GLOBAL LAW AND POLICY DEVELOPMENTS

Haub Prize 2017 Laureate

International Water Law in the Anthropocene

by Stephen C. McCaffrey

Excerpt from the remarks of Liliane Haub in conferring the Elisabeth Haub Award for Environmental Law and Diplomacy:

The Elisabeth Haub Award recognizes the innovation, skill and accomplishments in environmental law and diplomacy. Past recipients are lawyers, academics, diplomats, international civil servants and others who work to create the world environmental order. I am so pleased that tonight Professor McCaffrey joins this distinguished group.

This award means a great deal to our family, as it helps recognize the life and legacy of Elisabeth Haub, who was devoted to an appreciation of nature and the sound stewardship and sustainable development of natural resources. She worked tirelessly to promote these ideals and we are so pleased that her legacy and work live on through this honor.

Tonight we recognize Professor Stephen McCaffrey for his lifetime of service in the development of international environmental law, and in particular for his work as Special Rapporteur for the International Law Commission. His tireless work on international watercourses resulted in the world’s first treaty open to all countries to protect the ecology of international rivers and lakes. Importantly, the treaty also calls for all nations to share fresh water to protect the environmental resources upon which all of us depend.

As the world becomes increasingly interconnected, we must work together to face global challenges such as combating climate change and, building a more sustainable future, this kind of work is critically important.

Professor McCaffrey, it is our privilege to bestow upon you the Elisabeth Haub Award for Environmental Law and Diplomacy.

It is a great honor to have received the Elisabeth Haub Award for Environmental Law and Diplomacy. I am humbled by this recognition and thank the jury for having selected me to receive it. The honoree has traditionally been asked to offer remarks in response. This essay is offered in that vein.

“The Anthropocene” is the name given by scientists to our current geological epoch. It was first proposed by atmospheric chemist and Nobel Laureate Paul J. Crutzen and biologist Eugene F. Stoermer in a paper published in 2000.\(^1\) The term “Anthropocene” refers to the fact that we are now living in the age of humans, that humans are the dominant influence on Earth’s climate and therefore our global environment. Though the name is rather new, Crutzen and Stoermer believe the Anthropocene began in the latter part of the 18th century, “when data retrieved from glacial ice cores show the beginning of a growth in the atmospheric concentrations of several greenhouse gases”, in particular CO2 and CH4. [It also coincides with James Watt’s invention of the steam engine in 1784. About at that time, biotic assemblages in most lakes began to show large changes”.\(^2\) The International Union of Geological Sciences (IUGS) has not yet determined whether the name of the current epoch should be changed from the Holocene to the Anthropocene,\(^3\) but the latter will be used in this paper to signal the massive influence humans have had on Earth and its systems, including water systems, an influence that shows no signs of abating.

In its Fifth Assessment Report, the Intergovernmental Panel on Climate Change (IPCC), the most authoritative scientific body on that subject, has described the effects of anthropogenic climate change on the hydrologic cycle and noted the impacts that climate change is having and will likely continue to have on freshwater systems.\(^4\) The report of the IPCC’s Working Group II, whose coverage includes the impacts of climate change, concludes:

Climate change over the 21st century is projected to reduce renewable surface water and groundwater resources significantly in most dry subtropical regions (robust evidence, high agreement), intensifying competition for water among sectors (limited evidence, medium agreement). In presently dry regions, drought frequency will likely increase by the end of the 21st century under RCP8.5 [in the IPCC’s RCP 8.5 scenario, [Note: The text is cut off here. Additional content is not visible.]

\(^1\) 2018 Laureate of the Elisabeth Haub Award for Environmental Law and Diplomacy; 2017 Laureate of the Stockholm Water Prize; Distinguished Professor of Law at the University of the Pacific, McGeorge School of Law, Sacramento CA, US; and Special Rapporteur on the International Law Commission’s work on the Law of the Non-navigational Uses of International Watercourses, 1985–1991.
\(^2\) [Recently the Elisabeth Haub Prize for International Environmental Diplomacy and the Elisabeth Haub Award for International Environmental Law have been combined into a single award. Ed.]

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emissions continue to rise throughout the 21st century, leading to high greenhouse gas concentrations] (medium confidence). In contrast, water resources are projected to increase at high latitudes (robust evidence, high agreement).

In simple terms, in the Anthropocene, dry areas are projected to become more arid while wet areas are projected to become wetter. Human civilisation has adapted to water resources availability in different regions over centuries and, in some cases, millennia. The changes wrought by climate change are occurring much more rapidly, challenging the ability of human societies to keep up through adaptation. These changes and the accompanying challenges will, of course, play out not only on the domestic level, but also with regard to internationally-shared freshwater systems.

This paper will comment briefly on the implications of these changes for the peaceful sharing of freshwater resources and on the adequacy of the law to keep pace.

The Importance of Shared Freshwater Resources and their International Legal Regulation

A large portion of the world’s freshwater resources is shared by two or more countries. The world’s 310 transboundary river basins cover 47.1 percent of the globe’s land surface and are home to some 45 percent of the global population. But much of the world’s accessible fresh water is underground. To date, 592 transboundary aquifers have been identified, and this number is likely to increase with the further development of technological capabilities. Most of these aquifers are recharging, i.e., they are replenished by the infiltration of surface water or precipitation.

The expansion of the global population and the continued development of water resources for such purposes as irrigation and power production place stresses on those resources and, consequently, on the countries relying on them. As early as 1970, the United Nations General Assembly (UNGA) recognised these phenomena in a resolution in which it referred the topic of the law of international watercourses to the International Law Commission (ILC). Among the desiderata mentioned in the resolution’s preamble are:

Considering that water, owing to the growth of population and the increasing and multiplying needs and demands of mankind, is of growing concern to humanity, that the available fresh water resources of the world are limited and that the preservation and protection of those resources are of great importance to all nations,

Conscious of the importance of legal problems relating to the use of international watercourses, inter alia with regard to international water resources development,...

Convinced of the necessity to promote ... the work on the progressive development and codification of the law of international watercourses and to concentrate this work within the framework of the United Nations ...8

Thus the UNGA, representing the international community, drew a connection between humanity’s increasing reliance on fresh water and the need for clarification of the rules of international law governing its sharing by States.

The ILC, whose mission is the codification and progressive development of international law,9 after 20 years’ work on the “Law of the non-navigational uses of international watercourses”, sent a complete set of draft articles on the subject to the UNGA.10 The Assembly decided that a treaty should be negotiated on the basis of the ILC’s draft, resulting ultimately in the adoption of the 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses (UN Watercourses Convention).11 It is worthy of note that few changes were made to most of the provisions of the ILC’s draft by the States negotiating the Convention, and that the Working Group in which the Convention was negotiated recorded that it had referred to the ILC’s comments throughout the elaboration of the Convention “to clarify the contents of the [ILC’s] articles”.

The UN Watercourses Convention entered into force in 2014, but in view of its provenance, as the outcome of an exercise of codification and progressive development, is more significant as a codification of the fundamental rules of international water law than as a treaty. These customary rules are binding on all States, regardless of whether they are Parties to the treaty. The core principle of international water law, set forth in Article 5 of the UN Convention, is that of equitable and reasonable utilisation. This was underscored a mere four
months after the conclusion of the Convention by the International Court of Justice in its judgment in the Gabčíkovo-Nagyamaros Project case. There the Court cited what it referred to as a State’s “basic right to an equitable and reasonable sharing of the resources of an international watercourse”.  

Perhaps the most prominent feature of the principle of equitable and reasonable utilisation is its inherent flexibility. This quality, perhaps more than any other, may have been responsible for the early adoption of equitable utilisation, or allocation, on the domestic level in States with inter-jurisdictional rivers – i.e., those shared by more than one political subdivision of the State in question. It quickly becomes apparent that where water is involved, things change – be the changes natural (the amount of precipitation in a basin, for example) or human-related (population growth, intensified water use for agriculture, urbanisation, etc.). Rigid legal rules do not make sense in such a context. Countries with many inter-jurisdictional rivers have learned that and a number have put in place flexible systems well before this was done on the international level. Thus countries with federal systems and freshwater resources that are shared among political subdivisions have functioned as laboratories for the international system.

The two foremost examples of countries that adopted equitable utilisation on the domestic level are the US and Germany, both countries with federal systems. In the US, the Supreme Court in 1907 ruled on a dispute between Kansas and Colorado over the Arkansas River, emphasising the importance of an “equitable apportionment of benefits between the two States resulting from the flow of the river”. In Germany, the Staatsgerichtshof in 1927 decided the Donauversinkung case between the states of Württemberg and Prussia, on the one hand, and Baden, on the other. The court stated: The exercise of sovereign rights by every State in regard to international rivers traversing its territory is limited by the duty not to injure the interests of other members of the international community . . . . The application of this principle is governed by the circumstances of each particular case. The interests of the States in question must be weighed in an equitable manner against one another. One must consider not only the absolute injury caused to the neighboring State, but also the relation of the advantage gained by one to the injury caused to the other.

States with federal systems, having had experience in the judicial settlement of differences between political units concerning shared freshwater resources, developed an overarching principle that provides for flexibility. That principle is based on equity, which contemplates a balance of interests of the parties that is fair under the circumstances.

It was not a large step to carry the principle over to the international plane. This the International Law Association (ILA) did in its 1966 Helsinki Rules on the Uses of the Waters of International Rivers. Article IV of the Helsinki Rules provides simply as follows: “Each basin State is entitled, within its territory, to a reasonable and equitable share in the beneficial uses of the waters of an international drainage basin”. Like the US Supreme Court, and the German court in Donauversinkung, the Helsinki Rules go on to provide that what constitutes a reasonable and equitable share “is to be determined in the light of all the relevant factors in each particular case”. As already noted, equitable and reasonable utilisation is also the cornerstone of the UN Watercourses Convention. After setting forth that principle in Article 5, the Convention, like the Helsinki Rules, provides in Article 6 that equitable utilisation requires taking into account “all relevant factors and circumstances”. Both the UN Convention and the Helsinki Rules explicitly include the prevailing climate as a factor to take into consideration.

International Water Law in the Anthropocene

The question is whether international water law, as reflected generally in the UN Watercourses Convention, is up to the daunting task of dealing with the conditions brought about by global climate change. I believe it is, but with one important caveat: those administering and implementing the law, principally States, will in the end determine whether it is or is not a useful tool for the management and protection of shared freshwater resources in the age of the Anthropocene. But it is submitted that international water law as it stands is sufficiently flexible to accommodate the changed conditions and new impacts that will inevitably follow from climate change.

Signs of a recognition that the law will have to accommodate change can already be seen. In the Kansas v. Colorado case itself, the US Supreme Court in 1907 denied relief to Kansas, the downstream state, and said that Kansas could bring a new suit if due to “a material increase in the depletion of the waters . . . by Colorado, . . . the substantial interests of Kansas are being injured to the extent of destroying the equitable apportionment of benefits between the two States resulting from the flow of the river”. Equitable utilisation is thus essentially a process, requiring that adjustments be made when needed to restore the equitable balance.

And in the landmark Kishenganga arbitration between Pakistan and India, the tribunal in its Final Award acknowledged that “a degree of uncertainty is inherent in any attempt to predict environmental responses to changing conditions” and that it “is cognizant that flows in the Kishenganga/Neelum may come to differ, perhaps significantly, from the historical record as a result of factors beyond the control of either Party, including climate change”. The Court of Arbitration continued: The Court considers it important not to permit the doctrine of res judicata to extend the life of this Award into circumstances in which its reasoning no longer accords with reality along the Kishenganga/Neelum. The minimum flow will therefore be open to reconsideration as follows: If, beginning seven years after the diversion of the Kishenganga/Neelum through the KHEP [the Kishenganga Hydro-Electric Plant], either Part
consider that reconsideration of the Court’s determination of the minimum flow is necessary, it will be entitled to seek such reconsideration through the Permanent Indus Commission and the mechanisms of the Treaty.23

Thus the tribunal recognised, ex ante, that conditions might change sufficiently that an adjustment of its award would be required. Especially in view of the uncertainties posed by climate change, this “review mechanism”24 established by the tribunal is a blueprint for future judgments and awards in cases involving the non-navigational uses of international watercourses.

Conclusion

Much as the leadership of some countries may wish to deny it, global climate change is with us and is here to stay, perhaps for hundreds of years, even if we halted all greenhouse gas emissions now.25 The law, being designed to create certainty and predictability in human affairs, is generally ill-equipped to accommodate the rapidly-developing impacts of climate change, responses to which require flexibility. This essay submits that such flexibility is built into the law of international watercourses. The question for humanity now is whether the same humans who caused climate change will administer the law in a sufficiently flexible way to permit adjustment and adaptation to its impacts and avoid, or at least mitigate, the seemingly inevitable dislocation and disruption it will cause.

Notes

2 Ibid., Crutzen and Stoermer.
3 Its Working Group on the “Anthropocene” (AWG), however, has voted in favor of recommending that the IGUS adopt the Anthropocene as the new geological epoch. See http://www2.le.ac.uk/offices/press/press-releases/2016/august/media-note-anthropocene-working-group-awg.

Climate Change

Children’s Rights and Climate-Change Policy: Addressing the Concerns of Children and Future Generations

by Deva Prasad M1 and Suchithra Menon C2

The 1992 United Nations Framework Convention on Climate Change (UNFCCC) is a major achievement for the international community from a policy formulation perspective. Tackling the problem of climate change requires pertinent law and policy formulation grounded in science and evidence-based studies. Based on the reports of the United Nations Children’s Fund (UNICEF), the impact of climate change on children and the future generations of mankind would be quite severe.1 The survival needs and developmental needs of children and future generations are pertinent issues that usually receive insufficient attention at the policy deliberation stage.

Adopting a human-rights-based approach to climate-change policy is a significant measure which could reduce the acute impact of climate change on human lives. In the rapidly evolving arena of climate-change policy, the fact that the protection and realisation of human rights could be threatened by the impacts of climate change has slowly begun to gain recognition, and such concerns have started to be addressed within the UNFCCC regime. It is in this context that the need for a deeper understanding regarding children’s rights and climate-change policy emerges.

1 Assistant Professor of Law, Indian Institute of Management, Kozhikode, India.
2 Assistant Professor of Law, National Law School of India University, Bangalore, India.

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Cover photo: Tillage agriculture (a major contributor to climate change) and wind power (a climate-friendly alternative)

Courtesy: Environment and Climate Change Canada (https://www.ec.gc.ca/?lang=En)