It is imperative in our view that such Safety zones should be mandated by the Security Council whose decisions all the member State have undertaken to accept and carry out in Article 25 of the Charter.

VII. When Can UNHCR be Asked for Help in Such Zones

A strong case can be made for clarifying UNHCR's role in assisting and protecting displaced people. UNHCR has normally assisted displaced people only when requested by the UN Secretary-General or the General Assembly and allowed to do so by the authorities concerned. An important step forward could be taken if the UN General Assembly were to clarify the situation and provide for adequate institutional arrangements and a mandate on behalf of internally displaced people. The starting point for UNHCR's involvement in the country of origin for the displaced persons is clearly defined in General Assembly Resolution 46/182 of 19 December 1991. Para 3 of the annex to that resolution states:

"The Sovereignty, territorial integrity and national unity of states must be fully respected in accordance with UN Charter. In this context, humanitarian assistance should be provided with the consent of the affected country and in principle on the basis of an appeal by the affected country."

The recent tragic event in war stricken Yugoslavia and drought-hit Somalia have again witnessed the UN Security Council passing resolutions to help people. These resolutions with respect to former Yugoslavia related to restoring peace in the country and related to providing food and humanitarian assistance to the suffering population in Somalia. These two examples clearly illustrate what has been envisaged in the Chapter VII of the UN Charter, which is an exception to the rule of "non-interference in state sovereignty." The United Nations can intervene in cases where there is a grave threat to peace and security in the region or where the situation is so grave that a suo-motto intervention would be justified. But this provision should be used in the rarest of rare cases and with utmost caution or else we might face a situation where the sovereignty of states can be interfered with at the behest of some other country with ulterior motives.

VIII. Conclusion

The establishment of safety zones for the displaced persons in one's country of origin can be regarded as a humanitarian measure the application of which would help curtail the "refugee population." It is true that under no circumstance should it be established without the consent of the state of origin. However, no country is free to abuse its citizens and to use sovereignty as a shield to cover its anti-human activities. To this extent, the world opinion matters much. Donor states and international organizations should therefore be urged to support governmental programmes of assistance to displaced people only when certain conditions are fulfilled. First those programmes should conform to the requirements of the Fourth Geneva Convention of 1949. This guarantees the presence of an international organization, prohibits the use of violence against civilians, and specifies the situations in which relocation programme can be implemented. Second, donors should ensure that relief programmes for the displaced

people in Safety Zones are able to function independently of the military actions. There is a danger that the establishment of "Safety Zones" might provide justification for interventions by military powers. Where governmental relief agencies are subject to stringent political controls, assistance should be channelled as far as possible through international organizations and non-governmental agencies. In this sense, the word "humanitarian access" might be more appropriate than the word "humanitarian intervention" as the concept of the latter word contains the meaning of military interventions shown in Iraq and in Somalia.

Assistance programmes for the displaced, like those for refugees, should guarantee choices and participations for the people concerned. Relief aid imposes its own kind of imprisonment, creating conditions of dependence and hopelessness. Many displaced people may become prisoners within the "Safety Zone" in their own country. Therefore they should be empowered to regain control of their lives.

A major consideration in the creation of a Safety Zone is its effectiveness in actually providing Safety to those in need. The guarantees of Safety need to be underlined as clearly as possible and in the most effective manner. They will depend on the actual circumstances, including the degree and nature of the threat as well as the methods used to establish the Safety Zone. If a Safety Zone is created with the consent of the government and supervised by a relevant international organisation their assurances may provide a basis for safety. If it results from multilateral action, international supervision by a UN peace keeping force may be an option. The presence of international human rights observers or monitoring by organisations, including UNHCR and the Commission on Human Rights of the UN could be important additional methods. But experience has shown that such operations are cumbersome and very expensive.

Another factor to be borne in mind is the length of time for which a Safety Zone should be created. How temporary a measure of protection it lums out to be would depend on the success of political initiatives to resolve the underlying conflict. The dangers of failure to reach a political settlement are evident. The costs of maintaining a Safety Zone for a long period and the number of persons it might attract could make it an unavoidable proposition. These concerns underscore the importance of political initiatives for a solution in parallel to the establishment of a Zone.

The final consideration relates to the presence and participation of other organizations, governmental or non-governmental, in the Safety Zone. The value of inter-agency co-operation would be enhanced in the politically delicate concept of a "Safety Zone."

This topic needs further study with a more careful evaluation of situation such as in Northern Iraq and Sri Lanka. Also it needs to be studied with utmost care and caution, taking into account the evolving concepts, as the recent operations of the UN in Somalia and Bosnia-Herzegovina have come under severe criticism.

IV. The Law of International Rivers

(i) Introduction

The item entitled "Law of International Rivers" was taken up for consideration by the Asian-African Legal Consultative Committee (AALCC) through a reference forwarded by the Governments of Iraq and Pakistan during the AALCC's Eighth Session held in Bangkok in 1966. At the Ninth Session in New Delhi, (1967) Iraq indicated the areas which necessitated a closer consideration, namely: (a) Definition of the term "International Rivers"; and (b) Rules relating to utilization of waters of International rivers by the States concerned, for agricultural, industrial and other purposes not connected with navigation. Pakistan, on the other hand, laid emphasis on the uses of international rivers with particular reference to the rights of lower riparians.

At the Tenth Session held in Karachi, (1969) after extensive deliberations the AALCC decided to set up a sub-committee of all the member governments to prepare draft articles on the Law of International Rivers, "particularly in the light of experience of the countries of Asia and Africa and reflecting the high moral and juristic concepts inherent in their own civilizations and legal systems." In order to fulfill this mandate, the Sub-Committee met in New Delhi in December 1969 with the representatives from the Governments of Ghana, India Indonesia, Iraq, japan, Jordan, Pakistan, Sierra Leone and Sri Lanka. At this meeting the delegation of Pakistan placed a set of ten draft articles for the consideration of the Sub-Committee. The Iraqi delegation also placed before the Sub-committee a set of draft principles consisting of 21 articles. The Indian delegation, on the other hand, suggested that the Sub-Committee should consider the Helsinki Rules drawn up by the International Law Association as the basis for discussion. During the Eleventh Session of the Committee held in Accra, 1970, the delegations of Iraq and Pakistan jointly submitted a draft consisting of 10 articles as the basis for discussion. The Indian delegation continued to maintain that Helsinki Rules should be the basis for Committee's study. No progress could be registered at this Session on this item as most of the time was spent on procedural issues. Both the proposals were referred to the member governments for their consideration. The Twelfth Session (Colombo, 1971) also did not register any substantial progress towards the finalization of this topic except that once again a Sub-Committee was constituted. It was mandated to prepare a study which would formulate a basis for the further discussion.

In the subsequent sessions of the Committee, the Sub-Committee could not arrive at any conclusions due to few unclear provisions existing in the draft formulations. Meanwhile, the committee was preoccupied with the deliberations relating to the "Law of the Sea and Economic Cooperation." There was also a trend of opinion supporting the idea that since the International Law Commission (ILC) was actively engaged in considering this topic, its examination could be deferred. After a prolonged gap, this topic was placed again on the agenda of the Twenty-third Session of the Committee (Tokyo, 1983) at the insistence of the Government of Bangladesh. The uncertainty regarding the scope of this item continued to hinder the progress towards its finalization. The Government of Bangladesh suggested that the Committee should resume the active consideration of the item without in any way touching the areas under scrutiny by the ILC.

Nepal, on the other hand, specifically suggested that the Committee may direct the Secretariat to initiate studies relating to regional system agreements of the international rivers. However, many member Governments were suggesting that the Committee should await the finalization of ILC work, in order to avoid the duplication of work. At the same time, the member governments were keen to follow the progress of work in the ILC. In order to accommodate these suggestions, the Committee in the final analysis mandated the Secretariat to continue the study on the following patterns (a) to identify the areas which were not likely to be covered by the work of the ILC and where it was deemed desirable, the Committee to undertake a study; (b) to examine the provisions of the Articles provisionally adopted by the ILC; and (c) to submit a tentative programme of work for the consideration of the Committee.

In the Kathmandu (24th) Session, the Committee considered a "Preliminary Report" prepared by the secretariat which inter alia, indicated five areas which could be examined by the AALCC, namely, (a) an examination of the draft articles after they were adopted by the ILC and to furnish comments thereon for consideration of the Sixth Committee and possibly before a diplomatic conference; (b) development of norms and guidelines for the legal appraisal of the validity or otherwise of any objection that may be raised by one watercourse State in relation/regard to projects sought to be undertaken by another watercourse State; (c) study the matter relating to navigational uses of and timber floating in international watercourses; (d) study of other uses of international rivers such as agricultural uses, and (e) study of state practice in the region of user agreements and examining the modalities employed in the sharing of waters of such watercourses as the Gambia, Indus, Mekong, Niger and Senegal.

There was, however, no unanimity among the member Governments as no what should be the specific future work programme of the Committee on this topic. Pending a final decision in this regard, the Secretariat continued to monitor the ILC deliberations and presented concisely ILC's progress of work for the consideration of the Twenty-fifth Session (Arusha 1986) of the Committee. For the subsequent sessions, held in Bangkok (1987), Singapore (1988), Nairobi (1989) and Beijing (1990) the Secretariat presented studies which were confined only to the examination of the draft articles so far adopted by the ILC. It should be noted that since Twenty-sixth Session (1987) the Committee has been considering this item while deliberating on the "Report of the ILC". Bangladesh was, however, insisting that at the forthcoming session this study on "International Rivers should be placed on the agenda for a full discussion. India did not accept this proposition.

The Thirtieth Session (Cairo 1991) decided to place this item independently on the agenda of the Thirty-first Session. This was felt necessary as ILC had completed the first reading of the draft articles during its Forty-third Session. Before commencing the second reading, the ILC had solicited comments on these draft articles by the member States. In order to assist the member governments of AALCC to submit their comments, the Cairo Session as mentioned above decided to place this item heparately on the agenda in the ensuing session (1992). This was found essential so as to generate substantial discussion with a view to lay down broad and acceptable principles in the Asian-African region. Accordingly, the Secretariat prepared a detailed analysis of the ILC draft articles adopted by it after the first reading. During Thirty-first Session (Islamabad 1992) the Committee decided to keep this item on the agenda for the next session (1993) to facilitate substantive discussion and study on the ILC's draft articles adopted after the first reading in the preparation of their comments and observations for the second reading of the draft articles by the ILC at its next session.

Thirty Second Session: Discussions

The Secretary-General, while introducing the item "Law of International Rivers" briefly explained the background of the study undertaken. The study, however, could not proceed consistently due to Committee's increasing work schedule, especially relating to the Law of the Sea. Subsequently, the Committee continued its evaluation of the work of the International Law Commission and furnished comments on the ILC's draft articles. The Secretary-General outlined the plan and scope of the study which *inter alia* examined three major areas, namely: (a) International Watercourse; (b) Equitable and reasonable utilization and participation; and (c) Protection and preservation of Ecosystems. He informed the meeting that the study under consideration to the extent possible examined institutional and legal aspects of the River Systems Agreements in the Asian-African region. He also emphasized, in the final analysis, the fact that the future studies could be made on the river basin development and its linkages with the legal infrastructure needed for its implementation.

The Delegate of Syria appreciating the study outlined the scope and legality of principles relating to international rivers. He explained various sources of these legal principles and their acceptability. He also appreciated and called for the adoption of ILC draft articles so as to finalise the draft of the "Law of International Rivers". He requested the ILC to finalize the second reading and adopt the draft articles so as to fill the gap in the relevant principles of International Law.

The Delegate of Iraq termed the study as highly educative and briefly explained the principles as enunciated by the ILC. He stressed on the right of sharing equally the water resources by every State. He also pointed out that no harm to quality and quantity to the watercourse should be done while sharing these resources. In response to cases of harm, they should entail international responsibility on the part of the State concerned.

The Delegate of India expressed the view that this topic was not amenable for continued examination as there were immense diverse factors and difficult systems of management in different river basins of the world. Since the matter was before the ILC, the Committee could defer examining it until the ILC had finalised the second reading. This would lessen the burden of more agenda items for discussion.

The Delegate of Uganda appreciated the Secretariat study and informed

the meeting about the importance of lakes and rivers to Uganda. Referring to para 23 of document, the delegate pointed out that Nile was much more than a river utilised for hydropower and irrigation. He also informed the meeting about the Water Masterplan for Uganda. He emphasized on the importance of fresh water resources for Uganda. He expressed his delegation's doubt about the "utilization" provisions as existing within the national jurisdictions, since the State should have national sovereignty over such water reservoirs.

The Delegate of Tanzania, pointed out that the topic had been on the agenda for a long time and supported the idea that the Secretariat should continue to study the topic in order to arrive at more acceptable principles on sharing of fresh water resources.

The President succinctly placed two views as regards continuation of the topic on the agenda; one, to keep it on the agenda; and second, to remove it from the agenda as it was being dealt with by ILC also.

The Delegate of Tanzania supported the inclusion of the topic in the future agenda as it facilitated the ILC by supplementing its work.

The Delegate of Syria also supported the inclusion of this topic in the agenda as it had very crucial dimensions.

The President subsequently ruled that the item should be maintained on the agenda and proposed a draft decision tabled by the Secretariat for adoption. The text of the decision formally adopted is reproduced herewith.

(ii) DECISION ON LAW OF INTERNATIONAL RIVERS

Adopted on 5.2.1993

The Asian-African Legal Consultative Committee

Taking note of the Study prepared by the Secretariat on the item "International Rivers: A preliminary Study Relating to River Systems Agreements" contained in Doc. N. AALCC/XXXII/Kampala/93/6;

Expresses its appreciation for the preliminary study relating to River Systems Agreements;

Requests the Member States to send their comments with necessary details to the Secretary-General for the preparation of a further in-depth study;

Requests the Secretary-General to examine other crucial areas relating to River System Agreements with special emphasis on the utilization of fresh water resources;

Requests the International Law Commission to finish as early as possible the second reading of the draft Convention on Non-Navigational Uses of International Watercourses and to take all necessary measures in order to conclude that law as a Framework Convention for International Law; and

Decides to inscribe the item on the agenda of its next session to facilitate substantive discussion on the topic.

(iii) Secretariat Study: The Law of International Rivers: A Preliminary Study Relating to River System Agreements

Background

The scope of this preliminary study is confined primarily to the study of state practice in the region of user agreements and examine the modalities employed in the sharing of waters of watercourses. It may be recalled here that at the Tokyo Session (1983) the delegate of Nepal had suggested that the Committee might prepare some guidelines for regional system agreements.¹ The Secretariat study had also indicated the difficulties existing in pursuing such a study "in view of the fact that the geographical, hydrological and climatic conditions considerably vary within the Asian-African region leading to the diverse characteristics of various watercourses."² The Secretariat study had also indicated that "with a view to assist member governments in the negotiation of user agreements in the future, the AALCC could take up the study of state practice in the region of user agreements and examine the modalities employed in the sharing of water of watercourses such as the River Niger, the Nile, the Gambia River, the Mekong and the Indus.³

During the deliberations at the Islamabad Session (Thirty-first Session, 1992) the delegate of India in his brief statement had clarified that his delegation did not "see any necessity for inclusion of this item again as a separate item from the International Law Commission."⁴ On the other hand,

Due. No. AALCC/XXXI/Islamahad/92/5.

^{2.} Mid. p. 34.

Ibid.

Verbatim Record of Dicussions, Thirty-first Session, (Islamabad, 1992) p. 127.

Arab Republic of Syria and Pakistan insisted that his item should be taken up for further study in order to assist member countries in responding to the ILC draft.5

In his clarification the Secretary-General said that "the study by the ILC was confined to particular aspects, i.e. the aspect of non-navigational use of international watercourse It was felt these other aspects could be usefully studied within our region, because that would facilitate the preparation of the user agreement."6

In accordance with the mandate given to the Secretariat by the AALCC the following study proposes to examine the regional system agreements relating to international rivers. The broad categories under which this examination will be made are, namely (a) International Watercourse; (b) Equitable and reasonable utilization and participation; (c) Protection and preservation of ecosystems. It may be noted that the above categorization has been adopted from the ILC draft text itself. Apart from this, the study under consideration to the extent possible also proposes to examine the institutional and legal aspects of the river system agreements in the Asian-African region.

International Watercourse:

The draft articles prepared by ILC on the "Law of the Non-navigational uses of International Watercourses", define in Article 2, an "international watercourse" as "watercourse parts of which are situated in different states". Specifically, it defines "watercourse" in Article 2 (b) as "a system of surface and underground waters constituting by virtue of their physical relationship a unitary whole and flowing into a common terminus." This definition can be examined in the specific context of Afro-Asian rivers.

The Indus Waters Treaty concluded between India and Pakistan in its preamble declares that attaining the most complete and satisfactory utilization of the Indus system of rivers should be its one of the primary objectives.7 This treaty defines in very clear terms, the term "Tributary" as any surface channel, whether in continuous or intermittent flow and by whatever name called, whose waters in the natural course would fall into that river.8 It is pointed out that this treaty applies to named rivers, their tributaries and connecting lakes and defines the term tributary

In the recent times, the definition of an "international watercourse" has broadly.9 acquired more logistic approach to international water resources management, The Action Plan for the Environmentally Sound Management of the Common Zambezi River System, for example, states its objective as being to overcome certain enumerated problems "and ensure environmentally sound water resources management in the whole river System."10 The Senegal River Basin Development Project provided in the agreement that "the river is an international basin including all its tributaries". It further stipulated that "the basin is to be exploited rationally in close cooperation between the three states (Senegal, Mali and Mauritania) with the liberty of navigation and equality of treatment of users".11 it is, however, stated that to identify whether parts of a watercourse are situated in different states "depends on physical factors whose existence can be established by simple observation in the vast majority of cases".12 So, the "watercourse" would have as its components, in the broadest terms, "rivers, lakes, aquifers, glaciers, reservoirs and canals". It is further stated that "so long as these components are interrelated with one another, they form part of the waterdourse".13 There is no unanimity in accepting this definition as the final authority. This is clear from the commentaries on the ILC draft articles which inter alia pose two important questions.14 Firstly, accepting the fact that the surface and underground waters form a system, and constituting by virtue of their physical relationship a unitary whole, what about the situations where human intervention at one point in the systems which may have effects elsewhere within it? Secondly, the term "Watercourse" does not include "confined"

groundwater i.e., that which is unrelated to any surface water.

During the Thirty-first Session of the AALCC the delegate of Turkey, while presenting his views on the ILC draft articles did not completely

Draft Articles on the Law of Non-Navigutional Uses of International Watercourses and Commentaties therein, provisionally adopted on First Reading by the International Law Commitsion

10. Ibid., p. 10. Soc. Agreement on the Action Plan for the Environmentally Sound Management of the

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Ibid. p. 128 5.

thid. p. 130. ñ.

The Indian Journal of International Law, Vol. 1, October 1960- January 1961, p. 341, quoted in the Legislative Texts and Treaty Provisions concerning the utilization of International Rivers for other purposes than Navigation, thereinafter referred to as Legislative Texts) (United Nations Publications, Sales No. 63, V. 4).

Ibid. 8.

Common Zambers River System, Final Act, Harare, 26-28 May 1987 in International Legal Materials, Vol. XXVII (1988) p. 1109. This was an agreement among Botswana, Mozambique, Tanzania, Zambia and Zimitabwe to develop regional Cooperation in the snanagement of the Zambezi river

^{11.} River and Lake Basin Development. Natural Resources Water Series No. 20 (1990) (United Nations

Publication Sales No. E-90, 11, A. 30) p. 276. 12. Yearbook of the International Low Commitman, 1987, Vol. II (Part Two) p. 26.

¹³ Deatt Articles, n. 11 p. 6.

¹⁴ Ibid

accept the abovementioned formulations relating to "watercourse" and he termed them as "too broad."13 He pointed out that by incorporating glaciers, canals and particularly underground water, it amounted to sharing of those natural resources which was in contradiction with the generally accepted principle of international law concerning the permanent sovereignty of states over their natural resources. He supported the distinction between free groundwater and confined groundwaters.16 Supporting the definition the delegate of Jordan specifically outlined the importance of groundwaters to the Middle-East and stressed the fact that "the underground water should not be linked with resources that could be far deep in the territories of countries, because the countries have full sovereignty in all the dry surfaces and reservoirs can be built on this".17

It may be interesting to note that the basic objectives laid down for the development of the Lower Mekong River basin are too broad including many diverse factors. The Mekong Committee which was formed in 1957 had to deal with highly complex process involving the collection and analysis of a large amount of data on the physical, economic, social and institutional factors that determine the opportunities for development.11 Accordingly, its basic objective, inter alia, incorporates the promotion of "the comprehensive development of the water resources of the lower Mekong basin, including mainstream and tributaries, in respect of hydroelectric power development, irrigation, flood control, drainage, navigation improvement, watershed management, water supply and related developments for the benefit of all the people of the basin, without distinction as to nationality, religion and politics."19 This approach, though seemingly vague, is quite significant in the context of Mekong river. There are differences in the cultural, political and economic backgrounds of the four Mekong countries who are members of the Mekong Committee.

The International Law Commission has identified with the view that

19 Ibid.

the concept of a watercourse or river system was not a novel one.20 It has also been pointed out that this expression had long been used in international agreements to refer to a river, its tributaries and related canals; and to substantiate this view it has cited many examples.21

Equitable and Reasonable Utilization and Participation

The survey of available legal materials show that the principle of "equitable and reasonable utilisation and participation" has generally been widely accepted. The International Law Commission while recognising the legal validity of this principle has not attached same importance to all the sources.22 However, it has found that the survey did provide an indication of the wide-ranging and consistent support for the rules contained in the draft article.23 This draft article refers to the attainment of "optimal utilization" which according to ILC "does not mean achieving the "maximum" use, the most technologically efficient use, or the most monetarily valuable user. Nor does it imply that the State capable of making the most efficient use of a watercourse-whether economically, in terms of avoiding waste, or in any other sense-should have a superior claim to the use thereof. Rather, it implies attaining maximum possible benefits for all watercourse States and achieving the greatest possible satisfaction of all their needs, while minimizing the detriment to, or unmet needs of, each".24 The principle of "equitable participation is equally important and it is closely connected with the principle of "optimal utilization". It is pointed out that "the core of this concept is Cooperation between Watercourse States through panicipation, on an equitable and reasonable basis, in measures, works and activities aimed at attaining optimal utilization of an international

^{15.} Verbasim Record of Discussions, AALCC, (Thirty-first Session, 1992) p. 120.

^{16.} Ibid. p. 121. Notably the Turkish delegate considered only "free groundwater" as a part of the definition of "watercourse". Further, he submitted two problems; one, no concrete examples of international practice can be found in relation to groundwater easily; second, the difficulty in collecting scientific data concerning free and confined watercourses for the Asian-African States.

^{17.} Ibid. p. 123-134. Supporting the delegate of Jordon, the Syrian delegate pointed out that according to the ILC report 77 per cent of joint rivers have underground sources.

^{18.} Phadej Savasditute, "The Development of the Lower Mekung River Basin, in River and Lake Basin Development, Natural Resources Water Series No. 20 (United Nations, 1990) p. 170. The Mekong Committee in 1937 comprised Democratic Kampuchea, Lao People's Democratic Republic, Thailand and Vietnam, joined together with twenty-one other co-operating countries, twelve international agencies and some private foundations.

^{21.} Ifrid. It is interesting to note that the definition of an "international watercoarse" did not specifically tooch the principle of "utilization" till few decades earlier. The Trenty of Versnilles, for example, referred to "river systems" in terms of "all navigable parts of these river systems..." In the River Onter case the Permanent Court of International Justice defined the "International Watercourse" as "All navigable parts of these river systems... together with lateral canals or channels constructed either to duplicate or to improve naturally navigable sections of the specified river systems...".

^{23.} Article 5: 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 watercouse States with a view to attaining optimal utilizaton thereaf and benefits therefrom consistent with adequate protection of the watercourse.

Watercourse Stmes shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation include both the right to utilise the watercourse and the duty to cooperate in the protection and development thereof, as provided in the present articles.

watercourse, consistent with adequate protection thereof".39

In the context of laws relating to international rivers it is not easy to place the meaning of "equitable" on a strong base. This difficulty arises due to the concept of "sovereign equality". There cannot be any dispute as regards the right of a watercourse State to make use of the waters of an international watercourse. It is pointed out that "the principle of the sovereign equality of States results in every watercourse State having rights to the use of the watercourse that are qualitatively equal to, and correlative with, those

The ILC draft articles reflect the principles embodied in various international treaties and agreements.27

The manner in which States are to implement the rule of equitable and reasonable utilization is also equally important. The commentaries on the ILC draft article specify that "What is an equitable and reasonable utilization in a specific case will therefore depend on weighing of all relevant factors and circumstances".28 The factors and circumstances which need consideration are:29 (a) geographic hydrographic, hydrological, climatic, ecological and other factors of a natural character; (b) the social and economic needs of the watercourse States concerned; (c) the effects of the use or uses of the watercourse in one watercourse State on the other watercourse States; (d) existing and potential uses of the watercourses; (e) conservation, protection, development and economic use of the water-resources of the watercourse and the costs of measures taken to that effect; and (f) the availability of alternatives of corresponding value, to a particular planned or existing use.

It should be noted that these factors are not exhaustive. It has, however, been stated that due to "wide diversity of international watercourses and the human needs they serve, it is impossible to compile an exhaustive list of factors that may be relevant in individual cases".30 Further, it may be noted

25. Ibid. p. 30. The "Cooperation" generally should extend to - flood-control measures, pollutionabatment programmes, drought-mitigation planning, erosion control, disease vector control, river regulations (training), the sadeguarding of hydraulic works and environmental protection. This list is not exhaustive and extensive cooperative endeavours could be provided under the watercourse 26.

Ibid. p. 31. Also See: ILA, Report of the Fifty-second Conference, Helsinki, 1966, (London, 1967). The commentaries on the ILC deaft articles explain that the scope of a State's rights of equitable utilization depends on the factual and circumstances of each individual case, and specifically on a weighing of all relevant factors, as provided in article 6.

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that efforts have been made at the international level to compile lists of factors to be used in giving the principle of equitable utilization concrete meaning in individual cases. For example, the International Law Association adopted the "Helsinki Rules on the Uses of the Waters of International River" in 1966.34

For the purposes of integrated development of the resources of the Senegal River basin the States of Mali, Mauritania and Senegal had established the Oganization for the Development of the Senegal River (OMBS).12 The general policy for harnessing the Senegal River and exploiting its resources and for co-operation among the States bordering the river is laid down by the Council of Ministers.33 Further, the Organization defines the joint programme of work for the co-ordinated development and rational exploitation of the resources of the Senegal River basin (article 13 of the Convention) and defines priority operations for harnessing the river and developing its resources (article 8).³⁴ There is a Standing Commission on the waters of the Senegal River, established by the amended convention in 1975 which is responsible for defining the principles and procedures for sharing the water of the Senegal River among the States concerned and among the sectors utilizing it.35

The River Nile passes through nine countries and is the main source of irrigation and the site of hydropower activities in riparian countries.³⁴ It is pointed out that the conservation, control and regulation of the Nile and its tributaries has a major bearing on the economic development of the entire area, particularly in respect of irrigation, drainage, swamp reclamation, hydroelectric power generation, navigation and provision of community water supplies.37 In order to utilize the waters of the River Nile effectively Egypt and Sudan have concluded several agreements which broadly have the following features:18 (a) each country's share was agreed, taking into consideration (i) the acquired right of each country to the waters used prior

^{27.} Yearbook of the International Law Commission, 1985 Vol. II (Part one).

^{28.} Draft Articles, n. 11, p. 44.

^{29.} Article 6. Druft Articles, n. 11, p. 44. 30. Ibid. p. 45.

^{31.} ILA, Report of the Fifty-second Conference, Helsinki, 1966 (London, 1967). Article IV deals with equitable utilization and article V deals with the manner in which "a reasonable and equitable share" is to be determined.

^{32.} Since its establishment the Organization has several times been remodeled, affecting both the institutional structure of the Oranization and the nature and scope of its activities.

^{33.} Article VIII of the Convention. Sev: Experiences in the Development and Management of International River and Lake Basins, Natural Resources/Water Series No. 10 (United Nations, 1983) p. 142.

³⁴ Ibed 35 Ibid. p. 143.

^{36.} Ibid, P. 158. The sine countries through which the River Nile passes are: Burundi, Egypt, Ethiopia, Kenya, Rwunda, Sudan, Ugunda, United Republic of Tanzania and Zaire.

^{37.} Ibid.

^{38.} United Nations Legislative series (United Nations publication, Sales No. 63, V. 4) p. 143.

to the signing of the agreement; and (ii) the future development of each country; (b) because considerable quantity of the Nile waters was being lost in the swamps of Bahr El Gebel, Bahr El Zerat, Bahr El Gazal and the Sobat River, it was considered essential that this loss be prevented and the yield of the river increased for use in agricultural expansion. The two parties agreed that Sudan would construct projects in the above-mentioned regions, with the participation of Egypt. The net yield of these projects would be divided equally between the two countries and each of them would contribute equally to the costs; (c) in order to ensure technical cooperation between the two countries and continuation of research and study necessary to control the Nile and increase of its yield, as well as continuation of the hydrological survey of its upper reaches, the two Governments agreed to form a Permanent Joint Technical Commission for Nile Waters.³⁹

The Niger Basin Authority for the River Niger essentially has the following objectives to utilize its waters which, *inter alia*, include:⁴⁰ (a) Harmonization and co-ordination of the policies, projects and programmes of States; (b) Centralization of hydrological and related data and their dissemination to member States; (c) Formulation of the general policy for development of the basin, which shall be compatible with the international character of the river; preparation and implementation of the plan, the integrated development of the basin; implementation and monitoring of an orderly and judicious policy for the utilization of the surface and subterranean waters of the basin; (d) conception and implementation of studies, research and surveys; formulation of plans, construction, exploitation and maintenance of works and projects set up within the framework of the general objective of the integrated development of the basin.

The Convention establishing the Gambia River Development Organization declares the river as "of regional interest" and the statute aims to ensure⁴¹ (a) concerted action using the river's water resources; (b) equality of treatment of nationals of member States as regards transport on the rivers; (c) respect for the Commitment undertaken by States in the framework of the development of the Gambia River.

Protection and Preservation of Ecosystems

The International Law Commission in the draft article 20 has laid down a general obligation to protect and preserve the ecosystems of international watercourses.⁴² It is pointed out that "these obligations relate to the "ecosystems of international watercourses", ... because it is more precise than the concept of the "environment" of a watercourse".⁴⁹ And it requires that these ecosystems be protected in such a way as to maintain them as much as possible in their natural State. Further, it is stated that by incorporating the principle that watercourse States act "individually or jointly", the article 20 recognizes that in some cases it will be necessary and appropriate that "watercourse States co-operate, on an equitable basis, to protect and preserve the ecosystems of international watercourses".⁴⁴

The International Law Commission has identified various provisions concerning the ecosystems of international watercourses in a number of agreements. The reference is made to the 1978 Convention relating to the status of the River Gambia in which Gambia, Guinea and Senegal agreed that "No project which is likely to bring about serious modifications on the characteristics of the river's regime, ... the sanitary state of the waters, the biological characteristics of its fauna and its flora ... will be implemented without the prior approval of the contracting States".⁴⁵

The nine States parties to the 1963 Act regarding navigation and economic cooperation between the States of the Niger Basin "undertake to establish close cooperation with regard to the study and the execution of any project likely to have an appreciable effect on certain features of the regime of the River, its tributaries and sub-tributaries... the sanitary conditions of their waters, and the biological characteristics of their fauna and flora".⁴⁶

The Agreement on the Action Plan for the Environmentally Sound Management of the Common Zambezi River System is a unique and farreaching effort to jointly manage, develop, and preserve the 1,400-mile Zambezi River. This is a major river system which begins in North Zambia, and is fed by hundreds of major tributaries and winds its way towards the

For the brief analysis of the institutional and legal arrangements of the Permanent Joint Technical Commission See: The Permanent Joint-Technical Commission For Nile Waters: Egypt-Sudan, in Natural Resources/Water Series No. 10 (United Nations, 1983) p. 159.

The members of the Niger Basin Authority are: Benin, Chud, Guinea, Ivory Crunt, Mali, Niger, Nigeria, United Republic of Cameroon, and Upper Volta). For details See: "Technical None on the River Niger Commission" in Natural Resources/Water Series No. 10 (United Nationa, 1983) p 191.

 [&]quot;Technical Note on the Gambia River Development Organization", in Natural Resources Water Series No. 10 (United Nations, 1983) p. 420.

⁴² The ILC dodt article 20 in Part IV — "Watercoarse States shall, individually or jointly, protect and preserve the occupations of international watercoarses.

^{43.} Deaft Articles, n. 11 p. 123. The Commission perferred the term "ecosytems" as it had," a more percise schemific and legisl memory. Comp various authornies the Commission states — "Generally, that term technystems) refers to an acategorial unit consisting of living and non-living components that are pour-dependent and function as a community".

^{44. /}bud. p. 125.

^{45.} Natural Resources/Water Series No. 11 (ST/ESA/141) 1984 p. 19.

⁴⁶ UNT.S. Vol. 587, No. 2508 p. 9.