


1985

The Trinidad and Tobago/Venezuela Fishing Agreement

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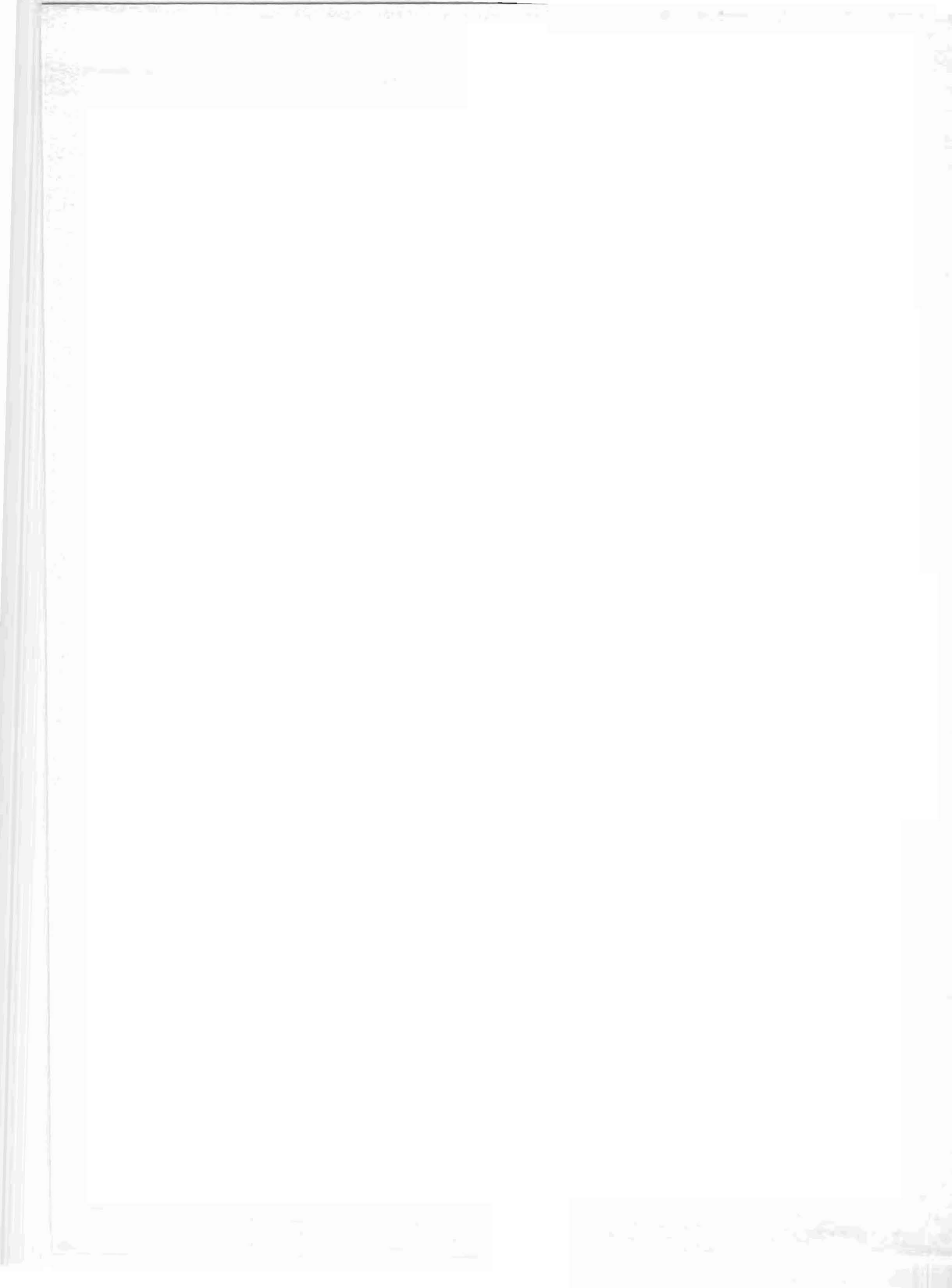
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I. INTRODUCTION

The Republic of Trinidad and Tobago (T&T) has the Republic of Venezuela as its closest neighbour. The distance between Trinidad and Venezuela is so small that the Venezuelan land-mass is at times visible from some parts of western Trinidad.

Fish resources around T&T, especially those found between Trinidad and Venezuela, are thus likely to be trans-boundary stocks moving between the waters of each state. Nationals of both countries in pursuit of these fish are therefore often found fishing in each other's waters. In the absence of a fishing license which permits this, or some other form of understanding between the two countries, such activity is clearly in violation of the laws which apply internationally to foreign fishing within territorial waters.

It is therefore not surprising that T&T fishermen found operating in Venezuelan waters were often arrested and their boats, equipment and catch seized. The frequency of the incidents however inevitably became a source of constant friction between the two countries.

This paper describes the sources of conflicts which led to T&T and Venezuela successfully negotiating a fishing agreement in 1977 and the problems related to its implementation. The value of the agreement to each state is determined and, because it expired in 1984, proposals for reaching new accord are suggested.

A. Trinidad and Tobago

The Republic of T&T lies between coordinates $10^{\circ}2' - 11^{\circ}12'N$ and $60^{\circ}30' - 61^{\circ}56'W$. Tobago is situated 30 km (18.6 miles) to the northeast of Trinidad with the Atlantic Ocean on one side and the Caribbean Sea on the other. Trinidad has the Atlantic Ocean on its eastern shore, the Caribbean Sea on the north and the coasts of Venezuela off its southern and western shores. The body of water on the south is known as the Columbus Channel and leads into the Gulf of Paria by an 11.3 km (7-mile) channel, the Serpent's Mouth. The Gulf opens into the Caribbean through a 14.5 km (9-mile) channel in which is interspersed several islands belonging to T&T. This is the Dragon's Mouth. Both these narrow channels are the closest points which separate Trinidad and neighbouring Venezuela and form the only two openings of the Gulf of Paria which is surrounded elsewhere by the Venezuelan coast and the west coast of Trinidad.

[Figure I.]

The land-mass of T&T covers 5128 sq. km. (1980 sq. miles) and supported a population of 1.09 million in 1980 (1980 Census). It was estimated that this had increased to 1.25 million by 1984. The highest population centres of Trinidad are on the Gulf coast.

The Government of T&T (GOTT) supports a food and nutrition policy of increasing domestic production so as to reduce dependence on imports and move towards greater self-sufficiency in food production (White Paper on Agriculture,

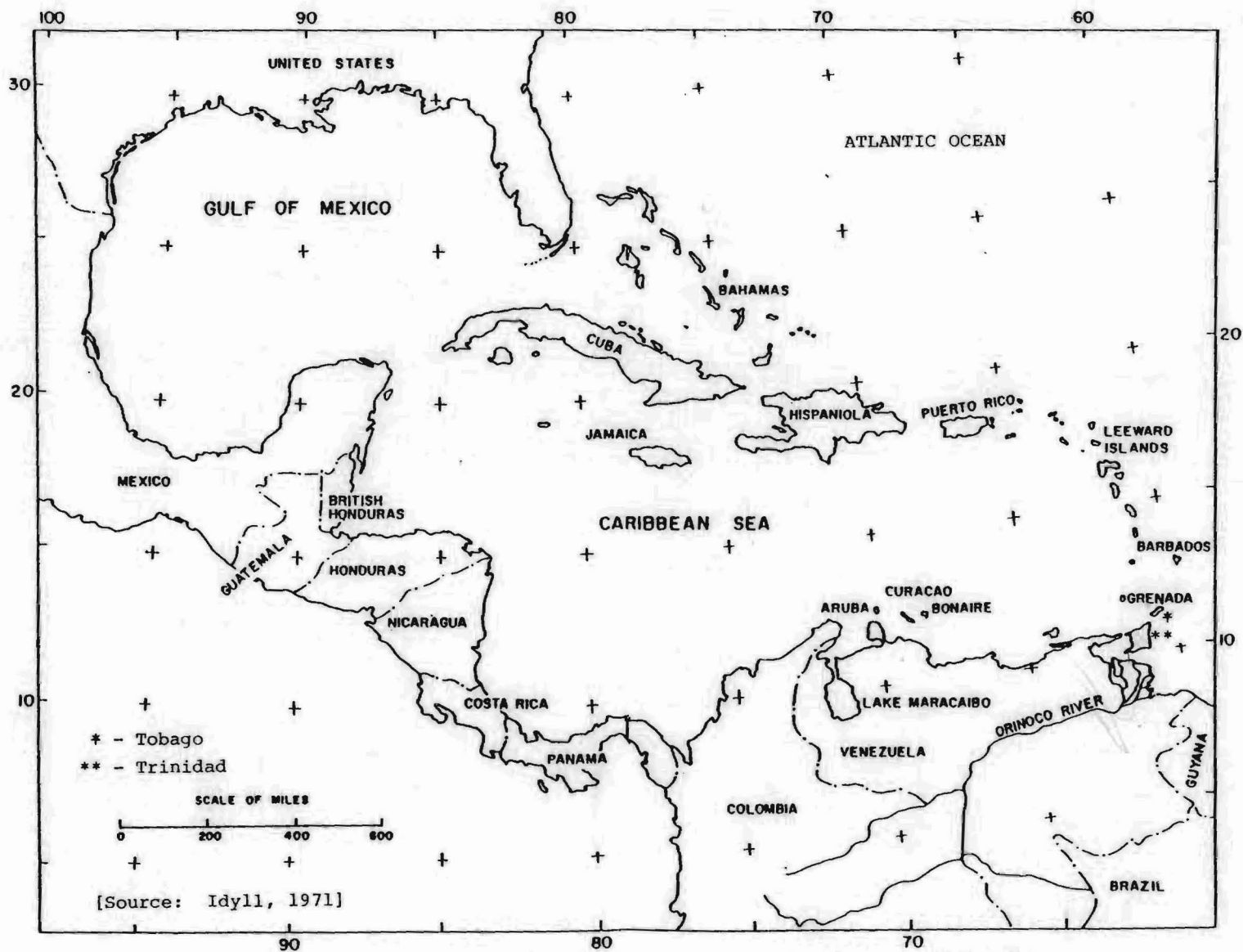


Figure I - Map of the Caribbean Indicating Relative Positions of Trinidad, Tobago, and Venezuela

1978).

B. Venezuela

The Republic of Venezuela is situated between coordinates $0^{\circ}45'$ - $12^{\circ}11'46''\text{N}$ and $59^{\circ}45'49''$ - $73^{\circ}11'49''\text{W}$ and has a total land area of 912,050 km.² (352,142.5 sq. miles). It shares territorial borders with Colombia on the west, Brazil on the south and Guyana on the east. Its northern coast is on the Caribbean Sea and its eastern on the Atlantic Ocean. A small part of its Atlantic coast is separated from the south and west coasts of Trinidad by the Columbus Channel and Gulf of Paria, respectively. The delta of the Orinoco River which drains the country's interior, is to be found on the Atlantic coast southeast of Trinidad (1971 Anuario Estadístico, 1973).

The population of Venezuela was reported to be 16.70 million in 1982 (Yearbook of Fishery Statistics, 1982). Coastal areas bordering the Gulf of Paria are for the most part uninhabited and are covered by extensive mangrove forests. The largest population centre on this coast is the port of Guiria in the northeastern sector. [Figure II.]

II. THE FISHING INDUSTRY

A. Trinidad and Tobago

Trinidad and Tobago has commercial, artisanal and recreational fleets.

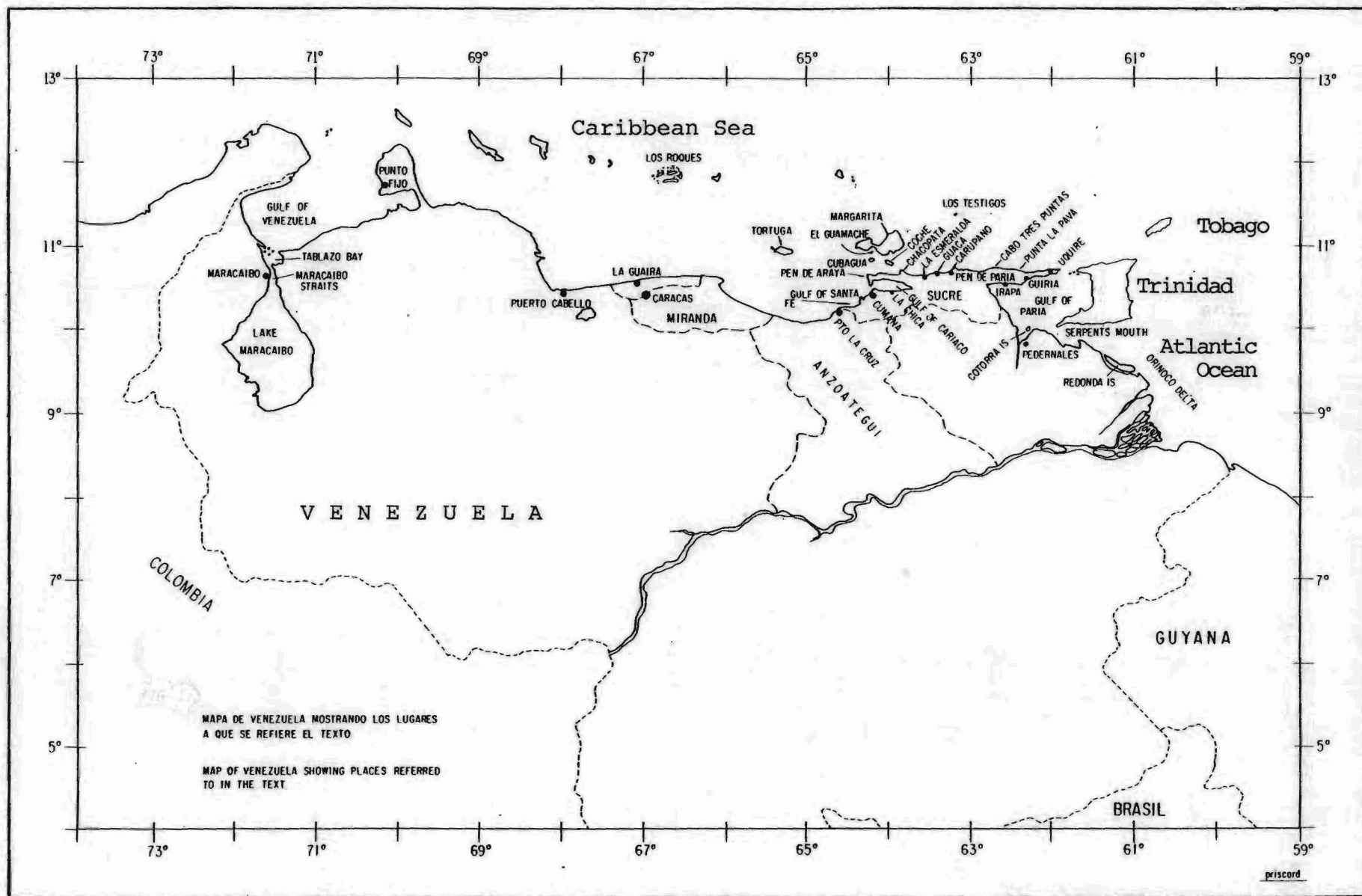


Figure II - Map of Venezuela

[Source: Griffiths and Simpson, 1972]

1. The commercial fleet

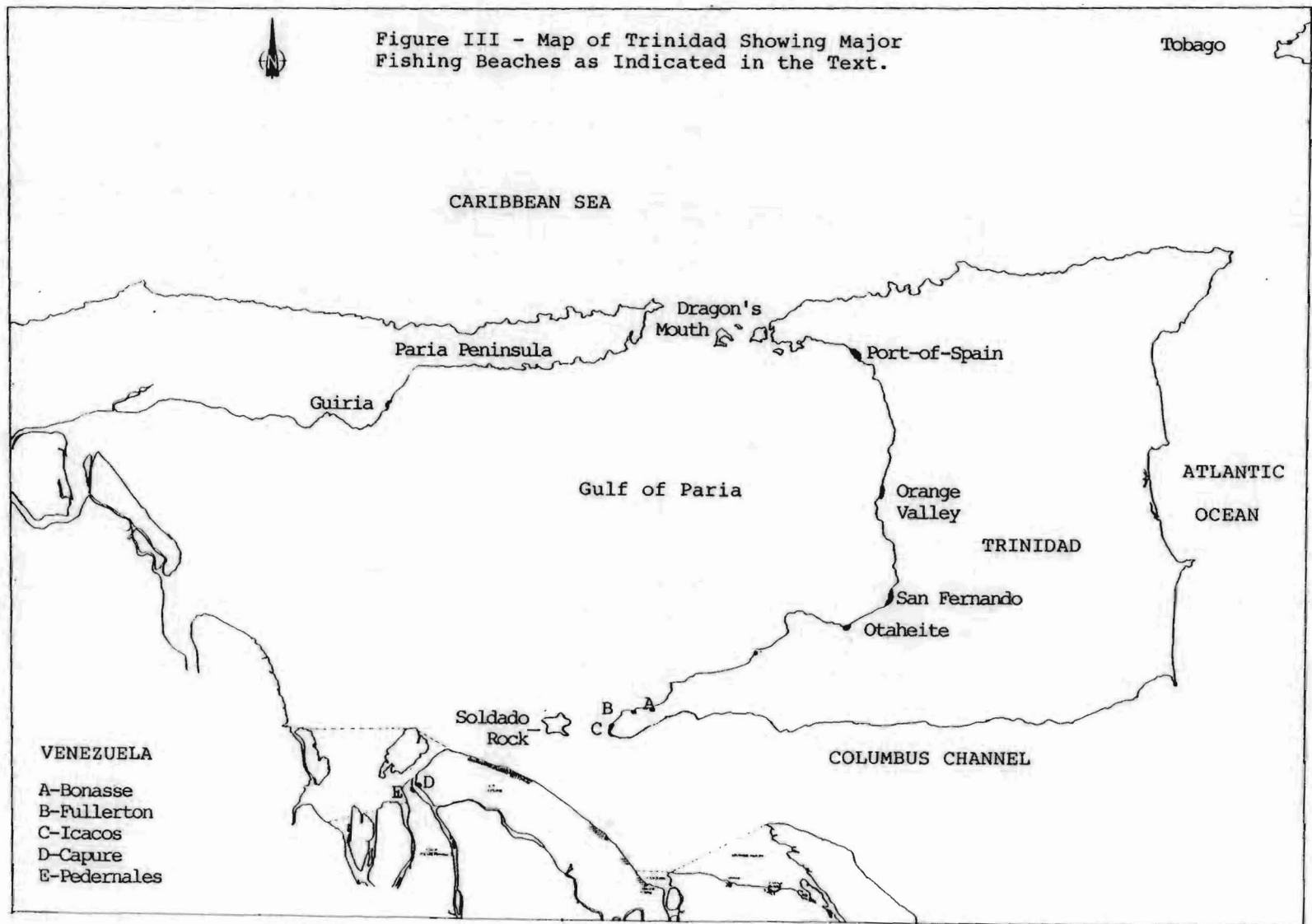
The commercial fleet is separable into domestic and distant-water vessels. They are all Gulf-of-Mexico-type double-rigged bottom trawlers.

The domestic fleet operates in territorial waters and off the Orinoco Delta and is comprised of the following:

- a. 8 vessels- 10.7-18.3 m. overall length (35-60')
- b. 22 vessels- 23 metres overall length (75')
- c. 3 vessels- 27.6 metres overall length (90').

Those vessels listed at (a) and (b) are wholly owned by nationals while those at (c) belong to National Fisheries Company (NFC), a state-owned harvesting-processing-marketing company. NFC also has access to 10 Barbadian trawlers in the 23-m size range. Vessels described at (a) and (c) are also capable of being rigged for fishing methods other than trawling. This fleet operates from Port-of-Spain, San Fernando and Orange Valley. [Figure III.]

The distant-water fleet of 10 x 23-m (75') vessels belongs to NFC and is based in Belem, Brazil under a Joint Venture Agreement (JV) which allows it to shrimp within that country's 200-mile Exclusive Economic Zone (EEZ). The catch is landed in Belem, processed and exported from there. Landings from this fleet average 681.8 thousand tonnes (1.5 million pounds) of shrimp annually at a value of US\$5.25 million [Chin-Yuen-Kee, 1984].



2. The artisanal fleet

Some 3000 open-deck vessels comprise this fleet. They are constructed from wood or wood coated with glass-reinforced plastic (GRP or fibre-glas) or are 100% GRP. All are motorized and engage in a variety of fishing activities on a day-trip basis and usually within sight of land.

Harvesting methods employed include line-fishing, fish-trapping, drift-netting and bottom-trawling for shrimp. The boats operate from 85 landing sites around both islands thus rendering total data collection impossible by current methods. As a result, catch statistics are taken at 17 locations in Trinidad and 4 in Tobago. The figures are extrapolated to include the rest of the fleet and thus provide an estimate of the total landings. The catch of the domestic commercial fleet is at times included in these figures. Landings and value of catch of the vessels which off-loaded at the collection points in 1983 are provided at Table I.

A survey conducted in Trinidad in January, 1985 indicated that some 6,500 people find employment in the fishing industry of Trinidad and Tobago. This includes direct employment in the harvesting sector and indirect employment in support services such as boat-building, engine sales and repair, gear fabrication and repair, processing and wholesale and retail of fish.

3. Artisanal shrimp fisheries

It is estimated that some 250 artisanal vessels from Trinidad are engaged in shrimping. These are based at

TABLE I

Landings and Value of Artisanal Catch at Collection
Points in Trinidad - 1983

Month	Landings (kg.)	Value (TT\$)	No. of Boats	No. of Fishermen
January	248,554	1,922,730	440	880
February	268,325	1,877,190	459	918
March	311,903	2,180,563	470	940
April	362,390	2,154,853	530	1,060
May	376,494	2,163,557	546	1,201
June	350,706	2,231,201	517	1,034
July	297,335	1,810,377	552	1,214
August	273,538	1,586,213	574	1,148
September	300,653	1,740,552	550	1,100
October	273,629	1,573,178	524	1,048
November	273,938	1,831,677	560	1,120
December	212,107	1,458,953	494	988
Total	3,549,762	22,551,284		
Average			518	1,054

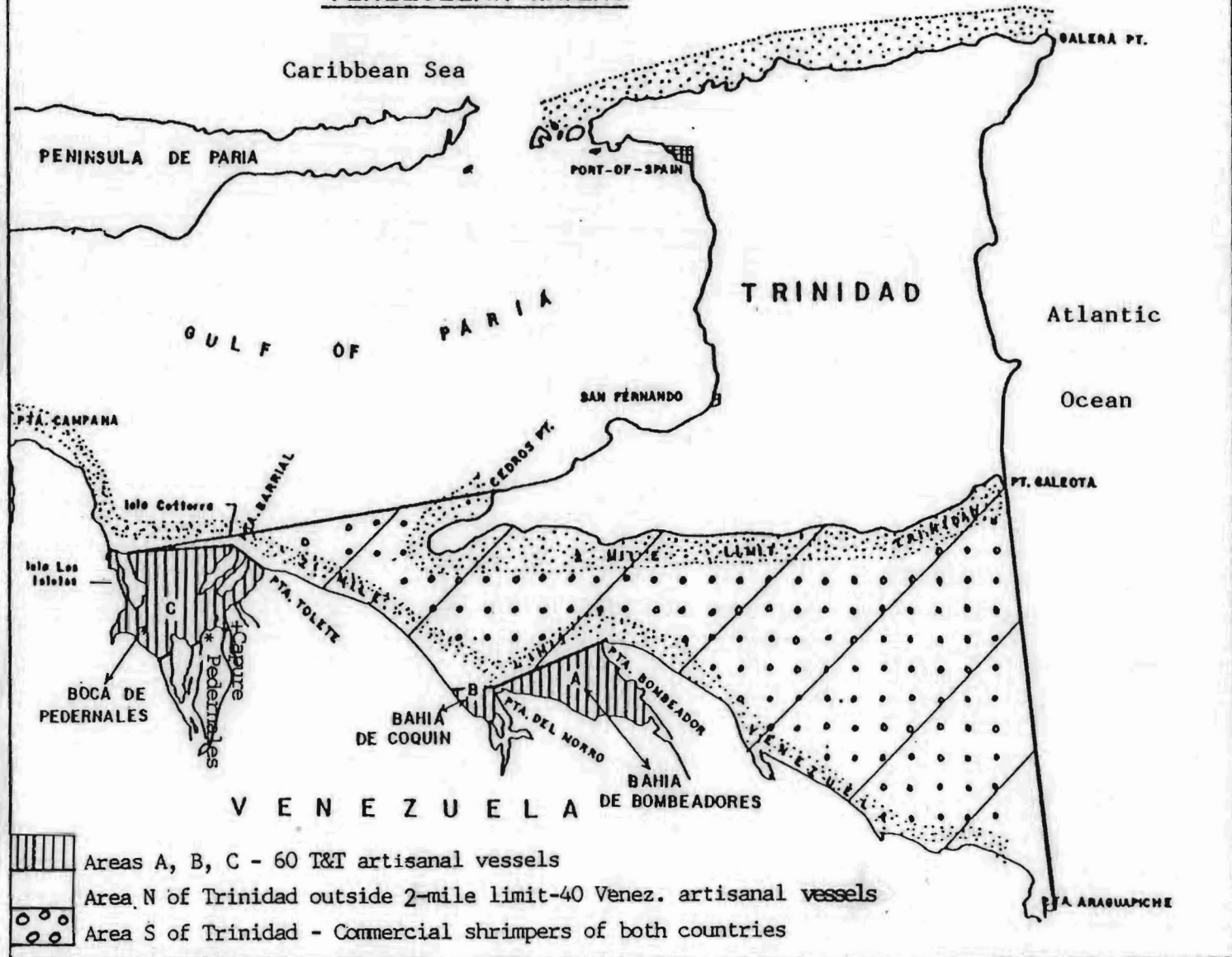
[Source: Condensed from Appendix I - Monthly Quantities and values of fish (ex-vessel)- Trinidad, 1983. Fisheries Division, Ministry of Agriculture, Lands and Food Production. Government of Trinidad and Tobago.]

Orange Valley, Otaheite and on the southwestern peninsula--all areas bordering the Gulf-of-Paria. The vessels at Orange Valley and Otaheite employ inboard diesel engines on wooden boats covered with GRP. Those on the peninsula are wood and fibre-glas or entirely of fibre-glas and utilize twin out-boards. The former shrimp in territorial waters in the Gulf often in areas shallower than 1 metre and sell their catch at their home-bases--either to middle-men or retail it themselves. Orange Valley is the most prolific beach in terms of shrimp production [Figure III, Page 4].

The shrimpers from the south of the island generally operate in Venezuelan waters. Sixty of these vessels were granted permits (under the TT/Venezuela Fishing Agreement) which allowed them to shrimp in three special areas of that country's internal waters. This is a seasonal activity and occurs between the months of December and June [Figure IV]. In the off-season, the vessels engage in other types of fishing within territorial waters. There is also an artisanal beach-seine fishery for white shrimp at Icacos Point. During this period, all the shrimpers from the Icacos area refrain from going to Venezuela and shrimp at home.

In 1983, landings from the artisanal shrimpers amounted to 480 tonnes valued at TT\$5.5 million (US\$2.27). The by-catch taken in domestic waters consists mainly of juveniles and adults of croakers (Micropogon spp.), sea-trout (Cynoscion spp.) and lesser quantities of grunts, flat-fish, moon-fish, ribbon-fish and small sharks.

FIGURE IV
AREAS AUTHORIZED FOR FISHING BY TRINIDAD
AND TOBAGO FISHERMEN IN
VENEZUELAN WATERS



The vessels which operate in Venezuelan waters take cat-fish and occasionally a type of flat-swimming-crab (probably of the Genus Callinectes) as by-catch. Both these species have no commercial value in Trinidad. The cat-fish are discarded or occasionally sold to or traded for other species with the Venezuelan villagers in the vicinity of the fishing ground (Pedernales and Capure) [Figure IV]. Few crabs are landed for the consumption of the fishermen's families; the majority are discarded.

Shrimpers operating in Venezuela seldom return with by-catch while those which operate on the Trinidad-side of the Gulf land and sell everything which is edible and saleable. The by-catch from these waters is generally composed of juveniles of food fish which are popular on the domestic market. All the artisanal shrimpers utilize miniature bottom trawls.

B. Venezuela

Venezuela has marine and fresh-water fisheries. The latter is conducted on the numerous rivers which are to be found in the country's interior, but is concentrated at Barrancas, Ciudad Bolivar, San Fernando and Guasqualito. In 1978, 77% of the total fresh-water production was landed at these points. This accounted for 4% of total landings (Gines and Pastor, 1979). [Figure V.]

The marine fisheries are separated into four operational zones, thus:

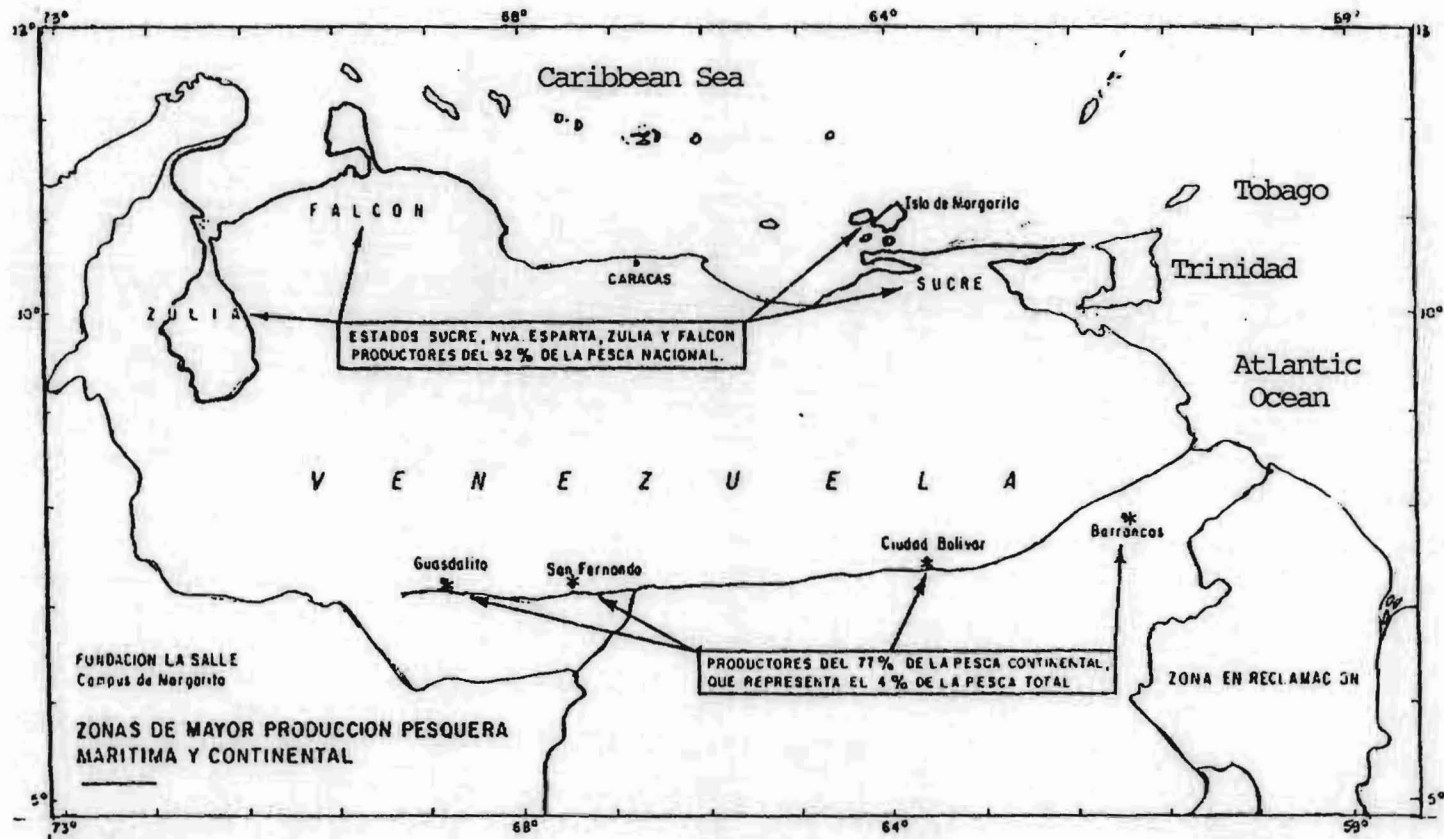


Figure V Venezuela showing major landing points for fresh-water fisheries - Guasdalito, San Fernando, Ciudad Bolivar and Barrancas.

[Source: Gines and Pastor, 1979]

1. Zona Occidental - West of 68°18' to the Colombian border and includes Lake Maracaibo and the Gulf of Venezuela.
2. Zona Central - 65° - 68°18'W
3. Zona Oriental - 61°50' - 65°20'W
4. Zona Atlantica - East of 61°50'W

[Figure VI.]

Each of these zones supports artisanal and commercial fleets which in 1979 were comprised of:

Commercial

Shrimp fleet	301
Tuna fleet	24
Snapper fleet	197
Vessels of more than 20 GRT	336

Artisanal

Marine	6430
Fresh-water	4172
Total Fishing Vessels	8132

Fishermen

Fresh-water fishermen	4172
Marine fishermen	19792
Total Fishermen	23964

[Source: Gines & Pastor, 1979.]

Landings of the marine fleet by major species for the period 1977-1982 are presented at Table II while Table III indicates the method of disposal of these catches.

Processing capacity greatly exceeded the harvesting capabilities of the fleet. According to Gines and Pastor (1979), processing capacity in 1979 was estimated to be 187,500 tonnes/annum (at 750 tonnes/day for 250 days) while raw material processed in the best year, 1972, was 32,929

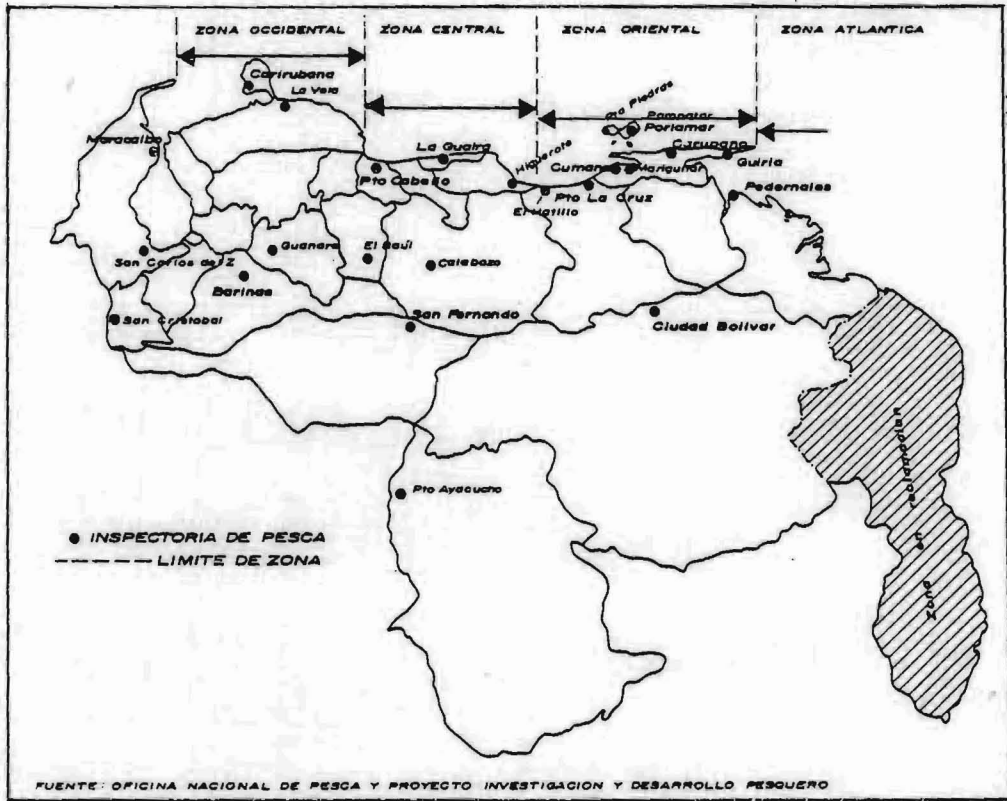


Figure VI Map of Venezuela showing fishing zones.

[Source: Nascimento and Cardona, 1970]

TABLE II

Landings of Venezuelan Marine Fleet by Major Speices, 1977-1982

Species	1977	1978	1979	1980	1981	1982
Sardines	35,752	26,153	37,047	51,764	27,974	52,521
Bivalves	16,611	46,500	14,367	9,031	19,375	12,952
Weakfishes (Sea Trout)	11,335	12,355	9,928	12,442	14,212	12,084
Tuna	2,726	2,887	3,855	8,545	19,559	23,978
Grunts	5,765	6,836	5,048	4,024	7,211	3,674
Shrimp	5,031	3,820	4,919	8,070	5,080	4,747
Carite	3,897	3,344	3,342	4,360	4,018	3,757
Total	81,117	101,895	69,570	98,236	97,429	113,713

1 Tonne = 1 metric ton

[Source: Yearbook of Fishery Statistics 1982.]

TABLE III

Venezuela - Disposition of Marine fish Catch - 1977-1978

	1977	1978
Canning Industry	56,230 - 37%	78,328 - 46%
Fish Meal	19,535 - 13%	19,195 - 11%
Export	7,492 - 4%	5,769 - 4%
Direct Consumption	69,368 - 46%	66,602 - 39%
Total (Tonnes)	152,625 -100%	169,894 -100%

[Source: Gines and Pastor, 1979.]

tonnes or 17.5% of installed capacity.

Nascimento and Cardona (1971) placed the idle-capacity of the canning - fish meal industry at 31% per annum and 72% for shrimp processing. They further stated that there were 14 plants capable of canning and producing fish meal in 1969. Five of these were inactive. Similarly, of the 15 shrimp processing plants present in 1969, 5 were inactive.

It seems therefore that the trend of overcapitalization of processing in 1969 had become more acute by 1979.

Employment in the harvesting sector of the fishing industry over the period 1959 - 1969 is given at Table IV and showed an increasing trend.

TABLE IV

The Numbers of Artisanal and Commercial
Fishermen - Venezuela 1959-1969

Year	Artisanal Fishermen			Commercial Fishermen	Total
	Marine	Fresh Water	Total		
1959	20,546	7,582	28,128	1,456	29,584
1960	19,650	9,824	29,474	1,673	31,147
1961	16,001	7,879	23,880	1,745	25,625
1962	18,101	9,490	27,591	1,831	29,422
1963	17,385	10,345	27,730	2,122	29,852
1964	17,619	9,722	27,341	2,504	29,845
1965	18,988	9,057	28,045	2,607	30,652
1966	17,518	8,956	26,474	2,815	29,289
1967	18,615	7,975	26,590	3,120	29,710
1968	17,887	12,401	30,288	3,602	33,890
1969	19,056	14,056	33,949	4,325	38,274

[Source: Nascimento and Octavio, 1970.]

III. SOURCES OF CONFLICT

The essence of the problem between T&T and Venezuela is the visible encroachment of the fishing fleet of one nation into the waters of the other; the economic considerations of such activity; the political concerns resulting from military intervention in this regard and the attendant media coverage.

During the period of British Colonization, T&T had a 3-mile Territorial Sea (TS). Trinidad, by virtue of its close proximity to Venezuela and both sharing the same continental shelf, was involved in a treaty with Venezuela. This was the "Treaty between the United Kingdom and the United States of Venezuela relating to the submarine areas of the Gulf of Paria (1942)." [Figure VII.] The waters between the two countries were/are not delimited but the submarine boundary line is utilized by some officials and citizens of both countries as a method of separation of marine zones. References to the "Trinidad-side" or the "Venezuelan-side" therefore relate to those marine areas on either side of this line.

Figure VII therefore indicates the parts of the seabed and sub-soil which have been delimited by this treaty. No other boundaries have been established between T&T and its other neighbours (Grenada, Barbados and Guyana). Nevertheless, T&T has leased large tracts of offshore marine areas to a variety of oil companies. Oil and natural gas have been found in large quantities in some leases and are being extracted. In a small number of these instances, the leases

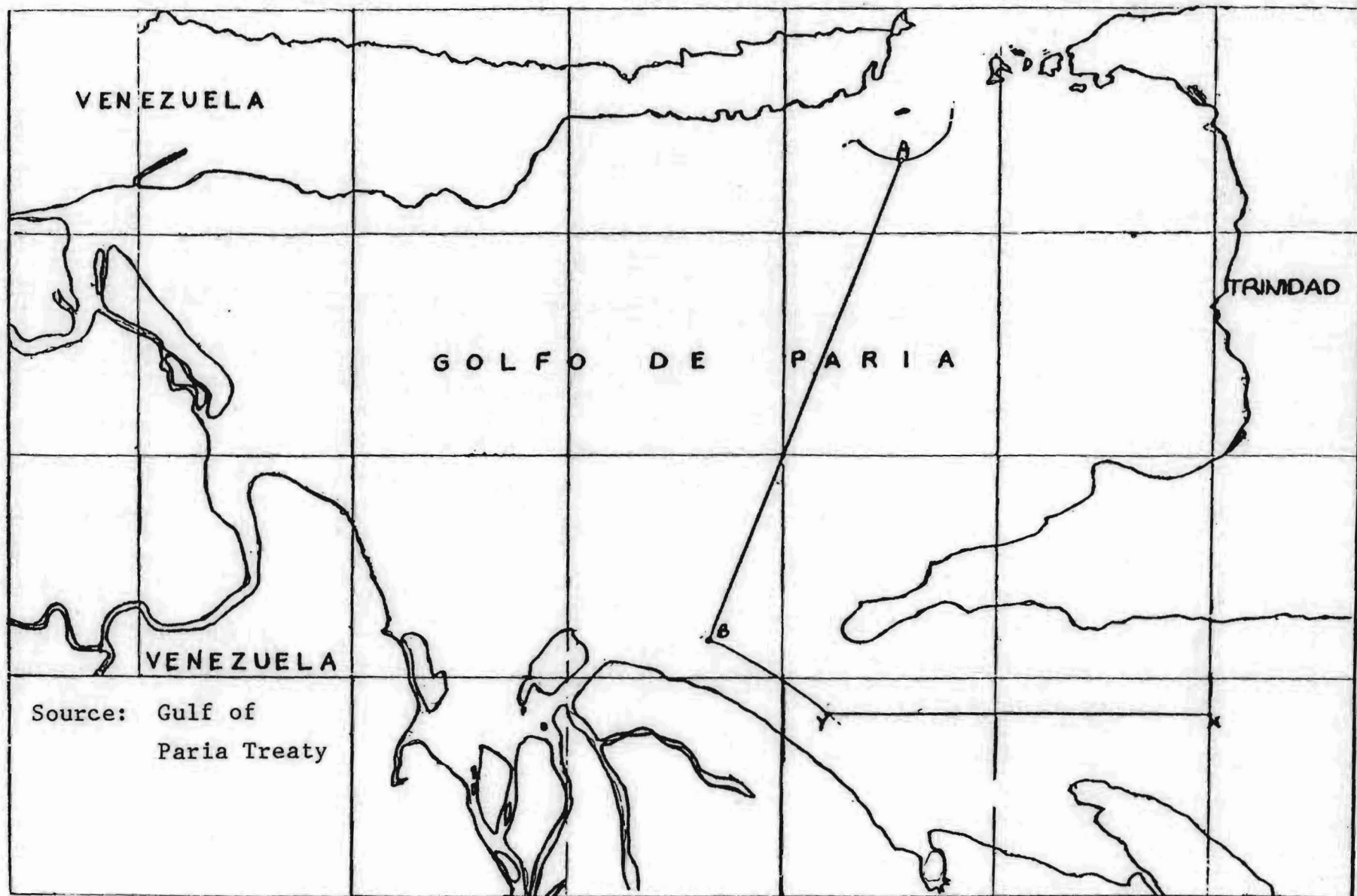


Figure VII Map showing delimitation of submarine areas of the Gulf of Paria.

are in the areas which may border, overlap or be adjacent to Venezuelan waters (southeast of Trinidad).

T&T fishermen have historically shrimped in Venezuelan waters while Venezuelan fishermen have likewise fished in the waters of T&T. Problems however arose whenever the T&T fishermen were arrested by the Venezuelan authorities for illegally entering areas on the Venezuelan-side of an imaginary mid-line between the two countries.

Due to the lack of legally established boundaries, the arrests of T&T fishermen and the off-shore extraction of oil and natural gas in the absence of clear marine demarcations, both countries negotiated for several years in an attempt to

* solve the fishing problem by arriving at an agreement

and

* demarcate marine boundaries.

A Fishing Agreement [Appendix II] was finally ratified in 1977, became effective in 1978, was continued for a second term of 2 years and expired in 1984. [Appendix II, Article XVIII.] No agreement has yet been reached on the boundary delimitations.

A. The magnitude and value of Venezuelan fishing activities in the waters of Trinidad and Tobago

Under the terms of the agreement, both commercial and artisanal vessels were permitted to fish in the territorial waters of T&T. These territorial limits were extended from 3 to 12 nautical miles in 1969.

1. The character and dimensions of the commercial fishery in the waters of T&T

Commercial vessels were allowed to operate in the area south of Trinidad and north of Venezuela outside of a 2-mile limit of both coasts. No restrictions were made with respect to the number and size of vessels, time of year or the type and size of gear. [Appendix II, Article III(b).]

It is estimated that in 1979 an average of 15 commercial bottom trawlers operated simultaneously in this area (Roach, T&T Coast Guard, personal communication). These vessels were in the 23-meter size range (75') and remained on the grounds day and night all year round.

"The principal commercial species taken by the Venezuelan vessels are shrimp (mainly P. schmitti), croaker (Micropogon furnieri), curvina, curvinata and mojarra (Eugerres plumieri). The catches show strong seasonal variation, with croaker, curvinas and mojarras most abundant between August and November, and shrimp usually most abundant in the remaining months. White shrimp occupy more than fifty percent of the catch of the Venezuelan fleet during most months of the year except August, September, October and November. The total annual landings of this small fleet were about 184 tons in 1969 and 149 tons in 1970 (Ewald et al., 1971)."

The above quotation was taken from Griffiths and Simpson, 1972, and was included in their paper, "An Evaluation of the Present Levels of Exploitation of the Fishery Resources of Venezuela." It related to the trawl fishery in the "Gulf of Paria-Orinoco Delta Region."

The paper further stated that sea-bob (Xiphopenaeus kroyeri) appeared in large quantities in trawls, usually in association with white shrimp, but were discarded at sea due to lack of commercial value in Venezuela. "Preliminary estimates give a proportion of five or more tons of sea-bob per ton of white shrimp." (Griffiths and Simpson, 1972). The indication therefore is that for every ton of white shrimp landed from these vessels, five (or more) tons of sea-bob were discarded.

-- Value of Catch

Landings of the T&T domestic, commercial fleet are often unaccounted for or at times are mixed with the artisanal landings. It is therefore not possible to accurately state the landings of this fleet by month or trip. However, during the period 22-28 July, 1984, the Fisheries Division (FD) of the Ministry of Agriculture, Lands and Food Production (MALFP) was able to monitor the activities of a domestic commercial trawler off the south coast of Trinidad.

The data is condensed as follows:

Operating distance from south coast	2 - 6.5 miles
Depth in fathoms	7 - 19
Trawl time	2 - 6.25 hours
Number of boats trawling	3 - 13
Shrimp catch per trawl	30-400 lbs.
Daily shrimp catch	300-1130 lbs.
Total shrimp catch over 7 days (heads-on)	5330 lbs.(2423 kg.)

Information provided by the manager of the Fish Market in Port-of-Spain was as follows:

10 boats-23 meters long (75') each land 300-6000 lbs. of fish and shrimp every 1-2 weeks.
 1 boat-13.7 meters long (45') lands 4000-5000 lbs. of fish and shrimp every 1-2 weeks.

Therefore, 11 boats can land between 4300-65,000 lbs. of fish and shrimp every 2 weeks (1954.5-29545.5 kgs.).

[Chin, personal communication, January 1985.]

Table V indicates the landings of the T&T domestic commercial fleet at the Port-of-Spain Fish Market during the period 21 June, 1983 to 30 June, 1984.

TABLE V

Commercial Shrimp Landings - Port-of-Spain Fish Market

21 June - 31 Dec. 1983	43,344 kg.
3 Jan. - 31 Jan. 1984	15,615 kg.
1 Feb. - 29 Feb. 1984	16,368 kg.
1 Mar. - 31 Mar. 1984	15,506 kg.
1 Apr. - 30 Apr. 1984	11,042 kg.
15 May - 31 May 1984	4,888 kg.
1 June - 30 June 1984	13,622 kg.

[Source: Working Papers, Fisheries Division.]

Total landings 21 June 1983-30 June 1984 - 120,385 kg.
 These shrimp landings were all from the domestic trawler fleet as the artisanal shrimp fleet does not land in Port-of-Spain.

Using the above data from the T&T fleet, the following can be stated:

- a. A 7-day trip off the south coast of Trinidad can harvest 2,423 kg. shrimp.
- b. A fleet of 11 boats can land between 1900 and 29,000 kg. fish and shrimp every 2 weeks.

- c. This 11-boat fleet produced 120,385 kg. shrimp in a 12-month period.

The average prices (wholesale) of shrimp in TT\$ between 1979 - 1983 were:

1979	\$ 7.43/kg.
1980	\$ 9.31/kg.
1981	\$10.91/kg.
1982	\$10.91/kg.
1983	\$11.44/kg.

[Source: Working papers, Fisheries Division.]

No catch and value data of Venezuelan vessels operating under the Treaty are available to T&T. A series of assumptions will therefore be made concerning these landings:

Assumption 1 - Operating fleet, 11 vessels.

Assumption 2 - Annual landings equivalent to that of T&T domestic fleet.

Assumption 3 - Wholesale prices of shrimp equivalent to that obtained in T&T.

Assumption 4 - No by-catch of value landed.

It is expected that the annual catch of shrimp will fluctuate yearly and that as effort is increased the total catch could well increase or on the other hand decrease as the fishery approaches its maximum sustainable yield. Griffiths and Simpson (1972) however stated that the Venezuelan fleet operating in the Gulf of Paria-Orinoco Delta region took 184,000 kg. of fish and shrimp in 1969 and 149,000 kg. in 1970, over 50% of which was shrimp. Utilizing the 1970

landings of 149,000 kg., the shrimp catch is 74,500 kg. or 50%. The difference between the T&T catch of 120,385 kg. in 1983/84 and the Venezuelan catch in 1970 is 45,885 kg. This figure is used to make a final assumption.

Assumption 5 - The Venezuelan landings increased steadily over the period by identical quantities of 3,529.6 kg. annually. (Venezuelan effort in this fishing area has always been greater than the T&T effort.)

Values and quantities therefore of Venezuelan shrimp catch taken south of Trinidad over the period 1979-1984 are estimated at Table VI.

TABLE VI

Estimates of Venezuelan shrimp catch in the waters of Trinidad & Tobago, 1979-1984

Year	Quantity kg.	Ex-Boat Price TT\$/kg.	TT\$
1979	106,266.5	\$ 7.43	\$ 789,560.09
1980	109,796.1	\$ 9.31	\$ 1,022,201.6
1981	113,325.8	\$10.91	\$ 1,236,384.4
1982	116,855.4	\$10.91	\$ 1,274,892.4
6/83- 6/84	120,385.0	\$11.44	\$ 1,377,204.4
1/84- 10/31/84	105,002.0	\$12.05*	\$ 1,265,274.1
Total	671,630.8		\$ 6,965,516.9

* Prices available for period January-July 1984 only. Average of these months taken.

Based on the assumptions one through five, and neglecting the catch of saleable fish taken as by-catch plus the tons of

discarded sea-bob (5 tons to each ton of white shrimp = 3355 tons), the catch of the Venezuelan trawler fleet south of Trinidad over the period of the Fishing Agreement is estimated to be TT\$ 6.9 million.

One could well suggest that the T&T vessels also fished in this area and that the agreement permitted vessels of both countries to operate there but outside of the 2-mile zone of each coastline. Theoretically, this was the stipulation but practically, the T&T vessels generally do not operate on the Venezuelan side of the mid-point of Columbus Channel for fear of seizures by the Guardia Nacional. Additionally, the shrimp are sought in depths of 20-fathoms or less and these depths are closer to shore than to the mid-line. The T&T vessels do not therefore operate on the Venezuelan side. The Venezuelan vessels operate freely throughout the zone.

2. The value and size of the artisanal fishery in the waters of Trinidad & Tobago

Venezuelan artisanal vessels were permitted to fish in the area north of Trinidad and outside a 2-mile border of the shore. [Appendix II, Articles III(A) and V(1).] Twenty boats received permits in 1983 and subsequently 12 more. These boats ranged in size from 6.8 - 12.1 m (22'-39.7'), had no restrictions on gear type and were free to operate year round. They were equipped with inboard-diesel engines and utilized drift-nets and hand-lines in their search for snapper (Lutjanus spp.), grouper (Mycteroperca spp.),

Epinephelus spp.), carite (Scomberomorus spp.), sea trout (Cynoscion spp.) and shark (Carcharhinus spp.). The long-line operators fished with live bait, a method known locally as 'a-la-vive' fishing. (Working Papers, Fisheries Division, May 16, 1983).

Article V(1) of the agreement stipulated that a percentage of this catch was to be sold to T&T with "the percentage, price, venue for sales and other details to be worked out by the Fisheries Commission to be established under Article XIII." This was never "worked out" and all the catch went to Venezuela. No data on quantity, species or value of this catch was ever provided since Venezuela claimed that it was "unavailable."

Mihara et al, 1971, stated the following in the Summary of their paper entitled, "Construccion de una red de barrera para Uquire,":

"Uquire is the nearest convenient base for small boats engaged in hand-line fishing for carite off Trinidad and Boca de Dragon. Sometimes more than 200 of these boats operate from Uquire, where there is a great demand for live bait, usually sardine, which must be caught and kept for the carite fishing boats." [Figure VIII.]

This paper further stated that fishing for carite occurred along the coasts of the Paria Peninsula but the greater activity occurred off the north coast of Trinidad at a depth of 10 fathoms (60' or 19.7 m), some 50-100 metres from shore. The major fishing season was May-November as it was difficult to work at other times of the year. (The north

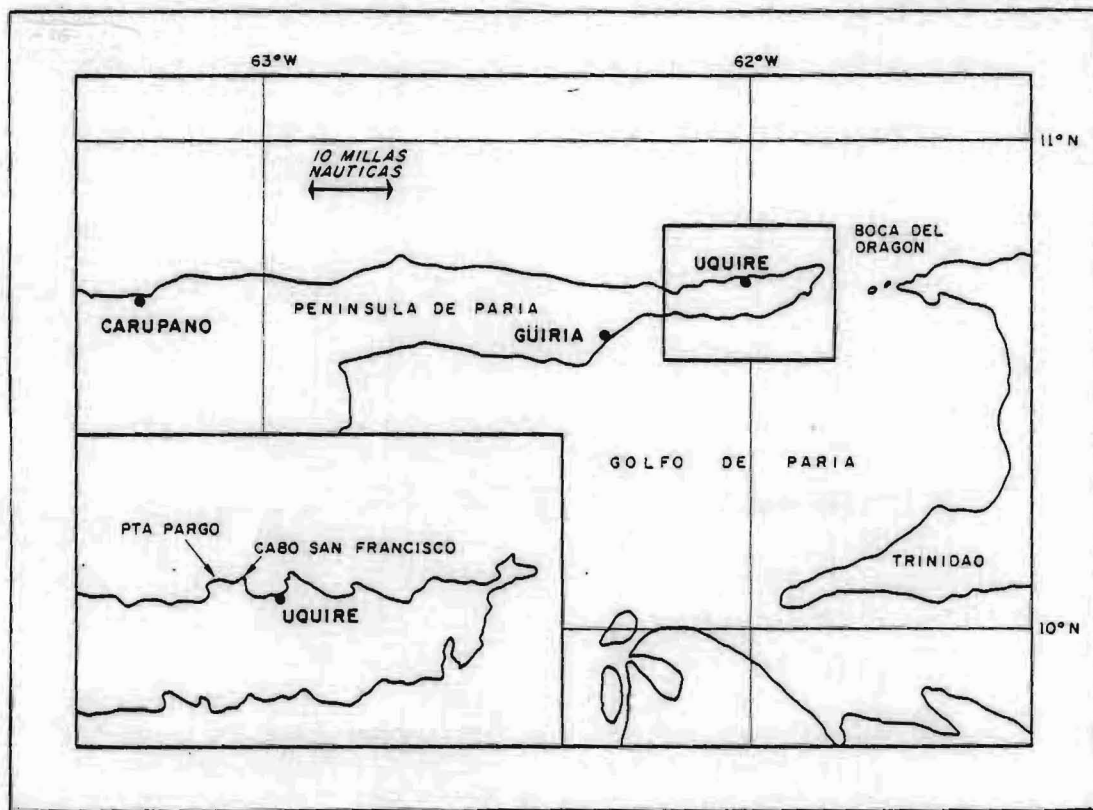


Figure VIII Venezuela - Paria Peninsula showing location of Uquire, Punta Pargo and Cabo San Francisco in relation to Trinidad.

[Source: Mihara et al. 1971]

coast becomes extremely rough in December).

The boats leave Uquire at midnight, go to Cabo San Francisco or Punta Pargo to collect live bait and proceed to the fishing ground which they reach at 5:00 a.m. They stop work at mid-day and return to Uquire at 4:00 p.m.

The average catch per boat is "between 100 and 200 kilograms of fish a day" but a catch of "400 and up to 500 kgs." is not rare. [Mihara et al, 1971.]

Utilizing the landings and value data from the Fisheries Division over the period 1962-1983, an average price (TT\$) ex-vessel of these species was determined (Table VII).

TABLE VII

Average price (TT\$) ex-vessel of some marine species landed in Trinidad and Tobago 1981 - 1984.

Species	1981	1982	1983 ^o	1984
King mackerel	\$7.70	\$9.78	\$11.08	\$
Carite	5.53	6.11	7.02	
Cavalli	4.83	6.62	6.74	
Snapper	8.05	9.23	10.63	
Shark	2.46	3.10	2.85	
Sea trout+	3.53	4.89	4.43	
Grouper*	8.05	9.23	10.63	
Avg. Price	5.84	6.99	7.62	8.00

1984 Data unavailable-considering the increasing trend in prices-Avg. price set at \$8.00.

+ Is grouped as miscellaneous fish in T&T landings.

* Grouper would fetch same price as snapper.

^o Artisanal vessels did not commence operating until 1983.

[Source: Fisheries Division.]

These prices relate to fish caught by trawling, trolling or drift-net. Fish landed by the a-la-vive method fetch a higher price as they are at times brought to shore alive and always in superb condition.

Specifications on 20 of the Venezuelan boats fishing with permits off the north coast of Trinidad were accessible. Fishing method and target species as stated on the applications are at Table VIII.

TABLE VIII

Fishing Method and target species of 20 Venezuelan vessels fishing off the north coast of Trinidad.

Fishing Method	No. of Boats	Target Species	No. of Boats	Target Species	No. of Boats
Nets	16	Sea Trout	11	Cavalli	15
Handlines	4	Carite	17	Grouper	5
		Snapper	17	Shark	11

[Source: Working Papers, Fisheries Division, May 16, 1983.]

The additional 12 boats which were granted permits ranged in lengths between 9-12.6 m (29.5-41.3'), were supposed to be using hand-lines (7) and fork-nets (5), and all gave their ports of registration as Guiria. Target species were not indicated.

Landings by drift-net of carite, king mackerel, cavalli and shark by T&T vessels in the same area average 40 kg. per boat-trip but can be as high as 4,000 kg. when a school is

trapped. An average value of 100 kg. will therefore be used for the nets and 200 kg. for the lines (Mihara et al, 1971). Using a 5-day week and a 7-month year (May-November, Mihara et al, 1971) produces 140 working days for each of 20 boats.

16 boats using nets for 120 days	=1920 boat-days
4 boats using lines for 120 days	= 480 boat-days
1920 boat-days at 100 kg.	=192,000 kg./yr.
480 boat-days at 200 kg.	= 96,000 kg./yr.
TOTAL CATCH/YEAR	=288,000 kg.

Estimates of the value of catch taken by Venezuelan artisanal vessels off the north coast of Trinidad based on landings of 288,000 kg. per year, are at Table IX.

TABLE IX

Estimated value of Venezuelan artisanal catch taken off the north coast of Trinidad, 1983 - 1984.

<u>Year</u>	<u>Avg. Price/ kg. ex-vessel</u>	<u>Value (TT\$)</u>
1983	\$ 7.62	\$ 2,194,560.
1984	8.00	2,300,000.
1984*	8.00	1,150,000.

* Additional 12 boats in fishery--assume 50% catch of 20 boats.

Based on Table IX, the estimated value of the catch taken by 32 artisanal vessels on the north coast of Trinidad is TT\$5.64 million.

3. Dimensions of other fisheries in the waters of T&T

The Fishing Agreement legally permitted 32 boats to operate north of Trinidad outside a 2-mile limit. However, artisanal vessels from Venezuela have been operating within these stipulated areas (as well as in other areas) without permits. [Plate 1]. As far back as 1979, the T&T Coast Guard (TTCG) reported 5-10 artisanal vessels per night off the south coast engaged in drift-netting and line fishing. (Roach, TTCG, personal communication). In 1984, the TTCG reported the following:

- a. Venezuelan vessels within the 12-23-m (40-75') size range in the Gulf of Paria and off the south coast within the 12-mile territorial limit of Trinidad;
- b. Venezuelan vessels in the 12-m (40') size range on the north and east coasts of Trinidad between 5-15 miles off shore and also off Tobago.

[Source: Mohammed, TTCG, personal communication.]

The numbers of vessels thus operating, quantity and value of catch being taken is unknown but those 200 artisanal vessels to which Mihara et al (1971) referred, are suspect. On the basis of these reports a minimal value of TT\$1 million is added for each of the years 1983 and 1984, bringing the total value of landings of Venezuelan artisanal vessels to TT\$7.64 million--a minimal estimate.



PLATE I. Venezuelan artisanal vessel heading east on north coast of Trinidad (100 metres from shore). The registration number of the vessel indicates that it is not one which was permitted to fish under the terms of the TT/Venezuela Fishing Agreement.

[Photograph taken by personnel of the Fisheries Division, Ministry of Agriculture, Lands and Food Production. September 14, 1984.]

- B. The technical and economic dimensions of Trinidad and Tobago shrimping in Venezuelan waters.

The stipulations of the Treaty [App. II, Articles III (C) and VII] permitted 60 artisanal vessels to operate in 3 Special Areas of Venezuelan internal waters. The boats had to be of "artisanal-type" not exceeding 12 metres, with "maximum storage capacity of 1 ton," "a crew of not more than 4," using trawl nets "with a minimum diameter of mesh opening at 3.5 cm. that is to say 1.75 cm. between knots at the cod end." "Fifty percent of the catch made by T&T boats shall be sold to Venezuela" (Article VII).

Shrimping is seasonal (January-June). The fishermen claim that landings are related to moon-phase and therefore concentrate their activities over a period extending 2 days before and after the First and Last Quarter Phases of the moon. Landings of the vessels shrimping in Venezuelan waters are presented at Table X. These came from vessels which had permits and also from those which did not and were therefore poaching. The maximum number of boats fishing on any day in the special areas was 20 with the average being 15 or fewer. The boats left home-base at dawn and returned mid-afternoon.

From Table X, the value of landings of the T&T artisanal fleet operating in Venezuelan waters is estimated to be TT\$5.93 million. 1984 is excluded as landings were negligible since little fishing occurred.

The trend of substantially reduced landings between 1980 and 1983 was a direct result of dwindling fishing effort

TABLE X

Shrimp landings of T&T artisanal fleet from Venezuelan Waters
1979 - 1983

Beach ^o	1979 Kg.	1980 Kg.	1981 Kg.	1982 Kg.	1983 Kg.
Fullerton	28,068	21,665	8,740	10,056	803
Bonasse	59,193	108,999	41,194	37,230	18,025
Icacos	* 66,365	* 116,171	* 48,366	44,402	17,351
Total Landings	153,626	246,835	98,300	91,688	36,179
+ Avg.					
Price/ ex-vessel	\$7.43	\$9.31	\$10.91	\$10.91	\$11.44

Value TT\$ \$1,141,441.1 \$2,298,033.8 \$1,072,453.0 \$1,000,316.0 \$ 413,887.76

[* Statistics not collected at Icacos until 1982. Figures included here based on incremental values at Bonasse during 1979, 1980 and 1981 and added to 1982 value of Icacos landing.

Bonasse 1981-1982=3964+Icacos 1982 = 48,366.

Bonasse 1980-1981=67,805+Icacos 1981= 116,171.

Bonasse 1979-1980=-49,806+Icacos 1980=66,365.

+ Calculated at Section (III)(1), Page 15, as average annual value of catch per kg. in TT\$. Same values used for Venezuelan catch in T&T waters.

^o All shrimp taken in Venezuelan waters is landed at these three beaches.]

[Source: Data Report No. 3, September, 1983.]

brought about by the policy of the GOTT which reduced the subsidy on gasoline available to the consumer as follows:

Regular Gasolene

Prior to December 1979=	TT\$0.61/Imperial Gallon [IG]
1 December 1979-17 January 1982=	TT\$0.80/IG
18 January 1982-17 December 1982=	TT\$1.05/IG
18 December 1982-11 January 1984=	TT\$2.05/IG
12 January 1984- Present	=TT\$3.64/IG

Trawling is high in fuel consumption even more so when the engines used are twin-outboards and the grounds are long distances off shore. It was stated that each boat used 65 gallons per trip, 14-15 of these being consumed by traveling to and from the grounds. Venezuela also began purchasing shrimp from the artisanal vessels in 1983, thus reducing the landings in T&T even further.

Average costs and earnings during the 1983 season were:

65 gals. gas/oil mixture =	Cost TT\$104.00
50-300 lbs. small/medium shrimp @	TT\$1.50/lb.=\$75-\$450.
30-100 lbs. large shrimp @	TT\$7.50/lb. =\$225-\$750.
Gross earnings possible per trip	=\$300-\$1200.
Net earnings possible per trip	=\$196-\$1096.

The number of boats fishing averaged 20 daily--15 with permits and 5 without. However, to save on fuel costs, the vessels stayed away from home for up to 5 days. Conditions ashore in the Venezuelan mangroves were not conducive to comfort and fishermen worried about their families. The fishing effort thus became considerably reduced as of 1983.

The above information was obtained from a fisherman engaged in shrimping in Venezuela in mid-1983.

IV. THE CONFLICTS AND IMPLEMENTATION OF THE TREATY

Fishermen of both countries have fished in each other's waters for decades. The majority of fishing activity conducted by Trinidadian fishermen in Venezuelan waters revolve around shrimp. The vessels used are artisanal types [described at Section II, A (2, 3)] which leave their home bases daily, travel for at most 2-3 hours to the fishing ground, shrimp and return home by mid-afternoon. Each trip lasts at most 10 hours.

These Trinidadian vessels originated from Otaheite in earlier days (1940's-1960's) but have since given way to those from Icacos, Fullerton and Bonasse on the Cedros Peninsula (Figure III, page 4).

The Venezuelan artisanal or coastal fishermen in the vicinity of the Paria Peninsula have habitually fished for carite off the north coast of Trinidad within territorial waters.

A cordial relationship has always existed between the fishermen of the Cedros Peninsula and the villagers of Pedernales and Capure. This is apparent from the fact that Trinidadians (from the Cedros Peninsula) visit friends across the border, attend the cinema and parties there and usually deliver groceries as are required by their Venezuelan friends (e.g.) powdered milk, flour, evaporated milk and canned goods. The Venezuelans on the other hand, cross the border to purchase clothing, furniture, visit friends and

attend the Trinidad Carnival celebrations. The nearest Venezuelan city to Pedernales and Capure is Tucupita, some 6 hours steaming up river. Pedernales and Capure are therefore isolated villages on the edge of a mangrove forest. No roads lead from these villages and each is only accessible to the other by boat. Approximately 2500 people live there.

The sole form of employment is subsistence farming and fishing. The fish catch is landed at Pedernales, salted and sun-dried and shipped up-river to Tucupita. Conditions on this part of the mainland are best described as primitive, isolated and undeveloped.

A Venezuelan National Guard Station is situated at Pedernales. Communication from here is only possible by radio-phone. Entry of goods and people on both sides is illegal as there are no ports, customs or immigration authorities at either landing point.

As a result, a brisk trade in uncustomed alcohol existed, moving to the Trinidad side. This involved thousands of cases of whiskey which were transported by artisanal vessels of both countries. Boats, engines and fishing gear were (are) occasionally stolen and traded/sold to Venezuelans, probably in exchange for alcohol or some other commodity (ies). Occasionally, the trading partners disagree(d) resulting in complaints being made to the Guardia Nacional (National Guard) who then arrested the Trinidadians, seized their catch and impounded boats, engines and equipment. Beatings and gunfire occasionally occurred. Fines were

always imposed and paid by fishermen so as to effect release of boats, men and equipment.

The conflict between Trinidad and Venezuela was (is) therefore sporadic and generally left Trinidadian fishermen at a distinct disadvantage. The result of such activity was that the TTCG occasionally brought Venezuelan vessels into port but were always instructed to have them immediately released.

Within this framework of events, both governments therefore began negotiating for a fishing agreement and achieved success several years later.

A variety of problems were inherent in the implementation of this treaty. These will be discussed in order of importance.

A. Actions of Venezuelan Guardia Nacional

During the period of the treaty, T&T fishermen were arrested on average once a month in shrimp season. These incidents involved all or various combinations of the following:

- a) Discharge of fire-arms by Venezuelan authorities at unarmed fishermen who refused to stop when ordered/pursued;
- b) Physical abuse of unarmed fishermen by Venezuelan authorities;
- c) Seizure of catch without regard for the legality of fishing activities (i.e.) with permits, in authorized areas with authorized gear;
- d) Impoundment of vessels, engines and gear until arbitrary fines were paid;
- e) Arrests of fishermen until arbitrary fines were paid;
- f) Reported seizures of men, boats and equipment in T&T waters;
- g) Reported hot pursuit of T&T vessels into T&T

- waters accompanied by gun-fire;
- h) Fines set by authorities ranged from hundreds of Bolivars to thousands of Bolivars (per boat) to cases of whiskey and wine.

One may well disclaim some of these charges but, over the years 1975-1984, prior to and during the agreement, the majority of these reports have been taken personally from fishermen. These are recorded in the files of the Fisheries Division in Port-of-Spain. Some are documented in newspapers and others have been forwarded to the Ministry of External Affairs for the attention of the T&T Ambassador to Venezuela.

1. Gunfire and physical abuse

Concerning (a) and (b), delegations of fishermen have on numerous occasions provided signed statements and displayed bruises which they claimed resulted from physical abuse received at the hands of the Venezuelan Guardia Nacional. On one occasion a fisherman appeared with a large bandage on his forehead which, on removal, exposed a clean wound. This was reported to have been caused by a bullet. Bullet holes were also present in the hulls of vessels.

2. Seizures of equipment and catch, arrests of men

Concerning (c), (d) and (e), these are regular, normal occurrences. On the occasion of an arrest or "round-up," the guards arrive in the early morning. They usually leave the station at Pedernales and travel to the fishing ground so as to arrive there before the fishing boats. They conceal

themselves and emerge when the nets are down and the boats are fishing--usually appearing in one or two patrol boats, each carrying several armed men. As a fishing boat is caught, an armed guard is transferred and this vessel is commandeered and used to chase others. In such fashion 5-10 boats are seized while the others make their escape.

Occasionally after arresting the men and seizing the catch and equipment, boats carrying permits are released. The catch is not. Those vessels which are caught without permits are held, fines set and the catch impounded. The fines are arbitrary, varying each time. They may range from 1500 Bs to 10,000 Bs, the higher amount being charged to the occasional commercial vessel which is caught.

Fishermen pay the fines so as to have possession of their boats and equipment. On one occasion a boat-owner had permission from the Central Bank of T&T so as to acquire the necessary foreign exchange. The cheque was made payable to the Government of the Republic of Venezuela. He returned to Venezuela with the cheque and was sent back to Trinidad to get cash. The fine was subsequently reduced and paid in cash but no receipt was provided.

In mid-1984 some arrested fishermen were asked to provide 1 case of whiskey (Johnny Walker Black Label), 1/2 case of whiskey (Swing) and 1 case of wine. Two fishermen were released to return with the "payment." On their way back they were stopped by another group of Guards who seized the

"payment" since they were transporting uncustomed liquor. The boats were returned finally on payment of 750 Bolivars (TT\$166.66).

3. Seizures and hot pursuit in Territorial waters

C. These cannot be proven but fishermen claim that they have occurred and that several villagers witnessed pursuit ending on the Trinidad shore with Venezuelan Guards firing shots at the fleeing vessels and men.

Another claim (in mid-1984) was that 6 men (Trinidad & Tobago nationals) were diving with scuba-gear at Soldado Rock so as to spear-fish. Soldado Rock belongs to T&T. The Venezuelan Guards allegedly arrested and held them for several days claiming that they were spies. Fines were paid.

On numerous occasions fishermen claim that Guards state their need for automobile tyres. Tyres are expensive in Venezuela and often in short supply.

B. Activities of Trinidad and Tobago Coast Guard against Venezuelan Vessels

The TTCG has on occasion escorted into port Venezuelan fishing vessels which were in violation of the Treaty. Invariably, instructions have been relayed for the release of these vessels, usually before reaching the Coast Guard Station. As a result, vessels are no longer escorted in but merely asked to leave. As soon as the patrol boat departs, the fishing boats return.

It is a common occurrence to see Venezuelan fishing

being moved in this fashion.

The flow towards Venezuela is reported to include flour (in 100-lb. bags), powdered milk, clothing, rice, etc. Fresh-water food fish, crabs, engine oil, etc., make the return trip in exchange for the groceries. Apart from goods, people move back and forth freely at all points.

One enterprising trade has developed at a fishing beach on the Gulf coast of Trinidad. Venezuelan buyers deal with 4-6 fishermen who salt and dry mullet caught in T&T waters with salt provided by the Venezuelans. The salted fish is then transported to Guiria and sold to the buyer. Salt is brought back on the return trip. It is reported that "other items" accompany the salt.

Considering the extensive area of coastlines, the numerous bays and coves, the short distances separating both countries, the extent and thickness of the mangroves--especially on the Venezuelan side--and the few patrols, it is well nigh impossible to patrol this area effectively without incurring extremely high costs.

V. VALUE OF THE AGREEMENT TO BOTH PARTIES

A. Trinidad and Tobago

1. Economic

Theoretically, 60 boats received permits which allowed them to fish freely in 3 Special Areas of Venezuelan waters. Practically, this was not without trauma resulting in physical, emotional and financial costs. Nevertheless, at least

60 boats and possibly 120 families legally were entitled to these earnings and, when one considers the numbers of boats which fished illegally, the numbers could easily swell to 120 boats and close to 400 families. The Cedros Peninsula is a depressed area. The major form of employment there, other than fishing, is agricultural labour on nearby coconut plantations at wages below the minimum. The economic benefits therefore are substantial to the fishing community.

However, considering the price of fuel within recent times, the economics of the situation are no longer as feasible as they were in 1979.

2. Social

The population of the Cedros Peninsula is an agricultural and fishing one. The people have been so engaged for generations and are generally untrained for any other occupation. Any attempt to change them to some other form of livelihood will be resisted and retraining will be costly. The fishermen however have calculated their costs and benefits and when it became less profitable, turned to other types of fishing within territorial waters.

Despite the incidents with the Venezuelan authorities, some of them continue to fish on the Venezuelan side and it would be almost impossible to stop this even in the absence of a Treaty. Their social contacts with friends at Pedernales and Capure are of long duration and the absence of a Treaty is not going to be a deterrent.

3. Political

The GOTT is most anxious to have a Treaty with Venezuela. The political considerations/benefits to be had from this at Governmental levels are unknown but the determination and desire is most apparent. At the level of the fishermen in a depressed area, the reasons are obvious.

B. Venezuela

1. Economic

The number of vessels which operate in T&T waters by far outweigh those that were permitted under the stipulations of the agreement. In 1979, Venezuela had over-capitalized processing capacity and was expanding its fleet. By 1971, Venezuela had fished its shrimp resources in the Zona Occidental and Zona Central to levels close to their maximum sustainable yield (Griffiths and Simpson, 1972). The tuna fleet has been accustomed to fish within the territorial waters of T&T [Figure IX, Novoa and Ramos, 1976] and with the declaration by T&T in 1983 of a 200-mile EEZ, some of these grounds are now within areas of T&T jurisdiction. It is therefore of great economic importance for Venezuela to have a fishing agreement with T&T.

2. Social

The social benefits accruing to Venezuelan fishermen operating in T&T waters are more than likely similar to those of the Trinidadian fishermen operating in Venezuelan waters.

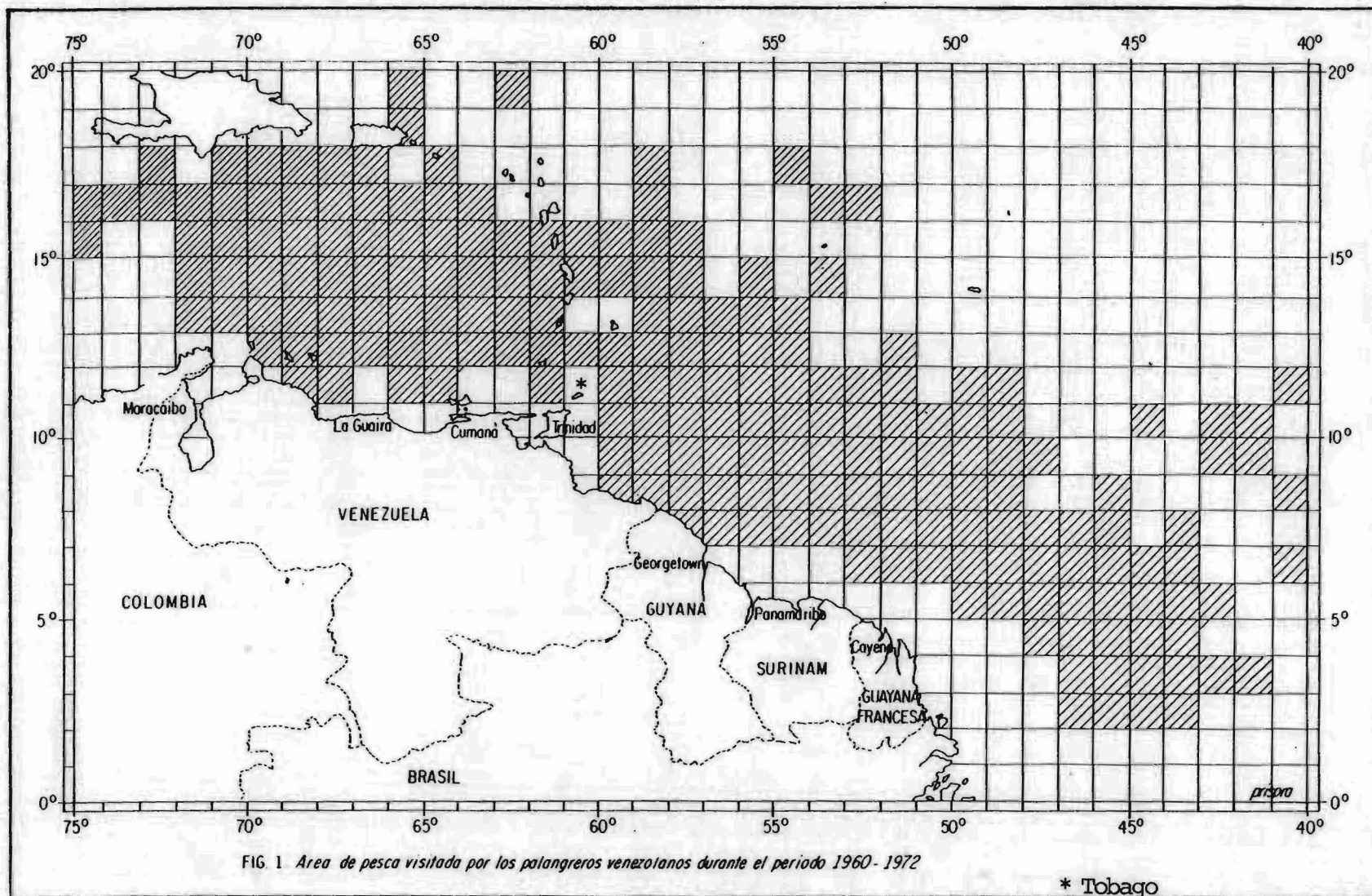


Figure IX Fishing grounds of Venezuelan long-liners during the period 1960-1972.

[Source: Nova and Ramos, 1976]

3. Political

Venezuela, like T&T, seems desirous of having a treaty. Again, the reasons for this at Governmental levels are unknown but, at the level of the fishermen, who are numerous and number in the hundreds, the political considerations are obvious.

C. Comparison of economic value to both Parties

Section III, A, related to the economic value of Venezuelan fishing activities in T&T waters. Since no data was provided by Venezuela, a seemingly logical (and minimal) set of values was placed on the Venezuelan catch. These were:

Catch of trawler fleet off south coast of Trinidad 1979-1984	=	TT\$ <u>6.9 million</u>
Catch of artisanal vessels fishing legally 1983-1984	=	TT\$ <u>5.64 million</u>
Catch of artisanal vessels fishing illegally 1983-1984	=	TT\$ <u>2.00 million</u>
Sub-total artisanal	=	TT\$ <u>7.64 million</u>
Total Value	=	TT\$ <u>14.54 million</u>

Section III(B) dealt with the economic value of T&T fishing activities in Venezuelan waters. 80% of the data was available. Extrapolations indicated that the value to T&T was TT\$5.93 million. If the artisanal fleets of both countries are compared under the terms of the treaty, Venezuela is estimated to be losing by TT\$0.3 million.

If the estimate for illegal Venezuelan fishing is also considered over the same period (1983-1984), then T&T loses

by TT\$1.7 million. If this value is extrapolated backwards in time as far as the beginning of the Treaty in 1979 and during the actual time of the occurrences, the millions mount in favour of Venezuela.

When the landed value of the commercial fleet is added to that of the artisanal fleet, the figures favour Venezuela by at least TT\$8.61 million.

In 1983, T&T declared a 200-mile EEZ. The value of tuna being taken by the Venezuelan fleet in areas within the EEZ due east of Trinidad and Tobago has not been included and is unknown.

Therefore, in terms of numbers of boats fishing; numbers of men employed; varieties, quantities and values of fish landed, it seems that Venezuela gained more from this fishing agreement than did Trinidad and Tobago.

VI. PROPOSALS FOR A NEW AGREEMENT

The T&T/Venezuela Fishing Agreement expired in May, 1984. Governments of both countries seem to desire new accord because a series of negotiations have occurred since the expiration of the last agreement. However, before any new proposals are considered, there is a very basic problem which must be addressed--that of conflict resolution and the timeliness of the process. To date, this has only been of importance to T&T fishermen but it is possible that, with time and greater enforcement and surveillance by T&T, Venezuela may also find this activity problematic.

A. Conflict resolution

The station of the Guardia Nacional in Pedernales is 6 hours steaming down-river from the nearest city-Tucupita. There is no road or telephone communication between Pedernales and anywhere. Information concerning arrests of fishermen and seizure of boats and equipment generally reaches the MALFP 2-3 days after the incident. During this time the fishermen attempt to solve their problems. When this is unsuccessful, a relative or friend makes a vague report to the MALFP.

It is generally not known which boats (name and registration number) are missing or how many; how many men nor their names; details of the incident are vague as to time and place of occurrence, condition of men, etc. This scanty information is then forwarded to the Ministry of External Affairs (according to protocol) which then sends it to the T&T Ambassador in Caracas. Another day may elapse. The Ambassador then makes an appointment to see the relevant Venezuelan authorities in Caracas to discuss the problem. When the Caracas authorities acquire the information they then contact Tucupita, make enquiries about the matter and issue instructions. This could well be the 4th or 5th day after the incident. Tucupita then sends a boat down to Pedernales or instructs by radio-phone that the men be released. By this time, five or six days have elapsed and the fishermen have already effected their own releases by paying whatever

was demanded.

The protocol involved plus the distance and isolation of Pedernales makes the time-lapse between the receipt of information and release of the men too long.

The following are proposals which could be applied to a new agreement between both countries.

B. Other economic factors and the Agreement

1. Tourism

The Trinidadian populace recently discovered Margarita Island, a duty-free shopping area approximately 240 km.(150 miles) west of Trinidad. Margarita Island belongs to Venezuela. Hundreds of Trinidadians travel back and forth weekly to shop and holiday in Margarita. Local travel agencies offer numerous package-tours lasting 3-4 days inclusive of hotel accommodation, for as low as TT\$150. The traffic between Venezuela and Trinidad has therefore increased appreciably in the last two years. Additionally, Trinidadians do fly to Caracas but the traffic to Caracas is not as heavy as it is to Margarita.

The GOTT is actively pursuing the development of a tourist industry, particularly in Tobago. The T&T national airline flies to Caracas and Venezuelan airlines stop in Trinidad. It would therefore be attractive to both Governments if the GOTT fostered increased holiday-traffic between the two countries by offering special package-tours to Venezuelan citizens desirous of holidaying in T&T. This would increase

traffic travelling on national airlines, improve the tourist industry in Tobago and foster closer ties between the two countries.

2. Trade

Venezuela is one of the largest producers of sardines in the world and has its own canning plants. T&T imported over TT\$4 million in canned sardines in 1982 (Overseas Trade Bi-Monthly Report), the major imports originating from Canada and the rest from Japan.

It should be cheaper for T&T to import canned sardines from Venezuela at least in terms of the freight rates considering the distance between the two countries.

Concurrently, Venezuelans display a marked preference for carite (Scomberomorus brasiliensis) and king mackerel (S. cavalla). There are times during the rainy season (June-December) when a glut of carite exists on the domestic market. During these periods, fishermen dispose of their catches for as low as TT\$1.98/kg. (TT\$0.90 lb.) and are forced to reduce their effort. At other times this species fetches as much as TT\$9.90/kg. (TT\$4.50/lb.). The GOTT is also supporting export-oriented agri-industry. It should therefore be quite simple to export carite to Venezuela during the glut season in Trinidad. This would quite likely provide a higher price for the Trinidadian fishermen and serve as an incentive to maintenance of harvesting efforts during peak production.

Trinidadians and Venezuelans have for some time engaged in illicit trading involving several commodities.

Live monkeys, parrots, macaws, song-birds and land-turtles are brought to Trinidad. The birds and monkeys are sold locally and abroad for considerable sums. If this trade was legalized, the Venezuelan sellers would probably receive higher prices for their commodities and the Trinidadian businessmen would have to submit the live animals to proper health regulations. Being legal, the volume of trade would probably increase, thus benefitting the Venezuelans who live in the Gulf of Paria region, many of whom are native Indians.

The Trinidad market for Hoplosternum littorale (an armoured, fresh-water catfish) and blue crab (Ucides cordatus) is unsatisfied by domestic production. A considerable quantity of these species are therefore landed. Venezuela is aware of the uncontrolled trade in fish which occurs between domestic fishermen and buyers from Trinidad (Gines and Pastor, 1979) and would probably be interested in controlling and/or monitoring it.

Trading in salted mullet between Trinidadian fishermen and buyers from Guiria is another aspect which could be developed. At present, this originates from 4-5 fishermen at one Gulf-coast beach. The trade could possibly be developed to the benefit of both sides resulting in increased landings in Venezuela and the development of an under-utilized resource in Trinidad.

The port of Guiria has an excellent reputation in

Trinidad for boat repairs as it provides shorter down-time at substantially lower rates than are available at ship-yards in Trinidad. Owners of commercial fishing vessels in Trinidad currently undergo considerable bureaucratic problems so as to acquire foreign exchange (Bolivars) for boat-repairs in Guiria. Improved trading relations in this aspect of the fishing industry will benefit the ship-yards of Guiria and the commercial boat-owners of Trinidad who will be able to have their vessels working in shorter times and at lower costs.

Boats are also built in Guiria. T&T nationals have habitually purchased commercial boats from the United States (U.S.). Since boat repairs are relatively cheap in Guiria it may also be that boats built in Guiria would be cheaper than those purchased from the U.S. This is a possibility that could easily be explored to the benefit of both countries.

Gines and Pastor (1974) stated that Venezuela was over-capitalized in its canning capacity. NFC purchases tuna from Korean boats, stores it at the plant until a large inventory is available, ships it to Puerto Rico for canning and then has the finished product freighted back to T&T. Canning of tuna may therefore be possible in Venezuela at lower rates since the freight charges to and from Venezuela should be cheaper than to and from Puerto Rico--another mutually beneficial option to both countries.

3. Technology transfer

Venezuela has a more advanced fishing fleet than T&T. The T&T commercial vessels are basically bottom trawlers. It would be to the benefit of T&T therefore if Venezuelan expertise in long-lining could be transferred to the T&T commercial fleet so as to foster greater flexibility in fishing methods. Venezuelan fishermen harvest tuna within the 200-mile EEZ of T&T. There is no reason why T&T should not be able to harvest its own tuna.

C. Alternative Proposals

Legalizing of current trade patterns between T&T and Venezuela will result in financial costs as two additional ports will have to be established--one in each country. This will also necessitate the posting of customs, health and immigration officials here and offices being made available. The points at which these ports ought to be established are both far-removed from current developed centres of trading in both countries--Pedernales-Capure in Venezuela and Icacos in Trinidad. In the event that this type of expenditure is undesirable to both parties, three "cheaper" alternatives are proposed.

1. Venezuelan commercial vessels on the north coast of Trinidad

The last agreement allowed 60 T&T and 32 Venezuelan artisanal vessels to operate in the territorial waters of each other. It is hereby proposed that this arrangement be maintained.

However, the Venezuelan negotiating team has in the past desired legal entry of commercial vessels off the north coast of Trinidad. NFC requires fish for processing at its plant which is severely underutilized and T&T imports at least 50% of its fish. Add to this the policy of the GOTT which supports domestic food production and the reduction of imports. One solution to all these "needs" would be to permit a specific number of Venezuelan commercial vessels entry to the north coast of Trinidad on condition that all the catch be landed at NFC. In this way Venezuela achieves its goal, NFC receives fish and improves its operating capacity and T&T reduces fish imports.

Another stipulation for the entry of these vessels would be that T&T scientists/observers be allowed aboard to collect biological and oceanographic data, both of which are in short supply in T&T.

A third point would be the necessity for Venezuela to provide T&T with landing and other data from the artisanal boats which operate off the north coast under the terms of the agreement.

The fourth stipulation would be the regulation of the sizes and numbers of Venezuelan trawlers operating off the south coast of Trinidad and the inclusion of T&T scientists/observers aboard these vessels for scientific data collection.

Strict adherence to the terms of the treaty must be maintained by both parties.

2. Venezuelan commercial vessels-fee structure

An alternative to that suggested at (1) could be that the Venezuelan commercial vessels operating off the north coast of Trinidad would land 50% of their catches at NFC but that entry to these grounds would be on payment of a fee to be determined by both parties. The remainder of the stipulations would apply.

3. Venezuelan commercial vessels on the east coast of Trinidad

Venezuela has also expressed a wish to have vessels operate legally off the east coast of Trinidad. Novoa and Ramos (1976), Griffiths and Nemoto (1967) and Hooft and Ramos (1972) have all indicated by numerous figures that Venezuelan tuna long-liners operate off the north and east coasts of T&T.

The numbers and catches of these vessels should be regulated and those which operate within 200-miles of T&T should either:

- a. land all the catch at NFC; or
- b. land 50% of the catch at NFC and pay a fee; or
- c. land in Venezuela and pay a more substantial fee than that which applies at (b).

Scientists/observers should be permitted aboard these vessels for data collection and all catch data should be regularly made available to T&T.

Enforcement and surveillance must be strictly conducted by T&T according to the terms of the agreement.

D. Establishment of Ground Rules

The last fishing agreement was not enforced by T&T while the enforcement practices of the Venezuelan authorities were occasionally over-enthusiastic and therefore at times unappreciated.

Any agreement which enters into force must be strictly adhered to by nationals of both states. This requires that surveillance and enforcement be conducted by the appropriate authorities within the terms of the agreement. It is further suggested that an article dealing with violations be written into the treaty so as to include specific sanctions and penalties for infractions committed by nationals of both states, the ultimate being the permanent loss of license to operate. This should effectively end the harrassment of T&T artisanal fishermen by Venezuelan authorities and terminate their practices relating to arbitrary fines. It should also curtail the activities of nationals of both countries who fish in each other's waters without licenses.

The levels of enforcement and surveillance attained either regulate an agreement or make a mockery of it. Effective enforcement by both states will of necessity be costly in the short-term but will be fruitful in the long-term. There will be need for the establishment of an office/post for the TTCG on the Cedros Peninsula, probably at Icacos. AMOCO has a port on the east coast of Trinidad and it should be neither difficult nor expensive for the TTCG to dock and operate from here with respect to east coast patrols.

Attendant on this enforcement/surveillance activity will be the urgent need for closer collaboration between enforcement and administrative arms of both governments. A variety of problems could be more expeditiously handled in this way without the bureaucratic time-consuming delays that currently operate. These include contraband traffic of goods, unauthorized entry of people (including criminal elements escaping from the law) and inter-state traffic of stolen goods.

The establishment of Customs, Health and Immigration authorities at points in the Pedernales-Capure region and at Icacos would therefore be useful to both countries with respect to monitoring the movement of goods, live animals and people.

VII. CONCLUSION

The conflict which has existed between the Republics of Trinidad and Tobago and Venezuela historically relates to fishing by nationals of one country in the waters of the other, generally without the benefit of a permit or license.

One might well expect that decades of fishing in each other's waters would become so common that it would no longer pose problems. Nevertheless, enforcement is generally initiated by Venezuela to the detriment of T&T fishermen. By comparison, Venezuela has greater numbers of vessels and men operating freely within the territorial waters of T&T and harvesting unknown (but quite likely large) quantities of a

variety of high-priced fish species.

Alongside the numerous vessels scattered within the territorial waters of T&T and even within the 200-mile EEZ, Venezuela has for some time been desirous of having legal access for its commercial vessels off the east and north coasts of Trinidad. Concurrently, Venezuela seems reluctant to accede to the requests of T&T for permission for additional artisanal vessels to operate in its waters.

The end result therefore is that Venezuela is requesting additional privileges, not receiving these but taking them anyway. Trinidad and Tobago on the other hand is requesting additional access, neither receiving nor taking these while being extremely accommodating of the activities of its neighbour.

T&T has a food import bill which increases annually and reached a high of TT\$905 million in 1982. Under the current financial constraints, the country can ill-afford to be over-generous with its food resources.

One may therefore be tempted to speculate about the T&T approach to Venezuela with respect to the fishing agreement. Is T&T trading one resource (fish) for another (oil and gas)? There seems to be no other plausible or visible reason.

Despite this generous and tolerant approach by T&T, the policy of the Government concerning agriculture supports increased local food production so as to reduce imports. T&T needs food without the loss of foreign exchange. The proposals suggested herein allow increased food production under

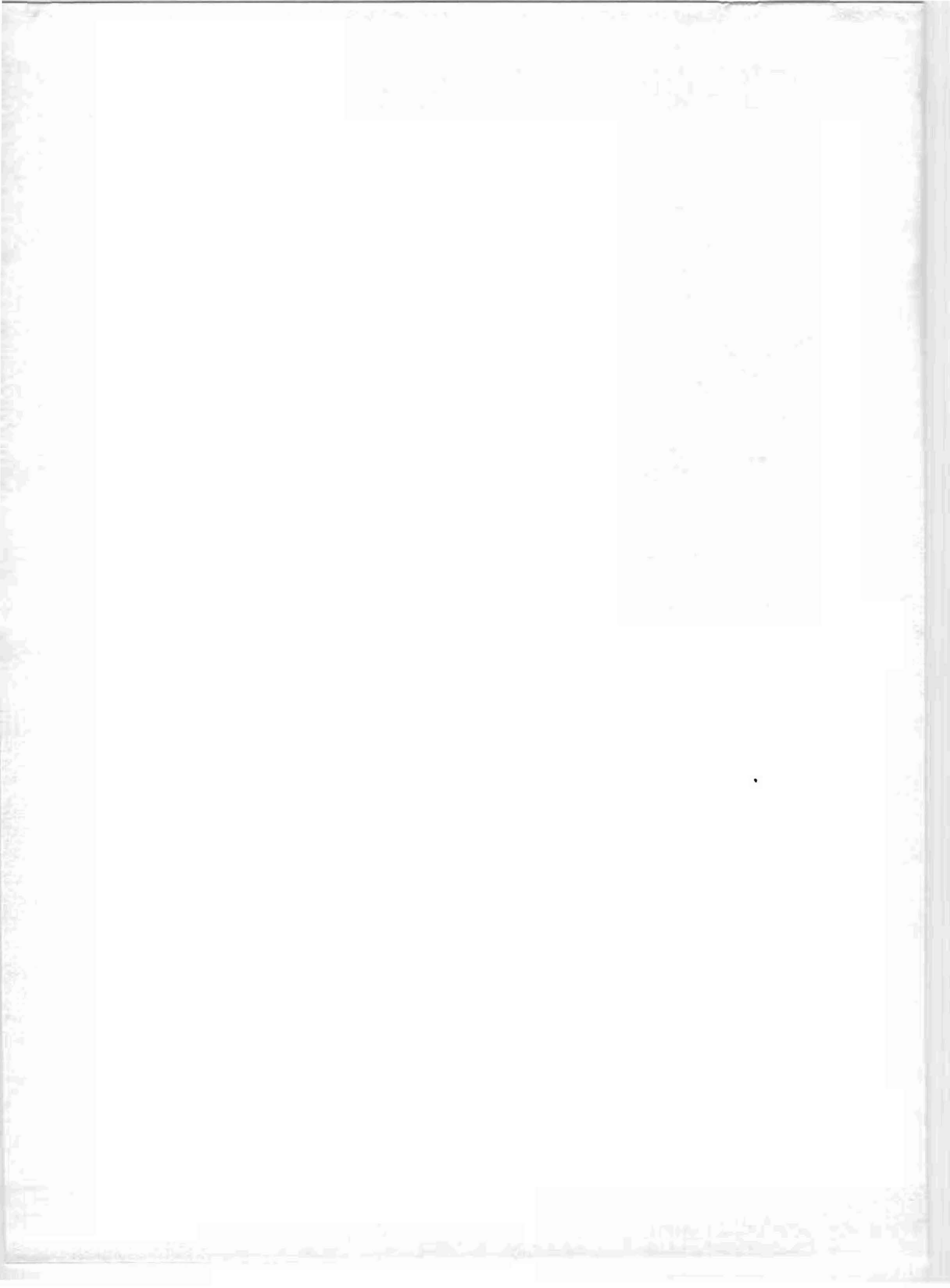
legally approved circumstances, with more controls and equity than currently exists. Continuation of a system which permits open entry to foreign fishing vessels all around its coasts in such a manner that T&T reaps little or no benefit is not supportive of established policy objectives.

While a fishing agreement may not be the most important point of discussion between the two countries at present, T&T or any other country, is hardly able to afford generous and free disbursements of its resources to all who may wish to exploit them. Venezuela, while being the most fortunate in this particular instance, is not the only recipient.

This paper has indicated that Venezuela was the greater beneficiary under the terms of the last fishing agreement. It is hereby suggested that minimal but firm assertion by T&T of its sovereignty over the resources of its TS and its jurisdiction over those within its EEZ would be the first important step in dealing with Venezuela on an equal basis.

As a colony, the T&T economy was channelled by and tied to that of the United Kingdom. As an independent nation for over 22 years, T&T now finds itself in a position in which it owns resources that another independent country seems to need and/or want. Therefore, the most feasible time to negotiate the dispensation of these resources is while they exist in economically viable quantities and while they are yet in demand. The time to bargain and seek equity is now.

Times have also changed. In 1973 oil was the most



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METRIC CONVERSION

1 Metre	=	39.37 inches
1 Kilometre	=	0.62 miles
1 Sq. Km.	=	0.3861 sq. miles
1 Kg.	=	2.2 lbs.
1 Tonne	=	1000 Kg. = 2200 lbs.
1 Ltr.	=	0.22 Imperial Gallons
4.545 Ltrs.	=	1 Imperial Gallon

[Source: Merriam-Webster Dictionary.]

Currency - 1985 Value

Trinidad & Tobago Dollars	=	TT\$
Venezuelan Bolivars	=	Bs
US\$ 1	=	TT\$2.42
US\$ 1	=	Bs 10.8995 (Selling 3/11/85)
TT\$ 1	=	Bs 4.5 (Selling 3/11/85)

Monthly quantities and values of fish (ex-vessel) - Trinidad, 1983

Appendix I

MONTHS	KINDS OF FISH																		Total
	Catn	King	Carall	Red	Wresting	Shark	Shrimp	Salmon	Bonito	Cre Cre	Moon	Mullet	Pomou	Plate	Jacks	Johns	Whorls	Other	
JANUARY	kg	34,604	8,205	3,330	11,340	3,705	39,835	58,010	14,840	2,189	17,607	3,311	1,094	3,686	2,663	93	1,49	37,907	280,544
	¢	359,811	129,674	22,691	131,633	6,739	129,12	635,310	103,835	7,300	119,684	33,670	4,605	12,996	7,471	8,49	3,29	176,064	1,922,730
FEBRUARY	kg	52,22	12,86	12,90	7,07	3,03	27,908	33,456	11,001	2,901	17,291	3,600	810	2,665	770	7	3,84	41,674	260,325
	¢	458,192	243,328	67,258	77,543	6,254	80,977	548,521	88,395	6,451	97,302	16,225	3,476	8,237	2,709	407	8,150	163,754	1,877,190
MARCH	kg	47,040	18,864	9,39	13,271	12,164	39,292	60,842	10,537	1,345	24,066	8,962	704	3,517	607	220	23,19	37,87	311,903
	¢	306,135	222,555	75,715	144,874	17,529	105,20	751,991	83,025	3,310	124,041	52,435	2,870	11,570	1,604	1,37	47,50	150,70	2,100,563
APRIL	kg	65,08	21,907	13,724	16,704	19,065	30,620	37,301	14,312	1,125	42,821	7,358	662	1,797	2,882	427	10,56	75,154	362,370
	¢	535,335	230,400	97,190	174,79	27,104	73,958	329,152	110,104	3,541	221,663	40,431	2,794	6,455	5,200	2,36	21,04	264,144	2,154,853
MAY	kg	97,01	14,174	9,102	10,977	20,674	12,235	92,855	11,794	1,047	37,597	6,391	1,050	1,024	1,257	2,954	2,63	53,725	376,494
	¢	610,204	124,827	56,924	97,644	22,354	28,654	808,757	74,865	2,497	136,820	23,206	2,267	3,342	2,975	6,267	3,559	158,304	2,163,557
JUNE	kg	98,517	18,039	6,728	15,854	3,04	12,574	99,131	14,829	967	43,727	10,356	1,171	721	205	97	7,311	57,432	350,706
	¢	661,077	168,024	43,813	130,934	8,311	30,922	668,945	110,006	2,408	168,785	48,905	3,470	2,722	614	435	11,000	190,724	2,251,201
JULY	kg	130,450	8,604	2,654	12,790	5,574	11,090	26,331	13,155	1,156	11,121	7,740	935	1,445	1,516	89	6,482	48,124	297,335
	¢	818,119	90,694	17,470	91,561	9,831	50,934	361,131	83,584	3,316	104,945	36,752	1,567	3,175	3,915	39	8,201	144,897	1,810,377
AUGUST	kg	112,537	8,626	7,20	12,722	5,954	21,028	17,871	12,790	311	22,206	4,464	1,449	1,202	1,950	267	1,410	42,20	273,530
	¢	715,705	91,684	49,065	96,202	15,45	54,758	257,062	70,531	776	71,409	17,372	3,067	2,513	2,474	1,18	2,554	133,52	1,506,213
SEPTEMBER	kg	93,973	10,304	18,16	12,851	4,307	33,102	14,440	17,725	530	29,465	8,242	1,374	1,085	3,400	3	8,864	42,69	300,653
	¢	697,524	106,333	116,097	108,462	8,554	76,844	240,821	105,213	1,509	85,353	37,017	3,030	3,294	11,253	17	13,43	125,544	1,740,352
OCTOBER	kg	101,337	6,237	12,46	11,433	2,84	22,844	16,334	14,731	815	20,003	4,004	1,051	141	11	290	9,69	49,31	273,629
	¢	674,932	87,701	74,42	91,475	4,85	63,912	253,581	92,606	2,151	67,242	21,789	2,474	366	21	1,224	10,57	142,662	1,573,178
NOVEMBER	kg	109,205	6,79	13,014	10,094	6,007	28,228	22,421	14,476	1,275	6,640	2,821	1,599	587	2,046	7	3,100	45,304	273,930
	¢	773,300	75,55	81,804	90,210	10,311	91,624	340,290	92,697	3,477	73,924	14,465	3,760	1,924	5,168	197	5,811	167,094	1,831,677
DECEMBER	kg	51,095	11,350	3,794	12,137	3,40	15,694	21,977	12,950	2,855	20,234	1,624	2,640	1,648	334	50	3,107	44,102	212,107
	¢	388,431	136,572	43,84	105,274	10,65	57,397	300,425	84,497	6,469	71,676	8,380	9,952	1,166	586	310	5,16	218,194	1,458,953
TOTAL	kg	1,009,308	153,144	116,75	147,333	97,937	294,462	480,904	163,221	16,524	292,920	70,904	11,547	17,990	16,828	5,32	81,707	575,581	3,549,762
	¢	7,008,700	1,806,420	776,304	1,340,689	147,974	823,411	3,498,964	1,099,442	43,379	1,848,802	300,667	43,436	57,768	44,084	22,75	138,544	2,033,712	22,551,204
% of Grand Total	¢	20.44	4.31	3.29	4.15	2.59	8.30	13.55	4.60	0.47	8.25	2.00	0.31	0.51	0.37	0.16	2.30	16.21	
No. Of Boats			JAN.	FEB.	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT.	OCT.	NOV.	DEC.					
Fish	¢		440	499	470	530	546	517	552	574	590	524	560	494					
Average No. Of Fish/boat	¢		800	918	940	1,060	1,201	1,037	1,214	1,158	1,100	1,048	1,120	988					

Source: Working Papers
Fisheries Division

APPENDIX II

FISHING AGREEMENT BETWEEN THE GOVERNMENTS OF THE REPUBLICS OF TRINIDAD & TOBAGO AND VENEZUELA

The Governments of the Republics of Trinidad and Tobago and Venezuela, herein referred to as the Contracting parties:

Recognizing that the relations between both countries are based on mutual respect and observance of the principles of sovereignty and national independence, of the equality of rights, and non-interference in each other's affairs.

Reaffirming the excellent relations which have always existed between both countries and the desirability of maintaining and reaffirming these relations for the mutual benefit of their peoples.

Desirous of adopting effective measures so as to obtain the maximum productivity of the fishing resources situated in the Gulf of Paria and other marine areas adjacent to both countries.

Conscious of the need to apply measures for the preservation of the marine environment and the conservation of living resources, particularly in their natural nursery grounds.

Imbued with the spirit of cooperation necessary for effective control of pollution and for preventing, reducing and eliminating harmful effects on the environment.

Convinced of the need to carry out joint oceanographic research in the area.

Have agreed to the following Articles:

Article I

- (1) The Governments of both countries shall, in accordance with the present Agreement, grant fishing boats flying the flags of, or registered either in Trinidad and Tobago or in Venezuela, and duly authorized by their respective Governments access to the waters of the areas specified in Article III of this Agreement for the purpose of exploitation of their living resources.
- (2) The access referred to in paragraph (1) of this Article shall be granted only to boats which are the property of nationals of the Contracting Parties.
- (3) Fishing boats granted access to fishing areas under this Agreement shall not engage in activities other than fishing.

Article II

- (1) The fishing boats and crews of either Contracting Party when operating in the waters of the other Contracting Party shall comply with the laws and regulations of the country in whose territory and waters they may be.
- (2) The Contracting Parties undertake to make available to each other the text of their laws and regulations pertaining to fishing.
- (3) These laws and regulations shall be enforced by the authorities in whose territory and waters the fishing activities take place.

Article V

- (1) Venezuelan artisanal fishing boats shall be permitted to fish in the northern area as defined in Article III, A. The Fisheries Commission to be established under Article XIII of this Agreement may, however, propose to the Contracting Parties conditions of access to this area for non-artisanal fishing boats. The Government of Trinidad and Tobago shall grant permits to Venezuelan boats in conformity with the provisions of the present Agreement. A percentage of the fish taken in this area by Venezuelan boats shall be sold to Trinidad and Tobago; the percentage, price, venue for sales and other details to be worked out by the Fisheries Commission to be established under Article XIII. These details shall be submitted to the Contracting Parties for their approval.
- (2) With the exception of the special areas referred to in Article III, C., Trinidad and Tobago and Venezuelan fishing boats shall be permitted to fish in the southern area defined in Article III, B.

Article VI

The maximum length and number of fishing boats in authorized fishing areas of Trinidad and Tobago and Venezuela shall be determined by the respective Governments upon the recommendation of the Fisheries Commission to be established under Article XIII of this Agreement.

Article VII

SPECIAL FISHING AREAS

- (1) In the special fishing areas described in Article III, C., the Venezuelan Government shall, in exercises of its sovereignty, issue the relevant permits in accordance with the provisions of the present Agreement and in compliance with the applicable legal provisions under the following conditions:
 - a. Permission will be granted only for the use of fishing boats that do not exceed 12 metres in length, that are of artisanal type and that have a maximum storage capacity of 1 ton.
 - b. The trawl nets shall be of artisanal type with a minimum diameter of mesh opening of 3.5 cm, that is to say, 1.75 cm between knots at the cod end.
 - c. Each boat shall have a crew of not more than four.
 - d. No fishing whatsoever shall be permitted in the distributaries of the Orinoco River.
 - e. The Government of the Republic of Venezuela may alter the diameter of the fishing nets referred to immediately above at any such time as technical studies indicate a need for change in the interest of the conservation of the species. The Government of Venezuela will keep the Government of Trinidad and Tobago duly informed of the factors justifying such a change.
- (2) Fifty percent of the catch made by Trinidad and Tobago boats shall be sold to Venezuela. In this connection, the Fisheries Commission to be established under Article XIII will make the relevant recommendations on date, price and place where the product will be disposed of.

- (4) To give technical assistance to the other Contracting Party upon request in the event of serious pollution of the marine frontier zone.
- (5) To work out as early as possible a joint contingency plan to be implemented in cases of pollution caused by serious oil spills or other accidents of similar magnitude in the area.

Article XII

- (1) For the proper management and conservation of living resources in the waters adjacent to both countries, the Contracting Parties agree to take appropriate steps to protect such resources. Those measures shall be agreed to by both Governments, bearing in mind the recommendations of the Fisheries Commission to be established under Article XIII and may include restrictions relating to the number and size of fishing boats, catch and size of certain types of fish, fishing zones, seasons, methods and equipment.
- (2) No fishing boat shall keep on board species which are not of the minimum size of catch to be specified on the recommendation of the Fisheries Commission. When such fish are caught they shall be thrown back into the sea without delay.

Article XIII

FISHERIES COMMISSION

- (1) For the purposes of this Agreement, the Contracting Parties agree to create a Trinidad and Tobago/Venezuela Fisheries Commission consisting of three representatives of each country whose names will be duly communicated through diplomatic channels and which will meet at least once every six months or at any time on the request of either of the Contracting parties. Meetings will be held alternatively in Trinidad and Tobago and in Venezuela.
- (2) The Fisheries Commission shall present recommendations to both Governments on measures necessary for the proper management and conservation of living resources in the waters of both Contracting parties.
- (3) The Fisheries Commission shall consider amendments to this Agreement proposed by either Contracting Party and its recommendations shall be submitted to the respective Governments for their consideration.

Article XIV

No provision in the present Agreement is to be considered as a diminution or limitation of the rights of either Contracting Party in relation to the limits of its internal waters, territorial waters, continental shelf and exclusive economic zone.

Article XV

None of the provisions contained in this Agreement in respect of fishing in the waters of either Contracting Party shall either be invoked or claimed as a precedent.

Article XVI

The Contracting Parties agree to adopt in their respective territories the appropriate legislative and administrative measures to ensure compliance with the provisions of this Agreement as well as to impose sanctions on those who break them.

Article XVII

Whatever controversies might arise in the interpretation or application of this Agreement shall be resolved through direct negotiations between the Contracting Parties.

Article XVIII

- (1) The present Agreement shall enter into force on the date on which an exchange is made of diplomatic notes which indicate compliance with the legal formalities required by the constitutional procedures of each Contracting Party.
- (2) The Contracting Parties shall, after a period of two years from the date this Agreement enters into force, review the experiences deriving from the implementation of this Agreement with a view either to its continuation or to the negotiation of the terms and conditions of a new Agreement.
- (3) The Contracting Parties agree that they shall commence their review three months before the expiry of the two-year period under reference in paragraph (2) above.
- (4) If no agreement is reached within the three-month period under reference in paragraph (3) above, the present Agreement shall continue provisionally for one year after the commencement of the review, provided that a new Agreement is not reached before the end of the one-year period.

Article VIII

COOPERATION AND ESTABLISHMENT OF JOINT ENTERPRISES

The Contracting Parties shall cooperate actively in fishing matters with a view to promoting the establishment of joint fishing enterprises for catching, processing and marketing of fish.

Article IX

OCEANOGRAPHIC RESEARCH

- (1) To achieve the objectives outlined in this Agreement, the Contracting Parties agree to coordinate oceanographic research programmes in the Gulf of Paria and adjacent marine areas, especially in the following fields: conservation, mariculture, and marine biology; development of scientific and technological research in relation to living resources, as well as identification of the physical, chemical and biological characteristics of these resources.
- (2) The Contracting Parties agree to exchange information obtained in the carrying out of the aforementioned activities.

Article X

The Contracting Parties agree to the joint conduct of fishery research and exploratory fishing in the waters of both countries subject to the following conditions:

- (1) The consent of the Government of the country in whose waters such fishery research and exploratory fishing will be conducted, shall be obtained particularly in respect of the vessels to be used.
- (2) Scientists and technicians of both countries shall be included on such vessels.
- (3) Both Contracting Parties shall be entitled to all the information obtained as a result of such research and exploration and agree to share all catches equally.

Article XI

PRESERVATION OF THE MARINE ENVIRONMENT

Each Contracting Party shall adopt the measures necessary for the preservation of the marine environment from pollution. As a result each Contracting Party undertakes:

- (1) To provide information to the other Contracting Party concerning its legislation on and experience with the preservation of the marine environment.
- (2) To supply information on the competent authorities who are aware of and make decisions in matters concerned with pollution.
- (3) To inform each other of any indications of actual or potential pollution of a grave and imminent nature originating in the territory and waters of either Contracting Party. On the basis of the information received, the Contracting Party, in whose territory or waters the pollution problem originated, shall immediately take appropriate measures to avoid or eliminate such pollution so as to preserve the marine environment. The measures adopted shall be communicated immediately to the other Contracting Party.

APPENDIX II

FISHING AGREEMENT BETWEEN THE GOVERNMENTS OF THE REPUBLICS OF TRINIDAD & TOBAGO AND VENEZUELA

The Governments of the Republics of Trinidad and Tobago and Venezuela, herein referred to as the Contracting parties:

Recognizing that the relations between both countries are based on mutual respect and observance of the principles of sovereignty and national independence, of the equality of rights, and non-interference in each other's affairs.

Reaffirming the excellent relations which have always existed between both countries and the desirability of maintaining and reaffirming these relations for the mutual benefit of their peoples.

Desirous of adopting effective measures so as to obtain the maximum productivity of the fishing resources situated in the Gulf of Paria and other marine areas adjacent to both countries.

Conscious of the need to apply measures for the preservation of the marine environment and the conservation of living resources, particularly in their natural nursery grounds.

Imbued with the spirit of cooperation necessary for effective control of pollution and for preventing, reducing and eliminating harmful effects on the environment.

Convinced of the need to carry out joint oceanographic research in the area.

Have agreed to the following Articles:

Article I

- (1) The Governments of both countries shall, in accordance with the present Agreement, grant fishing boats flying the flags of, or registered either in Trinidad and Tobago or in Venezuela, and duly authorized by their respective Governments access to the waters of the areas specified in Article III of this Agreement for the purpose of exploitation of their living resources.
- (2) The access referred to in paragraph (1) of this Article shall be granted only to boats which are the property of nationals of the Contracting Parties.
- (3) Fishing boats granted access to fishing areas under this Agreement shall not engage in activities other than fishing.

Article II

- (1) The fishing boats and crews of either Contracting Party when operating in the waters of the other Contracting Party shall comply with the laws and regulations of the country in whose territory and waters they may be.
- (2) The Contracting Parties undertake to make available to each other the text of their laws and regulations pertaining to fishing.
- (3) These laws and regulations shall be enforced by the authorities in whose territory and waters the fishing activities take place.