ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN

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UNITED NATIONS AGREEMENT ON FISHING ON THE HIGH SEAS

Two years after signature: a regional perspective

Carmen Artigas
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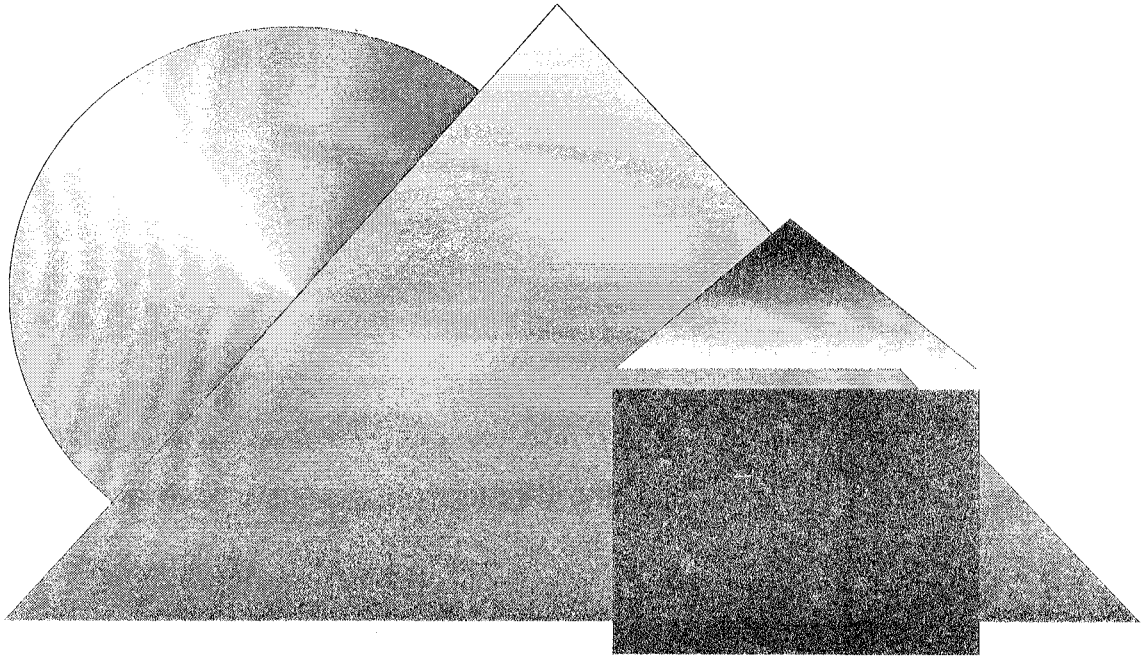

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ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN
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This document was prepared by Carmen Artigas, Legal Officer, and Jairo Escobar, Scientific Adviser, in the Environment and Development Division. The opinions expressed in this document, which has not been formally edited, are those of the authors and do not necessarily reflect the views of the Organization.

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ABSTRACT

The programme of work of the Economic Commission for Latin America and the Caribbean (ECLAC) for the 1996-1997 biennium contains provision under subprogramme 6 (Natural resources and energy), subject area **6.2 Utilization of natural resources and energy,** for the preparation of "a document on the functioning of cooperation mechanisms adopted by the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks".

The cooperation mechanism adopted within the United Nations after negotiations following the United Nations Conference on Environment and Development in 1992 was the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.

As at 23 May 1997, the Agreement had been signed by a total of 59 States, ratified by the Federated States of Micronesia, Fiji, Iceland, Norway, Saint Lucia, Samoa, Senegal, Sri Lanka, Tonga and the United States of America, and acceded to by the Bahamas, Mauritius, Nauru and Solomon Islands.

This situation merely reflects the arduous negotiation process and the conflicting reactions which, for various and contradictory reasons, its provisions elicit.

In addition to the Bahamas and Saint Lucia, countries which are now parties to the Agreement, the following Latin American and Caribbean countries have signed: Argentina, Belize, Brazil, Jamaica and Uruguay.

The United Kingdom of Great Britain and Northern Ireland signed the Agreement on behalf of Bermuda, the British Virgin Islands, the Falkland Islands, the South Georgia Islands and the South Sandwich Islands, and subsequently indicated that the Agreement would also apply to Anguilla.

This regional situation attests to the difficulties that exist with respect to the text of the Agreement. They have given rise to intense national debate in several countries, with resolute arguments being put forward in favour of or against signing, ratification or accession.

On the basis of appropriate analysis and of informal consultations in selected countries of the region, the present document examines the provisions of the Agreement and the consequences of their implementation from the legal and political viewpoint,

supplemented with a scientific perspective. The basic objective is to assist countries of the region in the monitoring process and with respect to possible approaches to regional cooperation.

I. A POSSIBLE LEGAL PERSPECTIVE

The Agreement was opened for signature on 5 December 1995, the date of the adoption by the General Assembly of resolution 50/24, in which it emphasized the importance of the early entry into force and effective implementation of the Agreement, and requested the Secretary General to report to the Assembly at its fifty-first session and biennially thereafter on developments relating to the conservation and management of straddling fish stocks and highly migratory fish stocks.

Without prejudice to the ongoing scientific discussion concerning the exact classification of straddling species and highly migratory species, it may be stated generally that **straddling species** are those found within a State's exclusive economic zone (the 200-mile zone of sovereignty and national jurisdiction) and in immediately adjacent areas of the high seas.

For their part, **highly migratory species** are those whose range covers extensive geographical areas and significant expanses of ocean.

Opinions on the Agreement vary. For many developing coastal States, the final text went beyond the original intention at the time of negotiation, which was to spell out more clearly the provisions of the United Nations Convention on the Law of the Sea in order adequately to protect existing resources in the exclusive economic zones of many States from fishing activities on the high seas that target the same fish stocks.

The deliberations of the Conference finally led to recognition of the principle of compatibility of conservation and management measures set forth in article 7 of the Agreement.

This article states that, without prejudice to the sovereign rights of coastal States for the purpose of exploring and exploiting, conserving and managing living marine resources within areas under national jurisdiction as provided for in the United Nations Convention on the Law of the Sea, and the right of all States for their nationals to engage in fishing on the high seas in accordance with the Convention:

(a) With respect to straddling fish stocks, the relevant coastal State or States and the States whose nationals fish for such stocks in the adjacent high seas area, shall seek, either directly or through the appropriate mechanisms for cooperation provided for in Part III, to agree upon the measures necessary for the conservation of these stocks in the adjacent high seas area;

This regulation has the same effect as article 63.2 of the United Nations Convention on the Law of the Sea, which states that: "where the same stock or stocks of associated species occur both within the exclusive economic zones and in an area beyond and adjacent to the zone, the coastal State and States fishing for such stocks in the adjacent area shall seek, either directly or through appropriate subregional or regional organizations, to agree upon the measures necessary for the conservation of these stocks in the adjacent area".

(b) With respect to highly migratory fish stocks, the Agreement establishes that the relevant coastal State or States and other States whose nationals fish for these stocks in the region shall cooperate, directly or through the appropriate mechanisms for cooperation, with a view to ensuring conservation and promoting the optimum utilization of such stocks throughout the region, both within and beyond the areas under national jurisdiction.

This provision also reproduces almost exactly article 64 of the United Nations Convention on the Law of the Sea, which establishes that: "the coastal State and other States whose nationals fish in the region for the highly migratory species listed in Annex I shall cooperate directly or through appropriate international organizations with a view to ensuring conservation and promoting the objective of optimum utilization of such species throughout the region, both within and beyond the exclusive economic zone".

The Agreement would not have evoked any opposition on the part of coastal States if it were not for the fact that it specifies, further on, that conservation measures established for the high seas and those adopted for areas under national jurisdiction should be compatible in order to ensure conservation and management of the straddling fish stocks and highly migratory fish stocks in their entirety. The Agreement imposes on coastal States and States fishing on the high seas the duty to cooperate for the purpose of achieving compatible measures in respect of such stocks.

This duty, whereby the coastal State is required to cooperate to ensure the compatibility of measures adopted for the same fish stocks, is interpreted by many such States as sanctioning interference with respect to their sovereign authority over the conservation and sustainable use of their fisheries within the exclusive economic zone.[1]

Unfortunately, following many years of negotiation within the framework of the third United Nations Conference on the Law of the Sea, at which a balance was achieved in the wording thereby making it possible to reach agreement on the text, and subsequently, after various attempts had been made within the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks to establish ways of ensuring compatibility that favoured the measures of the coastal State, a formula was arrived at, which, although it can be interpreted in the way outlined below, raises doubts among coastal States in that they perceive it basically as weakening the jurisdiction established in the Convention in relation to straddling species.

As indicated in an earlier ECLAC document on the issue,[2] the third United Nations Conference on the Law of the Sea, at its last meetings, examined a series of proposals for

the final wording of article 63.2 which granted some degree of respect for the conservation measures adopted by the coastal State.

Moreover, various coastal State delegations which took the floor at the signing ceremony for the Convention concurred that it should be borne in mind that both its provisions relating to straddling species and those relating to highly migratory species were contained in Part V of the Convention, dealing with the exclusive economic zone, leaving no doubt as to the preferential rights of coastal States over those stocks within the zone under their national jurisdiction.

In this connection, it would seem that countries of the region should adopt positions that reflect their concern to safeguard their sovereignty over straddling fish stocks and highly migratory fish stocks, instead of clinging, as they have so far, to a negative and isolationist position with respect to the Agreement, since there is no doubt that the latter can be of considerable value in terms of the scope it provides for cooperation measures and mechanisms for access to information.

It is essential to bear in mind, moreover, that the fluidity of the marine environment and the interflow between the various oceans and seas makes it indispensable to examine the issue at the level of large marine ecosystems.[3]

In this regard, the Agreement is one of the instruments of conservation and sustainable use of marine biodiversity directly related in scope to the application to such ecosystems of the Convention on Biological Diversity.[4]

It is significant that various industrialized countries with high seas fishing fleets have been reluctant to consider fishing from the point of view of its impact on the biological diversity of marine species and insist on giving priority to other impacts;[5] this results in a fragmentary approach to the problems involved, and weakens chances of negotiating the issues in their entirety.

The first Meeting of Experts on Marine and Coastal Biological Diversity[6] convened pursuant to the Convention on Biological Diversity, recommended the development, as part of a proposed three-year plan, of an ecosystem-based approach to the sustainable use of living resources of coastal and marine environments, including identification of key variables or interactions for assessing and monitoring sustainable use and, in that context, overcapitalization and socio-economic requirements.

The suggestion was made that studies on the impact on the ecosystem should take into account such factors as by-catches, balance between species and harmful fishing techniques and practices.

It is important to bear in mind that, in looking at the issue of socio-economic requirements, as has been pointed out in other ECLAC documents,[7] the Convention established the concept of fisheries management referred to as "maximum sustainable yield", at a time when concern was already being expressed in the international community,

about its weaknesses. Hence, the Agreement modifies the concept by introducing the phrase "*as qualified by relevant environmental and economic factors*".

It is therefore essential for States Parties to the United Nations Convention on the Law of the Sea, irrespective of their status with respect to the Agreement, to take into account the need to discuss this model and any possible adjustments, and that they identify these environmental and economic factors.[8]

Although there is reluctance to accept that maximum catches or individual quotas[9] be established under the existing cooperation arrangement for fishing on the high seas, any alternative arrangements for conservation and management that may be adopted will undoubtedly have to refer to the provisions of the Convention and, in this regard, the issue of models and their implications must be addressed and an attempt made to determine to what extent the needs and interests of coastal developing States can be reflected in these environmental and economic factors.

In this respect, in an attempt to weigh up the political and economic factors that currently play a more important role than biological factors in the establishment of overall quotas, it would be useful to review the efforts of fisheries organizations such as the International Commission for the Conservation of the Atlantic Tuna (ICCAT).[10]

It is also interesting to note that some fishing countries such as Chile, have opted for subregional or regional agreements, indicating their preference for existing cooperation arrangements such as the Permanent South Pacific Commission (CPPS).

Notwithstanding the importance of empowering existing organizations having authority in fishing matters in response to the need for regulation of fishing on the high seas, it should be pointed out that this calls for a prior review of their area of responsibility which, in the case of the Permanent South Pacific Commission, extends exclusively to zones over which member States have sovereignty and jurisdiction. It is also vital for coastal States to consider participating in similar cooperation arrangements that exist for other regions, when such States also engage in high seas fishing activities in other oceans, as is the case of Chilean ships fishing in the subregional area of the Atlantic islands and in distant waters of the Indo-Pacific region.[11]

Therefore, beyond subregional or regional interests based on specific fisheries or historical cooperation arrangements, sight should not be lost of the need for a universal negotiation framework relating to oceans and the resources of the high seas.

At the fifth Meeting of Ministers for Foreign Affairs of Member States of the Permanent South Pacific Commission, it was agreed that one of the areas of their work to be strengthened should be that of fishing on the high seas.

States reaffirmed their special interest in the adoption of measures to ensure conservation of fishing resources in areas of the high seas adjacent to their respective 200-mile maritime zones, indicating that the term "conservation" should include the sustainable use of resources.[12]

In this connection, the ministers for foreign affairs agreed to give priority to the signing, by the end of 1998, of an international instrument to promote conservation of fishing resources in the high seas of the south-east Pacific, with special reference to straddling fish stocks and highly migratory fish stocks, in accordance with the guidelines adopted by the Working Group for the Evaluation and Management of Fishing Resources in the South-east Pacific and of Straddling and Highly Migratory Species, which was instructed to outline scientific considerations for the proposed agreement at its meeting in November 1997.

The ministers instructed the Permanent South Pacific Commission to prepare, in coordination with the national departments, a draft framework agreement relating to the conservation of fishing resources of the high seas of the south-east Pacific for consideration at the twenty-third Ordinary Meeting of the Commission in October 1997.

It was finally agreed to undertake a study, to be submitted for consideration at the above-mentioned meeting of the Commission, on the coordination of national policies for regulating access to the ports of member States by fishing boats whose activities on the adjacent high seas area adversely affect the conservation of straddling fish stocks and highly migratory fish stocks or infringe the measures established for conservation and sustainable use within the 200-mile zone of sovereignty and jurisdiction.

The basic guidelines for drafting the framework agreement were prepared in the light of the provisions of the 1952 Declaration of Santiago on the Maritime Zone, which establishes the obligation of member States to prevent predatory practices and protect maritime resources *beyond the scope of their jurisdiction.*

These guidelines state that coastal and other States whose nationals fish in the area of the high seas adjacent to national exclusive economic zones should cooperate to ensure that such nationals, in engaging in these activities, respect the rights and interests of coastal States.

According to the guidelines, the framework agreement will set out the terms and procedures whereby, after its adoption by the member States of the Permanent South Pacific Commission, provision would be made for the subsequent accession of third-party States whose fishing vessels engage in fishing activities in the area covered by the Convention on Biological Diversity and have a vested interest in these resources.

Initially, the most complex aspects of the agreement appear to be the nature of the authority that the Permanent South Pacific Commission will exercise in the relevant zone of the high seas, the definition of vested interests in these resources and whether third-party States will be willing to accede to an agreement whose terms they were not involved in negotiating from the beginning.

The procedure adopted by the countries of the south-east Pacific in formalizing this agreement will no doubt serve as an example when the possibilities are being studied for a negotiating framework for fishing on the high seas that is separate from a global arrangement such as the United Nations Agreement.

It is fundamental —and ECLAC is assisting and will continue to assist countries of the region in this respect— to continue to monitor and analyse the Agreement relating to fishing on the high seas. It is also important to develop interpretative approaches based on the United Nations Convention on the Law of the Sea, whose provisions the Agreement seeks to clarify.

The Agreement, by virtue of its very title, confirms its relationship with the United Nations Convention on the Law of the Sea, which it echoes in its preamble, its general provisions and various other articles.

In article 1, which deals with use of terms and scope, "conservation and management measures" are defined as those that are "adopted and applied consistent with the relevant rules of international law as reflected in the Convention and this Agreement".

The "relevant rules of international law" reflected in the Convention are, in this instance, those contained in Part V, which deals with the exclusive economic zone and Part VII, section 2: Conservation and management of the living resources of the high seas.

As can be seen from our earlier analysis of Article 63.2 relating to straddling species, this provision does not place any obligation on the coastal State to arrive at agreements with the States whose nationals fish on the high seas with respect to the management of those resources within its Exclusive Economic Zone.

Similarly, the articles referring to the High Seas point to the duty to cooperate in matters relating to the living resources of this zone and indicate that rights to fish on the high seas shall be subject, *inter alia*, to the rights and duties, and to the interests of coastal States established in article 63.2 and articles 64 to 67.

This reference is highly significant since it places a restriction on the interests of the State with the sea-going fleet with respect to the resources to the extent that the rights or obligations of the coastal State within its Exclusive Economic Zone are jeopardized.

This makes it possible to reconsider the earlier analysis of the economic and environmental factors that must be taken into account in management measures, in addition to elements such as the importance of living resources to the coastal State's economy, the rights of land-locked, developing States of the subregion or region and the need to minimize economic disruption for those States whose nationals have traditionally engaged in fishing activities or have made substantial efforts to research and identify fish stocks.

In this connection, the requirement of compatibility established in article 7.2 of the Agreement effectively safeguards the management measures adopted by the coastal State in compliance with its rights and obligations under Part V of the Convention: those measures cannot be negated by measures adopted in relation to the high seas, in which area as the Convention itself subordinates management decisions to those rights and obligations.

In the same way, with reference to article 64 on highly migratory species, the obligation to cooperate throughout the area of distribution of the fish stock must be

interpreted in conjunction with other provisions of Part V, which recognize the precedence of the interests of the coastal State both in terms of the interests of its nationals and with respect to its agreements with other States of the subregion or region.

This is, in our view, the only interpretation that is truly compatible with the provisions of the United Nations Convention on the Law of the Sea and with the rights of sovereignty it confers on the coastal State over the natural resources within its exclusive economic zone.

On the other hand, the coastal State is strictly bound to cooperate with respect to the resources of and activities on the high seas, as clearly established in article 118 of the Convention.

II. INTRODUCTION TO THE AGREEMENT FROM THE SCIENTIFIC VIEWPOINT

A. BACKGROUND

The adoption of the United Nations Agreement of 4 August 1995 on fishing on the high seas was the outcome of a process initiated in 1993 in compliance with General Assembly resolution 47/192 relating to the convening of an international conference to negotiate an agreement in order to put an end to the numerous conflicts existing between coastal and remote fishing States in various areas of the high seas.

The purpose of the Conference was to promote the effective implementation of the provisions of the United Nations Convention on the Law of the Sea on straddling fish stocks and highly migratory fish stocks by identifying and assessing problems relating to the conservation and management of such stocks, by considering ways of improving fisheries cooperation among States and by formulating appropriate recommendations (Doulman, 1995). Following six meetings (held between April 1993 and August 1995), the Final Act and Agreement were open for signature as of 4 December 1995. The Agreement will enter into force 30 days after the date of deposit of the thirtieth instrument of ratification or accession.

Following adoption of the Agreement, States initiated an important process of consultation, nationally or through regional fisheries organizations, on the interpretation of the new principles it contains, with a view to agreeing on uniform criteria for the establishment of mechanisms for cooperation with respect to fisheries. At the regional level, mention should be made of the progress made in the South-American eastern Pacific area at meetings convened by the Permanent South Pacific Commision (CPPS), in 1995 and 1997, the Latin American Fisheries Development Organization (OLDEPESCA) in 1996, in some cases even before the Agreement was adopted (PCSP, 1993), and other relevant progress made, in the preparatory process by ECLAC in 1994 and the Latin American Fisheries Development Organization in 1993.

This section contains reflections on the terms of the Agreement with a view to assisting interpretation of the criteria to be standardized in order to facilitate the elaboration of regional fishing agreements in Latin America and the Caribbean and to support, through this means, the application of the provisions of the instrument in the region. Reference is made in particular to articles 5, 6 and 7.

Conflicts relating to fishing rights and jurisdictions have arisen in all regions and between different types of countries. The cod trade disputes (between the United Kingdom and Iceland and between France and Canada) and the lobster dispute (between France and Brazil) are examples of such conflicts. Other examples mentioned by Couve (1996, 1996a) refer difficulties encountered in pollack fishing in the Dought Hole in the Bering Sea and in the Peanut Hole in the Okhotsk Sea off the Russian coast; the conflicts relating to orange roughy fishing on the Challenger Plateau off New Zealand, cod fishing in the Barents Sea and squid fishing in the south-west Atlantic; and the recurrent problems in the area regulated by the north-west Atlantic Fisheries Organization, which manages cod stocks and straddling demersal fish on the Grand Banks of Newfoundland, Canada.

These and other problems gave rise to a series of consultations and activities both within and outside of the preparatory process for the United Nations Conference on Environment and Development, held in 1992, and under the auspices of organizations such as the Food and Agriculture Organization of the United Nations (FAO) and ECLAC.

The Agreement on the Implementation of the United Nations Convention on the Law of the Sea of 10 December 1982 is the continuation of the fisheries agenda, not finalized at the third United Nations Conference on the Law of the Sea, which met between 1973 and 1982. The Agreement seeks to fill the main gaps in the final wording of the 1982 Convention with respect to the classification of straddling fish stocks and highly migratory fish stocks. Basically, it was concluded with a view to solving the numerous problems associated with unregulated fishing practices and lack of appropriate management, which have given rise to an excessive increase in fishing activity, over-exploitation of species, fish discards, by-catch, lack of control and use of insufficiently selective techniques and methods.

In order to direct international action towards the solution of earlier conflicts through cooperation, the Agreement introduces new terms and principles which must be interpreted in a broader and more fully integrated manner; this calls for the definition and harmonization of criteria in order to work out new arrangements for fisheries management, as advocated in the Agreement. A number of concerns in this regard were expressed in various technical consultations held in the region, and it was generally recognized that there were difficulties in interpreting the scope and definition of many terms used in the Agreement. Moreover, most coastal States in the region have limited experience in high seas fishing. Many of these initiatives reflect the diversity of systems and experience of coastal States of the region in this area. It is important to note that a document was prepared along the same lines by Mahon (1996) for the western central Atlantic.

B. ANALYSIS OF THE MAIN COMPONENTS

1. Objectives (arts. 1 and 2)

These articles define the terms used in the Agreement and extend the use of the term fish to crustaceans and non-sedentary molluscs, so that the Agreement also applies to those species.

It defines "Arrangement" as a cooperative mechanism established by two or more States for the purpose of establishing conservation and management measures for one or more straddling fish stocks or highly migratory fish stocks. Article 2 defines the objective of the Agreement as being to ensure the long-term conservation and sustainable use of highly migratory fish stocks through effective implementation of the relevant provisions of the Convention.

2. Application (art. 3)

The Agreement applies to the conservation and management of straddling fish stocks and highly migratory fish stocks both within and beyond areas under national jurisdiction. Its applicability presupposes an ecosystem-based rather than a spatial approach and, in terms of geographical coverage, is related to the "Range" of fisheries populations, in respect of which it establishes national jurisdiction over maritime areas. Article 3 calls for interpretation regarding the extent of jurisdiction of the agreements and/or regional and/or subregional fisheries organizations. It also calls for harmonization of national fisheries legislation with that of adjacent coastal States that share the same fisheries populations (art. 3.1).

Highly migratory stocks such as tuna usually have a very wide geographic distribution and the Agreement establishes the need to set the practical geographical boundary of the maritime areas of Latin America and the Caribbean within which conservation and management measures for highly migratory fish stocks may be implemented properly and without interference. Reference was made to the scope offered by the concept of "Large marine ecosystems" (LME) as defined by Caddy and Griffiths (1995). In accordance with the Intergovernmental Oceanographic Commission (IOC, 1993), in the case of Latin America and the Caribbean, such ecosystems are considered to include: the Humboldt Current region, for the Eastern Pacific off South America; the Patagonian shelf, for the southernmost tip of Argentina; the Brazil current region for the Central and South American Atlantic; the north-eastern shelf of Brazil, for Brazil and Guyana and the Caribbean Basin.

Also under the heading *range of fish stocks*, the implementation of the Agreement will involve the problem of identifying and determining the species that belong to each of the two main categories of populations covered by the Agreement since the biological distinction between straddling species and highly migratory species is not always very clear. In Latin America, this problem arises with Chilean horse mackerel shared by Peru and Chile, which is a straddling species; however, from the strictly biological viewpoint, it could prove to be highly migratory. There are also biological criteria relating to the location of a single species within those major groups. In view of the foregoing, it is relevant to ask whether the precautionary approach is applicable when it comes to placing a species in one or other category, bearing in mind that scientific uncertainties still exist.

As indicated when we first mentioned the term, "straddling species" are understood, in very simplified and broad terms, to mean those species found within a State's exclusive economic zone and in adjacent areas of the high seas.

Highly migratory species are those whose range involves extensive geographical areas and which cover very large distances. Examples of highly migratory species are those identified in annex I to the United Nations Convention on the Law of the Sea, including various types of tuna, sword fish, shark and cetaceans.

Straddling fish stocks comprise: (a) species that reproduce and spend the greater part of their life cycle within the 200-mile exclusive economic zone and which, in some cases (as a result of climatic conditions and the need to extend their range owing to population growth) may migrate beyond the 200-mile zone; and (b) species whose natural habitat includes both the 200-mile zone of sovereignty and jurisdiction and the adjacent area.[13]

However, as pointed out by the United Nations,[14] the biological distinction between straddling fish stocks and highly migratory fish stocks is not always clear. For example, as indicated above, Chilean horse mackerel, which extends up to a distance of 1,500 miles beyond the exclusive economic zones of Chile and Peru, is a case of a straddling species whose migration range, in biological terms, may be as extensive as that of some of the smaller-sized tuna listed in the 1982 Convention. On the other hand, some species of smaller tropical tuna (such as skipjack tuna and yellow-fin tuna) have a limited migration range, especially when their life cycle is cut short by fishing activity.

As indicated by FAO (1994), the extent to which a species "straddles" the boundary of a particular exclusive economic zone normally depends on whether the continental shelf extends beyond the limit of national jurisdiction and on the seasonal presence of the species within the area of that jurisdiction. However, when the continental shelf is wider than 200 miles, the whole series of species must be considered to straddle that limit and this could be the case of many countries of the region with Caribbean coasts. FAO (1994) mentions that the north-western Pacific and south-eastern Pacific are the two main centres of straddling fish stocks (mostly demersal fish), followed by the north-eastern Pacific and the south-western Atlantic.

At the regional level, within the framework of the Permanent South Pacific Commission, specific reference was made to the need to specify the concepts and terms relating to the New York Agreement on straddling species and highly migratory species with a view to identifying and defining the fish populations in the region that fall into those categories. On the same occasion, it was also considered necessary to define the terms and biological features of straddling species and highly migratory species and to agree on a common interpretation of the terms and concepts or biological point of view (Permanent South Pacific Commission, 1997).

3. Relationship between the Agreement and the United Nations Convention on the Law of the Sea (art. 4)

The Agreement establishes that it shall be applied and interpreted in the context of and in a manner consistent with the Convention. States need not be party to the Convention in order to be party to the Agreement. This reaffirms the central role of the Convention as a conceptual base and ideal frame of reference for the Agreement. The interpretation of the

political texture of the relationship between the Agreement and the Convention may be defined by the position of the States with respect to the Convention and with respect to the Agreement. In this connection, it can be asked whether the Agreement is subordinate to the Convention or whether they are on an equal footing. This is a matter of legal interpretation where there are at least two views regarding this relationship: one is that the Agreement may be considered to be legally independent, the other that it has a fundamental relationship or link with the Convention. Some countries, given their position with respect to the Convention, would perhaps have preferred the Agreement not to contain any reference to the Convention, which could be wrongly interpreted by reason of the interpretation in the Agreement of issues in the Convention that have made it difficult for those countries to ratify the latter instrument. This could give rise to a proliferation of fishing agreements, with or without reference to the Convention, which would require an immense effort of interpretation and harmonization.

4. Conservation and management of straddling fish stocks and highly migratory fish stocks (art. 5)

The Agreement sets forth 12 basic principles for conservation. These principles, in essence, are based on the United Nations Convention on the Law of the Sea of 1982, on the United Nations Conference on Environment and Development of 1992 (such as chapter 17 of Agenda 21) and the Code of Conduct for Responsible Fishing. In practice, the Agreement reproduces in a legal binding context the majority of the voluntary principles set out in the Code. The principles of the Agreement refer to the adoption of measures designed to ensure the survival of the fish stocks that are the subject of the Agreement and to maintain or restore stock levels that allow the maximum sustainable yield, bearing in mind also environmental factors, the interdependence of species, pollution control, discards, by-catch, the protection of biodiversity, the reduction of overfishing and of excess fishing capacity, the interests of artisanal and subsistence fishers and the need to collect and share complete and accurate data on fishing activities, as set out in annex I to the Agreement. The application of these principles to measures for fisheries management and conservation demands the adoption of agreements and gives an integrated character to fisheries management. This calls for a significant technical and financial effort in the region and will require a considerable degree of international assistance.

Implementation of the Agreement in the region calls for harmonization of approaches and concepts in relation to the different terms used in the instrument, some of which are completely new and have not been applied before in the region. From the strictly biological/fisheries point of view, some of them were developed during the drafting of the Agreement and may therefore still be at an "experimental stage". Harmonization of concepts is also justified given the existence of several arrangements for fisheries management in the region.

Some principles go beyond what relates strictly to fisheries and affect sectors which do not normally or traditionally have any bearing on the fishing sector in the region, these include biodiversity, pollution and shipping. It will therefore be necessary to develop mechanisms for interaction with non-fishing sectors, and to develop them not only within

existing and/or future regional fisheries organizations or agreements. The principles set forth in the Agreement in essence promote integrated fisheries management, since an overall approach to unity of concepts is vital.

As some principles in the Agreement are not sufficiently specific they may give rise to many interpretations and lead to confusion as to the importance of given management measures. For example, principle 5 makes no reference to the protection of biodiversity; moreover, implementation of the Convention on Biological Diversity adds to the uncertainty surrounding the protection and management of marine biodiversity. In fact, article 22.2 of this Convention states that the contracting parties shall implement the instrument with respect to the marine environment in accordance with the rights and obligations of the States under the Law of the Sea. This reference indicates that the principle should apply within a complex framework which hinges on the third United Nations Conference on the Law of the Sea (Artigas, 1993) and is linked to a variety of legal instruments, of which the best example is the United Nations Convention on the Law of the Sea (Artigas, 1993). Certain shortcomings of the Agreement as far as the protection of biodiversity is concerned are indicated in Artigas and Escobar (1997). Annex II to the Agreement points to the scope that biodiversity has to offer as a possible reference point in the management of high seas fishing.

Within a broad, general context, regional experience in terms of protecting marine biodiversity has been limited because the main concern with respect to fishing on the high seas has been to address the problems of by-catch of sea mammals (the tuna-dolphin problem) and by-catch of sea turtles in drag-net fishing of prawn (the prawn-turtle problem). Some States in the region and other States parties to the La Jolla Agreement (April 1992) adopted within the framework of the Inter-American Tropical Tuna Commission, agreed upon a multilateral programme to gradually reduce dolphin mortality caused by fishing in the Eastern Pacific Ocean to almost zero by establishing annual limits. In order to eliminate dolphin mortality in these fishing zones, they decided to seek ecologically sound methods for catching large yellow-fin tuna not associated with dolphins in the Eastern Pacific Ocean and, at the same time, to maintain these tuna stocks at levels capable of producing maximum sustainable yield year after year and thus to curb and, to the extent possible, eliminate dolphin mortality in fishing in these waters. The Agreement also establishes a review panel to monitor and report on compliance by international fishing fleets with mortality limits agreed on therein.

Both by-catch of dolphins and capture of turtles in drag-net shrimp-fishing have led to unilateral trade restrictions resulting in trade embargoes based on non-treaty ecological arguments and in the use of technical devices for reducing by-catch, such as turtle-excluder devices (TEDS) (Alverson, D. and others, 1994).

The measures adopted to protect marine biodiversity within the framework of regional fisheries organizations, in compliance with the fifth principle in the Agreement, could prove insufficient for this purpose unless mechanisms are adopted to ensure that other regional fisheries organizations apply the same or similar measures.

Another consideration concerning application of the principles of the Agreement in the region relates to mixed fish stocks from different faunal zones as a result of movement through natural and artificial channels such as the Panama Canal and the Strait of Magellan.

5. Application of the precautionary approach (art. 6)

This is a new term in fisheries management introduced into the Agreement since the United Nations Conference on Environment and Development of 1992 and the Code of Conduct for Responsible Fishing. It is intended to facilitate the application of management and control measures in doubtful or scientifically uncertain circumstances.

Another new concept for fisheries management introduced by the Agreement is that of r*eference points.* This concept reflects the recognition, for the purposes of implementing the Agreement, of the current uncertainty relating to fishing as a science and, in a sense, obliges coastal States and States whose nationals fish on the high seas to accept the risk associated with this scientific uncertainty and requires a constant and ongoing review of the reference points agreed to within the framework of regional and subregional fishing agreements and arrangements.

The proper implementation of the Agreement calls for research (art. 6.2, 6.4-7) if the provisional limits agreed on for certain reference points are not to become permanent. It also requires a guaranteed effective mechanism for ongoing exchange of information within a regional and/or subregional system, as the case may be.

If reference points are to fit in with the precautionary principle, they must, by definition, be conservative, so that they may be applied in a proactive manner without this implying moratoriums or obstacles to fisheries development. This principle implies a new, longer-term approach to fisheries management than the short-term approach that has generally prevailed in the region. According to the Food and Agriculture Organization of the United Nations (FAO, 1995a) and García (1994), precaution with respect to fisheries management reflects two main concepts: **the precautionary principle** and the **precautionary approach.** The precautionary principle, owing to its complex nature, has been a highly controversial issue and outweighs economic and social considerations. The precautionary approach is more acceptable and is more easily applied in fisheries management systems. This approach advocates caution in all aspects of fisheries activities. As indicated by García (1994), the precautionary approach to fisheries management entails a series of activities designed to ensure, on a consensual basis, common management standards. It implies that the States of the region do all in their power to acquire and exchange the best available information on fisheries management through regional agreements and/or regional fisheries organizations. This approach not only applies to the fish stocks that are the target of current fishing practices but to the possible impact of this exploitation on the environment and primary associated species. Article 6.6 stresses the need for the precautionary approach to new fisheries and areas being fished on an exploratory basis.

The implementation of article 6 will not only require that reliable information be obtained, processed and disseminated, but also that a system be established for communicating information in real time. This is an important and costly requirement of the Agreement, which may exceed the technical and economic capabilities of many of the fisheries organizations of the region and will require strong international cooperation. The establishment and monitoring of reference points will require more detailed information than that obtained from nominal catches, which are related more to the biology of the species. The establishment of fishing quotas and closed seasons, monitoring catch levels and opportunities for establishing conservation measures, and the review of provisional reference points are information-intensive and exceed existing individual capacities of fisheries institutions in terms of infrastructure and financing.

In view of the current state of knowledge in the region regarding the biology of highly migratory fish stocks and of the limited experience of many regional States in the area of high seas fishing, and since the scientific classification of species in each of the major groups of fish stocks covered in the Agreement is still a matter of uncertainty, tuna is being considered as the most promising species —in the short term— to be chosen as the reference biological unity. This gives rise to the problem of the impact of this weighting on non-tuna fishing countries in the region and/or those with an interest in migratory species other than tuna. Moreover, it has not been specified what amount of information on a species is considered sufficient for the species to be considered as a possible reference for biological unity. Consideration of the advantages and disadvantages for coastal States and their fisheries in the use of this new concept is an underlying issue since the adoption —and definition— of conservation and management measures hinges perhaps on this fundamental technical concept. The definition of biological unity presupposes at the least: an appropriate knowledge of the stocks to be managed under this fisheries agreement; knowledge of the biological characteristics, including the area of distribution of the stocks, and time-space fluctuations attributable to environmental changes and fishing activity; it also implies a knowledge of the other stocks that are being or are likely to be exploited, in order to agree on reference points for conservation purposes.

6. Compatibility of conservation and management measures (art. 7)

This article is one of the key points of the Agreement and, according to some actors, represents a very important advance with respect to the United Nations Convention on the Law of the Sea insofar as coastal States and those that fish on the high seas are under an obligation to cooperate to achieve compatible measures for conservation and management of the target stocks referred to in the Agreement. This, according to Couve (1996), represents a globalization of two different mandates established in the Convention, which translates into an extension of the obligation of coastal States by including straddling fish stocks within the exclusive economic zone. Subparagraphs 1 (a) and (b) impose different obligations with respect to the two major categories of fish stock covered by the Agreement. For straddling species (subparagraph (a)), the mandate refers to an intention, spelled out in the term "shall seek"; this term means that there will not necessarily be agreements, in which respect it is weak and not restrictive and does not establish time limits as is indicated in the reference to article 8 in this document. The content of subparagraph 7 (b) is mandatory. For both cases,

review by coastal and fishing States of their national fishing regulations is necessary to bring them into line with the various approaches and concepts established by the Agreement, in the interests of consistency and compatibility of measures. Such a review is also partly necessary because the terminology used in domestic legislation is not uniform and could prove inaccurate for the purposes of the Agreement. This could lead to regulations for a region and/or subregions having national nuances derived from regulations relating to some particular migratory species of interest to a particular country. In any event, a self-critical review of national legislation is necessary to ensure their compatibility for the purposes of the Agreement.

7. Mechanisms for international cooperation and regional and subregional fisheries management organizations and arrangements (arts. 8, 9 and 10)

Article 8 of the Agreement identifies two options for establishing cooperation among coastal States and those that fish on the high seas; directly or through regional or subregional fisheries management organizations or arrangements (art. 8, paras. 1 and 2). The Agreement does not give any guidance for deciding whether an arrangement that is established directly is also considered appropriate for the interests of other fishing States that share the same stocks covered by the direct arrangement. Nor does it offer information as to the conditions and/or circumstances under which a direct arrangement takes precedence over other regional and/or subregional arrangements. Since straddling fish stocks and highly migratory fish stocks generally straddle the zones of jurisdiction of two or more coastal States, such arrangements must pay due regard to issues relating to the definition of marine boundaries and the effect that such arrangements could have on the sovereignty of countries. In Latin America and the Caribbean, in general, implementation of many aspects of the Agreement requires the consideration of and consultation on issues relating to the definition of marine boundaries.

A study of the parties' obligations under the Agreement suggests a preference for the conclusion of agreements through regional or subregional fisheries management organizations, as appropriate. A movement in this direction seems to be turning attention towards various existing regional organizations, such as the Permanent South Pacific Commission, which has prepared guidelines for a draft regional agreement (García, 1997). Where there is no regional organization or arrangement to establish conservation and management measures for a specific fish stock, relevant coastal States and States fishing on the high seas for such stock in the region shall cooperate to establish such an organization or enter into other appropriate arrangements to ensure conservation and management of such stock and shall participate in the work of the organization or arrangement. The term "arrangement" in the context of the Agreement (art. 1 (d)) means a cooperative mechanism and its scope of application is two-fold and necessarily implies a certain institutionalization for its administration. For straddling fish stocks, the cooperation to be established does not necessarily entail arriving at an agreement and basically reflects an intention, as has already been mentioned; whereas for highly migratory fish stocks there is a more specific obligation to cooperate (art. 7.1 (a) and (b)). This also implies a certain degree of institutionalization for the management of these binding arrangements, which, could, in the long run, also encompass the management of direct arrangements. The above could affect a number of

existing fishing arrangements in common fishing zones arrived at under boundary agreements.

From the perspective of the Latin American and Caribbean region, the conclusion of fishing agreements arising out of the 1995 New York Agreement through already existing regional and subregional organizations (art. 8.3 and 4) raises some considerations as to the qualifications and competence of these organizations in respect of the requirements of the Agreement. Arias-Schreiber (1995), Marashi (1993), Caddy and Griffiths (1995) and Mahom (1996) provide information on existing fisheries organizations in Latin America and the Caribbean. The table below shows the main organizations of which countries of the region are members.

The prospective Eastern Pacific Tuna Fisheries Organization (OAPO) whose objective will be to conserve, protect and explore the six species of tuna throughout their area of distribution, with the participation of the coastal States and fishing States would be one example of a fisheries organization. Other organizations with responsibility in this area are the Caribbean Community (CARICOM) and the Organization of Eastern Caribbean States (OECS).

The different treatment reserved for straddling fish stocks and for highly migratory fish stocks (art. 7) in the Agreement introduces some overlapping in its implementation insofar as fisheries arrangements and regional fisheries organizations are concerned. Coastal States and States that fish on the high seas might prefer to belong to, or enter into fisheries arrangements with, certain fisheries organizations for straddling species and other organizations for highly migratory fish stocks. During the preparatory process of the Agreement, it was clear that this was a possible option under the Agreement.

In a working document, "Elementos de un acuerdo internacional de conservación y ordenación de los recursos tranzonales y altamente migratorios de alta mar", presented at the preparatory meeting in New York in July 1993 by the member countries of the Permanent South Pacific Commission (Colombia, Chile, Ecuador, Panama and Peru), section IV of which included all the straddling species and highly migratory species, the delegation of Colombia suggested an additional explanatory paragraph to indicate that the list of species in the south-east Pacific did not include larger cetaceans which came within the province of the International Whaling Commission or any other organization which might succeed it. Also excluded are other highly migratory species whose exploitation is governed by special regional or global agreements, such as the Inter-American Tropical Tuna Commission (IATTC) (Londono and Mora, 1993). The above may explain the need to establish flexible mechanisms within regional fisheries agreements and/or arrangements to accommodate the fisheries interests of a coastal State on the basis of its own fisheries policies and/or preferences of the moment.

Main organizations dealing with fisheries in Latin America and the Caribbean

Organization	Established	Head-quarters	Members	Area of competence	Functions
Regional Fisheries Advisory Commission for the South West Atlantic (CARPAS) (Inactive)	1961 by resolution of of the FAO Conference, pursuant to article VI-V of the FAO Constitution (currently inactive)	FAO, Italy	Argentina, Brazil and Uruguay	South-western Atlantic and inland waters of member countries	To establish an organized approach to the rational management and exploitation of marine and inland fish stocks; to promote a cooperative scheme for training and research
Joint Technical Commission for the Argentina / Uruguay Common Fishery Zone (CTMFM)	1973 Bilateral agreement	Montevideo, Uruguay	Argentina and Uruguay	South Atlantic	To adopt and coordinate plans and measures for the conservation and rational exploitation of living resources and for the protection of the marine environment in the common fishing zone
Inter-American Tropical Tuna Commission (IATTC)	1949 international convention	La Jolla, California, United States	Costa Rica, France, Japan, Nicaragua, Panama, United States, Vanuatu and Venezuela	Eastern Pacific	To compile and interpret information on tuna, carry out scientific research and recommend proposals for joint conservation plans
International Commission for the Conservation of the Atlantic Tuna (ICCAT)	1996 international convention	Madrid, Spain	Angola, Benin, Brazil, Canada, Cape Verde, Cote d'Ivoire, Ecuatorial Guinea, France, Gabon, Ghana, Japan, Morocco, Portugal, Republic of Korea, Russian Federation, São Tome and Principe, Spain, United States, Uruguay and Venezuela	Atlantic ocean and adjacent seas	To study the stocks of tuna and related species; make recommendations to maintain these stocks at levels that allow maximum sustainable catches
Latin American Fisheries Development Organization	1984 international convention	Lima, Peru	Bolivia, Brazil, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Panama, Peru and Venezuela	Zones of national sovereignty and jurisdiction of member countries	To attend to the food requirements of Latin America and the Caribbean using the potential of fishery resources for the benefit of the populations of the region; to promote the coordination of policies for fisheries management and the implementation of related projects by member States
Permanent South Pacific Commission	1952 international convention	Rotates every four years among the member countries	Colombia, Chile, Ecuador and Peru	South American eastern Pacific	To coordinate common maritime policies of its member States; to propose studies and research projects, designed to protect and conserve the living resources of the maritime area within the jurisdiction of the member States and to protect the environment

Organization	Established	Head-quarters	Members	Area of competence	Functions
Western Central Atlantic Fishery Commission (COPACO)	1973 FAO resolution, pursuant to article VI-I of the FAO Constitution	Rome, Italy	Antigua and Barbuda, Anguilla, Aruba, Bahamas, Barbados Belize, Brazil, British Virgin Islands, Cayman Islands, Colombia, Costa Rica, Cuba, Dominica, France, Grenada, Guadalupe, Guatemala, Guinea, Guyana, Haiti, Honduras, Jamaica, Japan, Mexico, Montserrat, Netherlands, Nicaragua, Panama, Puerto Rico, Republic of Korea, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Saint Lucia, Soviet Union, Spain, Suriname, Trinidad and Tobago, United States, United States Virgin Islands, Venezuela	Western central Atlantic	To facilitate the coordination of research, promote education and training, assist member Governments in the establishment of national policies for promoting the rational management of resources of interest to two or more countries

Among the highly migratory fish species, tuna seems to be of special interest in the region, since tuna organizations seem to have amassed the most experience in such stocks. The region's options could be centred on these organizations, unless the decision is made to establish new bodies. Given the specific nature of existing tuna organizations in the region, other equally migratory species of particular interest to one country or groups of countries could be managed through other similar organizations, but the result could be a multiplicity of fisheries organizations with overlapping functions. To avoid this, a comprehensive approach should prevail. Caddy and Griffiths (1995) provide statistics on the overlapping roles of the fisheries commissions at the global level, using FAO fishing zones, which reveal some overlapping of roles for area 77 (Eastern Central Pacific) and for area 41, to be served by the proposed regional fisheries advisory commission for the south-west Atlantic.

The assignment to a regional fisheries management organization of jurisdiction over the range of distribution of an entire fish population area as a requirement (albeit not in itself sufficient) for proper management, reduces the current possibilities of the existing fisheries organizations in the region, owing, in part, to the fact that the distribution ranges of fish populations generally exceed the areas of operation and/or jurisdiction of these organizations. Their composition in terms of coastal State membership do not correspond exactly to the range of fish populations. In addition, for at least one species, tuna, coastal States have different jurisdiction and ownership criteria, which could also apply to migratory fish stocks other than tuna with ranges that are also different. Extending the composition of existing fisheries organizations in the region would not appear to be consistent with the requirements of the Agreement.

Some regional fisheries organizations have expanded their membership by admitting associate members on the basis of specific interest activities, without this implying a formal commitment with respect to other activities of the organization. An example of this with respect to the tuna-dolphin issue in dolphin fishing can be seen in the La Jolla Agreement (California, United States) of April 1992 and the subsequent Panama Declaration of 1995 in which Governments that were not members of the Inter-American Tropical Tuna Committee (IATTC) (Colombia, Belize, France, Honduras and Spain) reaffirmed their commitment under the La Jolla Agreement progressively to reduce dolphin deaths associated with fishing activity in the eastern Pacific ocean (IATTC Panama Declaration, 1995). These and other issues that demand special treatment and which are the result of omissions or management problems, could lead fisheries organizations to have functions beyond the strictly fisheries related functions for which they were originally established.

The establishment of new regional fisheries organizations (art. 8.5) will lead to a high degree of overlapping of roles, as has already been the case with the existing regional organizations. This possibility was previously raised by IATTC (FAO, 1992). The establishment of a joint mechanism in which current and future regional fisheries organizations would collaborate involves a degree of uncertainty as to how their activities would be integrated.

In the region, the efficiency requirements that management organizations should satisfy for high seas areas defined by FAO (1992) are only partially met, for example:

- some organizations are merely advisory bodies with coordinating functions and the power to convene meetings, but without any executive power for the management of fisheries resources, especially the fish stocks covered by the Agreement;

- some coastal States have fishing interests in more than one regional organization, and these organizations have areas of overlap with respect to practical aspects of the Agreement;

- some regional organizations have very limited regulatory competence in certain areas defined by the instruments establishing them and are specifically geared to administering the small fraction of the range of distribution of species falling within the organization's jurisdiction; and

- a large proportion of regional fisheries organizations lack the technical capacity to implement the practical proposals of the Agreement and/or lack the economic means to collect, process, analyse and exchange information; others have no capacity to influence high-level political decisions of their member States and/or have a limited capacity to penetrate those States.

In addition to the foregoing, there are other possible regional constraints, the most obvious being the following:

- limited experience of some coastal States in the region in the area of high seas fishing, which places the region at a certain disadvantage with respect to coastal States and regional organizations that have such experience and capacity; for example, the global fishing fleet is distributed to the disadvantage of most coastal States of the region, since from Asia (China, Japan and the Republic of Korea), accounts for 42% of it, the Russian Federation (the former Soviet Union) 30%, the European countries 11.6%, North America 9.8% and Latin America 3%;

- lack of a fishing tradition: some coastal States in the region, with a markedly land-based style of development are limited in terms of their ability to participate in regional fisheries agreements. The degree of economic dependence on fisheries resources varies greatly between coastal States of the region, even coastal States that share the same fish stocks;

- some States of the region are, *strictu senso*, non-fishing States;

- some coastal States have fishing interests in more than one regional fisheries organization with duplication of functions relating to one or several maritime objectives;

- many coastal States lack the mechanisms for integrating fisheries with other sectors in the country that have maritime interests. This situation also occurs at the regional level with respect to existing fisheries organizations, so that the social and economic

objectives of the Agreement will be difficult to achieve as long as this absence of mechanisms for sectoral integration remains a problem; and

- in some countries, application of the precautionary principle allows vaguely defined environmental concerns to take precedence over fisheries criteria, which does not occur with the precautionary approach to fishing; this clearly results in a conflict of interests, which prevents or impedes fisheries agreements.

8. Non-members of organizations and non-participants in regional arrangements (art. 17)

This article establishes the obligation of States not members of fisheries management organizations and not participants in fisheries management arrangements to cooperate *mutatis mutandi* in the de facto application of conservation and management measures established by a regional or subregional organization or arrangement. The reference to enjoyment of the benefits deriving from participation commensurate with their commitment suggests that such obligation to cooperate may only be partial. The Agreement does not indicate under what conditions and in what circumstances the commitment must be total.

9. Duties of the Flag State, Compliance and Enforcement (art. 18 and 19)

These are basic articles for the effective implementation of the instrument. They determine the type of information to be provided and the regulations that must be put in place for flag States to authorize fishing on the high seas in accordance with agreed procedures at the subregional, regional or global levels. In order to avoid clashes and problems due to a possible difference in procedures within and between regions, such procedures must be standardized, as should licensing systems, permits and mechanisms; these include procedures for on-board inspection by national authorities and for national monitoring programmes, and systems and procedures for transmission of information in real time. Under this part of the Agreement, any member country of a fisheries organization has the right to arraign and inspect vessels of other States that are fishing on the high seas to ensure compliance with conservation measures. The responsibility to comply with the conservation measures falls to the State under whose flag the vessel is operating (the flag State) and implies the possibility for the coastal State to exercise enforcement action.

The Agreement, at this point, opens up the possibility of enforcement action being exercised within the framework of rights and duties other than those resulting directly from fishing activity and which are presumed to be related to this activity. This is the case of immigrant fishworkers employed on vessels that fish in remote waters whose working conditions are fully described by the action group on industrial fishing vessels of the International Collective in Support of Fishworkers (ICSF) and are also covered by art. 7 of the Code of Conduct for Responsible Fishing, which deals with fishing operations (FAO, 1995b). The overlapping of fishing rights with other rights connected with their exercise will require an important and necessary clarification in the implementation of regional

agreements, in fields such as navigational safety, working conditions and emigrant fishworkers.

Article 20 and the remaining articles in part VI of the Agreement deal with questions relating to procedures for regional and subregional coooperation for purposes of enforcement. It establishes the situations that are deemed to constitute a "serious violation" of the Agreement and includes a certain supposed scale of violations in terms of their seriousness, insofar as the measures adopted by non-flag States with respect to vessels that have engaged in activities contrary to the subregional or regional conservation and management measures will be proportionate to the seriousness of the violation (art. 21.16).

10. Requirements of developing States (art. 24)

This article stresses the need to ensure that developing countries have access to the resources of the high seas. In view of the technical and economic conditions existing in countries of the region with respect to access to fishing on the high seas, such access should occur on an equitable basis in order to reduce the possibility of over-fishing in the case of some "target" species. Access to significantly overexploited fishing grounds where highly migratory species are to be found, is contrary to the precautionary approach to fishing.

11. Forms of cooperation with developing States (art. 25)

This article outlines the forms and objectives of cooperation among developing island States and least-developed countries for the conservation, management and development of their national fisheries with respect to straddling fish stocks and highly migratory fish stocks, in the light of the general principles relating to fishing on the high seas and new members and organizations. This article may well pave the way for the establishment of joint-venture type fishing companies. Such companies could adopt a structure based on guidelines established on the fringes of the Agreement, due consideration being of course paid to equity and State interests that go beyond business concerns. Equity is unquestionably an important point with respect to the implementation of regional measures for access to fishing on the high seas.

12. Special assistance in the implementation of the Agreement (art. 26)

The Agreement promotes the establishment of special funds to assist developing States, in implementing the Agreement or in establishing new regional fisheries management organizations or arrangements and in strengthening existing organizations and/or arrangements. It does not offer any guidelines on criteria and/or conditions for access to the special funds and does not give any hint as to whether the term "developing" applies in the context of fisheries or to economic and social development as a whole. It is considered that the criteria for establishing priorities for the allocation of such funds should also be based on the equity situation at the time when the funds are established.

The remaining articles of the Agreement relate to procedural matters that are standard for this type of instrument, such as the settlement of disputes (part VIII, art. 27-29), procedures for the settlement of disputes (art. 30), provisional measures and other criteria for implementation.

III. GENERAL CONCLUSIONS

The Agreement is an important global appeal which shapes and promotes integration through the establishment of regional and subregional spaces for the orderly exercise of fishing on the high seas and places fishing in a holistic and integrating perspective. The effectiveness of its implementation will depend on the solution of the main factors that determine and/or limit its regional operation.

One characteristic of the instrument is that its implementation demands intensive agreement within and among States, which requires mobilization of international assistance on a joint and equitable basis. The general implications include:

- access to the fisheries resources of the adjacent high seas area by States which have expanded their pelagic fishing activities to the high seas;

- technical, financial and institutional requirements for collecting, processing, analysing, diffusing and communicating necessary information, especially in real time;

- the requirement for precise, rapid and economic procedures for the revision, amendment and harmonization of national fishing regulations and, where appropriate, for their development and complementarity;

- delimitation of marine boundaries and/or specific prior agreements;

- decisions on integration mechanisms and methods of regional fisheries organizations; and

- meeting the research requirements demanded by the Agreement for the establishment of reference points and limits to such points and other conservation and monitoring measures.

As indicated above, the countries of Latin America and the Caribbean would do well to maintain an on-going assessment of the progress of the Agreement and the experience gained in implementing it and separate cooperation arrangements concluded in this area.

As emphasized from the outset, the fluidity of the marine environment, the interaction between its various ecosystems and the interdependence of fish stocks point to the advisability of seeking, beyond individual cooperation agreements, the promotion of concerted efforts at the global level.

Moreover, apart from fishing issues, there are numerous other considerations that enter into decisions on the conservation and sustainable use of fishing resources, and these must be analysed and assessed.

Without prejudice to national sovereignty and interests, and specific historical associations, a clear international trend exists towards the adoption of common standards for sustainable development which, with respect to high seas fishing, consist, *inter alia,* of the United Nations Convention on the Law of the Sea, the Convention on Biological Diversity, Chapter 17 of Agenda 21, the Agreement relating to fishing on the high seas, the Code of Conduct for Responsible Fishing and the Agreement for promoting compliance with international measures for conservation and management by fishing vessels operating on the high seas.

It would be in the interest of our region to continue to develop criteria and mechanisms for adapting this international framework to its requirements and priorities for sustainable development by adopting a proactive approach to all issues relating to the environmental dimension of globalization.

Notes

[1] Patricio Pavéz Carrera, "Análisis de la proposición sobre compatibilidad y coherencia para un mismo stock", document presented at the Meeting of the Regional Group of Experts on High Seas Fisheries, Santiago, Chile, 3-6 December 1993.

[2] ECLAC, "High-seas fisheries and the interests of the coastal states of the region: an analysis of the upcoming negotiation from the perspective of social equity" (LC/R.1314), Santiago, Chile, 31 December 1997.

[3] Intergovernmental Oceanographic Commission (IOC), "The use of large marine ecosystem concept in the Global Ocean Observing System (GOOS)" (IOC/EC-XXV/Inf.7), Paris, 10 March 1992.

[4] ECLAC, "El Convenio sobre la Diversidad Biológica y los principios del Derecho del Mar: hacia un marco jurídico para la biodiversidad de los mares y océanos" (LC/R.1598), Santiago, Chile, 31 December 1996; "El Convenio sobre la Diversidad Biológica y la agenda marina internacional: tres escenarios negociadores para la conservación y uso sostenible de la biodiversidad costera y marina" (LC/R.1714), Santiago, Chile, 8 April 1997.

[5] UNEP, *Report of the first meeting of the subsidiary body on scientific, technical and technological advice* (UNEP/CBD/COP/2/5), document presented at the Convention on Biological Diversity, Paris, 21 September 1995.

[6] UNEP, "Jakarta Mandate on Marine and Coastal Biological Diversity", *Report of the First Meeting of Experts on Marine and Coastal Biological Diversity* (UNEP/CBD/JM/Expert1/5), document presented at the Convention on Biological Diversity, Montreal, 24 April 1997.

[7] ECLAC, Los conceptos básicos utilizados en la conservación y ordenación de los recursos pesqueros: una invitación a la reflexión (LC/R.1339), Santiago, Chile, 31 December 1993.

[8] Geoffrey Kesteven, "The maximum sustainable yield revisited. A realistic approach to fisheries management and administration", *Marine Policy*, vol. 21, No. 1, Oxford, January 1997.

[9] Luis Felipe Moncada Arroyo, "¿Por qué no debe suscribir Chile el Acuerdo de Pesca de Nueva York?", paper presented at the Seminar Expopesca, Santiago, Chile, 27 November 1996.

[10] International Commission for the Conservation of the Atlantic Tuna (ICCAT), "The allocation of catch for South Atlantic Swordfish, the Brazilian approach", document presented at the Inter-sessional Meeting of Panel 4, Madrid, July 1997.

[11] Carlos Hernández Salas, "*Pesca chilena de altura: una perspectiva histórica y jurídica*", document presented at the Seminar "La Ley General de Pesca y Acuicultura: un balance necesario" (Valparaíso, Chile, 31 July-1 August), 1997.

[12] Permanent South Pacific Commission, "Proyecto de declaración de la V Reunión de Ministros de Relaciones Exteriores de los Países de la Comisión Permanente del Pacífico Sur-CPPS", Bogotá, 4 August 1997.

[13] United Nations, "Definition of straddling stocks of marine life and list of their main species", submitted by the delegation of the Russian Federation (A/CONF.164/L.18), New York, 20 July 1993.

[14] United Nations, "Some high seas fisheries aspects relating to straddling fish stocks and highly migratory fish stocks" (A/CONF.164/INF/4), New York, 15 June 1993.

BIBLIOGRAPHY

Alverson, L.D and others (1994), "A Global Assessment of Fisheries by Catch and Discards", FAO Fisheries Technical Paper, No. 339, Rome, Food and Agriculture Organization of the United Nations (FAO).

Arias Schreiber, A. (1995), "Consideraciones para la ordenación de las pesquerías en áreas de alta mar en el Pacifico Sudeste", Lima, Permanent South Pacific Commission, November.

Artigas, Carmen (1993), High-seas fisheries and the interests of the coastal states of the region. An analysis of the upcoming negotiation from the perspective of social equity: Part I, From the United Nations Convention on the Law of the Sea to the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks (LC/R.1314), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), December.

Artigas, Carmen and Jairo Escobar (1997), El Convenio sobre la Diversidad Biológica y la Agenda Marítima Internacional: tres escenarios negociadores para la conservación y uso sostenible de la biodiversidad costera y marina (LC/R.1714), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), April.

Caddy, J.F. and R.C. Griffiths (1995), "Living Marine Resources and their Sustainable Development: Some Environmental and Institutional Perspectives", FAO Fisheries Technical Paper, No. 353, Rome, Food and Agriculture Organization of the United Nations (FAO).

Couve, A. (1996a), "Negociaciones sobre la pesca de alta mar", document presented at the Seminar "Los intereses de pesqueros de Chile en alta mar", Santiago, Chile, Sociedad Nacional de Pesca (SONAPESCA), April.

_____ (1996), "Itinerario de la negociación en Naciones Unidas sobre poblaciones de peces transzonales y altamente migratorias 1993-1995", Primeras Jornadas del Mar, Luis C. Vaccacela (ed.), Guayaquil, Armada de Ecuador, Dirección General de Intereses Marítimos, April.

Doulman, J.D. (1995), "Structure and process in the 1992-1995 United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks", Fisheries Circular, No. 898, Rome, Food and Agriculture Organization of the United Nations (FAO).

ECLAC (Economic Commission for Latin America and the Caribbean) (1994), Report of the Meeting of the Regional Group of Experts on High Seas Fisheries (LC/G.1799), Santiago, Chile, February.

FAO (Food and Agriculture Organization of the United Nations) (1995a), *The State of World Fisheries and Aquiculture*, Fisheries Department, Rome.

_____ (1995b), *La pesca responsable*, Fisheries Department, Rome, October.

_____ (1994), "World Revue of Highly Migratory Species and Straddling Stocks", FAO Fisheries Technical Paper, No. 337, Rome.

_____ (1992), *Report of the Technical Consultation of High Seas Fishing* (Rome, 7-15 September 1992), FAO Fisheries Report, No. 484, Rome.

García, M.A. (1997), "Texto del proyecto base del Acuerdo Marco Relativo a la Conservación y Ordenación de las Poblaciones de Peces Transzonales y las Poblaciones de Peces Altamente Migratorias en Áreas de Alta Mar del Pacífico Sudeste", document presented to the Permanent South Pacific Commission, Lima.

García, S.M. (1994), "The Precautionary Approach to Fisheries with Reference to Straddling Fish Stocks and Highly Migratory Fish Stocks", FAO Fisheries Circular, No. 871, Rome, Food and Agriculture Organization of the United Nations (FAO).

IOC (Intergovernmental Oceanographic Commission) (1993), *Evaluación y monitoreo de grandes ecosistemas marinos (LME)* (IOC/INF 942), Paris, United Nations Educational, Scientific and Cultural Organization (UNESCO).

Latin American Fisheries Development Organization (1996), "Ordenación regional de la pesca en alta mar: urgente tarea de Latinoamérica", Documento OLDEPESCA, Lima, May.

_____ (1993), "La pesca en alta mar, un enfoque latinoamericano", Documento OLDEPESCA, Lima, November.

Londono, G.A. and L.O. Mora (1993), "Informe de la participación a la Conferencia de las Naciones Unidas sobre las Poblaciones de Peces cuyos Territorios se Encuentran Dentro y Fuera de las Zonas Económicas Exclusivas y las Poblaciones de Peces Transzonales (Nueva York, 12-30 de julio de 1993)", Bogotá, Instituto Nacional de Pesca y Acuicultura (INPA), August.

Mahon, R. (1996), "Fisheries and Research for Tuna and tuna like species in the western central Atlantic: implications of the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks", Fisheries Technical Paper, No. 357, Rome, Food and Agriculture Organization of the United Nations (FAO).

Marashi, S.H. (1993), *Activities of International Organizations Concerned with Fisheries*, Fisheries Department, International Institutions and Liason Unit, No. 807, Rev. 1, Rome, Food and Agriculture Organization of the United Nations (FAO).

Permanent South Pacific Commission (1997), *Informe final de la Primera Reunión del Grupo de Trabajo de Evaluación y Ordenación Pesquera en el Pacífico Sudeste y de Especies Transzonales y Altamente Migratorias*, Valparaíso, Chile, May.

_____ (1995), *Informe final de la Reunión Preparatoria del Grupo de Trabajo sobre Evaluación y Administración Pesquera en el Pacífico Sudeste y de Especies Transzonales y Altamente Migratorias*, Bogotá, October.

_____ (1993), *Acta Final de la XXI Reunión Ordinaria de la CPPS, Intervención del Secretario General de la Comisión sobre el tema la Conferencia de las Naciones Unidas sobre Poblaciones de Peces cuyos Territorios se encuentran dentro y fuera de las Zonas Económicas Exclusivas y Poblaciones de Peces Altamente Migratorios*, Santiago, Chile, August.

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