Chapter I
Introduction

"Water", said the eminent Greek philosopher Pindar, "is the best of all things". Throughout history water has been considered a natural resource critical to human survival. From the earliest evolution of hominid species around the lake shores of northern Kenya to the development of the main civilizations on the bank of certain major rivers, human history can generally be considered to be water centred. Because of this fact the early important civilizations which were developed and flourished on the banks of major rivers such as the Nile, Euphrates, Tigris and Indus therefore, are aptly called as "hydrological civilisations". Human history can, in fact, be written in terms of interactions and interrelations between humans and water.

It is not difficult to realise why civilizations and habitats often developed along the banks of several strategically important rivers. Easy availability of water for drinking, farming and transportation was an important requirement for survival. Human survival and welfare generally depended on regular availability and control of river water and because of this fact Egypt was rightly considered by historian Herodotus a "gift" of the River Nile. Similarly, our ancestors also adored their rivers, they extolled them, sang their praises, indeed worshipped some and out of
emotional flattery and to indicate closeness few rivers were addressed as priatame, or most loved, and Naditame, the River of Rivers, and even Amitame: Most revered of mothers. Indian rivers have always been looked upon as the prized gifts of Mother India herself and like her they are all women: Ganga, Yamuna, Kaveri, Narmada, Tapi, Godvari and Sindhu (or Indus). In Rigveda a section is devoted to Indian rivers which is called "Nadistuti", or "An adoration of rivers". In "Nadistuti" regarding Indus, it has been said that it constitutes a blessing to those who have the good fortune to reside in the land through which it flows. For such immense contribution of rivers, over the centuries these poetic fancies came to be absorbed in the fabric of the rituals of the country's religion, Hinduism. So the "Eight Lines" of the Hindu wedding service are a memorial to the country's rivers, and so too, our Brahmins, wherever they take their compulsory daily bath, are taught to say thanks to the rivers which bring their munificence to our land and by projection, make it possible for him to have plenty of water for his bath i.e., for consumptive use. Therefore, as he splashes himself he mumbles the names: Ganga and Yamuna, Godavari and Sarswati, Narmoda, Sindhu and Kaveri - my gratitude for bringing water within my reach.  

Since pre-historic times rivers are being proved as lifelines of all civilisations. But interactions and interrelations between people and its river water have not always been smooth and simple. As in present, though in different magnitude, conflict and dispute over river was not an uncommon event in the past. Legend has it that the Buddha intervened in a terrible war between two communities in Ancient India, the Sakiyas and Koliyas over the sharing of the river Rohini, brought both sides together and ended the long drawn discord.\(^2\) In early times, however, the population were limited and it was often possible for individuals or communities to settle differences in many cases by simply moving on and exploiting a new source. Water was available in most situations and consumptive uses even for irrigation seldom threatened others with deprivation. Transport whether for navigation or the floating of timber provided the most obvious and important inter-regional river water use in India as well elsewhere in the world. Rivers often formed natural boundaries as flowed through successive domains or territories and came to be used as common highways to all for communication and commerce, though kings and conqueror often bared passage or levied taxes.

Increasing population and higher level of human activities over the centuries, however, have made the situation completely reverse. The rate of increase in total global water use accelerated remarkably in the twentieth century compared to earlier period, particularly after 1940 and the total demand is still increasing rapidly. The percentage share of agriculture water use is likely to continue into the twenty first century, as more and more food has to be produced to feed an expanding global population. The same picture is also in case of industrial and other non-navigational water use. The situation is more critical for developing countries where the rates of population growth are the highest and the per capita demand for water increasing steadily.

As all different modes of water use have continued to increase, many countries especially those located in arid and semi-arid regions, have started to face crisis, although the magnitude, intensity and extent of the crisis could vary from one country to another, as even within the same country, and also over time. But undoubtedly such an emerging global crisis at present has assumed a critical form and competing claims over river water resources have led to tensions and conflicts both within countries and between countries to such an extent, out of which a prediction has been made that the
next war will not be waged over oil, as was the case with Iraq’s invasion of Kuwait but over water\(^3\). West Asia, chronically deficient in water, was a potential flash point, with Israel occupying the Golan Heights, source of some of the tributaries of the Jordan rivers, and thus controlling supplies to Palestine and Jordan itself. Turkey has been damming the Tigris and Euphrates and thereby depriving Syria and, further downstream, Iraq. To complicate matters the Kurdish separatists occupy the headwaters of twin rivers in Turkey and are fighting to claim their homeland. On the Nile, there are disputes between Egypt, the Sudan and Ethiopia, with the downstream state Egypt.

Water resource scarcities are not only likely to lead wars of new millennium but such a scenario can also have security implications which could translate into regional security problems. The depleting waters of the river Indus could well become the cause of a fourth war between New Delhi and its traditional rival or there could be a communal flare-up between India and Bangladesh if thousands of Bangladeshis poured into the country when rising sea level submerges their land. Even the treaty India has with Pakistan over the sharing of the waters of the river Indus and its tributaries can come under a cloud if climatologist are right.

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\(^3\) Darryl D’monte, ‘Soon, the World will Wage Water Wars’, The Hindusthan Times, New Delhi. 2nd September, 1996, p-12.
that the Indus could lose 40 percent of its flow in the coming century.¹

However, it would be a highly wrong proposition that global as well as regional water crisis that lead to water disputes or conflict are only due to factors like population growth, increasing diversified water uses etc. They are factors but it is now widely recognised that the epicentre of the problem lies in current social, economic, legal policies and the institutions governing river water resource administration and management. A nation’s institutions, its form of government, laws, customs, organisations and all that are associated with these institutions, more than any other factor determine its ability to guide its destiny.⁵ Therefore, effective use of river water resources, treaties, agreements, enactments, institutional arrangement and also making use of technology which helps further that goal can well counter the thesis of water wars.

Developed resource management techniques along with well constructed jurisprudence of natural resources, progressive water policy and principle like optimum utilization of water resources as evident in many countries can substantially mitigate the water resource scarcities. And

it is needless to say, in this respect, that water legislation acts as an important lever for effective implementation and enforcement of water policy. But legislations enacted for solving water dispute problems should be based on sound water policy that is, water policy should precede its enactment. The water laws pertaining to water dispute mechanisms should also be rolling type requiring modifications every few years in the light of operational experience and as a result of improved understanding, increased knowledge and availability of data. One may notice that since last century diverse statutory, non statutory methods are being employed both at the national and the international level for settlement of water dispute. In order to do that both at national and international sphere few national courts, Tribunals, committees and commissions have gone far beyond the traditional Roman, English or common law rules of water use and distribution to satisfactorily settle new claims and thus evolving new jurisprudence of water resource sharing. On the otherhand, many countries are still having serious difficulties in operating old Roman Law or common Law concepts while others are having problems in justifying apparently arbitrary principles of management in which the state takes overall responsibilities but is unable to execute them. Still others are tackling the weight of customary laws against the seemingly modern statutes. The basic issues seem to be nowhere settled, more confusion is
apparent than agreement. The situation also suggests that to resolve water dispute there are often no universal model both geographically and in terms of time. The solutions that work in the United States may not be the appropriate for China or India primarily because of differing technical, economic, social, institutional, political and environmental conditions. Similarly, solutions that were successfully used in a country two decades ago may need to be carefully reviewed and then perhaps modified for use at present.

India also is neither a stranger to these conflicts both internally as witnessed over the sharing of Krishna, Godavari, Narmada, Cauvery and Rabi and Beas water and across frontier, as evident, in the ongoing dispute with Bangladesh and Nepal nor her problem of inter-state water dispute are only due to population growth and diversified water uses. Rather, to a large extent problem has been aggravated in India due to historical negligence of the same at the institutional level during colonial state formation and continuation of the tradition even after the adoption of the new constitution. Unfortunately the irrigation and water related Acts passed both during and after independence are unable to effectively tackle the current requirement for sustainable use and management of water resources. As a

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result considerable confusion prevails in respect of the right and wrong of what should or should not be done in respect of an inter-state river by the Central Government or by the Governments of different states through which the river flows. Demands are constantly being made calling upon the Central Government to accord sanction to a project or to order the stoppage of work on another. In making these demands, little distinction is made between the constitutional role of the Central Government or what that Government may do and accomplish by virtue of its being the supreme executive authority in the country and the major source of finance for the execution of large River Valley Project nor has the Government of India ever explained in any detail, in parliament or outside, the limitations of its power under the constitution and the Acts of parliament passed thereunder. The confusion described above is helped, to some extent by the attitude adopted by some states in respect of inter-state rivers, by the tendency apparent in them for the ruling party to avoid taking on itself the onus of decision on any controversial issue which decision might provide a political handle to the opposition to beat the ruling party with; also by the growing trend in the country as a whole for politicians to take on themselves functions which should be entrusted largely to expert person and civil servants. Narrow political

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8 N.D. Gulhati, Introduction in Development of Inter-State Rivers, Law and practice in India, New Delhi, Allied Publishers, 1972, P-1
gain thus dominates when only an objective approach can yield satisfactory results.

Under British Rule, Government of India and his Majesty's Government in London had the power to pass orders on any question of water rights, as between different provinces of India, and to deal finally with all disputes and differences that arose between them in connection with the development of any inter-state river. No principles were, however, developed to govern water rights between political units. Each question was decided on its own merits; there was, in fact, as will appear hereafter, a wide variation in the manner in which similar matters were determined on different rivers. Decision in one case did not constitute a precedent or guideline for the other cases. The position thus remained indefinite and vague and the related information was confined to a few high-ranking officers or buried in Government files or blue books. On Indian states, the British Government exercised powers of suzerainty and was able to influence agreements relating to the use of waters between a province and a princely state. In general, the provinces, enjoying a superior political status, got a better deal than the princely state.

\* S.N. Jain and (Mrs) Alice Jacob, "Centre-State Relations in Water Resources Development", JII, vol-12, No.-1, January-March 1970, P-4
Since Independence, no outside authority has anything to do with any matter relating to the development of interstate rivers in India (or any river in India which flows from, or into, another independent country except that if India has voluntarily entered into agreement with a neighbouring country. In respect of such a river, India has to abide by the term of the agreement). The constitution of India (1950) and the Act of parliament passed thereunder lay down specific procedures to be followed under different situations. The constitution gives equal status to all the states in India and lays down a definite distribution of legislative functions and of executive authority between the Union and the state in respect of all matters, including to those relating to the use of the water of inter-state rivers. The full import of the changes in the administration of river water that have come about since the constitution came into force do not appear to be widely known or fully appreciated. As a result a lot of confusion prevail regarding inter-state river administration and management. Till date, even there is no effective National Water Policy for effective utilisation of river water resources. In this respect, it is suffice to recall the centre’s continuing inability to declare all river systems as national resource notwithstanding the need underlined repeatedly by growing inter-state water disputes of serious
political proportion.\textsuperscript{10}

In the years preceding the 10\textsuperscript{th} General Election of 1991 most of the works in the field that had been undertaken put too much emphasis on engineering and other agro-economic solution of the problem with an assumption that the existing constitutional and statutory schemes are without flaw and would be able to resolve the problem of inter-state water dispute in India. But in the context of more intensified resurgence of Tamil Nadu, Karnataka wrangle over Cauvery water in the 90's and peoples' resistance on the construction of high dam in the form of Narmada Bachao Andolan, it has now increasingly been felt that Federalism as entailing operation of first order public law principles for equitable and efficient use of water resources in India remains profoundly flawed. In India, the almighty state (both centre and state) has been virtually turning, twisting and blocking the river where it pleases, simply because the people have not been aware of the right or has not the economic power to demand their right.\textsuperscript{11} But when from mid 80's peoples' grievances mounted in the form of anti-dam movement with a demand for reviewing of existing tribunal awards and even abolishing few of them, since then it has been realised that existing provisions and legal arrangements for resolving inter-


\textsuperscript{11} Supra note 6, at P-16
state water dispute are not adequate and can no longer suitable for sustainable development of water resources and therefore, requires more research oriented Constitutional (legal) and policy reforms for streamlining the water resources administration in the country. In this respect it is further contended that existing traditional quantity based administrative water allocation mechanism in India is not based on efficiency and equity and does not provide any incentives for using water most efficiently in the context of changed political economy scenario of the dispute situation in addition to the fact that the present dispute resolving machinery is highly state centric that ignores local development of conflict at different levels. But as a matter fact conflicts take place at the local level, between individuals and groups, and are deeply enmeshed in complex relations that span villages, river basin and states sometimes further.

With this perspective of the problem of inter-state water disputes in India and outlining the approach that should be adopted to study the problem, the present research study intends to dig further down to the roots of the problem in order to suggest concrete legal steps to deal with such dispute in future.

Accordingly, in this study, at first it is planned to examine various theories, principles, norms and methods that have emerged in the course of resolving inter-state water dispute in three classical federations i.e., U.S.A., Australia and Canada, with an object to get an insight regarding the federal river water dispute resolving process and to make conclusions as well as to see how these conclusions compare with Indian federal laws and practices.

After cross federal analysis, for searching sources of law and method for settlement of inter-state water dispute, the study intends to make an attempt to have a look into the international laws, norms and principles that have developed over the years in the course of settlement of international river water dispute. Further, in the search for sources of law for settlement of international water dispute, examinations of juristic works comprising early twentieth century works as well as recent works are also to be made in the study. The analysis is to be supplemented with the evaluation of the works of the non-official organizations with specific reference to Helsinki Rule formulated by the International Law Association (I.L.A.). The works of the International Law Commission and other official organisations are also contemplated to be examined here. This is to be followed by an analysis of the judicial decisions, arbitral awards as well as other miscellaneous source material in search of the
sources of law in the field under study. This part of the present treatment is also supposed to encompass the survey and critical evaluation of India’s water disputes with Pakistan, Nepal and Bangladesh.

While coming face to face with the problems concerning inter-state rivers, the present work first plans to give a brief description of the main basins and rivers system in India. This will include, the description of the Indus Basin, Narmada River Basin, Godavari River Basin, Ravi and Beas River and Cauvery River Basin. Then by way of historical survey, the work contemplates to examine the position of India’s inter-state (Inter-provincial) rivers before and after the 15th of August, 1947. Such historical survey is expected to be useful to understand the root of the present day problems of inter-state water dispute in India.

Analysis of any federal problem demands prior examination of the constitutional provisions and statutory measures adopted for the purpose of resolving such problems. Accordingly, the present work plans to examine the relevant constitutional provisions and statutory measures under Indian federation adopted for the settlement of her interstate river water disputes. Further, to have a background analysis in this respect, the study intends at first to proceed with the analysis of relevant provisions laid down in the Government of India Acts, 1915, 1919 and 1935 and then
includes relevant constitutional provisions of the Constitution of India, 1950, including interalia, the provisions with reference to the administration of the interstate rivers within the framework of this analysis. The relevant statutory measures adopted in the River Boards Act, 1956 and the Interstate Water Disputes Act, 1956 for resolving interstate water disputes in India are also intended to be extensively examined here.

With an object to examine various dispute settlement methods, the present work at first plans to go through the performances of the Tribunals so far Constituted in India by reviewing their awards in case to case situation. The work, intends then to make an attempt to examine inter-state river water dispute resolving methods other than adjudicatory method. In this context, the role of water policy, administration and other sort of alternative dispute settlement methods like negotiation, conciliation and good offices are to be analysed in order to explore their potentialities for resolving inter-state water dispute in India.

Finally, the work plans to have a broader appraisal of the problem of inter-state water dispute in India examining the issue, touching principles of law as well as highlighting the social, economic and political effect of these disputes and the awards of the Tribunals. Lastly, for future solutions of the problems and qualitative improvement of prevailing
dispute settlement mechanisms few steps are to be suggested. Therefore, according to requirement and scheme of the study, the entire work is divided chapterwise as under:

<table>
<thead>
<tr>
<th>Chapter — I</th>
<th>Introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter — II</td>
<td>Inter-State River Water Disputes Resolution in Classical Federations.</td>
</tr>
<tr>
<td>Chapter — III</td>
<td>International River Water Disputes Resolution and International Law.</td>
</tr>
<tr>
<td>Chapter — IV</td>
<td>Origin and Nature of Inter-State River Water Disputes in India.</td>
</tr>
<tr>
<td>Chapter — V</td>
<td>Constitutional and Legislative Scheme for settling Inter-state River Water Disputes in India.</td>
</tr>
<tr>
<td>Chapter — VI</td>
<td>Methods and Machinery for Settling Inter-state Water Disputes in India.</td>
</tr>
<tr>
<td>Chapter — VII</td>
<td>Appraisal and suggestions.</td>
</tr>
</tbody>
</table>