

SHARED FISHERY

ARGENTINE – URUGUAYAN

COMMON FISHING ZONE

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SUMMARY

Cooperative management of fisheries shared by Argentina and Uruguay, had its origin in the Treaty the two countries signed in November 1973. The Treaty is a legal document based on the cooperation between two neighboring and friendly countries sharing a peaceful history. Two large geographic areas were established: the Rio de la Plata, from its origin till its outside border and from this, the sea itself, a pure marine area named Common Fishing Zone (ZCP).

The fishing fleet from Argentina and Uruguay operate inside the River and in the ZCP, exploiting the species with higher commercial value. Fisheries in the River are managed by the Administrative Commission of the Rio de la Plata (CARP) and the one in the Common Fishing Zone (ZCP) by the Technical Commission of the Maritime Front (COFREMAR). Owing to the situation that there are species distributed over both regions, the Rio de la Plata as well as the ZCP, both Commissions agreed to establish a joint management administration.

This paper presents a description of fisheries, the main species harvested and the rules applied to their management and conservation. The Treaty regulation established to fix the volumes of capture by species and to divide them between the two countries, is mentioned.

Different arguments relating to the application of the Treaty are discussed, chiefly regarding the distribution of captures. A synoptic analysis of the situation of the most important commercial species is presented as well as the regulations that are being applied or programmed for their recovery. The scientific research activities are presented that are carried out by the two Commissions, through the project concerning the protection of the aquatic environment to avoid contamination and to restore the various habitats.

GENERALITIES

SEQUENCE OF THE EXPOSITION

This paper begins with a description of the legal framework that supports the fisheries shared between Argentina and Uruguay, arising from the Treaty elaborated by the two countries. The requirements asked by FAO will be treated in the following sequence: First, “to describe the nature of fisheries”, and includes the essence, the arrangement, the quality and availability of fisheries resources. Second, the requisites asked by FAO concerning critical topics that alters the effectiveness and success of the managements of shared fisheries resources. Finally, the practical problems that arose from the management of shared resources, those that were resolved, those that are being determined, and the conclusions regarding the requirements asked by FAO.

I. LEGAL FRAMEWORK

I.1. **The Treaty.** On 19th November 1973, Argentina and Uruguay signed the Treaty of the Rio de la Plata and its maritime front. If necessary to define in a few words its essence, it could be summarized as a “Cooperation Treaty”. One of its objectives consists of giving general rules in order that the two countries are able to carry out their fishing activities.

I.2. **Rio de la Plata.** The first part of the Treaty is dedicated exclusively to the Rio de la Plata and different aspects are considered concerning the legalities, navigation, lightening, protection of human life, rescue, pollution and others. One chapter that explains specifically the rules about fisheries.

I.3. **Outside border of the River.** An imaginary line is observed, extended between the geographic sites of Punta del Este in Uruguay and Punta Rasa, (Cape San Antonio) in Argentina (Figure 1). This line established by the two countries in 1961, constitutes the outside border of the Rio de la Plata as well as the beginning of its Maritime Front.

I.4. **Maritime Front.** The second part of the Treaty refers to the Maritime Front which addresses: the side maritime border, navigation, fishing, pollution, research and defense. The chapter on Fishing, includes the agreement to establish a Common Fishing Zone (ZCP) which consists in a large maritime area extending from the borders of the Territorial Sea to the 200 miles (Figure 1).

1.5. Founding and functions of the bilateral Commissions.

a) Rio de la Plata (CARP)

The first part of the Treaty includes the disposition to establish the Administrative Commission of the Rio de la Plata (CARP) with different functions. Those concerning fisheries are summarized in the following statements:

1. To promote joint activities on scientific studies and research;
2. To establish rules to control the fisheries activities in the Rio de la Plata, related to the conservation and protection of living resources;

b) Maritime Front (COFREMAR)

The second part of the Treaty resolves the establishment of the Technical Commission of the Maritime Front (COFREMAR) with jurisdiction in the Common Fishing Zone. The different functions concerning to fisheries are detailed in the following statements:

1. To fix the volumes of catches by species, to distribute them between the two Parties and to settle (regulate) the capture periodically;
2. To promote joint activities on scientific studies and research;
3. To formulate recommendations and to apply projects having as a main objective: to ensure the maintenance of the value and equilibrium in the biological systems;
4. To establish rules about the rational exploitation of species and to prevent and eliminate pollution;
5. To arrange plans concerning protection, conservation and development of living resources.

c). Budget of the Commissions, CARP and COFREMAR

The two Commissions receive annual financial support equally shared by the two countries, to cover costs of operation and administration, research surveys and study groups.

II. DESCRIPTION OF THE TYPE OF FISHERIES

II.1. Fisheries in the Rio de la Plata. Species, and geographical areas of distribution.

- a) Three type of fisheries coexist in the Rio de la Plata: the artisanal, the sports/recreational and the commercial fisheries. The last one is operating in the river and marine waters.
- b) The species of higher commercial value are caught in the lower Rio de la Plata.
- c) Whitemouth croaker (*Micropogonias furnieri*) occupies the first place. It is a coastal demersal resource inhabiting from the proximities of the coast line, till 20 meters depth (Figure 1). Its main area of reproduction is in the “wedge shaped” zone, from the line formed between Punta Piedras (RA)-Punta Brava (ROU) till the line between Punta Piedras (RA) - Piriápolis (ROU). There are nursery grounds in the proximities of Montevideo, and of Samborombon Bay, and others of less density, along the coasts. Concerning the whole habitat of croaker, 80% of its biomass is distributed in the Rio de la Plata and 20% in coastal areas of the

Common Fishing Zone (ZCP). Total geographical area of distribution exceeds the scope of the Treaty.

- d) The second important commercial species is striped weakfish (*Cynoscion guatucupa*), a coastal demersal resource that inhabits till 50 meters depth. It is more oceanic than whitemouth croaker, with a geographical area of distribution that includes 20% in the Rio de la Plata and 80% in the Common Fishing Zone (ZCP). The total geographic area of distribution exceeds the scope of the Treaty.
- e) Another commercial species is the Patagonian smoothhound (*Mustelus schmitti*), with a nursery ground in the Samborombon Bay, and its habitat is covered from the coast till a maximum depth of 120 meters in the south.
- f) Other commercial species inhabiting the Rio de la Plata are: black drum (*Pogonias cromis*); eagle ray (*Myliobatis goodei*), flounder (*Paralichthys orbignyanus*) and king weakfish (*Macrodon ancylodon*).

II.2. Fisheries in the Maritime Front. Jurisdiction, species and areas of distribution.

- a) The lateral maritime boundary of the above mentioned Common Fisheries Zone [ZCP (2.3.)] delimites the control areas for each country, being a real border except for legally authorized operation of fishing fleets by the two Parties.
- b) Hake (*Merluccius hubbsi*), a migratory species, is the most important commercial resource. It has its highest abundance (density) in the ZCP, and appears from middle autumn till October. During summer months, hake migrates to the south extending from 34° S to 41° S latitude, an extension that outlines the northern management unit of this species. On the other hand, there is a southern management unit for the same species that extends from 41° S to 48° S, but this unit has not any relationship with the present work. The associated fauna of hake, includes the following species with less biomass and different patterns of distribution:

Pink cuskeel (*Genypterus blacodes*)

Hawkfish (*Cheilodactylus bergi*)

Argentine seabass (*Acanthistius brasiliensis*)

Parona leatherjack (*Parona signata*)

Brazilian codling (*Urophycis brasiliensis*)

Red porgy (*Sparus pagrus*)

Argentine squid (*Illex argentinus*)

- c) Argentinean Fishing Fleets: Two types of fisheries are in the ZCP, one is the coastal/artisanal fishing fleet which harvests coastal demersal species (white croaker and striped weakfish) and pelagic species such as anchovy (*Engraulis anchoita*). This fishing fleet is made up of smaller sized vessels, with limited hold capacity. The other fishery is the one of the high seas fleet, which operates in the sea, with large sized vessels that

catch hake and its associated fauna. Fishing vessels come from the Argentinian harbours of Mar del Plata, Quequén and Ing. White.

- d) Uruguayan Fishing Fleet: Before this present Treaty was signed, Uruguay had an artisan coastal fleet which operated on the coastal resources, chiefly with whitemouth croaker and stripped weakfish. Hake catches were around 1000 tons/year.

Since the ratification of the Treaty, in February 1974, Uruguay developed a high seas fleet with hake as the main target, whose catch has been increasing from then onwards, together with its associated fauna. The fishing vessels come from the Uruguayan harbours of Montevideo, Colonia and La Paloma.

II.3. Generalities concerning the distribution of catches.

- a) The Treaty establishes that the volumes of catches for the Rio de la Plata and the ZCP must be as follows:
- For the Rio de la Plata, volumes must be fixed in agreement and distributed equally between the two countries.
 - For the ZCP, criteria of equity and proportionality are established and applied by the COFREMAR, in order to fix the volumes of catches and allocate them between the two Parties. The proportionality must be evaluated according to the ichtic abundance each Party contributes, based on the scientific and economic criteria.
- b) When the Treaty is applied, a particularity arises concerning the determination of volumes of catches and allocation between the two Parties involved, of those species (white croaker, stripped weakfish, Patagonian smoothhound) which inhabits the Rio de la Plata as well as the Common Fishing Zone. Their biomasses are submitted to different patterns of distribution. The procedure adopted by the two Commissions to fix and distribute the Total Allowable Catch (TAC) and to manage those resources, will be mentioned in due course.

II.4. Studies carried out with hake. First rules of management

- a) The bilateral Commission COFREMAR was established in 1976. At that time, the two Parties had not research vessels, hence foreign vessels were hired to assess the hake stock. Then, catches of hake reached 180000 tons in 1978 (Figure 2).
- b) Taking into account the first data obtained for the whole geographic area of distribution of the species, in September 1979 COFREMAR approved Resolution 3/79 which specifies the following statements:
- I) To recommend not to exceed the “at that time” level of hake catches.
 - II) Not to exceed the TAC limit of 200000 tons /year, adapting their respective volumes according to the above objective, until COFREMAR

is able to present a plan to the two Parties, about the distribution of the amounts of capture of hake.

III) To study the distribution of catches for the two countries.

c) Distribution of catches. Article 74 of the Treaty establishes the way the catches of the species will be distributed.

d) Joint research

i) In 1984 COFREMAR and the Fisheries Research Institutes agreed to develop a Joint Research Plan about the species of highest commercial value in the geographical area of the Treaty.

ii) Both Commissions agreed that COFREMAR was responsible to coordinate together with the Fisheries Institutes, the joint research about the coastal demersal species.

After a trawl fishing survey in 1984, the Research Plan began in 1985. Figure 3 summarizes the objectives and annual distribution of the 52 surveys carried out for the study of hake and the 36 surveys for the coastal species. COFREMAR has funded 88 research surveys till present.

e) Proposal to modify Resolution N 3/79.

In 1986, 4 seasonal surveys and 3 more in 1987 were carried out to evaluate the hake. Based on the obtained data, a reduction of the TAC, established as 200000 tons/year (II-4 b)), to a value of TAC in agreement with the biological condition of the species, was proposed. Such value was estimated at 130000 tons/year. Two different opinions resulted from this proposal: (i) there could be a risk of overfishing and signs indicating a decrease of the species; (ii) there were not any indicators that the species was decreasing.

Since there was not a general agreement, the value of 200000 tons/years established in 1979, was maintained till 2000.

f) Evolution of the catches of hake from 1974 till 2001 (Figure 2)

The established maximum value of 200000 tons/year was never attained. A sustainable increase of the Uruguayan catches in the ZCP was reached till 1981 when they exceeded the Argentinian catches. In 1985 Uruguay reached its historical maximum value of 97150 tons. The highest values were got in 1978, owing to the increased tons of the Argentinian and the Uruguayan catches together.

In 1991 a yield of 190000 tons was attained, because of the good catches as well as the equivalence of both countries. From 1991, catches of hake have been decreasing.

II.5. Management and regulations over the control of hake.

- a) Closed areas. Until August 1993 closed areas were established inside the jurisdiction of each country in order to protect the concentration of juveniles of hake. Those measures were taken unilaterally and obligatory applied to the vessels with the flag from the Party responsible for establishing the closed area. Unfortunately, a discriminatory situation was created among the fishing vessels. Closed areas were established in spring, summer and autumn. However, such regulation had the disadvantage of the impossibility of being applied when the concentration of juveniles was extending outside both boundaries of the Lateral Maritime Border. Besides, coordination between the two Parties was really difficult, although not impossible.
- b) In August 1993, COFREMAR established that the Commission has the faculty to decide the setting of closed areas in order to protect spawning or nursery areas, to avoid the entrance of hake to polluted areas or to areas where red-tides exist, and establishing obligatory regulations to the authorized fishing vessels.

From then onwards, three annual closed areas have been established in order to protect juveniles in spring, summer and autumn. Those areas are represented by typical diagrams shown in Figure 1. To avoid catches of juveniles which come together with adults in winter, a possibility of establishing closed areas in the cold season is also being considered.

- c) Fishing gear. From September 1989, fishing vessels could only use the 120 mm diamond mesh to catch hake and its associated fauna. This regulation was applied till 31st December 2001.
- d) COFREMAR has recently established the use of new fishing mesh for selective fishing known as “device to allow juveniles of fishes to escape from the drift net” (DEJUPA). Its use is compulsory since January 2002.
- e) Minimum size. From September 1993, a 35 cm minimum size was fixed to put hake onshore.
- f) Total allowable catch (TAC) and limitations to each country. COFREMAR established (item 6.2) the amount of 200000 tons/year the CTP for hake. Such value was allowed till 2000 when a TAC of 90000 tones/year was agreed. Thus, the Commission resolved:
 - i) To fix a TAC for hake of 90000 tons/year in the ZCP, from the 1st January 2001.
 - ii) To keep an additional amount of 10000 tons/year in case needed to be used, controlled by COFREMAR.
 - iii) To distribute the maximum amounts to each country established in the Treaty, according to the following decision:

55000 tons/year to Argentina (61%); 35000 tons/year to Uruguay (39%).

Such disposition is conditioned to good results in a common system of fishing reports, equivalent penalties for both countries, observers on board of every fishing vessels and a satellite monitoring system of position and identification of vessels.

II.6 Coastal species, whitemouth croaker and stripped weakfish.

- a) Whitemouth croaker has its habitat in the Rio de la Plata and the Common Fishing Zone (round 80% and 20%, respectively). In 1984, COFREMAR agreed to be in charge of coordinating a joint research on coastal species. Thirty six surveys were carried out to study both species (Figure 3).
- b) Stripped weakfish has its habitat in the Rio de la Plata and the ZCP as well (round 20% and 80%, respectively). Stripped weakfish is also a coastal species but more oceanic than whitemouth croaker. Some of these mentioned surveys were carried out to study the two species (Figure 3), others had only one target species, either whitemouth croaker or stripped weakfish.

II. 7 Application of management to control whitemouth croaker.

The progress in the establishment of rules for management and administration of the species whitemouth croaker, is shown by the following:

- a) Total allowable catch and maximum amount to each country. In July 1996 CARP and CROFEMAR recommended, not to exceed the preliminary upper limit of 40000 tons/year of catch.
- b) In September 1996, the two Commissions resolved to fix a provisional total of catch quota of 40000 tons/year and to settle a final volume according to the complementary studies.
- c) In May 1997, the two Commissions established the following allocation quotas for the period from 1997 till 1999: (i) Argentina: 17.500 tons/year (44%); Uruguay: 22.500 tons/year (56%).

The two Commissions agreed that if one of the involved Parties exceeded its quota, a compensation must be obtained during the following year. The two countries fulfilled the compromises since during 1997, Argentina caught 25499 t (+7999) and Uruguay 23624 (+1124). Thus, a compensation for those exceeding catches was reached in two years, determining the following quota for the years 1998 and 1999: (i) Argentina: 13500 tons/year (1998: 12781; 1999: 5733); (ii) Uruguay: 21938 tons/year (1998: 22253; 1999: 14650) (Figure 2).

- d) In April 1999, the following quota was established, based upon the criteria that was being applied: Argentina: 13500 tons/year; Uruguay: 21623 tons/year.
- e) In March 2000 the two Commissions, CARP and COFREMAR, agreed to reduce the TAC to 36000 tons/year, and the same for 2001 in a system of olympic catches. The TAC for 2002 has not been determined.
- f) Management. In February 2002, CARP and COFREMAR approved Resolution 1/02 concerning the assessment, conservation, protection and rational exploitation of whitemouth croaker and stripped weakfish. The following statements were established:
 - i) The two Commissions agreed to be responsible for the assessment, conservation, protection and rational exploitation of the species whitemouth croaker and stripped weakfish inside the area of the Treaty, including the setting of one TAC, the establishment of closed areas and the technical characteristics of vessels and fishing gear.
 - ii) Regarding the distribution of fishing quotas, each Commission must be adapted to what the Treaty establishes.
 - iii) The management and research of whitemouth croaker will be the responsibility of CARP whereas that for stripped weakfish COFREMAR.
 - iv) The decisions regarding conservation, protection and management of the mentioned living resources will be taken through joint resolutions.
- g) Closed areas. At present the determination of a closed area is under study to protect concentration of reproductive whitemouth croakers.
- h) Fishing gear. Two surveys were carried out to determine a selective fishing gear similar to the type that is used for hake fishing. The resulting device (DEJUPA/whitemouth croaker) turned out to be successful for the species. However, it could not be used yet, since it cannot be applied together with the associated fauna like Stripped weakfish and Patagonian smoothhound. Possible solutions are being analyzed. For this species a 120 mm diamond gear is employed.
- i) Minimum size. The two Commissions established a minimum size of 32 cm to unload onshore.
- j) Protection rules. Fishing vessels of more than 21,99 m length are forbidden to catch whitemouth croaker at the west side of the indicated line in the Rio de la Plata (Figure 1).
- k) Vessels of more than 28 m length are forbidden to catch whitemouth croaker, stripped weakfish and other demersal species at the NW side of the line traced in the ZCP (Figure 1).

II.8 Application of management to control stripped weakfish.

- a) Management. The same rules of management established for whitemouth croaker in the item II-7 f), are applied to stripped weakfish. Because this species is more oceanic than whitemouth croaker, its management is under the responsibility of COFREMAR. All decisions of common interest, regarding conservation, protection and management of this resource, are taken through joint resolutions of CARP and COFREMAR

- b) Closed areas. Every year in summer, a closed area is established to protect concentrations of juvenile striped weakfish. Figure 1 shows the typical outline of the closed area applied for the first time during the summer 2000, and annually repeated.
- c) Fishing gear. A survey was carried out to determine the selective fishing device, the one employed for hake (DEJUPA / striped weakfish). However, its use has not been determined yet, since it cannot be applied to zones where this species coexists with whitemouth croaker and with another associated fauna. Possible solutions are being analyzed.
- d) Minimum size. COFREMAR established 30 cm to be the minimum size to unload striped weakfish onshore (October/99). A joint resolution needs to be established.
- e) Total allowable catch. COFREMAR established 23000 tons / year in 2001. In 2002, an equal estimation of 23000 tons has been determined. A joint regulation needs to be established. Amounts for each country have not been established yet, thus the olympic system is applied.
- f) Protection rules. Vessels of more than 28 meters length are forbidden to catch whitemouth croaker, striped weakfish and demersal species, at the NW side of the line in the ZCP (Figure 1).

II.9 Other commercial species

Other commercial species caught in the Common Fishing Zone and rules for their control will be described.

II.10 **Squid (*Ilex argentinus*)**. This resource comes into the ZCP in summer and autumn, as part of the migratory movement which belongs to the Bonaerense-Northpatagonic population.

COFREMAR establishes the dates when harvesting activities must begin and end.

Neither TAC nor quotas by countries have been established. Catches carried out during the period 1989/2001 show an irregularity, may be due to fluctuations of the cost of squid in the world market and, to the variation of the oceanographic conditions since squid is a thermophilic species.

II.11. **Anchovy (*Engraulis anchoita*)**. This species has a key ecological role inside the trophic chain of the ecosystems belonging to the Maritime Front.

- a) Minimum size. COFREMAR established a minimum size of 120 mm, with a tolerance limit of 10% in number, for anchovies of smaller size.
- b) Closed areas. A permanent closed area has been established to protect a nursery area which is shown in Figure 1.
- c) Night fishing of anchovy with a mid water trawl has been forbidden.
- d) Total allowable catch. A research survey to determine an advisable biological catch is being programmed to be carried out. Every project

considering anchovy as an objective, will need to include a biological research to hold its protection.

II.12 Bastard halibut, Argentine seabass, Brazilian flathead, Patagonian smoothhound and red porgy.

COFREMAR established the TAC of these species during 2002, based on the recommendations of the Fisheries Institutes, regarding protection and conservation reasons (Table 1).

TABLE 1. TACs for several species belonging to the Common Fishing Zone from Argentina and Uruguay.

Spanish name	English name	Scientific name	CTP
Lenguado	Bastard halibut	<i>Paralichthys patagonicus</i>	4200 t
Mero	Argentine seabass	<i>Acanthistius brasiliensis</i>	1290 t
Pez palo	Brazilian flathead	<i>Percophis brasiliensis</i>	4200 t
Gatuzo	Patagonian smoothhound	<i>Mustelus schmitti</i>	4850 t
Besugo	Red porgy	<i>Sparus pagrus</i>	1270 t

Limits of distribution by country have not been established.

II 13 Chondrichtyes.

During the XVst Scientific Symposium of COFREMAR, a round table was held in order to discuss about chondrichtyes (rays and sharks). The first steps for an adequate management of these species were analyzed. These species are migratory, with low reproduction as well as low recruitment rate. Biomass of these species has been decreasing. Thus, in order to protect them, the following statements were proposed in order to protect them: i) to fix a TAC for Patagonian smoothhound; ii) to decrease the fishing effort on chondrichtyes.

III. REQUISITES ASKED BY FAO ABOUT CRITICAL TOPICS THAT ALTER THE EFFECTIVENESS AND MANAGEMENT OF SHARED FISHERY RESOURCES.

III.1 Management regulations

The management regulations are established in the Treaty, which is a kind of cooperative agreement approved in 1974. It provides the legal framework within which both countries, Argentina and Uruguay, develop their fishing activities. The Treaty is based upon the shared history of the two neighbouring and friendly countries.

The Treaty establishes as one of its objectives, a fishing agreement for the use of: 1) the common fluvial waters of the Rio de la Plata, and 2) the marine waters the two Parties agreed to share, the Common Fishing Zone (ZCP).

III.2 Political will of the national authorities to promote cooperative management.

The political will is written in the introduction of the Treaty. The two countries, through their representatives established, in a friendly and harmonic spirit, the background for a wide-ranging cooperation based on the documents published in 1910, 1961 and 1964. Thus, the Treaty was signed to provide for definitive solutions to the problems that had been appearing throughout the history. It is based on the historical respect of the sovereignty and the rights and interests of the two countries.

III.3 Institutional agreements and capability of the authorities to promote the fisheries management.

The Treaty, the legal framework for the shared fisheries, is an agreement where first two bilateral Commissions were established: CARP to administrate the Rio de la Plata, and COFREMAR, to administrate fisheries in the Common Fishing Zone and to protect the marine environment. The two Commissions are comprised of five delegates from each country representing the involved institutions that are considered in the Treaty. The two Commissions have the capability and the institutional power to take rational decisions based upon the gathered data and the fisheries research, in order to manage shared resources. Advisers from the Fishing Industry, belonging to each of the two delegations, participate in the Commissions. Resolutions taken by the two Commissions, either separately (for hake) or jointly (for whitemouth croaker and striped weakfish), have validity and are accepted by the two Parties.

III.4 Procedures and criteria on taking decisions to distribute the shared resources, based upon transparent and equal criteria.

The Treaty has two criteria for the distribution of the shared resources, either they are resources caught in the Rio de la Plata, or in the Common Fishing Zone.

a) Rio de la Plata.

The following condition is established:

“The two Parties will agree about the maximum volumes of catches by species as well as the corresponding periodical setting of total allowable catches (TACs). The TACs will be equally distributed between the two Parties.

To get those purposes CARP must:

“dictate the rules to regulate the fishing activity in the river, regarding conservation and protection of living resources”.

b) Common Fishing Zone. The distribution of volumes of catch by species is based upon three criteria (Art. 74 of the Treaty):

- (i) Equity in the distribution.
- (ii) Proportionality based on each Parties' contribution to the ichtic abundance.
- (iii) Assessment of ichtic abundance according to scientific and economic criteria.

Different interpretation of such article arose between the two Parties. Each country took its own position regarding what they considered an equitable distribution. In addition, a great complexity of different opinions was taken into account, about the meaning of the scientific and economic criteria to evaluate the contribution of ichtic abundance.

The duality on the interpretation of Article N° 74 remained until December 2000 when the volumes of catch for each country were established, whose standing depended on the fulfillment of certain conditions.

III.5 Giving facilities to new fishermen. (Art. 63-paragraph 2 Law of the Sea)

The Treaty establishes that:

- a) Fishing vessels legally enrolled, which belong to either of the involved Parties, are able to operate in the Common Fishing Zone. Hence a bilaterally fishery is established.
- b) If one of the Parties authorizes third flag vessels to catch a fixed volume, this will be charged to the corresponding quota of the involved Party.

The geographical area of distribution of the main commercial species, are beyond the Common Fishing Zone, in the following cases:

Hake, based on the specific oceanographic conditions of the species, is in the north of the lateral maritime border between Uruguay and Brazil, being caught by Brazilian vessels. Those catches are not significant. Besides, the unit of northern management for hake exceeds the Common Fishing Zone, since it reaches the 41° South Latitude.

Whitemouth croaker and striped weakfish are species found in every coast in South America. Both species are at the sides of the lateral maritime border between Uruguay and Brazil. An agreement with Brazil, about volumes and quota of catches was not necessary. Both species are also extending very far from the ZCP, to the Argentinian Exclusive Economic Zone (ZEE Argentina).

III.6. New member rights.

Fisheries shared by Argentina and Uruguay in the Common Fishing Zone have a bilateral character. The Treaty does not consider the incorporation of new members.

III.7. Mechanisms for sharing functions and responsibility in the management of fisheries. How to share the cost of management.

The bilateral Commissions, CARP and COFREMAR, comprise delegates from the two countries. Every month, Plenary Meetings are held in order to discuss fisheries topics and to establish resolutions with rules of management about conservation of species. Resolutions are: a) valid inside the jurisdiction of each Commission, b) obliged to be fulfilled and c) published in the Official Newspapers of both countries.

The Commissions have the responsibility to fund the research plans that originate the rules of management.

III.8 Prevention and elimination of illegal fisheries activities

Inside the Common Fishing Zone, each country fulfills functions of control and custody of their corresponding jurisdictions. Such activities are carried out by the Navies and Coastguards which received the list of vessels authorized to fish from COFREMAR.

In the Rio de la Plata, there is an agreement among the Coastguards from the two countries to interchange information about the authorized vessels that are fishing. When vessels arrived at their tying harbour, they must give a Fishing Report which is a legal declaration.

IV. PRACTICAL PROBLEMS ARISING FROM THE MANAGEMENT OF FISHERIES RESOURCES

IV. 1. Application of the Treaty

- a) Since the beginning of the fulfillment of the Treaty, difficulty to apply Article 74 which deals with the distribution of catches was seen, because each one of the Parties had a different interpretation of the text, causing delays in getting agreements.

- b) Difficulties also appeared regarding the volumes of catches to be fixed by species, based upon Article 82. a), a function that must be performed by COFREMAR. Taking into account the particular case of hake, this Commission established a TAC value in 1979, which has been applied until December 2000, when a new value was set. The establishment of a new TAC value was due to the lack of agreement between the two Parties during the period 1979 – 2000. Neither of them agreed about new values of TAC taking into account the real state of the resource. This situation contributed to the over-fishing state because of the lack of a TAC update.
- c) Regarding the distribution of TAC for each country (Art. 74), the Treaty establishes the criteria of equity and proportionality of the ichtic abundance provided by each Part, and evaluated according to the scientific and economic criteria. However, in practice, distribution was complex to be resolved because of the great number of parameters that were taken into account and the various assessment methodologies.
- d) Argentina and Uruguay contribute with an annual fee of similar amount in order to allow the two Commissions as well as fisheries research and study, to work. Unfortunately, the fees are irregularly received, which causes lack of fund during some years. At present, the two governments have two years of debt, making both Commissions to stop the research plan and the meetings of the study groups. Another difficulty arising from this inconvenience is the discontinuity of the performance of the Plan of Surveys, meaning a lack of information on the state of resources, hence impeding a rational following up of its evolution.

IV. 2. State and management of the resources

a) Research Plan

The information about the state of resources is obtained from the Plan of Joint Research Surveys which is partially supported by funds from the Commissions (oceanic research COFREMAR and coastal research CARP/COFREMAR). The Fisheries Institutes from the two Parties DINARA (ROU) and INIDEP (RA), cover the cost of research vessels which carry out the fishery research (three research vessels from Argentina and one from Uruguay) with financial resources coming from their own funds.

b) Situation of hake. Recommendations for its management.

In 1984, a program of studies and research was initiated to evaluate and rationally exploit the hake. From the obtained results, tendencies were observed, making it necessary to adequate the TAC to the state of the resource, fixing it at 90000 tons /year from 2001 (Resolution COFREMAR N° 9/2000).

Based upon the studies carried out, the following symptoms of the state of resource were determined: an increasing tendency of fishing mortality rate

and a decreasing tendency of CPUE during the period 1986-1996 (Figure 4). The total biomass of the unit of northern management decreased. Recruitment (age 2) decreased. The fishing stock is overexploited. Adult species tend to disappear. The reproductive biomass is below the acceptable biological values. Total catches have been decreasing. The abundance of hake is very low, most of it consisting of juveniles. When delimiting the concentration areas of juveniles in the last surveys, a marked decreasing density was observed.

In December 2000 (Resolution COFREMAR N 9/2000) allocation of TAC among the two Parties was agreed upon. Thus, for Argentina, 55000 t/year (61%) and Uruguay, 35000 t/year (39%). The accomplishment of the distribution to each country is conditioned by the existence of: a common system of Fishing Reports], a regime of common penalties, observers on board of every vessel and a system of satellite positioning. At present the achievement of a common system of Fishing Report and of satellite positioning is being established. There is a delay in the fulfillment regarding the regime of common penalties and of observers on board.

Taking into account the over-exploitation of the resource and the decrease of the total and reproductive biomass (Figure 4), one of the Parties suggested closing the Fishing Area of hake during one year as an emergency regulation. However the idea was not accepted.

Experts were called in order to give a diagnosis and suggestions about the management of the resource. Such work has not been finished yet, but one of the Parties made suggestions which must previously be accepted to be presented as a recommendation. The most important of those suggestions are:

- (i) to reduce the TAC drastically;
- (ii) to reduce the fishing effort;
- (iii) to protect breeding areas of juveniles during the four seasons of the year (to establish closed areas also in winter);
- (iv) to protect concentration areas of reproductive adults between the months of May and August, from 35° to 37° S and between 50 and 200 m depth. This regulation has never been adopted in the unit of northern management at 41° S.
- (v) to control the use of devices of selectivity;
- (vi) to have observers on board.

c) State of coastal demersal resources: whitemouth croaker and striped weakfish.

CARP and COFREMAR carry out the management of these species together, because their geographical area of distribution includes part of the Rio de la Plata and part of the Common Fishing Zone.

In 1985, a program of studies and research was initiated to evaluate and rationally exploit the species whitemouth croaker and stripped weakfish. Fourteen surveys were carried out to delimitate coastal concentration areas of juveniles of whitemouth croaker, two surveys to determine reproductive areas and one to evaluate stripped weakfish and its area of summer concentration of juveniles. Besides, two surveys for selectivity of both species and two more for whitemouth croaker exclusively, were also carried out.

An over-exploitation state of whitemouth croaker is observed, confirmed by the decrease of catches, the significant decrease of the CPUE during the period 1989 – 2001 (Figure 4) and the declaration of fishermen who observed a marked decreasing in density, particularly on the Argentinian coast.

Regarding the selective fishing mesh, DEJUPA for whitemouth croaker and stripped weakfish is defined, although it cannot be applied yet, since it is impossible to be used in the zones where both species coexist with other coastal species.

TAC for whitemouth croaker was fixed at 40000 tons/year by the two Commissions, CARP and COFREMAR during the period 1997 – 1999, and reduced to 36000 tons/year in 2000 and 2001; the corresponding TAC for 2002 has not been established yet.

The working group composed of specialists on this species, recommended: to establish a closed area to protect the concentrations of reproductive adults, to maintain the polygonals of protection to avoid: a) vessels of 21.99 m maximal length to operate west of the northern polygonal, and b) vessels of more than 28 m maximum length to operate north west of the NE-SW polygonal. Besides, the minimum size to unload the species onshore must be maintained.

The working group of specialists of stripped weakfish considered the catches for the period between 1989 – 2001 (Figure 4) and the CPUE, observing a light increasing, and recommended: a) to maintain the TAC at 23000 tons/year established for 2001; however ratification for 2002 is lacking; b) to continue, the closed area of concentration of juveniles of the northern Uruguayan coast, in summer (Figure 2) and c) to maintain the polygonal NE-SW (Figure 2) that forbids the fishing vessels of more than 28 m maximum length to operate NW of it.

d) Other commercial species

Squid: Each year COFREMAR establishes the beginning and ending of the harvesting season. Owing to the variation regarding the movement of this stock to the ZCP and the lack of means to carry out research surveys to study this species, the Commission takes into account the information coming from Argentina, then it is not necessary to establish a TAC. There is a considerable irregularity in the values of total catches and for each country, probably owing to the fluctuation of prices in the market and to

variations in the abundance of squid. Selective fishing gear to catch the species have not yet been decided upon.

Anchovy. The expert Group for this species recommended: to establish a minimum size to unload the species onshore, to forbid night fishing and to settle a permanent closed area to protect the breeding area of juveniles (Figure 1). Research surveys to fix a TAC for this species still needs to be established.

Bastard halibut, Argentine seabass, Brazilian flathead and red porgy. COFREMAR establishes the TAC for these species for 2002.

Chondrichthyes (rays and sharks). COFREMAR establishes a TAC for the Patagonian smoothhound and started the consideration of other species in order to protect their biomass (Table 1).

IV. 3 Preservation of the fluvial and marine environment

In 1997 the Argentinian and Uruguayan governments, represented by the two Commissions CARP and COFREMAR, signed an agreement with UNDP / GEF to start a "Project of Environmental Protection of the Rio de la Plata and its Maritime Front: Prevention and Control of Pollution and Restoration of Habitats" This Project began in February 2000 and is intended to last for three years and a half. The result to be obtained consists of carrying out a Transboundary Diagnostic Analysis (ADT) and to establish a Strategic Action Plan (PAE).

IV. 4 Conclusions

The species hake and whitemouth croaker are over-exploited. Hence management regulations have been taken to recover the stocks of those species.

The annual plan of research surveys are not being carried out, because both Commissions, CARP and COFREMAR do not have any financial support to continue such surveys.

TACs have been established for several commercial species but owing to their lower biomass, they do not constitute an alternative to hake.

A reduction of biomass of the group of chondrichthyes is observed. Management regulations are being considered.

A project on Environmental Protection has been initiated to prevent and control pollution for the restoration of habitats.

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ANNEX: MAPS AND TABLES

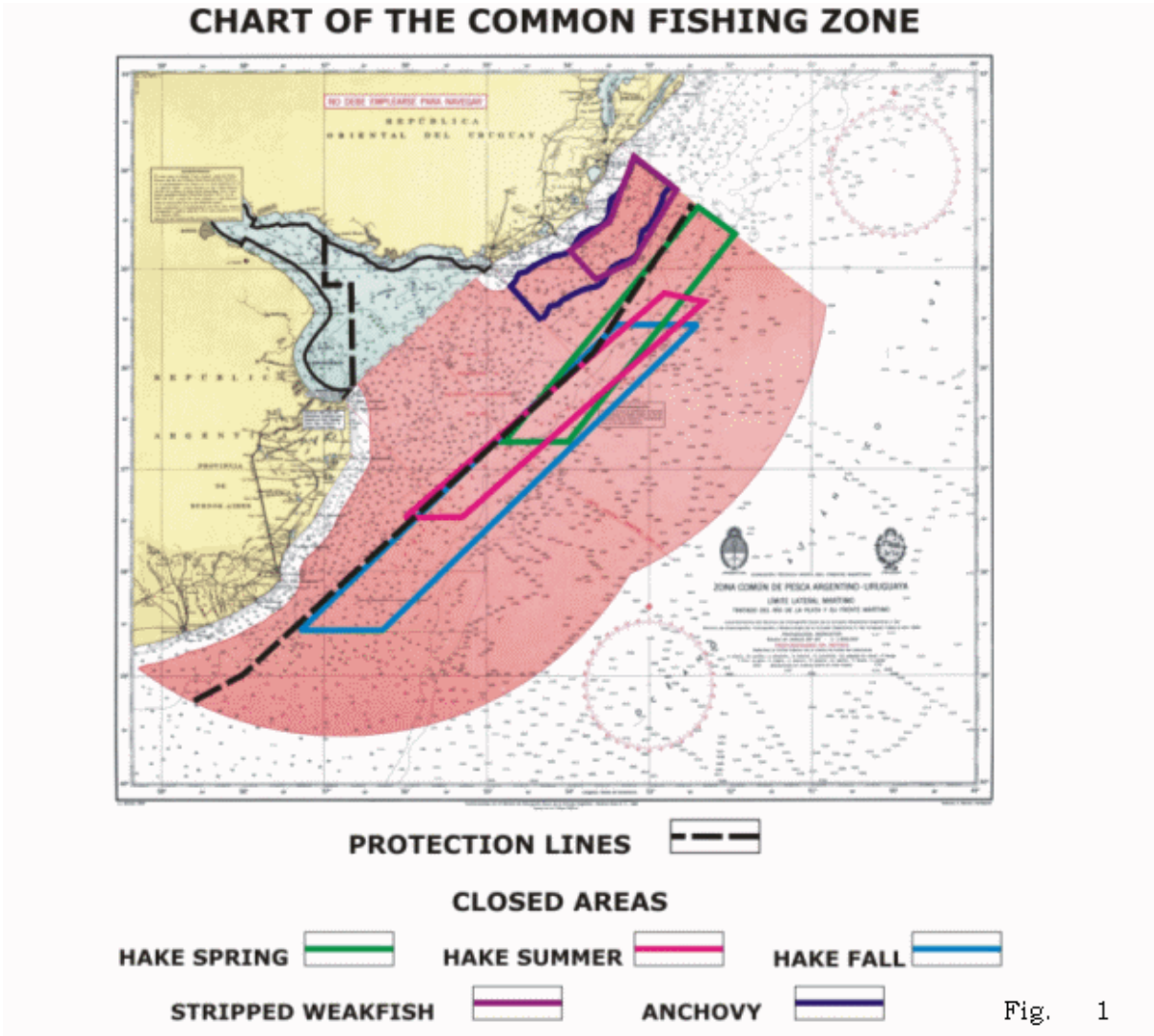
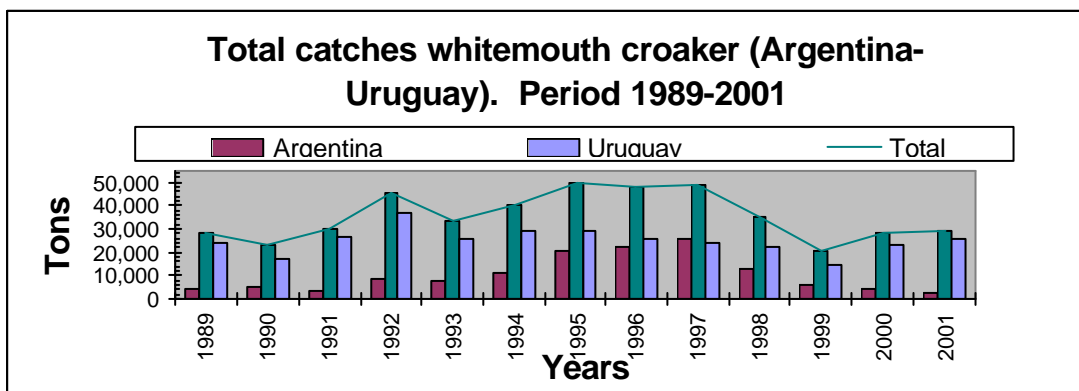
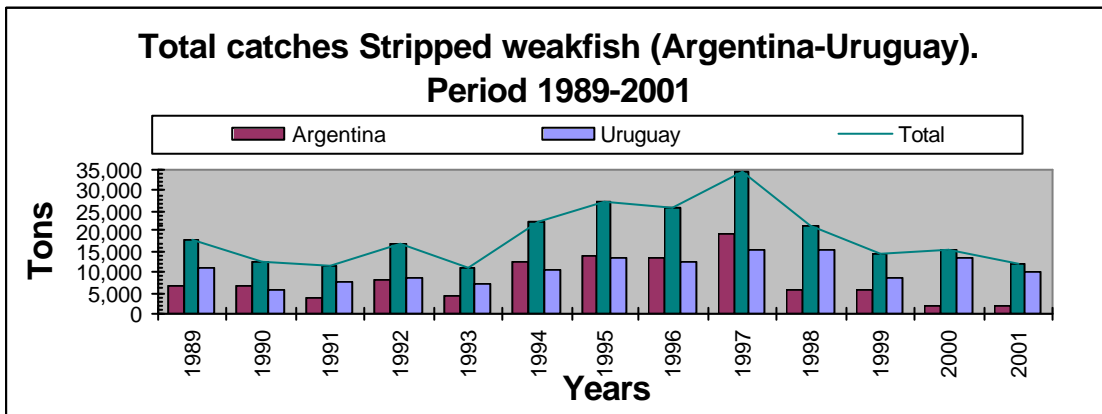
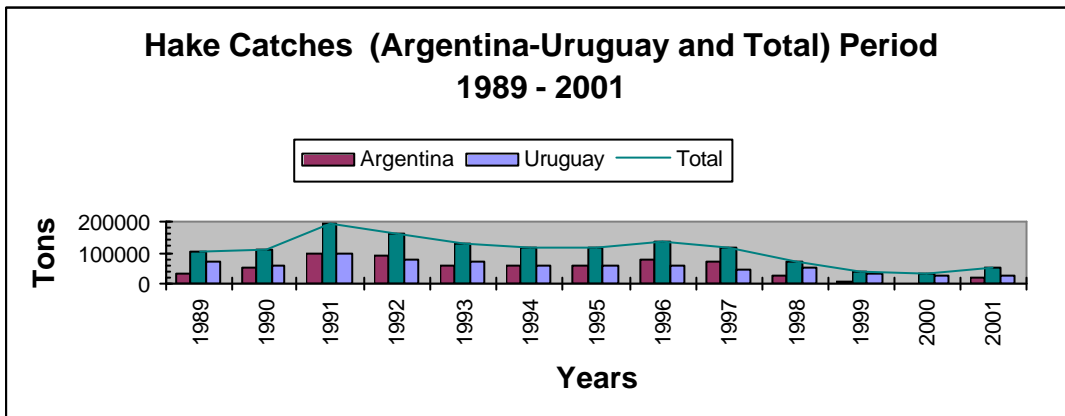
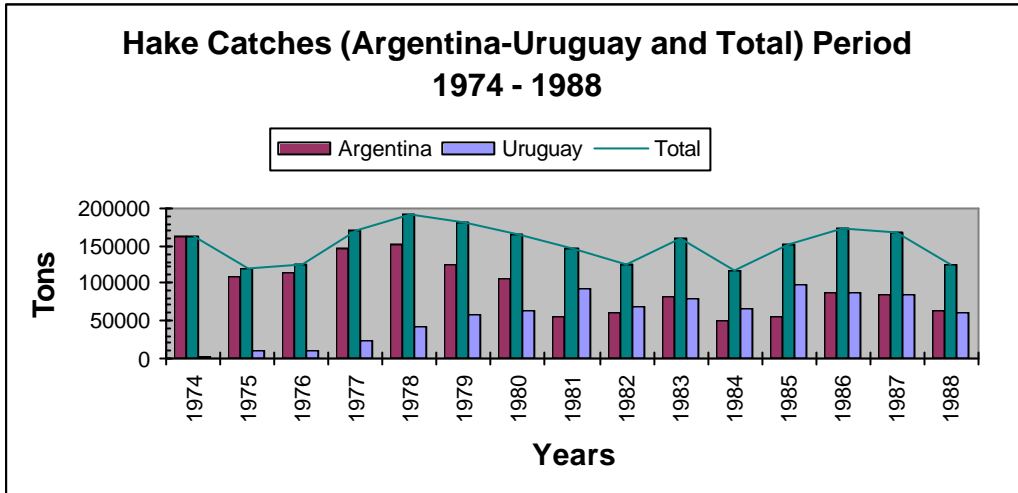


Fig. 2



HAKE RESEARCH 1984-2001

	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	Total
Evaluation(1)		2			1	1		1	1	2	1	1				2	1	1		14
Selectivity					1 (1)										1 (2)		1 (1)	1 (2)		4
Juveniles							1	6	4	2								1	1	15
Reproduction area									1				1							2
Stripped Weakfish																1				1
Totals		2			2	1	1	7	6	4	1	1	1		1	3	2	3	1	36

- 1) Whitemouth croaker and Stripped weakfish (2)Whitemouth croaker

	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	Total
Evaluation			4	3	3	1			1	2	1	1			1					17
Fishing Power	1			1						1										3
Closed area									1	3	3	3	3	3	3	3	3	3	2	27
Selectivity																1				1
Squid															2					2
Totals	1		4	4	3	1			2	6	4	4	3	3	6	4	3	2		50

Figure N° 3

Figure No. 4

