CURRENT SCIENCE

Volume 123 Number 9

10 November 2022

GUEST EDITORIAL

Potential nudging of transboundary water relations in the context of climate change

After the Second World War, the focus of international law discourse relating to water, transboundary in nature, has shifted from navigation to non-navigational aspects such as drinking, agriculture, industrial use and projects transboundary in nature. The riparian states treat the rivers as a prospective role in their economic development. Their entitlement is derived from permanent sovereignty over natural resources (PSNR), which is subject to two constraints: (i) not to cause significant harm (no harm rule, hereinafter NHR, see Trail Smelter Arbitral Tribunal Decision, 33 AJIL 182 (1939)) and (ii) equitable and reasonable utilization of water course (hereinafter ERU). The authority that underpins the subject of a shared watercourse is the 1929 Judgment of the Permanent Court of International Justice, regarding navigation on the River Oder in Europe (Territorial Jurisdiction of the International Commission of the River Oder, Judgment No. 16, 1929, PCIJ, Series A, No. 23, p. 27).

Reconciling PSNR with the NHR has always been very difficult in ensuring transboundary water cooperation, which is often attributable to trumping of the NHR by the upper riparian states in the context of meeting the growing needs of people, defending it on the ground of ERU. Secondly, it is due to the limited acceptance of the Convention relating Non-Navigational Uses of Water 1997 (hereinafter UNWC, ILM, 1997, vol. 36) and the prevailing territorial disputes preventing upper riparian China from entering bilateral treaty with lower riparian India to regulate the Brahmaputra. Thirdly, the lower riparian state expects it to be entitled to the entire water flowing naturally towards it. In such a situation, transboundary water cooperation is left to be regulated by customary international law (CIL). The latter is the only legal instrument to be leaned on to regulate transboundary cooperation in the Brahmaputra Rivershared amongst China, India and Bangladesh – as there is no basin-wide bilateral agreement. Both China and India have refused to become parties to the UNWC. Nor are they party to another multilateral legal instrument to regulate transboundary resources - the United Nations Economic Commission for Europe on the Protection and Use of Transboundary Watercourses and International Lakes 1992 (UNECE Convention). In contrast to CIL, treaties are more effective in ensuring sustained dialogue between the Parties and serve as the basis of predictability and legal certainty as to what extent the parties to a treaty may be allowed to use the common terminus. The Indus Water Treaty 1960 between India and Pakistan has so far proved effective, despite varying claims and counterclaims levelled by both India and Pakistan against each other relating to fear of diminished flow of water entailed by the construction of dams on their territory of the river basin.

The relationship between the principle of equitable and reasonable utilization and the obligation against causing significant harm has been the most challenging issue in the long history of evolution of the international water law. As an upper riparian in the Brahmaputra, China leans more towards the principle of equitable and reasonable utilization of water to defend its dam construction activities for hydropower generation than to the principle of no harm rule preferred by lower riparian India. The latter's apprehensions are diminished flow in non-monsoon season, flood in monsoon season and diversion of water by China to meet the growing demand of people, in the water-deficit region of northern part of its territory. As the NHR is a due diligence obligation, India's raising of its concerns might not prevent China from going ahead with the future construction of dams. The Pulp Mills Case (ICJ Judgment, 2010), Corfu Channel Case (ICJ Judgment, 1949) and the Nuclear Weapons advisory opinion (ICJ Advisory Opinion, 1996) reaffirm that 'A state is obliged to use all the means at its disposal in order to avoid activities which take place in its territory, or in any area under its jurisdiction causing significant damage to the environment of another state' (para 101 of the Pulp Mills Case). The ICJ confirms that the obligation is one of due diligence, an obligation of conduct rather than result, which amounts to saying that despite the best efforts taken by the Chinese side or a riparian state or the joint efforts may be found to be wanting in harm prevention. The following elements of due diligence identified in the Pulp Mills case should serve as the basis of India's negotiation strategy in future water negotiations with China, Pakistan, Bangladesh and Nepal: (i) adoption of appropriate rules and measures (para 197); (ii) a certain level of vigilance in their enforcement; (iii) the exercise of administrative control applicable to public and private operators; (iv) careful consideration of the technology to be used (para 223), and (v) Trans-boundary Environmental Impact Assessment and Notification.

Experts widely believed that the UNWC has subordinated the obligation not to cause significant harm to the principle

of equitable and reasonable utilization. The close reading of articles 5, 6 and 7 of the UNWC indicates this. Article 6 of the Convention enumerates seven factors to be considered while deciding ERU, and only two of them favour not causing significant harm: (i) the effects of the use or uses of the watercourses in one watercourse state on other watercourse states: (ii) existing and potential uses of watercourses. Article 7(1) of the Convention requires watercourse states, when utilizing an international watercourse in their territory, must take all appropriate measures to prevent causing significant harm to other watercourse states. In a subsequent paragraph, it requires watercourse states to give due regard to the principle of ERU when significant harm has nevertheless been caused to another state. In Article 7(2), there is an indication that the causing of significant harm may be tolerated in certain cases, such as when the possibility of compensation may be considered (Salman, M. A., AJIL, vol. 115, p. 186). Thus, the dominance of factors supporting ERU renders sub-ordination of NHR.

One issue which demands reviewing equitable and reasonable utilization of both inland and transboundary watercourses is the adverse effects of climate change on the hydrological cycle. After several studies, the predominant viewpoint indicates that climate change will alter 'the timing of water delivery, the quantity of water and the quality of the water resources' (Tekuya, M. E., Nat. Resour. J., 2019, 59(2), 321–346). As regards the Ganga–Brahmaputra– Meghna (GBM) river delta, large tides and widely variable river discharges result in rising salinity and salt intrusion. Sea-level rise due to climate change will result in penetration of seawater into the GBM delta region, exacerbating the salinity conditions (Bricheno, L. M., Wolf, J. and Sun, Y., Estuar., Coastal Shelf Sci., 2021, 252, 107246). Considering the alteration in the quantity and quality of water, what is required is change in the standards of environmental protection and the benchmarking for assessing equitability and reasonability. As ERU is part of CIL, many transboundary water agreements are designed using historical flow records, such states or even states without a treaty should anticipate these concerns and seek to satisfy the priorities of the riparian states in the context of alteration in the flow availability.

The UNWC mentions the factors relevant for equitable and reasonable utilization of water in Article 6 of the UNWC. The factors mentioned in Article 6(i) (geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character) provide an idea for deciding allocation of water, but it falls short of providing specific provisions on how the states should provide for climate change adaptability of their transboundary water or agreements relating to the river water in South Asia.

China and India entered into Memorandum of Understanding (MoU) in 2013 relating to sharing of hydrological information by the former to the latter during monsoon period (June to September). Considering the customary norm of sharing of information relating to shared natural resources, the embrace of MoU's could be expanded to include establishment of climate change focused information sharing mechanisms, creation of monitoring mechanisms and the setting up of a joint commission for the management of the transboundary basin (Jafroudi, M., *Water Policy*, 2020, **22**(5), 717–732).

India and China are Party to the United Nations Framework Convention on Climate Change 1992 and the Paris Agreement on Climate Change 2015. In pursuance of the Paris Agreement, both countries have submitted nationally determined contributions (NDC) that combine both the mitigation and adaptation contributions. China's NDC (2022) mentions that it will monitor and strengthen early warning of climate change risks. China will step up the protection of natural ecosystems such as forests, grasslands, rivers, lakes, wetlands and oceans, to improve its climate resilience, functionality and stability. Although China's NDC does not mention the climate resilience of the shared river, it shows the shaping of a developmental norm (as many states' NDC mentions about climate-resilient development for terrestrial and aquatic ecosystems), which includes effects of climate change influencing the decision-making process. In fact, in some of the jurisdictions, the Courts have taken into consideration the impacts of a project inducing climate change, in terms of cumulative impact of the release of greenhouse gas emissions over the years and the impacts of the said project in undermining climate resilience. Climate change has assumed such fundamental importance that it is a common concern of mankind. In Gabcikovo and Nagymaros Judgment (case between Hungary and Czechosolovakia, ICJ Judgment, 1997), the ICJ stressed that current environmental standards must be taken into consideration by both the parties so that the quality of the water of the Danube and nature, in general, are protected and a satisfactory solution is found for the volume of water to be released. The judgment suggested that the parties could, by agreement, incorporate newly developed norms of environmental law through the application of several of the Treaty's provisions

If climate change reduces water in the shared rivers, competition for water between riparian states would only intensify, possibly leading to conflicts over water. If the available water gets increased heavily, this will create a need for new legal responses to flooding. In either case, flexibility and cooperation must be shown, especially by China, India, Pakistan and Nepal, with the normative support emanating from changing environmental standards to deal with climate change (Tekuya, M. E., *Nat. Resour. J.*, 2019, **59**(2), 321–346). One such normative support laid down in Principle 2 of the 1978 United Nations Environment Programme's Draft Principles concerning the Conservation and Harmonious Utilization of Natural Resources (U.N. Doc. UNEP/IG.12/2 (1978)) to deal with all aspects of non-navigational uses of water, including climatic concern, in a predictable manner.

Anwar Sadat

Indian Society of International Law, New Delhi 110 001, India e-mail: sadatshazia@gmail.com