The Hovering Clouds of Water Wars

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Introduction

Ban ki-moon, UN Secretary General, has recently warned the global community that planet earth is facing severe water crisis and the scarcity of this natural resource would be a potential fuel for wars and conflict. He was concerned of the indifference and inaction of the governments concerned in taking steps to prevent instances of the resource being spoiled, wasted and degraded.1

This is not the first time that such fears were expressed of looming water wars by leaders of international organisations. In the 90s, Ismail Serageldin, then Vice President of the World Bank had stated that the wars of the 21st century would be about water and not oil.2 Also on the occasion of the World Water Day, 2002, the message from the then UN Secretary General, Kofi Annan was cryptic that “fierce national competition over water resources has prompted fears that the water issues contain the seeds of violent conflict.”3

The fears are real since misuse of the resource and poor management practices have been causing depleted supplies, falling water tables, shrinking inland lakes and stream flows diminished to ecologically unsafe levels; thereby, leading most parts of the world to the threshold of water famine. High population growth, rising consumption and pollution have posed significant threats on fresh water availability and climate change is also making a bad situation worse. Hence the threats of water wars are heading to become a reality as we are facing an unprecedented demand on the relatively decreasing natural resource of fresh water supplies and there is no substitute available to replace the natural resource like water.

Recent Studies

In this connection, a recent report on global water security released by US Secretary of State, Hillary Clinton, on the occasion of the World Water Day, 2012 is relevant.4 It has brought out the risk of water wars in the coming decades. The report, based on the assessment of Federal Intelligence Agencies, has concluded that lack of fresh water to meet the demands of a surging population would create tensions within and between the states, causing global instability and conflict. The report has also cautioned about the use of water as a weapon of war or a tool of terrorism becoming a reality in the near future.

Another interesting study published in the Journal of the US National Academy of Sciences by David Zhang recently, based on the data of more than 8000 wars in the past had established that the resource shortage was the main cause for triggering these wars.5

Water is a gift of nature playing an important role not only in the origin of civilization, but also in the overall development of the social fabric. Most of the world’s water is saline and only 2.5 per cent is fresh. A major part of this fresh water, almost 97 per cent, is tied up in ice, permanent snow and fossil ground water and only the remaining 3 per cent alone is renewable and available for use as surface and ground water. Human use of water has increased more than 35 folds over the past three centuries. According to studies by International Water Management Institute, nearly 1.4 billion people amounting to a quarter of the world population, or a third of the population in developing countries would be experiencing severe water scarcity by 2025.6

Legal Status on Use of International Rivers

There are more than 260 international rivers covering almost one half of the surface of globe, and an untold number of shared aquifers providing fresh water to people settled within these basins. Many of the participating basin states look at the administrative boundaries as the basis for decision making, ignoring the fact that rivers do not recognise political boundaries and legal generalisations. Hence it has been a cause of legal battles and consequent political tensions between countries in various continents.

International laws that govern the use of transboundary rivers are poorly developed. In 1997, the UN attempted to develop a framework on the issue and adopted the ‘Convention on Non-navigational Uses of International Water Courses’, but it is still to be ratified to come into force. Though it sets out many important principles for co-operation and joint management of such waters and provide practical guidelines for allocations, no practical enforcement mechanism exists in the text to back up the decisions of the final arbiter – the International Court of Justice (ICJ). Further it institutionalises the two conflicting principles in the upstream-downstream uses of an international waterway by emphasising both on ‘equitable use’ and ‘an obligation not to cause significant harm.’ These would enable the upstream users to stress on the principle of equitable use, while the downstream riparians would demand the protection of their existing uses under the provision of ‘no significant harm’ and might thereby trigger further disputes.

Water Wars - a Myth or Reality?

Many analysts do not subscribe to the view that water would become a source for wars in this century. Water wars are not economically viable, they argue. For the cost of a day’s war, alternative sources such as de-salinisation plants could be built to meet the water needs, they claim. They also point out that the past history on wars does not indicate any full-fledged battle for using river waters and the recorded disputes were all for controlling navigational rights on these rivers. However, they appear to forget the fact that wars are never cost effective.

The earliest documented conflict over water use is the dispute between the Sumarian city states of Lagash and Umma over the right to exploit boundary channels along the Tigris sometime during 2500 BC.

We have also witnessed a number of water related conflicts in the last century. To name a few, in 1958, the Nile waters were the cause for tension between Egypt and Sudan. Guns boomed in the conflict between Israel and her neighbours in 1967 as the Arabs wanted to divert the waters of the Jordan river system. In 1975, the dispute regarding the flows in the Euphrates brought out a hostile situation between Iraq and Syria. Confrontation occurred between Mauritania and Senegal on the Senegal river in 1989.

Water Treaties and Their Resilience

While historic reality does not point out to a full scale war over water, the newly added problems of climate change and increase in pollution further affecting the water availability are leading to an environment more conducive to trigger a military conflict. However, some war analysts are of the view that if the states sharing the international rivers conclude treaties and establish water regimes, such agreements are resilient enough to survive conflict inducing situations. To justify their stand, they cite the Indus Waters Treaty (1960) between India and Pakistan for sharing the waters of the Indus river as a model which survived two wars and many war like situations between the two countries. They also point out that there are many such treaties and agreements entered into by some of the co-basin states during the last century to optimally share and use their water resources due to which many potential threats have been averted.

The contention of these analysts that the inbuilt resilience in the existing water treaties and agreements is adequate to prevent wars has also its limitations, as an in-depth study of such agreements shows that some biased provisions in the agreements on sharing common rivers have brought out fresh problems . When scarcity looms large, these provisions could be exploited by one party to its advantage ignoring the interests of other parties and this could trigger conflicts. It is also seen that based on their past experience in the working of the agreements, many of the parties who are signatories to the existing treaties are pressing for renegotiating the terms with their counterparts as they feel that they have been taken for a ride while signing the agreements.7

Working of Existing Treaties

Take for example, 50 year old history of the Indus Waters Treaty (1960) between India and Pakistan. It is the story of a tragedy that began with hope as demonstrated by past events. It has failed not only in accomplishing its objective of optimum development and utilisation of the Indus waters, but also in settling water disputes between the two all these years. India feels aggrieved that it had to sign the Treaty which ignored its rightful share of more than 40 per cent of the Indus waters and gave it only about 20 per cent in the water allocation, due to World Bank using a concept of equally dividing the tributaries instead of equitably dividing the resource as per international norms. The disputes are continuing with no solution in sight as Pakistan is not willing to renegotiate and review the provisions in the Treaty.

The peace brought about by the treaty signed between the USA and Mexico on the Colorado river (1944) is under threat; since, recently Washington took the unilateral decision of lining parts of the All American Canal bordering Mexico ignoring the provisions and the latter objected to that action. The US took the stand that the canal being located in American territory and the water flowing through that being California’s share of the Colorado river water, it had every right to take a sovereign decision to line it, with the objective to make more water available to its people by preventing seepage loss. Mexican government disputed this right basing its case on the principle that their farmers of Mexicali valley adjoining the border had established a beneficial use of the seepage water since decades, giving them the right under the treaty. The tempers are rising on the issue between the two countries.

Likewise, the project initiated by the US unilaterally without consulting Canada for the diversion of water from North Dakota’s Devil’s Lake to Manitoba (Canada) ignoring the provisions in the Boundary Water Treaty (1909) has been objected to by the latter as it feared that the proposal would damage their ecosystem. Canada pointed out that the proposal should have been discussed and approved by the International Joint Commission (IJC) set-up by the two under the Treaty which had been handling all trans-boundary water issues for more than 100 years. But the US is poised to go ahead with the scheme bypassing the IJC and ignoring Canada’s protests. This has resulted in strained relationship between the two.

In South America, the Itaipu Treaty signed in 1973 between Paraguay and Brazil for the optimum utilisation of the Parana river for power generation, has opened up disputes on the benefits accrued. According to Paraguay, Brazil got undue benefits as the former had to invariably sell all its surplus energy to the latter at cheap rates as per the treaty provisions. Paraguay wanted to renegotiate the terms but Brazil is not willing till the Treaty lapses in 2023.

In Africa, a battle of control over the Nile has broken out between Egypt and the countries of Sub-Saharan Africa with the latter complaining that they have been denied the due share of the Nile water as per the existing treaty (1929). Flouting the Treaty provisions, Tanzania plans to build a 105 mile long pipeline for drawing out water from lake Victoria which feeds the Nile river.

Uneasy calm continues to prevail between Mauritania and Senegal on the Senegal river. The co-basin states, Mozambique, Zambia and Zimbabwe sharing the Chobe waters are still to come to terms with the present situation. The long standing disputes between Portugal and Spain on their common rivers could be settled by their signing the ‘Convention’ concerning the management of their shared river basins in November 1998 and adopted by both the countries in January 2000. However, according to media reports, the worst drought of 2005, has resulted in fresh disputes over sharing the Tagus and Douro waters in spite of the standing agreement.

Likewise, though the dispute between Hungary and Slovakia on the Danube river has been settled at the instance of the ICJ, many legal questions are being raised on the outcome of the court decisions.

Similarly, the disputes on the waters of Amu Daria and Syr Daria draining into the Aral Sea are waiting to erupt into major conflict among the Central Asian Republics. Troubles are brewing in Asia with the Chinese proposals to divert the waters of the Mekong, Yarlung-Tsangpo and Salween to its dry north, in spite of protests from the downstream countries as also from the Mekong River Commission. Interestingly, China is not a party to any treaty with

its neighbours regarding the sharing of its transboundary rivers.

There are more such simmering disputes on the use of common rivers all over the world. The examples shown above reveal that in spite of existing agreements, many nations continue to feel that they have not been able to get their due in their common rivers. As the demand for water is increasing by leaps and bounds to meet the aspirations and requirements of a surging world population, and the scarcity is becoming a reality, there is every possibility of the bickering countries taking the conflicts to the battlefields.

Actions Needed

The root cause of any conflict is the scarcity of the resource as brought out in many studies carried out on the subject and in this case it is water. Hence, the solution lies in improving its availability. For this purpose, supply and demand management aspects have to be analysed for an effective strategy and to provide for concrete solutions. These include adoption of techniques for improved water availability such as water conservation and pollution prevention, improving conveyance and water use efficiency, recycling and reuse of drainage water. These actions have to be taken both within and among the basin nations to avert the crisis. The task is a daunting one. The problem is complex and multisectoral, and the solution involves correcting decades of mismanagement of this resource. In the present context of socioeconomic and ecological problems of development under the conditions of severe demographic pressures, there is urgent need to take up measures as above to improve the availability of the resource.

Conclusion

Water is available to meet everybody's need, but not enough to meet their greed. This fact has to be recognised by all stake holders to work together to make the optimum utilisation of the available resource. International organisations have to take a greater institutional role to start dialogues among the contending states to impress upon them to share the limited resource to meet their water needs rather than insist on their water rights and to develop a sustainable arrangement in this regard. It would then be possible to mitigate the conflict inducing characteristics of water by taking adequate measures now itself, instead of waiting for the flash points to occur.

Endnotes

1. Ban Ki-moon, Address at the World Economic Forum, January, 2008 and Message for International Year of Water Cooperation, February, 2013.

2. Ismail Serageldin, Interview reported in the New York Times, August, 10, 1995.

3. Kofi Annan, Message on World Water Day, March 22, 2002.

4. Director of National Intelligence, USA- Report on Global Water Security, February, 2012

5. David Zhang, Proceedings of the National Academy of Sciences, USA, December, 2007.

6. David Seckler, Water security in the 21st century, IWMI Water brief- 1, March,1999.

7. Media reports on water conflicts among various countries in the recent times.

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