CHAPTER: V

CONCLUSION
The issue of sharing river water and problem of water shortage has become acute in the West Asian region. These problems are likely to become critical unless urgent and immediate action is taken both to increase and to conserve existing supplies of water resources. West Asia is a developing arid region and is facing the problem of water crisis. It has arid or semi-arid climate with average annual rainfall levels of less than 250 MMY. It is also a cyclone dominated area. Some parts of the region which are near the Mediterranean Sea, experience a special type of climate called the Mediterranean climate. There winters are mild, summers are warm and rainfall is during the winter season. There are three major drainage basins: the Jordan drainage basin, the Litani drainage basin and the Euphrates-Tigris drainage basin.

The Jordan River is the most important source of water in the Jordan basin. The river flows through Jordan, Syria, Lebanon and Israel. The length of this river is 156 miles of which 73 miles is under Israeli controlled territory. Its total flow is 1880 MCMY of which 77 per cent is in the Arab States and 23 per cent in Israel. The Jordan's northern headwaters have three tributaries- the Hasbani in Lebanon, the Dan in Israel and Baniyas in Syria. The major tributary of Jordan is the Yarmuk. Its annual discharge is 400 MCM. The area of Yarmuk basin is 7,252 square kilometres. Upper Jordan and headwaters of Yarmuk are major source of ground water. The Jordan basin includes also Israeli captured territories West Bank, Gaza Strip and the Golan Heights. The Jordan system discharge an average annual flow of 1850 MCM into the Dead Sea. Generally high quality of water is received by the Jordan’s headwaters. As the Jordan proceeds down into the Rift Valley toward the Dead Sea it becomes saltier.

For centuries, the Jordan River has been a symbol of life and peaceful coexistence in West Asia. As water comes down the southern slopes of Jabel-el Sheikh, it
stops for a time in Lake Huleh and the Sea of Galilee and then it meanders southward through the Jordan Valley into the Dead Sea. With the passage of time, the emergence of Zionism demanding exclusive control over historic Palestine sowed the first seed of discord in the basin. In 1897 Theodor Herzl wanted the creation of a Jewish State for the Jews. The First Zionist Congress was held at Basle on August 27, 1897 which demanded the creation of a National Home for Jews in Palestine. The outbreak of the First World War provided the Zionist movement the much needed opportunity to work for its goal. The defeat of the Ottoman Empire in World War I led to a redrawing of the map of West Asia. At the Paris Peace Conference held in 1919, Britain a long time ally of Zionism was given the mandate over Palestine and Transjordan and France got mandatory powers over Syria and Lebanon. It was during twenty five years of mandatory rule that the foundations of a Jewish state was firmly laid in Palestine. With the active connivance of the British authorities, massive Jewish immigration from Europe to Palestine took place during this period.

The indigenous Arab population of Palestine protested this massive influx of foreigners and several times this protest degenerated into violence. However, Arab protest had little if any impact on Jewish immigration which continued unabated. After the Second World War, Britain, unable to handle the explosive situation in Palestine decided to terminate its mandate and handover Palestine to the United Nation. The UN decided that partition of Palestine into an Arab and Jewish State was the only logical solution to the problem of Palestine. Thus the State of Israel was created by the UN in June 1948.

The Arab-Israeli War started in early 1948. It was concluded by four Armistice Agreement in 1949. Form early 1920’s, a number of plans have been put forth for the utilization of the water of the Jordan. However, till now none of them could be implemented due to differences among the riparian states. Some of the important plans were: Ionides survey (1939), Lodermilk Plan (1944), Hays savage plan (1948), McDonald plan (1951), Cotton plan (1954), Arab plan (1954), Baker Harza plan (1955), the Unified Johnston’s plan (1955), Israeli National Water Carrier plan and the Jordan headwaters diversion (Arab League plan 1964).
Israel considers the control over water supply a strategic instrument and defensive technique that greatly affects regional balance of power. Predictably, Israel's policy has generated a lot of tension as the riparian states have opposed Israel's attempts to control the water of the River Jordan. After its failure to acquire water of the Jordan in cooperation with the Arab State, its embarked on its National Water Carrier project. A major feature of Israeli water project was in connection with irrigation of the Negev and its articulated water policy. The National Water Carrier Project was started after the armistice agreements of 1949.

The Litani river originates in the south of Lebanon and is a national river in the republic of Lebanon. The Litani is 170Km long and has narrow ridge and width approximately 6km. Its basin has been divided into three major parts; the Upper basin, Middle basin and Lower basin. The area of its basin covers 2,290 sq. km that separates the Litani from the Hasbani river, a tributary of Jordan. The total flow of Litani is approximately 700 MCMY, of which Upper basin contributes 325 MCM, the Middle basin adds a net flow of 315 and the lower basin 60 MCM per annum. The Awali river is also a major contributor in the context of waters of Lebanon.

The early 20th century, Israel has been showing interest to acquire the Litani waters. In February 1919 the World Zionist Organisation (WZO) placed before the Supreme Council at the Paris Peace talks, a proposal concerning the boundaries of Palestine. It started from the Mediterranean coast just south of Sidon, running in easterly direction across the Litani river and included whole of the catchment area upto it northern most source in Rashayya before turning south towards Golan Heights. The Zionist proposal was opposed by France which insisted upon the original Sykes-Picot line.

The joint study approved in 1943 therefore, that most of the water be diverted from a point where the river takes a westward bent through a tunnel into Palestine. In exchange for water Lebanon would receive all or part of the power produced by the water drop from the mountains to the Jordan Valley. The study heartened the Zionist, whose dream of Negev development could not be fully realized without the Litani waters. In 1944, W.C. Lowdermilk proposed a Jordan Valley Authority (JVA) on the
lines of the Tennessee Valley Authority (TVA). The details of JVA were developed by James Hays, Chief engineer of TVA. Lowdermilk noted the possibility of tapping the Litani and diverting some of the water to the Palestine coast and Negev. Soon, these scheme however, lost relevance because of establishment of the state of Israel in May 1948. The establishment of Israel immediately sparked off the First Arab Israeli War. The Israeli army occupied southern Lebanon up to the point where the Litani takes a West ward bent, when negotiation for a General Armistice started, Israel tried to link its withdrawal form Lebanese territory with guaranteed access to the waters of the Litani. Israel’s attempt to bring in the Litani into a regional water development scheme did not find favour with the Americans. Waters of the Litani have been a source of great attraction for the Jewish State since 1948. Prior to the establishment of the state of Israel, the Zionist Agency in Palestine made every possible efforts to include the Litani river within the boundaries of the future Jewish State. However, they failed in their efforts and the Litani remained within Lebanon. It was only in the late 1970’s that Israel could manage to obtain a foothold on the Litani when it occupied a portion of Southern Lebanon. With the second Israeli invasion of Lebanon in the early 1980’s, this occupation was further, expanded and consolidated. Israel carried out extensive hydrological and technical studies, aimed at diverting part of the Litani’s water into northern Israel. In 1990’s several multilateral negotiations were held to solve the problem related to water. The 1991 Gulf War acted as a catalyst in reopening peace talks in the region. The first round of the talks between the frontline Arab States and Israel took place in Madrid in October 1991. One of the items on the agenda of the multilateral talks was sharing of river water in the region. At the subsequent rounds of negotiation Israeli government has shown a willingness to withdraw from southern Lebanon in return for some amount of assured water supply from the Litani. The Lebanese government too has indicated that it is not averse to sharing water with Israel for its better economic development.

The longstanding problem of sharing Litani waters, can only be solved by adopting a creative approach in the frame-work of regional cooperation. Both Israel and Lebanon can workout a formula whereby water can become an instrument for promot-
ing peace and regional development. What is needed is a willingness to make mutually beneficial compromises on the part of Beirut as well as Tel-Aviv. Without such a positive attitude it is extremely unlikely that the vexed question of sharing water can ever be solved in this turbulent region.

In January and May 1992 multilateral talks were held at Moscow and Vienna respectively. At the Vienna talks the Jordanians, Palestinians and Israeli delegations agreed to cooperate and exchange data. An interim agreement on sharing groundwaters of West Bank was signed between the Palestinians and Israeli in September 1993. The following year in 1994 the Israeli delegation at the multilateral agreed to discuss water rights.

The Euphrates and Tigris are the major rivers in the Euphrates-Tigris basin. The Euphrates flows through Turkey, Syria and Iraq. The Euphrates is 1,480 miles in length from the confluence of Karasu and Murad-Suyu to Basra. Three major tributaries of Euphrates originate in Turkey—Khabur, Sajur, and Balikh rivers. The Firat is the main stream and it has four important branches the Karasu, the Murat, the Munzur and the Peri. The mean discharge of Euphrates is 31,820 MCMY. The annual discharge differs from 16,871MCM to 43,457MCMY. The maximum discharge is 164,000MCMY. The Euphrates carries about 6,100 ppm silt by weight and it is deposited in the inland delta.

The Tigris flows in southern Turkey and comes directly into Iraq from Turkey and its total length is 1,718km. The major tributaries are the Great Zab, the Lesser Zab, Diyala and the Adhaim. The Tigris carries an average of 42,230MCM water discharge. The minimum discharge is estimated to be 5,140MCMY, and the maximum 44,000MCMY. During times of flood, the Tigris receives about 20,000ppm sit by weight. The Tigris and Euphrates together drains 808,000sq.km.

The Euphrates and Tigris rivers have been a source of livelihood since 4000B.C. In this basin various old civilization have developed and thrived. The region is called as the "cradle of civilization". The Mesopotamian and Babylonian civilizations have flourished in the region. From the beginning of this century, the sharing states of Euphrates-Tigris drainage basin have all formulated plans and implemented projects to regulate the flood waters of Euphrates as well as utilize its water for multipurpose
projects. In 1913 a Hindiyia barrage was constructed on the Euphrates to divert water of Euphrates into a canal, and increment in the general water level of the Euphrates. In the 1950's a second barrage was made at ar-Ramadi. Its main purpose was the diversion of Euphrates flood water into Lake Habbaniyah and the Abu Dibbis natural reservoirs to avert the danger of flood. The Euphrates dam was completed in 1973 with the Soviet help and cooperation. Turkey started work on a series of multipurpose dams. The Keban dam was constructed in 1974 on the Euphrates river with a total capacity of 1,650 MCM, of which 360 MCM is left for storage. The dam at Karababa, renamed the Ataturk dam, is intended to supply irrigation water for 3000,000 ha (2,964,000 dunams) in the Severck-Hilian Upper Martin and Nusaybin Cizre areas. The total capacity of Ataturk dam is 48,700 MCM.

Several dams and barrages have also been constructed on the Tigris river. In Baghdad, both rivers flow in distinct and well defined valleys at a distance of 40km from each other. Tharther barrage, similar to the Ramadi, was built in 1955-56 at Sammara on the Tigris. It has capacity of diverting 28,382 MCMY of water in the direction of the depression of wadi and its storage capacity is 72, 840 MCMY. The Dukhan dam was constructed in 1959 on the Lesser Zab river and has total capacity of 6,300 MCMY. Further south, the Darbandi Khan dam was built with in 1961 on the Diyala River with total storage capacity 3,250 MCMY. During the dry seasons when the Turkish and Syrian dams impounded part of the Euphrates spring flood, a major crisis developed between Syria and Iraq that brought the two counties to the brink of war. Iraq and Syria traded hostile statements in which Iraq threatened to take any action necessary to insure the Euphrates flow and Syria protested that it was passing on to Iraq 71 per cent of the water it received from Turkey.

At the end of April 1975 a technical committee was formed by the Arab League. Which had of representatives from Syria, Iraq and seven other Arabs state. As tension mitigated between Syria and Iraq, a round of hostilities erupted between the riparian states and this time which related to the construction of Karakaya Dam in Turkey. During the late 1970's and early 1980's. Baghdad and Damascus complained against Ankara that it was holding back a main part of the water from the Euphrates for it use.
A committee discussed several times on exchange of hydrological data. But the problem of water allocation has not been solved so far. Turkey’s assertive position on the issue of Euphrates water right is unacceptable to both Syria and Iraq. They have therefore spurned Ankara’s offer of joint ventures as long as their legitimate rights are not recognized by the Turkish government. In the 1990’s the problem of sharing Euphrates water has become more complicated Euphrates rivers for HEP generation and irrigation purpose. The first stage of GAP consists of 13 projects of which 7 are on the Euphrates and 6 on the Tigris. The Euphrates and Tigris are international rivers. Both have immense regional importance. Control of these rivers has become increasingly contentious, as the demand for water an increasing every year, in this dry region. The economic prosperity and regional development of those state are based on them. In late 1960’s and the early 1970’s various difference cropped up between sharing state in connection with the water allocation of two rivers. The relations between Turkey and Syria have been strained many a time, mainly due to the former’s efforts to control the flow of the rivers.

Due to the inability of three riparian states to reach formal agreement to share water the 1970’s witnessed several clashes between Turkey, Syria and Iraq over sharing right. A serious disagreement regarding water flared up in 1975 between Iraq and Syria flow as the outcome of the completion of Syria’s Tabqa dam. During the by season when the Turkish and Syrian dams impounded part of the Euphrates spring flood, a complicated as Syrian and Turkish irrigation works one at the verge of completion as well as sewage and industrial development in the two countries threaten to water lower quality as gone up phenomenally in recent years.

Growing population is also a source of concern as the demand for water for domestic use has deteriorated the water quality and quantity day by day. With the quality and quantity of Euphrates water deteriorating day by day, Iraq is the country most adversely affected.

International Law regarding the sharing of river water resources is still in a nascent stage and a full fledged international legal regime pertaining to this issue can develop only with the cooperation of all riparian states. The development of water
resources on a regional basis or state must involve relevant legislation and subsequent institutions to control that development. In international law, a distinction is drawn between national and international rivers. If a river passes through or along the territory of two or more states it is known as an international river and is governed by the rules of the international river law. If a river flows completely within the territory of a single state then it is a national river.

Europe was the first continent which witnessed disagreements over the sharing of river waters. In the 17th century controversy arose over navigation rights on the Danube and Rhine rivers. This controversy was resolved with the signing of several agreements which have become milestones in the development of international law on navigation. The Rhine and Danube commission were primarily administrative bodies concerning navigation issues. The American continent too witnessed sharp disagreement over the sharing of river water in the 18th and 19th century. The treaties signed on the European continent at times provided the basis for cooperative action with regard to the allocation of river water. 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. There were various treaties signed in connection with the navigation boundary waters in an important landmark in the evolution of international rules regarding water rights. For instance; Jay treaty (1794), Rio-Grande treaty (1906), Columbia river treaty (1909), and Tijuana and Colorado treaty (1944).

International water treaties in the Afro-Asian continent are of relating recent origin and the earliest treaty that was concluded in this part of the world was concluded in 1929 between Egypt and the United Kingdom. This treaty was in the context of the diversion of the waters of the Nile river proportionately among riparian states. The British Government suggested that it should be based on following consideration: The legal principle is that the waters of Nile river, the combined flow of the white and blue Nile and their branches should be accepted as a single unit, designed for the use of people inhabiting their banks according to their needs and capacity to benefit from the Nile.

Just after the partition of India, a conflict developed between India and Pakistan
in relation with the water allocation of Indus Basin. The treaty was signed between these two countries on May 4, 1948 for the utilization of water of Indus basin. The Ganges water agreement was signed on November 5, 1977 over the sharing of Ganges water at Farakka. Its aim was also to seek a long-term solution for a augmentation of the dry season flows of Gangas. The Gangas water agreement of solid foundation for a durable settlements to be reached. Pending a permanent settlement, the agreement of 1977 can be useful for the existing dry seasons flows.

Treaties regarding international rivers in West Asia have been patterned on the lines of European and American water treaties. The earliest treaty in this connection was following: the Franco-British convention concluded in December 1920 involving the Tigris, Euphrates, Jordan and the Yarmuk rivers: It reflects the practice where the vested as well as reserved rights of riparian states were protected. During the mandate, Britain and France adopted several agreement to regulate the flow of international rivers under their jurisdiction to develop upstream consumptive uses in Syria and Lebanon. They agreed to permit Palestinian authorities to do work in Syria for the benefit of down stream users. The mandatory system provided legal machinery for resolving conflicts over water through bilateral consultations. In 1921 the treaty of friendship concluded between Persia and Russia stated that the two countries they "shall have equal rights of usage over the Atrak river and other frontier rivers and water ways". An important West Asian water treaty was signed between the United kingdom and France on 3 February 1922 in connection with the utilization of the Yarmuk waters in equal proportion. The Final Protocol of the Franco-Turkish delimitation commission, May 3, 1930 recommended that: "whereas its neighbourhood on the Tigris imposes on the riparian specific obligations, it becomes necessary to establish rules regarding the rights of each sovereign state in its contexts with other water purpose." In March 1946 the treaty of Friend Neighbourly Relation was concluded between Iraq and Turkey. As per this treaty both countries could carry out conservation works relating to the Euphrates and Tigris in order to regulate the flow of the two rivers with a view to avoiding the danger of floods during the annual period of high water. The main aim of this treaty was both countries can conservation relating
Euphrates and Tigris, in order to regulate the flow of the two river during the annual period of high water.

In June 1953, Syria and Jordan signed a treaty concerning the joint development and utilization of the Yarmuk river waters. In July 1987 an economic cooperation agreement was signed 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. It is obvious that; International water treaties in West Asia are few and even the over's that have been signed are of a general nature. Many questions still remain unanswered and these seems to be very little effort to deal with contentious issues. Do upstream states within which a river originates, leave specific, have priority over down stream states? Do population growth and other needs in are riparian state gave it priority over another? Should a riparian state be demanded to consume water in more economical ways? Should be demanded of one riparian state to use only certain sources of water and leave specific sources for supplying the needs of other? These and related questions are as yet unanswered in the region and there is very little by way of international water treaties regime to serve as a guide. The result is that each country prefers to go it alone and all practical considerations and pragmatics solutions have been sacrificed at the alter 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 workout solutions on a cooperative basis in the light of existing unilateral laws and conventions.

From the foregoing analysis it is apparent that the instead of exploiting the river on a regional basis, each of these states has preferred to go it alone on whatever portion of the river that happens to lie within or along its borders. The result of this approach has been tragic, not only because such an approach is insufficient and uneconomical, but also and perhaps more importantly, such action has the potential of precipitation war among the sharing states of West Asia.

Water, however, has often been seen as the primary strategic factor behind the political and military manoeuvring in region. Under such tensed conditions, issues that might otherwise be managed peacefully can always trigger extreme responses. Water
conflict in West Asia have been zero sum water for one user means lack of water for the other. Factors of ideology and nationalism, prevent West Asian states from cooperating with each other to alleviate the problem of water scarcity. However, in the present scenario the only remedy lies in taking a regional approach to the problem. That is, water from certain countries could be diverted to other, according to the needs. This implies tacit recognition of the legitimacy of various demands. Thus factors like population growth and other needs in one riparian should be given priority over another. At the same time a riparian should be asked to consume water in more economical ways. It should also be demanded of one riparian to use only certain sources of water leave a specific source for supplying the needs of other. Conservation measures such a reduction of waste in irrigation, phasing-out of water intensive crops and price increases towards real value should be taken up an endangering basis. Neither time, money or hope should be wasted on regional water development projects. Care must be taken, however, to avoid plans that are grandiose or impossible part water development projects like the 1950’s plan of Eric Johnston failed to anticipate the level of hostilities in the region. In order to avoid past mistakes future project could be financed by the international monetary fund on the condition that the granting of money depended an unanimous agreement among the all riparian states.