Chapter VI

International Law
(A). **THE NATURE OF INTERNATIONAL LAW**

The evolution of International River Laws has taken many centuries and the process still continues. A number of principles and treaties for management, sharing, utilization and conservation of International and conservation of International Water Resources have been codified during the past two centuries (Naff & Maston, 1984: 158).

The success or not of the installation of water Law and International Water Law will depend on the social adaptive capacity of the players at the different levels of water allocation and management communal, national and international. At the turn of the twenty-first century addressing the politics of adoption is a more important priority than arguing the quality of the legal principles (Bulloch & Darwish, 1993: 232-295).

Navigation monopolized all major waterways. Consequently, International Law concerning navigation rights is now well developed (Sevett, 1952: 22). But International Law relating to the economic uses of rivers for consumptive purposes is still in the process of development (United Nation, 1957: 15).

In the case of International Law, water of common interest, the most helpful evidence of this practice is to be found in a number of bilateral treaties and certain multilateral treaties and conventions (Briggs, 1952: 274).

In International Law, a distinction is normally drawn between National and International Rivers. A river, which passes through or along the territory of two or more states is described as International River and is governed by the rules of the International River Law (Kaeckebabek, 1962: 1).

The utilization of the waters of an international drainage basin raises many problems with respect to both International relations and International law. Water rights have been the subject of state concern ever since the
earliest appearance of any form of state organization. In the light of the most recent research it may not even be going too far to organize (Hirsch, 1959: 168-186).

In the area of management of international water bodies, the geopolitical considerations and hydropolitical implications for the co-basin countries cannot be divorced from the technical, legal, economic and environmental issues. When water becomes scarce and is considered a strategic national resource, hydropolitics needs to be taken into account for the national management of international water bodies (Biswas, 1993: 179).

Law, an instrument which can be used to smooth resources, provides guidelines for ordering future conduct. Law can be determined by a court action which may set a precedent that becomes a “guideline” for future cases but may also come from legislation by an administrative body, for example a government, which passes a statute when it sees a need. According to Barrow (1987), in many countries the state constitution affects water rights and water management because it binds legislation and common law or its equivalent (Barrow, 1987: 68).

International rivers are of two general categories: those that flow between the land territories of two or more states, and those that flow from the territory of one state into the territory of another state. In the case of a successive river one state is in complete physical control of the river as it passes through its territory, while in the case of contiguous rivers, there is dual physical control of the waters. Even the geographic distinction between the two kinds of rivers can, in some cases, be more apparent than real, for a river may be both successive and contiguous (Garretson & Hayton, 1967: 17).

The states located uppermost in the drainage basin of an International river are normally in a position to exercise its control over the waters first. Generally, there can be only one such “upper basin state” since all other
states within the drainage basin are "lower basin states" with respect to that state, although, in turn, some may be "upper composed of a tributary stream in addition to the principal river, there may be more than one upper basin state relative to all other co-basin states (Garretson & Hayton, 1967: 1).

In general, the rights of any country with respect to a river pertain only to that section that lies within its territory and under its sovereignty. More precisely, the rights of the country pertain to the river bed rather than to the water, since it is limited by International Law in what it may do with the water; and what it can do with the water may be done only as long as the water is in that part of the river bed in that particular state's territory. A river that crosses the borders of a country remains under that country's jurisdiction only as far as the border of the next country, where the river becomes part of the territory of a different state (Hirsch, 1956a: 207).

It is an assumption of international law that the allocation of scarce resources requires legal adjudication if conflict is to be avoided. International law recognizes the community of property among riparian states as a customary rule of law, that is, each of them is entitled to use a share of the river so long as unreasonable injury to another riparian does not ensue. Although this principle has been upheld in the courts, it contains an inherent weakness and has also been challenged by countervailing legal arguments. The flaw lies in the fact that customary rules tend to be highly unstable unless all involved parties have compatible interests, preferably guaranteed by formal agreement. International law has recognized that a river is the property of the community of all riparian states and this has been followed by recognition of the existence of certain limitations to territorial sovereignty in favour of the international community in general. However, the first step toward translation legal theory into institutional application is the production of political agreements. Such facts are essential to the creation of a broader array of legal instruments for solving international disputes over shared water resources (Naff & Matson, 1984: 5).
6.1: THE LAW OF INTERNATIONAL WATER RESOURCES

The International law Association, at its meeting in August 1956 in Dubrovnik, Yugoslavia, unanimously adopted a statement of principles “as a sound basis upon which to study further the development of rules of international law with respect to International River”. The parties to international water disputes might go far towards advancing adjustment and agreement (United Nation, 1970: 34).

There has been no attention paid towards a variety of issues such as topographic structure, hydroelectric potential, and the irrigation components, in addition to political, economic and sociological factors. However pending the establishment of an accepted international code, the Dubrovnik draft statement of principles potentially affords a sound basic philosophy for planning and executing a project for integrated river development in an international river basin.

Of particular importance in the statement of principles adopted in Dubrovnik in the fifth principle which is as follows:

“The states upon an international river should in reaching agreements, and states or tribunals in setting disputes, weigh the benefit to one state against the injury done to another through a particular use of the water. The following factors should be taken into consideration:

a) The right of each to reasonable use of the water
b) The extent of the dependence of each state upon the waters of the river
c) The comparative social and economic gains accruing to each and the to the entire river community
d) Pre-existent agreements among the states concerned
e) Pre-existent appropriation of water by one state” (United Nations, 1970: 35).
The International Law Association also evolve certain general rules of international law applicable to the use of waters of an international drainage basin, in its fifty-second Conference in Helsinki in 1966.

The Helsinki rules introduced the concept of international drainage basins as: “the aggregate of both surface and ground water within a given geographic area flowing into a common terminus”. The rights of basin states are outlined by the Helsinki rules which also attempt to establish an attitude towards a variety of issues that the Dubrovnik draft avoided. The heart of the 37 article Helsinki rules is Article 5, whose recommendations contain the “relevant factors which are to be considered included, but are not limited to:

a) The geography of the basin, including in particular the extent of the drainage area in the territory of each basin state;

b) The hydrology of the basin, including in particular the contribution of water by each basin state;

c) The climate affecting the basin;

d) The past utilization of the water of the basin, including in particular existing utilization;

e) The economic and social needs of each basin state;

f) The population dependent on the waters of the basin in each basin state;

g) The comparative costs of alternative means of satisfying the economic and social needs of each basin state;

h) The availability of other resources;

i) The avoidance of unnecessary water in the utilization of water of the basin;
j) The practicability of compensation to one or more of the co-basin states a means of adjusting conflict among users;

k) The degree to which the needs of a basin state may be satisfied without causing substantial injury to a co-basin state.

The weight to be given to each factor is to be determined by its importance in comparison with that of other relevant factor. In determining what is a reasonable and equitable share, all relevant factors are to be considered together and conclusions reached on the basis of the whole (Manner & Metsalampi, 1988: 22).

In 1970, Finland introduced a resolution in the UN General Assembly on laws for international watercourses, which proposed that the Helsinki Rules be considered a model. While the UN Committee felt that the subject of international watercourse law was important, three reservations about the Helsinki rules surfaced. First, the rules were formulated by a professional organization which did not represent nation-states. Secondly, some countries such as Ethiopia argued that adoption of these rules as a model could preclude new considerations about this complex issue. The third was expressed in the fact that the Helsinki rules were based on a drainage basin approach that could be a potential threat to national sovereignty (Biswas, 1993: 172).

The important case submitted before international arbitration was the case of Lake Lanu situated between France and Spain. The International court of Arbitration in its review of that case came out with certain relevant principles:

a) The necessity of recognizing the right of sovereignty over its portion of the international river, of each riparian;

b) This right, however, should be subservient to all other international obligations of that riparian state;
c) There is no rule in international law which prohibits a riparian from the utilization of water-force to generate electricity, but in accordance with the rule of good faith the upper river riparian should take into consideration, and on the same footing of equality, all the interests of all other riparian states;

d) The necessity of consultation and the exchange of all relevant information among the riparian states about any projected constriction work on the international river.

Other Federal Courts in other Federal Governments have reached a consensus about the following principles:

a) International Law limits the freedom of action of the riparian states of an international river: every one of them should avoid causing any detriment to other riparian states;

b) Equitable apportionment of the international river’s water;

c) Due respect to acquire rights of the riparian states;

a) The illegality of diverting the set course of an international river

Water Commissions in the Indian sub-continent, in their review of inter-state water disputes, have added yet another important principle, namely that barren infertile land have a priority over the waters of international rivers (Howell & Allan, 1990: 224-228).

6.2: THE RIPARIAN APPROACH TO INTERNATIONAL LAW

From the theoretical point of view, an upper riparian state will initially claim “absolute territorial sovereignty” and this means claiming the right to do whatever it chooses with the water regardless of the effect of the activity upon other riparian states. Lower riparian states begin with a claim to the “absolute integrity” of the watercourse which means claiming that the upper riparian state can do nothing that affects the quantity or quality of
water that flows down to the lower riparian states (Dallapenna, 1993: 13). The quantity of water to which each state is entitled might be defined according to some more or less objective measure of need such as historic pattern of use, population, area, arable land or the United Nation’s clear idea that each state is entitled to an “equitable share” of the river’s water (Ergil, 1991: 55).

The Articles of the 1997 Convention are afflicted by politically determined contradictions. The role of the principles of international water law in currency at the end of the twentieth century in the West Asia river basins has been to provide conflicting legal principles to serve the arguments of contending riparian states. First, the principles are ‘prior use’ and no harm; favour the long standing downstream user. Secondly, versions of ‘sovereignty’, all of which have an intuitive appeal, are favoured by the upstream user and especially the new upstream user. Both sets of principle lend themselves to popular and very selective chauvinist advocacy. Thirdly the concept of ‘equitable utilization’, a consensus converging notion developed by the International Law Association in Helsinki in 1966 has only gained support amongst legal professionals and some outsider scientists. The International Law Commission articles produced in May 1997 cannot be precisely defined or effectively operationalised. They lead to impasse rather than resolution. They are not considered as tools with which to achieve agreement. They are not yet viewed as a language to achieve mutual understanding, nor as a means of analyzing issues in contention, nor as a set of guidelines to structure negotiations (Wouters, 1999a: 217-297).

The 1997 UN Convention defines an international water course as a system of surface and ground water constituting a unitary whole by virtue of their physical relationship, parts of which are situated in different states and normally flowing into a common terminus. Riparian states are expected to utilize the water course in an equitable and reasonable manner, in particular,
with a view to attaining optimal and sustainable utilization. This requires taking into account:

- Geographic, hydrographic, hydrological, climatic, ecological and other natural factors;
- Social and economic needs of the riparian states concerned;
- The population dependent on the watercourse;
- The effects of the uses of one riparian states on the others;
- Existing and potential uses;
- Conservation, protection, development and economy of use and the costs of relevant measures;
- Availability of alternative.

Riparian states shall, in utilizing an international water course in their territories, take all appropriate measures to prevent causing significant harm to the other riparian states. They should cooperate with each other and exchange data and information regularly.

Background on the Convention on the Law of Non-Navigational uses of International Watercourses:

Although the Convention is not specifically named “a framework convention”, some members of the Working Group envisioned it as a Convention that would serve as a basin for future regional agreements. The Convention sets forth the major principles of Watercourses Law.

1. Major provisions of the Convention

The Convention defines Watercourse as “a system of surface water and groundwater’s constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus (UN May, 21; 1997).

Article 3: Watercourse Agreements

1. In the absence of an agreement to the contrary, nothing in the present Convention shall after the rights or obligations of a watercourse State arising from agreements in force for it on the date on which it became a party to the present Convention.

2. Notwithstanding the provisions of paragraph 1, parties to agreements referred to in paragraph 1 may, where necessary, consider harmonizing such agreements with the basic principles of the present Convention.

3. Watercourse State may enter into one or more agreements, hereinafter referred to as “watercourse agreements”, which apply and adjust the provisions of the present Convention to the characteristics and uses of a particular watercourse or part thereof.

4. Where a watercourse agreement is concluded two or more watercourse States, it shall define the waters to which it applies. Such as agreement may be entered into with respect to an entire international watercourse or any part thereof or a particular project programme or use except insofar as the agreement adversely affects, to a significant extent, the use by one or more other watercourse States of the waters of the watercourse, without their express consent.
5. Where a watercourse State considers that adjustment and applications of the provisions of the present convention is required because of the characteristics and uses of a particular international watercourse, watercourse States shall consult with a view to negotiating in good faith for the purpose of concluding a watercourse agreement or agreements.

6. Where some but not all watercourse States to a particular international watercourse are parties to an agreement, nothing in such agreement shall affect the rights or obligations under the present Convention of watercourse States that are not parties to such an agreement.

Article 4: Parties to Watercourse Agreements

1. Every watercourse State is entitled to participate in the negotiation of and to become a party to any watercourse agreement that applies to the entire international watercourse, as well as to participate in any relevant consultations.

2. A watercourse State whose use of an international watercourse may be affected to a significant extent by the implementation of a proposed watercourse agreement that applies only to a part of the watercourse or to a particular project, programme or use is entitled to participate in consultations on such an agreement and, where appropriate, in the negotiation thereof in good faith with a view to becoming a party thereto, to the extent that its use is thereby affected.

PART II. GENERAL PRINCIPLES

Article 5: Equitable and Reasonable Utilization and Participation

1. Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilization thereof and benefits there from, taking into account the interests
of the watercourse States concerned, consistent with adequate protection of
the watercourse.

2. Watercourse States shall participate in the use, development and
protection of an international watercourse in an equitable and reasonable
manner. Such participation includes both the right to utilize the watercourse
and the duty to cooperate in the protection and development thereof, as
provided in the present Convention.

**Article 6: Factors Relevant to Equitable and Reasonable Utilization**

1. Utilization of an international watercourse in an equitable and
reasonable manner within the meaning of article 5 requires taking into
account all relevant factors and circumstances, including:

(a) Geographic, hydrographic, hydrological, climatic, ecological and
other factors of a natural character;

(b) The social and economic of the watercourse states concerned;

(c) The population dependent on the watercourse in each Watercourse
State;

(d) The effects of the uses of the watercourses in one watercourse State
on other watercourse states;

(e) Existing and potential uses of the watercourse;

(f) Conservation, protection, development and economy of use of the
water resources of the watercourse and the costs of measures taken to
that effect;

(g) The availability of alternatives, of comparable value, to a particular
planned or existing use.

2. In the application of article 5 or paragraph 1 of this article,
watercourse State concerned shall, when the need arises, enter into
consultations in a spirit of cooperation.
3. The weight to be given to each factor is to be determined by its importance in comparison with that of other relevant factors. In determining what is a reasonable and equitable use, all relevant factors are to be considered together and a conclusion reached on the basis of the whole.

**Article 7: Obligation Not to Cause Significant Harm**

1. Watercourse State shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.

2. Where significant harm nevertheless is caused to another watercourse State, the States whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures, having due regard for the provisions of articles 5 and 6, in consultation with the affected State, to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation.

**Article 8: General Obligation to Cooperate**

1. Watercourse States shall cooperate on the basis of sovereign equality, territorial integrity, mutual benefit and good faith in order to attain optimal utilization and adequate protection of an international watercourse.

2. In determining the manner of such cooperation, watercourse States may consider the establishment of joint mechanisms or commissions, as deemed necessary by them, to facilitate cooperation in existing joint mechanisms and commissions in various regions.

**PART III. PLANNED MEASURES**

**Article 11: Information Concerning Planned Measures**

Watercourse State shall exchange information and consult each other and, if necessary, negotiate on the possible effects of planned measures on the condition of an international watercourse.
Article 12: Notification Concerning Planned Measures with Possible Adverse Effects

Before a watercourse state implements or permits the implementation of planned measures which may have a significant adverse effect upon other watercourse States, it shall provide those States with timely notification thereof. Such notification shall be accompanied by available data and information, including the results of any environmental impact assessment, in order to enable the notified States to evaluate the possible effects of the planned measures.

Article 13: Period for reply to Notification

(a) A watercourse State providing a notification under article 12 shall allow the notified States a period of six months within to study and evaluate the possible effects of the planned measures and to communicate the finding to it;

(b) This period shall, at the request of a notified State for which the evaluation of the planned measures poses special difficulty, be extended for a period of six months.

Article 15: Reply to Notification

The notification States shall communicate their findings to the notifying State as early as possible within the period applicable pursuant to article 13. If a notified state finds that implementation of the planned measures would be documented explanation setting forth the reasons for the finding.

Article 17: Consultations and Negotiations Concerning Planned Measures

1. If a communication is made under article 15 that implementation of the planned measures would be inconsistent with the provisions of articles 5 or 7, the notifying State and the State making the communication shall enter
into consultations and, if necessary negotiations with a view to arriving at an equitable resolution of the situation.

**PART IV. PROTECTION, PRESERVATION AND MANAGEMENT**

*Article 20: Protection and preservation of Ecosystems*

Watercourse States shall, individually and where appropriate, jointly, protect and preserve the ecosystems of international watercourses.

*Article 21: Prevention, Reduction and Control of Pollution*

1. For the purpose of this article, “pollution of an international watercourse” means any detrimental alteration in the composition or quality of the waters of an international watercourse which results directly or indirectly from human conduct.

*Article 24: Management*

1. Watercourse States shall, at the request of any of them, enter into consultations concerning the management of an international watercourse, which may include the establishment of a joint management mechanism.

2. For the purposes of this article, “management” refers, in particular, to:

(a) Planning the sustainable development of an international watercourse and providing for the implementation of any plans adopted; and

(b) Otherwise promoting the rational and optimal utilization, protection and control of the watercourse.

**(B). INTERNATIONAL WATER TREATIES**

6.3: WATER TREATIES ON EUROPEAN CONTINENT

Europe was the first continent which witnessed sharp differences over the sharing of waters of international rivers as the thrust for harnessing water for industrial and economic development in the 19th century gained momentum. In most case these disagreements were solved through
negotiations. The agreement between Turkey and Austria in 1619 over Danube River and between Germany and France in 1697 over Rhine were among the early landmarks in the making of modern International Law on navigation (Berghese, 1990: 307). Much later, in 19th century two commissions were setup—the European Commission on the Danube and the Central Commission on the Rhine—to regulate navigation on these two rivers (Basset, 1932: 628). The Rhine and Danube Commission were primarily administrative bodies related with navigation issues.

In 1916, Holland, affronted with the final act of the Congress of Vienna, strived in the name of its sovereignty to render delusory the rights of the riparian states of the Rhine. Between 1816 and 1956, Germany concluded approximately twenty water treaties with its neighbours. The principle that was recognized in all these treaties was that no state may take measures on its own territory concerning an international water course which will affect the flow of water in the territory of another state to the disadvantage of the latter. This rule has come to be recognized in International Law (Berber, 1959: 140). For instance, article 21 of the treaty between Germany and Czechoslovakia regarding frontier waters stated that if an installation is likely to cause any considerable or permanent change in the flow of a frontier water course or stream intersected by the frontier, each of the two states shall take account of the legitimate claims of the intersected parties in the other state (League of Nation Treaty, Vol 109: 219). Similar provisions are to be found in the treaties between Germany and France, and the Grand duchy of Luxembourg, relating the Upper Rhine and the Moselle respectively (Berber, 1959: 75). Similar principles came into the Berne Convention of October 4, 1913, between France and Switzerland. Article 4 provides that the dam to be constructed would operate in accordance with “a set of rules agreed between the two government with a view to avoiding any risk of floods and any damage to the plant upstream, and so far as possible,
mitigating down stream the detriment which may result from the changes in
the water flow” (Smith, 1931: 178).

The Principle of limited territorial sovereignty is to be found in the
convention between France and Italy of December 17, 1914. In Articles 1,
and 3 of that treaty, both parties declare that they will avoid using or
allowing the exploitation of the Raya river and its tributaries in the sections
only under their jurisdiction unless prior concurrence in given.

From the foregoing analysis of some of the European water treaties
are important principle becomes apparent i.e., each state possesses rights of
sovereignty. However this right is limited by a second consideration which
is the duty not to injure the rights of the co-riparian state (British & Foreign

6.4: THE AMERICAN CONTINENT

The American Continent too witnessed sharp disagreement over the
sharing of river waters in the 18th and 19 centuries. The treaties signed on
the European Continent at times provided the basis for cooperative action
with regard to allocation of river waters. However in some cases the
situation demanded a completely new set of ideas and rules which had to
take into account the particularities of a specific situation.

For instance, the Jay treaty of 1794, concluded between Great Britain
and the United States in connection with navigation of boundary waters is an
important landmark in the evolution of international rules regarding water
rights. It was mutually agreed, that “both parties living on both side of the
boundary should be free at all times to pass and repass by land or inland
navigation into respective territory of each country; to navigable all the
lakes, rivers, and water thereof, and freely to carry on trade on trade and
commerce with each other (Bloomfield and Fitzgerald, 1958:2-3). A return
to the North American scan shows united attempts to develop machinery for
the settlements of boundary water problems.
Another milestone in the evolution of International River Law is the treaty of Washington signed between United States and Mexico in 1906. In 1894 a dispute started as a result of the change in the course of the Rio-Grande in the United States to the detriment of Mexico’s interest in the river. The Mexican Government protested against the injury caused to its existing interest claiming that, the principles of International law would from a sufficient basis for the rights of the Mexican inhabitants of the bank of the Rio-Grande (Griffith L. William, 1959:3). During the late 19th century and the early 20th century demands upon the waters of the Rio-Grande were increasing and friction between the United State and Mexico over the control of the river waters gathered momentum (United States treaty Series, No.455: 23).

Negotiations between US and Mexico ultimately culminated the treaty of water. The United States renounced de-facto, if not demure the principle of absolute sovereignties (Sevett, 1952: 114). The convention of May 21, 1906 provided that Mexico would receive a limited a quantity of water from the Rio-Grande. Article 4 of this treaty makes it clear, however that the supply of water to Mexico “should not be construed as recognition by the United States of any claim on the part of Mexico to the said waters” (Saliba, 1968: 52).

The US shares waters and shares longer boundaries related to water with Canadian. The two were at loggerhead for some time over the issue of water rights. In most case, the United State, being the riparian state, defended its case by invoking the principle of absolute territorial sovereignty, although Canada as the lower riparian state, upheld the principal of territorial integrity, where by restriction are placed on another states right to change the natural flow of international waterway without perior occurrence. As a matter of fact, Canada explained the United States attitude as contrary to international law (Chacko, 1932: 74-75; Gibbans,
An important boundary waters treaty was signed between them in 1889. The treaty defines boundary water in its preliminary article as:

“The waters from main shore to main shore of the lakes and rivers and connecting waterways, or the portion thereof along which the International boundary between the United States and the Dominion of Canada passes including all bays, arms and inlets thereof, but not including tributary water which in their natural channels would flow into such lakes, rivers and waterways, or water rivers flowing across the boundary” (Bloomfield, 1958: 17).

An International Joint Commission (IJC) was set up in 1909 under the provisions of this treaty to resolve disputes relating to both boundary and transboundary waters. The boundary water treaty and IJC dealt the matter on diversion of flows for irrigation purposes and power generation as well as, reduction of municipal and industrial waste discharge, sharing water costs and benefits concerning the water issues (Mackay, 1928: 293).

The Columbia River, with originates in Canada and which flows into the United States, has been the scene of large scale of hydroelectric generation and irrigation development. The International Joint Commission established technical studies and on the basis of this was able to draw up plans for the development of the river on cooperative basins. The commission also, at the request of the two governments, submitted a report relating to the principles to be applied in determining the allocations of benefit and the distribution of costs which would result from co-operative development of the Columbia basin. The Columbia River treaty is an example of an effective use of the federal approach in context of International basin development and settlement of water dispute. Under the federal approach crucial and divisive problems can be solved with mutually satisfactory results (Martin, 1963: 71).
6.5: AFRO-ASIAN CONTINENT

International water treaties in the Afro-Asian continent are of relatively recent origin and the earliest treaty that was concluded in this part of the world was signed in 1929 between Egypt and United Kingdom. This treaty was in connection with the diversion of the waters of the Nile River in equal proportion. The British Government suggested that it should be based on following considerations: the legal principle is that the waters of Nile river, the combined flow of white and Blue Nile and their branches should be accepted as a single unit, planned for the use of people inhabiting their banks according to their needs and capacity to benefit from the Nile (Saliba, 1968: 56-57).

In November 1956 an agreement was signed between United Arab Republic and Sudan in the context of the Nile river waters. The main intention of this treaty was that water must be used according to actual need and for the purpose of development. The treaty assigned an estimated 555,000 million cubic meter of waters per year to Egypt and 18,500 million cubic meter to the Sudan. The treaty also provides for the creation of a Permanent Joint technical Commission for the planning of Nile River as single hydrological unit to be developed on the basis of mutual benefit for all riparian states. At present, the 1959 Nile agreement will continue to be the principal regulatory instrument for managing waters of Nile river (Naff & Maston: 149).

6.6: THE INDUS RIVER BASIN AGREEMENT

In 1939 a controversy arose between the province of Sind and province of Punjab as result of the diversions of the Indus River. Sir Bengal Rao headed a commission which was established to look into and to make recommendation towards its settlement.

Just after the partition of India, a conflict arose between India and Pakistan regarding the water allocation of Indus basin. A treaty was
concluded between these two counties on May 4, 1948 for the utilization of waters of Indus basin. This treaty which was signed with the aid and advice of the international Bank of Reconstruction and Development laid down the following rules.

The Western river Indus, Jhelum and Cheneb and its waters area exclusively useful for the development Pakistani territory, except the Jhelum’s flow in Kashmir which is significant for the development of Kashmir.

In the case of the eastern rivers Rabi Beas, and Sutlej India would utilize their waters except for a specified transition period during which India would partially supply waters to Pakistan. Each country would construct the works located on its own territories which are planned for the development of supplies (United Nations Treaty, 1942: 54).

The cost of such works would be born by the country to be benefited thereby. An appropriate procedure would be established for adjusting or arbitrating dispute related to allocation of cost under this principle (Quoted in Berber: 106). Per management Indus Commission was set up to settle the dispute over water as the provisions of the treaty.

6.7: THE GANGES WATER AGREEMENT

The Ganges water Agreement was signed on November 5, 1977 over the sharing of Ganges waters at Farakka. Its aim was also to find a long term solution for augmentation of the dry season flows of Ganges. Bangladesh and India visualized divergent solution as to how to increase the dry season flow of Ganges River. The proposal of India was transfer of water from the Brahmaputra River in Assam through a long canal passing through Bangladesh. On the other hand Bangladesh proposed storage dams in the upper reaches of the Ganges River in Nepal and India that would store wet season flow for release during the low flow period. Bangladesh was unwilling to permit the country’s second major river to fall under the
physical control of India, which the diversion structures at Jhogighopa and the outfall at Farakka would involve. Official, Bangladesh has rejected the link canal proposal as technically and economically unfeasible and ecologically ruinous. The Ganges water agreement of 1977, nevertheless, has provided a solid foundation for a durable settlement to be reached. Pending a permanent settlement the agreement of 1977 can be beneficial for the existing dry season flows (Falkenmark, 1986: 93-94).

**(C). INTERNATIONAL WATER TREATIES IN WEST ASIA**

In the West Asia today, five elements of water legislation are discernible and they are based upon:

1) Local customs, based in part on legal principles perhaps dating back to earlier antiquity, which may still dominate the water relationships in many parts of the areas.

2) Principles of religious law often provide a theoretical super-structure which has an independent legal existence overshadowed by ancient customs, on the one hand, and more recent legislation on the other.

3) Ottoman law which has survived in many parts of the West Asia and remains an important factor for water laws.

4) The Independent states of the region which have also passed more recent legislation, some of it enacted after these states attained independence (Hirsch, 1956: 147).

According to Ergil (1991), Arab countries do not like to be dependent on another power, especially about water which appears to be very important from a socio-psychological point of view. Turkey's Southern neighbours both see the Euphrates-Tigris as the waters of a common basin and, as countries of this basin, they wish to use these waters and share them according to their needs. Current international law given the right of ownership of waters flowing within the borders of a country to that country
but, while implementing this, it adds a principle that one should not cause any loss to create a disadvantageous situation for another country. In this case, the country of origin, Turkey, has certain advantages and international law gives certain rights to the first country in the chain as owner of the water (Ergil, 1991: 52). Both Syria and Iraq, thus are demanding extra water from Turkey, but are not renovating their irrigation systems, improving watering techniques nor adopting water saving methods. It is therefore not reasonable for Turkey to respond to their southern neighbours demands which could be interpreted as “we need this much water therefore turkey ought to share it with us according to our needs alone”.

The Turkish government insists that its southern neighbours use available water with minimum waste and then come forth with realistic demands for more water if it is needed (Ergil, 1991: 55).

The Euphrates and Tigris are not international waters, and nobody had any claims on resources within Turkish boundaries” (Tekeli, 1990: 211). According to Ferruk Amik, the Turkish director general of the state Hydraulic Works (DSI): “Syria and Iraq insist on their right to share the water. We reject this term of ‘share’. It is a Turkish river so we are not required to share any of the water” (Frankel, 1991: 292).

Turkey differentiates between the notions of “International Waters” and “transboundary flows” declaring GAP Rivers as “transboundary”. This Turkish approach is based on two assumptions;

1) Turkey distinguishes between “International and transboundary” watercourse in the following ways. An international watercourse has its opposing banks under sovereignty of different countries and such waters are shared by the riparian states through the “median line”, while a transboundary watercourses crosses common political borders.

2) The Euphrates-Tigris rivers must be considered as one transboundary watercourse system, since they are linked by the Tharthaz canal before
merging as Shatt al-Arab, allowing the substitution Tigris waters for demands from the Euphrates (Tekeli, 1990: 213).

Another Turkish argument, according to Inan, is based on the length of the Euphrates River in each basin state, the area of the drainage basin and the contribution of water. Turkey contributes 89 percent of the annual flow of the Euphrates and Syria contributes only 11 percent of this flow. Since 1987 Turkey has delivered 500 m$^3$/ sec which are more than 50 percent of the water. In other words, Turkey has agreed to leave more water for the downstream states than they contribute to the system. On the other hand when this whole project came into force, Turkey left two thirds of the annual flow of the Euphrates and Tigris waters which was sufficient for both Syria and Iraq. These rivers have to be considered as falling from a single basin. Prior to the Gulf crisis Iraq was selling some of this water to Kuwait. By 1992 Turkey consumed only 1.5 percent the flow but when the GAP project is completed, Turkey will consume about one third of the whole consumption. Turkey’s contribution to both rivers is 19 billion cubic meter per year from the Euphrates basin, which amounts to 49 billion cubic meter per year. Turkey is going to consume one third of this 18 billion cubic meter per year, 36 billion cubic meter per year of water will be allocated to the lower riparian states, but only if they accept the equitable principles which were requested in the draft articles of the International Law Commissions.

“The Turkish principle of equity relates to actual needs. Syria indicates a need of 13 billion cubic meters per year. According to European publications its actual need is only 8 billion m$^3$. Iraq demands 26 billion cubic meters of waters and this means that it is claiming more than it needs. If modern techniques are used, Iranians Syrian demands for water will decrease. Turkey insists on considering both the Euphrates-Tigris basins as a whole. They both originate from Turkey which makes the greatest contribution to them. The water from the Euphrates-Tigris should be more
than sufficient for Iraq especially after constructing the Tharthar project which links Euphrates-Tigris river” (Inan, 1992: 30).

Treaties regarding international rivers in West Asia have been patterned on the lines of American and European water treaties. The earliest treaty on West Asian water resources was concluded in December 1920 between France and Britain involving the Euphrates-Tigris, Jordan and the Yarmuk rivers. The treaty the practice where the vested as well as reserved rights of riparian states were protected. Under Article 3 of the treaty two contracting parties would agree to nominate a commission to examine a plan of irrigation organized by the government of the French mandatory, territory the execution of which would be of a nature to diminish in any considerable degree of the Tigris and Euphrates water at the point where they enter the British mandate in Mesopotamia” (Saliba, 1968: 60). Article 8 of the same treaty further has become essential for the agreement that a second commission was to be appointed to invigilate uncommon the employment, for the irrigation purposes and the production of hydroelectric power, of the waters of the upper Jordan and the Yarmuk and its tributaries, after satisfaction of the needs of the territory under the French mandatory power.

In 1921, the Treaty of Friendship was concluded between Persia and Russia. The two countries state that “they shall have equal rights of usage over the Atrak River and other frontier river and Waterways” (United Nations Treaty, vol.9:401). An important West Asia treaty was signed between the United Kingdom and France on February 3, 1922 in connection with the utilization of the Yarmuk waters proportionately. This treaty recommended that the “inhabitants of Syria and Lebanon shall have the same fishing and navigation rights on Lake Huleh and Tiberias and the river Jordan as the people of Palestine ((United Nations Treaty, Vol.9: 401).

The Final protocol of the Franco-Turkish delimitation commission, May 3, 1930, recommended that: “where as its neighborhood on the Tigris
imposes on the riparian states specific obligations, it becomes necessary to establish rules in connection with the rights of each sovereign state in its context with the other”. All questions, for example-navigation, fishing, industrial and agricultural utilization of the waters, and the policing of the river shall, be solved on the lines of complete equality ((United Nations Treaty, Vol.37: 207-291). Internationally the general rule for Boundary River is that the boundary follows the thatweg. It is considered to assure access to navigation to both countries. In the case of the Shatt, however, Iraq can make a compelling appeal to equitable considerations of the sort often in deciding marine boundaries (Naff & Maston, 1990: 178).

On March 29, 1946 the Treaty of Friendship and Good neighbourly Relation was concluded between Iraq and Turkey. It declared that both countries have importance of conservation works on the Tigris and Euphrates with it branches, in order to insure that flow of the two rivers with a view to avoid the danger of floods during the annual periods of high water ((United Nations Treaty, Vol.84: 24). The treaty has significance for cooperation on the part of both countries on matters in the light of the exchange of information on the water-flow records and other data of the two rivers. Turkey moreover, agreed to grant Iraq the right to construct dams and other similar works on sites which are located in Turkish territory with the stipulation that Iraq will defray the cost of the constructions. Article 4 of the treaty stated that the above mentioned work shall be the subject of a separate agreement in respect of its site, cost operation and maintenance, and its use by Turkey for purposes of irrigation and power production. Under Article 5, turkey agreed to keep Iraq informed of plans for the construction of conservation works on either of the two rivers or tributaries. On June 4, 1953, Syria and Jordan signed a treaty concerning the joint development and utilization of the Yarmuk River (Saliba, 1968: 61). On July 6, 1987 an agreement was signed on economic cooperation between Turkey and Syria. Turkey was infavour of ad-hoc bilateral joint ventures in water and energy
development and was prepared to cooperate on data management (Beschorner, 1992-93: 273).

Following, in Chronological order, is a review of the international instruments governing the uses and the sharing of Nile waters. They are eight all in all, but are important at the outset to shed some light and make a few points of clarification as to the signatories and the nature of those treaties.

The first six agreements, ending with the 1929 Agreement, have to do with the territorial status of the contracting parties. It is an agreed principle of international law that such territorial status agreements constitute an obligation and a limitation on the contracting parties’ territory, unaffected by a change of sovereignty.

The following treaties and instruments which govern and regulate the juridical status of an international river, the Nile, do not contain any exceptional or illegal principle. Rather, they merely confirm the principles already accepted by international jurisprudence and international norms, as well as the historical acquired rights which Egypt or some other country, my have attained over many thousand years of dependence on the Nile as its sole life.

1) The protocol between Great Britain and Italy of 1891, for the demarcation of their respective spheres of influence in eastern Africa. In its third article, the protocol stipulates that Italy pledges not to construct on the Atbara River any irrigation work which might significantly affect the Atbara’s flow into the Nile.

2) Treaties between Great Britain and Ethiopia; and between the first and Ethiopia and Italy, relative to the frontiers between the Anglo-Egyptian Sudan, Ethiopia and Eritrea, signed in Addis Ababa on May fifteenth 1902. in the third article of these treaties, Emperor Menelek second, King of Ethiopia engages himself towards great Britain not to contract or to allow to
be constructed any work across the Blue Nile, Lake Tana or the Sobat River, which could arrest the flow from their waters into the Nile, except in agreement with the Government of Great Britain and the Government of the Anglo-Egyptian Sudan.

3) Agreement between Great Britain and the Congo free state (now Zaire) signed in London on May 9th 1906 bringing modification to the Brussels agreement of May 12th 1894. In its third article the 1906 Agreement the Government of the Congo free state undertake not to construct or allow to be constructed any work on or near the Simliki or Isango rivers, which might reduce the volume of waters flowing into Lake Albert except in agreement with the government of the Anglo-Egyptian Sudan.

4) Exchange of Notes between the United Kingdom and Italy in December 1925, wherein the Italian Government recognize the previously acquired hydraulic rights of Egypt and the Sudan in the waters of the Blue and White Niles, and engage themselves towards the other contracting parties not to construct on the head waters of the Blue Nile or the White Nile or their tributaries and affluent, any work which might substantially modify their flow into the main river.

5) Agreement between Egypt and Great Britain signed in 1929. This treaty stipulates that no work of any kind may be undertaken on the Nile, its tributaries or on the lakes which from its source, without Egypt’s consent; and in particular if these works are related to irrigation or power generation, or if they affect the volume of waters which reach Egypt, or in any other way be detrimental to Egypt.

6) Exchange of notes between Egypt and Great Britain the period from July 1952 to January 1953, regarding Egypt’s participation in the construction of the Owen dam for the generation of hydro-electric power in Uganda. It was agreed to heighten the Owen dam so as to raise the water level in Lake Victoria. Compensations were agreed upon for Uganda whose lands would
be detrimentally affected by the rise of the water level in Lake Victoria (Howell & Allan, 1990: 224-230).

Nile states may have different views of what constitutes utilization in an “equitable and reasonable manner”. For example, Egypt, which uses the greatest amount of Nile water, may consider its utilization equitable because it has no other source of water. In fact, Egypt argued during the Working Group negotiations that availability of other water sources should be a factor for determining equitable utilization under article 6 (McCaffrey, 1996: 100). Although the Working Group did not entirely accept Egypt's suggestion, it did include “the availability of alternatives, of comparable value, to a particular planned and existing use” as a factor in Article 6. Egypt also might consider its use equitable because it was the first to make use of the Nile waters. It could use the “existing or potential use” factor to support that argument. In addition, Egypt might argue that “the population dependent on the watercourse” factor weighs in favor of protecting uses that its population has been dependent on over time. Finally, it could argue that it is using water equitably because it has advanced systems for “conservation” and “economy of use” (UN Watercourses Convention, May 1997 Art. 6: 31).

Ethiopia, on the other, may have a different view of what constitutes equitable use. Because its territory contributes eighty-four percent of the Nile flow, Ethiopia may believe that it is entitled to a greater share of Nile waters. The contribution of water from each watercourse state, however, is not a relevant factor for determining equitable utilization under Article 6 of the Convention. At the Working Group level, India sought to include this as a factor in the Convention, but the Working group declined to include it in Article 6 ((McCaffrey, 1996: 100). Ethiopia, however, could argue under Article 6(a) that its significant contribution must be considered as a “relevant” “hydrographic” or “hydrological” factor. In addition, other Article 6 factors weigh in Ethiopia’s favor. Ethiopia could argue that it is entitled to an amount of water equitable for “the population dependent on
the watercourse”. In addition, the second Article 6 factor, “the social and economic needs of the watercourse states concerned,” is favorable to Ethiopia and all Nile states that have a lower per capita income than Egypt; (U.N. Watercourses Convention, May, 1997: 67) half of the Nile states are among the ten poorest countries in the world (Nile Basin Initiative,, 1998: 2-10). Due to aridity, Ethiopia, just like Egypt, experiences a lack of “availability of alternatives, of comparable value, to a particular planned or existing use”. In addition, Ethiopia could argue under Article 6(d) that “the effects” of Egypt’s “use” on the amount of water that Ethiopia may use is inequitable. Thus, Egypt and Ethiopia could use the Article 6 factors to come to different results on equitable utilization.

Article 6(g) also implies that the uses of different countries must be compared to determine equitable use. Thus, the “availability of alternatives, of comparable value” to water-intensive Egyptian agricultural projects near the Red Sea could be compared to the “availability of alternatives” to withdrawal for Ethiopian drinking water needs. This factor seems to weigh in favor of Ethiopia with respect to equity. “Comparable value,” however, is an ambiguous term, and thus Egypt could argue that it has no other projects available of “comparable value”. The Convention does not specify how this term should be used. Thus, as with the other Article 6 factors, the same factor easily can be formulated to support either side in the same debate. Disputes over the application of Article 5 and 6 are supposed to be answered under the Convention’s dispute settlement provisions, but such a process could be cumbersome. Because it is so difficult to determine how to apply the factor of Article 6, they should just be used as considerations in the negotiation of a Nile agreement, but not as a particular test for equitable utilization by Nile states (U.N. Watercourses Convention, May, 1997: 34).

It is obvious that International water treaties in West Asia are few even the one’s that have been signed are of a general nature. Many questions still remain unanswerable and there seems to very little effort to deal with
contentious issues. Do upstream state within which a river originates, have priority over down stream states? Do population growth and other needs in one riparian state it priority over another? Should a riparian state be demanded to consume water in more economical ways? Should it be demanded if one riparian state to use only certain sources of waters and leave specific sources for supplying the needs of other? These and related question are as yet unanswered in the region and there is very little by way of international water treaties to serve as a guide. The lack of political understanding and intense competition for regional influence is an important factor hindering the evolution of mutually acceptable water treaties in the region. Coupled with this is fact the subject of water raises unique emotions. The result is that each country prefers to go it alone and all pragmatic solution has been sacrificed at altar of populist and sometimes grandiose schemes. It is only in the 1990’s that the states in the region have shown some degree of willingness to eschew unilateral action and work out solution on a cooperative basis in the light of existing international laws and conventions (Beschorner, 1992-93: 273).