandate is very specific. It is to provide technical advice
to the riparian states in the utilisation of the delta waters and other resources based in the delta [3]. This mandate extends to all matters that deal directly or those that have some bearing on the delta. The prime goal is to coordinate the activities of the three countries inside the delta and beyond the delta in anticipation of, for example, pollution that might originate away from the delta. Thus, the Agreement, also known as the Commission, has those extensive powers.

All these concerns and lessons learnt from other Agreements have resulted in the Okavango Commission carefully working out and implementing an approach that is coherent and is closely monitored to ensure that the many goals of the Commission, which include equitable allocation of water and other resources as well as sustainability of its use and a management system that is proved to be sound are met. An excerpt from the OKACOM Agreement shows that the Commission has been given the legal responsibility to effect the following:

- Determine the long term safe yield of the river basin
- Estimate reasonable demand from the consumers
- Prepare criteria for conservation, equitable allocation and sustainable utilisation of water
- Conduct investigations related to water infrastructure
- Recommend pollution prevention measures
- Develop measures for the alleviation of short term difficulties, such as temporary droughts
- Address other matters determined by the Commission [3].

The Lesotho Highlands Water Project Treaty has a clause on how often it will be reviewed. This is an international practice. OKACOM also has a review clause which it implemented in 2007. The important thing is that the OKACOM review was done within the parameters of the Revised SADC Protocol on Shared Watercourses. Then the review achieved two additional gains, which were to give the Okavango Basin Steering Committee (OBSC) formal status and also to recognise it as an integral part of OKACOM. Clearly defined responsibilities were assigned the Okavango Basin Steering Committee and the roles and functions were also spelt out, along with the procedures to be followed in the operations of the Steering Committee.

The need for a well functioning Secretariat was highlighted in the discussions of both the Nile Basin Initiative and the Lesotho Highlands Water Project above. Although OKACOM had felt the need for a Secretariat as early as 2004, it only signed an agreement to establish one in April, 2007 and inaugurated the office in the following year in 2008. As in similar cases, the mandate and duties of the Secretariat were clearly spelt out, these being to ensure effective administration of the organ and administering its finances. The Commission appointed Botswana as the first state to host the Secretariat, which is located in Maun on the edge of the delta, led by the Executive Secretary, as is the case in Lesotho [3].

5. Conclusion

The purpose of this paper is to present the OKACOM as the best model of an agreement that other riparian states could consider learning from. OKACOM is better than any similar agreement so far because:

- it is quality assured because it is based upon the experiences learnt from similar transboundary water agreements elsewhere
- it is an agreement that has been entered into among equals and without an underlying pressure
- it is quality assured for best water sharing arrangements through being aligned with the Revised SADC Protocol on Shared Watercourses
- It has a well established secretariat to implement its requirements
- Over and above all these, it is a development based agreement which takes into the national development plans for the three riparian states and also addresses pollution control in its waters.

References


