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Environment Protection: Global Perspective

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ABSTRACT

Water law is the field of law dealing with the ownership, control, and use of water as a resource. It is most closely related to property law, but has also become influenced by environmental law. Because water is vital to living things and to a variety of economic activities, laws attempting to govern it have far-reaching effects. While India is marching with the world towards 21st Century there various issues that calls for attentions. One of such concern is issue pertaining to water resources and policies on these lines, both nationally and globally. Water pollution has emerged as one of the gravest environmental threats globally. Its biggest sources are city sewage and industrial waste that are discharged untreated into the rivers. Despite the best efforts of the government, only about 10 per cent of the waste water that is generated in the cities is treated. The entry of toxic substances into water bodies like lakes, streams and rivers leads to deterioration in the quality of water and severely affects the aquatic ecosystems. All these have a devastating effect on all living creatures that exist near the polluted water bodies. Urgent steps are needed to be taken at global level on water resources and the flawed policies need to be amended in order to obtain concrete results. This article highlights the availability and importance of water resources at global level and takes a brief review of the status of International Law relating to water resources.

KEYWORDS: Environment Protection, Global Policies, Environment Law

The water is one of the abundant resources on the earth. It plays very crucial role in biosphere and in all living organisms. Water is a common substance with several uncommon properties. It has several properties of reactive nature. It makes up bulk of most living organisms. In the form of complex organic compounds found in different organisms including human being. Compared with other resources, it is used in tremendous quantities. The use of water accelerates industrial production of goods and agricultural food production. There are many important issues and problems associated with its use, distribution and management. Mainly, the availability of water in a right place at right time, in the right form, is a major problem for human society. This article highlights the availability and importance of water resources at global level and takes a brief review of the status of international law relating to water resources.

Global Perspective:

The total amount of water held on the planet Earth is relatively constant on geologic time scale. Three quarters of the earth is covered by water. It amounts in total to more than 1400 million km^3. About 95% of this water is in the oceanic water. The remaining 5% of the total water, 4% lies in frozen state in polar regions and only 1% is available as fresh water in all the lakes, rivers, the total atmospheric moisture, water content in vegetation and underground water[1]. Almost 98% of the 1% flowing and rapidly circulating fresh water is in the form of ground water. About half of this total ground water lies more than 1 km below the ground surface and only 0.1% of the total 5% fresh water is in rivers. The average water use per capita in the World in 1975 was about 700 m2/year and today it has exceeded 1350 m3/year. The total human use of water was about 3850 km3/year and today it has increased to about 6100 km3/year. The total annual water yield in the form of river is about 48000 km3. The total quantity of water used is approximately 1000 times the World's total production of all minerals. This water is unevenly distributed in different continents in the form of precipitation. The South America has highest average precipitation of about 163 cm/year as against 469 cm/year of the estimated total and Australia has lowest of about 47 cm/year.[2]

The water is continuously circulating in the form of hydrological cycle. But the varying distribution of water in terms of time, of time, quality and quantity makes problems of its control and use. These problems are not confined within the boundaries of one country. Many rivers flow through several states or nations, all of which would like the right to use all of its water. Today, the human society has realized that fresh water is a finite resource, especially; river waters are precious natural for the augmentation of fishing, food and water supplies, energy and development of industries.[3] If everyone takes his water share as he want, many rivers would be dry. It would evoke the problem of water shortage. This problem may be tackled only with effective legal provisions.

Water resources in river basin

There are 214 continental flowing rivers with river basins shared by more than one nation. Out of these 214 rivers, 148 rivers flow through 2 countries, 31 through 3 countries and rest through 4 countries or more than 4 countries. Five or more countries share twelve of the major rivers of the world. The river Danube flows through 12 countries, the Niger through 10, the Nile and Congo through 9 each, the Zambezi and Rhine through 8 each, the Amazon through 7, volt and Mekong through 6 each and La Plata and Elbe through 5 each.

There is a great variability in river water resources in all the five continents. This variability is not only among the five continents but also among the different rivers of these continents. In South America roughly ten times more river water is available per capita than in Asia or Europe. In North America it is one and half times more than in Africa. The per capita flow of river water is 1,620,000 m3/year in Amazon, 750 m3/year in Rio Grande, 1920 m3/year in Ganga and 11,200 m3/year in Brahmaputra. With the increasing water consumption and growth in population, the per capita flow of river water is decreasing considerably.

Need of International Law on Water Resources

The river water is expected to provide the optimum benefit to the people settled in and around its basin. It should not matter whether the settlement lies within a single jurisdiction or not. The political interference and pressures turn it to be difficult. Most of the countries have enacted laws and regulations to resolve the conflicts on water resources of their river basin. If the river basin in question is under the control of single country, the concerned government can deal with and solve the all social, administrative[4] and economical [5] problems related to it. Even then, the claims and counter claims of competing states many times make the solution very difficult. The Narmada, Krishna and Kauveri water disputes in India are the examples of this kind. If the river basin in question falls within the territories of two or more countries, it is difficult to make a solution. This is because of political differences, problems of integrated planning and ultimate interests of political parties within each of these countries. Hundreds of lawsuits over water occupy the domestic courts now days. The battle lines are being drawn for an ever bigger. Therefore, it becomes necessary to balance and reconcile the issues, claims and the counter claims of these countries before emerging any international river basin development plan. Most of these issues, problems or claims and counter claims may be of an international[6] nature these issues, claims and counter claims need to be recognized and covered by international law. Therefore, there should be a set of legally formulated and systemized principles applicable to the water users of inter-nation rivers.

Sources of International Law on Water Resources

Since time immemorial, international law has permitted all the countries to exercise complete control over their territorial waters. The existing international law concerning water resources is an outcome of centuries of endeavor towards formulating the procedural instruments to balance and harmonize divergent interests of the participating nations. International water law can be interpreted in terms of its sources

and contents of interests.

The international law has originated in history of international social, economic and political relations. The international law was concerned with the matters of boundary demarcation on rivers in its initial period. It got concern with transboundary waters in rivers and lakes, aiming at assurance of the principle of freedom for navigation through international waterways thereafter. Later, regulation of hydroelectric power production and transmission along with drinking supply, irrigation and other concerned uses and conflicts between sharing countries modified the set of substantive principles. These principles need to recognize and confirm legal rights and obligations of each of the participating countries. These principles in the form of law can be employed as a tool or instrument to rule out the conflicts and smooth the relations with sound understanding of mutual interests of countries sharing these water resources. In a nut shell, the international law on water resources can provide machinery for the peaceful resolution of disputes, offers for the accommodation of correlative rights of each country and releases national energies to use in development and productive process.

Many conferences, meetings, discussions held at international level on the matters of rivers, lakes and water resources resulted into various treaties. These treaties are binding upon the participating countries, got the legal sanction of international law to which we now refer as international water law. The treaties concluded on various aspects of water resources like water management, sharing of water and water resources, utilization of river water and lake water etc in last century. There was growing interest of world community with growing awareness on the different issues of water and water resources including the water pollution. This has reflected through the signing of agreements and the interest has been increased for all purposes besides the navigation.

International water law has also origin of the statutes of the International Court of Justice as it may be learned from its Article 38. These sources are in the form of general or particular international Conventions, international tradition or custom, principles of law, arbitral awards and decisions of international tribunals, bilateral or multilateral agreements referring to water resources, as well as legal, scientific and social writings of qualified experts, law making activities of international bodies, resolutions passed and recommendations made by different international organizations.

The agreement sources of international law on water resources cover both the substantive issue[7] like allocation of the water or regulation of uses and procedural issues[8] like definition and identification of systems of control of uses, rights of inspection and procedures of applying suitable solution to overcome the differences that arrive from the interpretation of treaties or conventions.

The set of norms of international custom provides certain rules that are useful in resolving the conflicts on the river waters and water resources.

These emphasize on the duty to co-operate and negotiate, prohibition of management practices, equitable distribution of common water resources, mutual understanding and smooth consultation. The set of general principles of law relating to water have also been developed by the international courts and arbitral tribunals in their decisions beyond the limits of specific disputes.

Legal Theories and Practices

The international law on water has the base on theoretical concepts of two doctrines, the doctrine of Unlimited Territorial Sovereignty and Unlimited Terrestrial Integrity. The concept of sovereignty in the form of concept of Unlimited Territorial Sovereignty was totally unrestricted in the customary international law. This was an outcome of the efforts of political theorists for their justification of independent existence of national states. It has played a constructive role in building of the modern nations.

The concepts were extrapolated to the field water considering the field water as a subject of sovereignty of respective country. The doctrine asserts that no alien interference could be accepted or admitted in their water conservation, utilization and management practices. But, this doctrine protects the rights of upper basin countries and mostly neglects or ignores the downstream countries. The theorists of downstream or lower basin countries propounded the doctrine of Unlimited Territorial Integrity. This doctrine implies that the water is part of the territory of a country. The other countries with sharing of water resources can not hamper its use. If it happens, the sovereign right will get compromised over the territorial integrity right. Therefore, the theories of Unlimited Territorial Sovereignty and Unlimited Terrestrial Integrity appear to be two extreme theories. Whenever these are applied, the doctrine application needs to be justified for perceiving the interest of each country. Otherwise, the application of these doctrines can be breed a permanent conflict. Both these theories cannot stand the test of logical analysis in modern realities. This calls for the development of a new set of principles based on equity, fairness, modernity, sound understanding and peaceful relations. It needs to be based on scientific, technical and ethical base and social, cultural and economical realities of modern period[9] considering it, the Permanent Court of International Justice stated that the sharing of common water or river water is not just a right of passage but also a common legal right of shearing the resources as it is in the interest of communities belonging to all parties[10] substantial fines are needed to deter the violators of this legal rights.

The new theory of Limited Territorial Sovereignty is emerging out. This theory recognizes and focuses on the limited rights of territorial people with their sovereignty in respect of sharing of available water resources. This doctrine already has been practiced in the domestic Courts of many countries like USA (Kansas V. Colorado, 1930; New Jercy V. New York, 1931; Nebraska V. Wyoming, 1945), India (Sind V. Punjab, 1941), Germany (Wurttemberg V. Baden, 1926) and Italy (Connecticut V. Massachussetts, 1931; Electricite' de France V. Compagnia Impress Electiche di Liguria, 1968). These Courts have evoked or evolved and applied a variety of concepts and set of principles relating to the sharing of water resources.[11] The list of these principles include Equality of rights, Equitable Apportionment, Equitable Utilization, Community Ownership, Equalization of water, Reasonable and Equitable Utilization are a few. Moreover, the International Law Association has introduced the concept of the International Drainage Basin, as the aggregate of both surface water and ground water of a common geographic area. The text of international declaration of Helsinki rules[12] has incorporated the doctrine of Reasonable and Equitable Utilization.

Water Resource Management in India:

Water Resources management is a very important issue with regard to the conservation and the protection of water. In pre-British India water management was essentially a local matter and was in the hands of the community. This changed with the advent of the British period and of modernity. Control over water resources passed from the hands of the community into those of the state. While ownership of natural resources was claimed by the state, management passed into the hands of engineers and bureaucrats. The induction to western engineering ushered in the era of large dams and there was a concomitant decline of traditional forms of small scale, local, community-managed systems of water harvesting and management. These new projects became symbols of development. Government initiatives for water resource management are outlined in *National Water Policy, 1987, National Conservation Strategy and Policy Statement on Environment and Development, 1992,* and *Policy Statement for Abatement of Pollution, 1992.* The strategy and policy statement prescribe command and control, technological zoning, fiscal incentives and use of economic instruments as mechanisms for water pollution control. The present approach to control water pollution in India is to use regularity instruments along with systems for monitoring the prescribed standards to achieve the government's policy goals. This standards for ambient and point source discharges are set by various acts of the government. Compliance is mandatory and provisions for penalties are made in the acts.

The Constitution of India provides for the right to life, which is a fundamental right under Art. 21 and has been interpreted by the courts to also include the right to pure air and water. Citizens may also fight against polluted water under s. 277 of the IPC which deals with fouling water or water bodies. *The more recent legislation on water pollution is the Water [Prevention and Control of Pollution] Act, 1974. This Act is meant to curb the various kinds of pollution ranging from domestic to industrial pollution. Violations under this Act are more severe. Another legislation dealing with the aspect of purity of water is parts X-B and XI-A of the Merchant Shipping Act, inserted by the Amending Act of 1983 dealing with every aspect of marine pollution. There are several judicial decision which have affected the issues of water rights. Several legal and policy issues have affected water resources*

management especially in some of the drought prone areas.

The practical implementation of these principles both at National and international level requires spirit of fairness, mutual understanding and a close co-operation. This is possible by setting up of a governing international body that may be a part of UNESCO or an independent institution. Now days, the rules, agreements and regulatory orders on governing the distribution and utilization of water resources have advanced towards equity and fairness and empirical considerations in respect of fair and equitable sharing of water resources. International plans for the future together with regulations that are enforced at various levels in different parts of World are probably essential to a peaceful and sustainable future. Without these, free enterprise will continue to destroy the precious water resource.

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