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**An Overview of the Cuban
Commercial Fisheries Industry**

by

Chuck Adams

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Institute of Food and Agricultural Sciences

University of Florida

Gainesville, Florida 32611

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Abstract

Following the 1959 Cuban Revolution, the nation's fishing industry underwent significant development. The technological improvements and capital investment which occurred were funded in large part by a bilateral fisheries agreement with the Soviet Union. Cuba's fishing industry developed a large capacity distantwater fleet, which produced large quantities of low-value fisheries products for domestic consumption and export. However, Cuba maintained a prominent role in the world market as a supplier of high-value Caribbean finfish and shellfish products. With the breakup of the Soviet Union and the reduction of subsidized oil shipments and technological assistance from the Soviets, the distantwater fleet has been unable to maintain historic levels of production. The future is uncertain in terms of Cuba's prominence in the world seafood market.

Key words: Cuba, fisheries, trade, distantwater fleet, Soviet Union

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AN OVERVIEW OF THE CUBAN COMMERCIAL FISHERIES INDUSTRY

**Chuck Adams
Food and Resource Economics Department,
Florida Sea Grant College Program
University of Florida**

INTRODUCTION

The commercial fishing industry of Cuba is an important source of seafood products originating from the Gulf of Mexico and Caribbean region. Cuba has also historically fielded a large distant water fleet engaged in the harvest of many worldwide sub-tropical and temperate fisheries stocks. Cuba has played an increasingly important role in the world market for seafood products, particularly the markets for high-valued finfish and shellfish. However, given recent changes in the global eco-political environment, Cuba's agricultural and natural resource-based industries, which have grown dependent on subsidized imported fuel oil, may be in a state of flux. As the U.S. seafood industry strives to enhance its competitiveness in the global seafood market and domestic fisheries managers attempt to be more effective in developing domestic and regional fishery management policy, a need exists to better understand the role Cuba plays in the total production of seafood products from the Caribbean region and to recognize Cuba's importance in the world seafood market. This paper represents a brief attempt to describe and characterize the Cuban fisheries industry with available secondary data and related information.

INDUSTRY HISTORY¹

Prior to the 1959 Revolution, Cuba's commercial fishing industry was concentrated in near-shore waters, targeting traditional and indigenous finfish and shellfish species. These commercial catches were primarily directed to the Cuban tourist industry, which dominated the Caribbean region during the 1950's (Seafood Business, 1992). However, as a result of the Revolution, the structure and conduct of the fishing industry changed drastically. Initially, the Cuban government decided to gain control over all vessels, including fishing vessels, capable of leaving Cuban waters. The government also saw the fishing industry as a potential source of increased foreign exchange, of which all sources were of crucial importance, given the U.S. imposed trade embargo in response to the Revolution. To help better direct the fishing industry toward this objective, the Cuban government nationalized all fishing companies and vessels. Then, the commercial fishing industry was reorganized as a number of state fishing organizations under the auspices of the Ministerio de la Industria Pesquera (MIP). The fishing fleet, which at the time was characterized by a large number of small, aging boats, was rehabilitated. Vessels were modernized and newer, larger vessels imported from shipyards in Spain and Japan.

Cuba's fishery development objectives were also steeped in political aims. The Cuban government saw fisheries development as a means to increase political stability in Cuba's coastal communities and maintain working relationships and political ties with the many coastal Latin American countries. As a result, Cuba has historically maintained close ties with several Latin American countries regarding fisheries issues, particularly Argentina, Chile, Guyana, Mexico, Panama, and Peru. Some of these relationships were strained as many nations began enforcing 200-mile limits on territorial seas during the late-1960's to mid-1970's period. As these territorial seas limits were established, Cuba's access to traditionally targeted stocks was drastically reduced.

¹The following discussion draw heavily from documents prepared by Weidner (1992), Jacobson and Weidner (1989), and Thomas and Weidner (1988), of the Foreign Fisheries Analysis Branch, Office of International Affairs, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, US Department of Commerce.

Although initiated when most nations still observed 3 to 12 mile territorial seas limits, Cuba began developing in earnest its distantwater, high seas fleet, the Flota Cubana de Pesca (FLOCUBA).

To achieve the objectives of fleet modernization and expansion, Cuba began to establish a close relationship with the Soviet Union. In fact, the first formal cooperative agreement signed with the Soviets concerned fisheries development. The Cuban government sought to emulate the large, distantwater fleet long operated by the Soviets. Such a fleet was deemed useful in increasing domestic food production and generating much needed export revenues by tapping into high seas fisheries stocks. The development of the distantwater fleet was accomplished via close bilateral cooperation with and economic subsidization by the Soviet Union. The Soviets were looking for regional assistance (i.e. base of operations) in their attempts to drastically expand fishing activities in the Atlantic. The Soviets offered much needed technical assistance on vessel operation/maintenance, biological data on fishery stocks of common interest, fishing/processing methods, exchange of fishery scientists/students, port facility expansion, communications stations, fuel subsidies, among others. In exchange, Cuban ports served as locations where Soviet vessels could perform repairs and maintenance. Several other Eastern Bloc countries were involved in these activities, which eventually produced for Cuba the most technically advanced fishing fleet in the Latin American region. Soviet assistance, however, was key to this remarkable transformation.

Cuban distantwater trawlers were increasingly deployed off the coasts of southern Africa, southern South America (particularly the Pacific coast), and Canada. These vessels were engaged in producing significant quantities of low-value finfish species, such as jack mackerel, hake, and others, destined primarily for the domestic market, although some export of these fishery products occurred. The more valuable nearshore species caught in Cuba's coastal waters, such as spiny lobster, shrimp, and select finfish (snapper, grouper) were still being directed to lucrative foreign markets. Along with FLOCUBA, two other organized Cuban fishing fleets existed, Flota del Golfo (FG) and Flota Atuner Cubana (FAC). Both of these fleets were composed primarily of longliners, with the activities of FG being primarily confined to the Gulf of Mexico, and FAC primarily deployed off Western

Africa. Fishing activities of FG were severely curtailed with the enforcement of 200-mile territorial limits by the United States and Mexico in the mid-1970's.

Recent estimates indicate that MIP is currently composed of 18 state enterprises which operate 43 different fishery units. Several fishery processing plants have been constructed recently in Cuba, in response to the Cuban government's intent to provide import substitution and boost domestic consumption of seafood products. The exact numbers of these facilities and products produced are not available. In addition, an accurate estimate of the number of fishing vessels is also not currently available. The total employment associated with the fishing industry in Cuba is also difficult to determine given the available data. However, MIP is estimated to employ at least 18,000 fishermen. Anecdotal estimates of current total seafood industry employment reach 40,000.

LANDINGS, COMMODITY PRODUCTION, AND TRADE

The following discussion provides a brief description of recent trends in Cuban landings of commercially important species, global distribution of effort, the variety of seafood commodities produced, and pattern of international trade. The data come from various issues of the United Nations, Food and Agricultural Organization (FAO) documents entitled Yearbook of Fishery Statistics - Catches and Landings and Yearbook of Fishery Statistics - Commodities. For the purposes of this discussion, "landings" refer to the whole weight of finfish, shellfish, and other aquatic organisms as initially harvested, without further processing.

Production Trends

Within the Caribbean and Central American region, Cuba ranks second in terms of total landings of fish, crustaceans, molluscs, and other marine and freshwater species. In 1989, Cuba landed 192,062 metric tons of fisheries products (whole weight basis) (Table 1). Approximately 90 percent of these total landings originated from marine sources, while the remaining 10 percent represent production from inland, freshwater sources. Although averaging about 200,000 metric tons

on an annual basis during the 1980-89 period, Cuba's fishery landings increased from 186,481 metric tons in 1980 to 244,673 metric tons in 1986. Total landings then decreased by 20 percent from 1986 to 1989. Of the countries within the Caribbean region, only the annual fishery landings of Mexico have historically exceeded Cuba's reported landings volume on a consistent basis (Table 1). Mexico averaged 1.3 million metric tons of fishery landings on an annual basis during the 1980-89 period, over six times the landings volume reported by Cuba. Total fishery landings in Panama exceeded that reported for Cuba only in 1980 and 1985. Panamanian annual fishery landings have averaged approximately 20 percent below those reported by Cuba during the 1980-89 period. Cuba accounted for approximately 10 percent of the total fishery landings of the Caribbean and Central American region during 1989. Among major seafood producers in the Western Hemisphere, Cuba ranks eighth in terms of total landings on a whole weight basis.

Global Distribution of Landings

Cuban fishery landings from marine, oceanic sources in 1989 totaled 173,897 metric tons, or approximately 90 percent of the total reported landings. The remaining 10 percent, or 18,165 metric tons, represents production from primarily inland sources. The distribution between global oceanic and domestic inland sources has remained about steady during the 1980-89 period, with inland sources accounting for only a slightly increasing percentage of the total. This increase, although slight, in the share attributed to inland landings may be largely explained by the growing Cuban involvement in aquacultural development (Baisre and Castell, 1991; Alvarez, 1991; Weidner, 1992).

The oceanic sources of Cuban fishery products has changed recently. Prior to 1980, the most important sources of landings were the West Central Atlantic (region 31) and Southeast Pacific (region 87) (Table 2 and Figure 1). During 1980, these two regions accounted for approximately 90 percent of Cuba's total landings, with the distant-water landings in the Southeast Pacific contributing almost 50 percent of the total. During the 1980-89 period, the importance of the distant-water landings in the Pacific, in terms of total landings volumes, decreased. Landings in the Pacific region, although

sporadically increasing to pre-1980 levels in 1986 and 1988, decreased to 37,778 metric tons in 1989, or approximately 20 percent of the total production for that year. In contrast, landings in the Northwest Atlantic (region 21) and Southeast Atlantic (region 47) regions exhibited the greatest increases during the ten-year period. In 1980, these two regions represented less than 10 percent of the total landings. By 1989, however, landings from the Northwest and Southeast Atlantic accounted for about one-third of Cuba's total fishery landings. The East Central Atlantic (region 34) and Southwest Atlantic (region 41) continue to play minor roles as sources of Cuban fishery landings.

Species of Importance

Cuba's fishery landings are characterized by an impressive array of species. Cuba has the third most diverse array of target species among all countries in the Western Hemisphere. During the 1984-89 period, Cuba reported landings for at least 135 different species or species groups (Table 3)². This diversity is exceeded only by the species mix reported by the United States and Canada.

Finfish

Finfish represent the most important species category, in terms of total landings on a whole weight basis. Finfish represented 87 percent of the total Cuban fishery landings in 1989 (Table 3). Some of the most important marine species groups, in terms of volume, include hake, horse mackerel, snappers/groupers, herrings, "redfishes", and sharks/rays. With the exception of snapper, grouper, and sharks, Cuba's finfish landings are dominated by relatively low-valued species. These species have been of consistent importance during the 1980-89 period, although the growing importance of some species likely reflects the redistribution of effort from Pacific to Atlantic oceanic regions. For example, the increased landings in the Northwest Atlantic is composed primarily of silver hake production. Silver hake landings increased by seven-fold from 1980 to 1989. The increased landings

²Due to inconsistencies with reported FAO species specific landings data prior to 1984, only data for 1984-89 are contained in Table 3. Discussion of landings data during the 1980-83 period are in reference to data contained in earlier FAO Fisheries Yearbook documents. Beginning in 1984, FAO added new species and adopted new names for some species.

in the Southeast Atlantic region are characterized by significant increases in the landings of Cape horse mackerel, while Cape hake production in the same region decreased substantially during the 1985-89 period. Chilean jack mackerel landings in the Southeast Pacific region declined during the 1980-89 period, while south Pacific hake and Auracuanian (Chilean) herring landings have increased from the same oceanic region during the same period.

Inland landings of freshwater finfish species has increased dramatically. In 1980, reported landings of cichlids (i.e. tilapia) were approximately 5,000 metric tons. In 1989, landings specifically of Blue tilapia increased to 15,744 metric tons. Additionally, landings of carp and catfish exhibited increases. These changes most likely reflect Cuba's growing attention toward development of commercial aquacultural practices, which have also been focused on certain marine species, such as penaeid shrimp (Weidner, 1992).

Crustaceans, Molluscs, and Other Marine Organisms

Although small by world or regional standards, Cuba produces notable quantities of spiny lobster, shrimp, oysters, clams, crab, and squid (Table 3). Particularly, Cuba has long been noted as an important regional supplier of Caribbean spiny lobster. Landings of spiny lobster varied between approximately 10,000 and 14,000 metric tons during the 1980-89 period. Landings of spiny lobster declined from 13,578 metric tons in 1985 to 11,170 metric tons in 1989 (Table 3). Landings of northern pink shrimp varied between 3,000 and 5,000 metric tons during the same ten-year period, with landings increasing somewhat between 1985 and 1989. Landings of pink shrimp during the ten-year period peaked in 1987, with a total of 4,883 metric tons reported for that year. Pink shrimp landings then declined to 4,029 metric tons in 1989. Landings of other penaeid shrimps, though averaging 1,500 metric tons between 1980 and 1985, declined to reportedly zero by 1989.

Cuba also produces relatively small quantities of molluscs, including squid, oysters, and clams. Landings of Argentine, Northern, and other species of squid totaled 3,536 metric tons in 1989, of which approximately 60 percent was represented by Argentine shortfin squid. Mangrove oysters and Ark clams landings totaled 2,316 and 1,893 metric tons in 1989, respectively. Landings of these two

mollusk species has been relatively constant since 1980. Cuba also reported small quantities of frogs, marine and freshwater turtles, sponges, crocodiles, and alligators in the 1980 to 1989 fishery landings statistics.

Production of Processed Seafood Commodities

Available data do not allow for a detailed assessment of the variety of fishery commodities produced by the Cuban seafood industry. However, some limited information provides insight into four general commodity categories (Table 4). These categories include (1) fish - fresh, chilled, frozen; (2) crustaceans and molluscs - fresh, frozen, dried, salted, etc.; (3) fish products and preparations; and (4) meals, solubles, and similar animal feedingstuffs of aquatic origin.

Fish - fresh, chilled, frozen

The majority of fishery products processed on annual basis in Cuba is frozen fish, excluding canned products. Only a small percentage is frozen as fillets. In 1989, 87,649 metric tons of frozen fish were reported, with only three percent, or 2,649 metric tons, being reported as filleted product. The other 97 percent is reported as frozen fish, excluding fillets, without any species or species group designation. The total annual volume of frozen fish has increased significantly during the 1980-89 period. The total volume of frozen fish increased from 58,543 metric tons in 1980 to 99,087 metric tons in 1986, an increase of nearly 70 percent. The volume of processed frozen fish then declined to 87,649 metric tons in 1989.

Crustaceans and molluscs - fresh, frozen, dried, salted, etc.

The volume of processed crustaceans and molluscs has varied somewhat since 1980. The total volume of processed crustaceans and molluscs increased from 15,358 metric tons in 1980 to a peak of 21,460 metric tons in 1985. The volume of this commodity category then declined steadily to 10,801 metric tons in 1989. These trends mirror the movements in processed volumes of spiny lobsters, the most important single species group, on a volume basis, within the overall commodity category. The total annual volume of processed spiny lobsters (including frozen whole and frozen

meat/tails) increased from 10,600 metric tons in 1980 to 17,182 metric tons in 1985. The total volume of processed spiny lobster then declined dramatically to 7,524 metric tons in 1989, representing a five-year decline of approximately 60 percent. Interestingly, the volumes of processed spiny lobsters exceeds domestic landings in the years 1984-1986. During the periods 1980-1983 and 1987-1989, landings exceed processed volumes. This may suggest a greater dependency on imported product during this 1984-86 period, particularly during 1985 when processed volumes exceed domestic landings by over 25 percent. However, this assertion is not corroborated with the available import data for crustacean products. These import and export data will be discussed in more detail in later sections. The discrepancy between landings and processed volumes may also reflect potential error in reported statistics.

The volumes of processed shrimps and prawns has remained relatively stable during the 1980-89 period, averaging about 4,100 metric tons on a annual basis over the ten-year period. In contrast to spiny lobsters, the total processed volumes of shrimp (including both whole shrimp and tails) never exceeds reported domestic landings.

Fish products and preparations

Canned fishery products represent a small component of the total volume of Cuba's processed fishery products. Canned fishery products, including bonitos, tunas, and other non-specified species (the largest component), totaled 4,421 metric tons in 1980. This volume increased steadily to 10,748 metric tons in 1987 and then declined dramatically to 5,457 metric tons in 1989. The species of fish utilized in the canning industry, other than bonitos and tunas, are not revealed by the available data.

Meals, solubles, and similar animal feedingstuffs of aquatic origin

Oily-fish meal represents the single product listed within this commodity category. The volumes reported for this category have been somewhat erratic during the 1980-1989 period. A peak occurred in 1986 as the volume of processed fish meal reached 10,172 metric tons. The next year, the volume dropped by almost 50 percent, and then recovered to 9,525 metric tons in 1988. Fish meal production then fell to 6,750 metric tons in 1989, only slightly above the volume reported for 1980.

International Trade in Selected Fishery Commodities

Cuban international trade in seafood commodities is reported in terms of six commodity categories. These include: (1) fish - fresh, chilled, or frozen; (2) fish - dried, salted, or smoked; (3) crustaceans and molluscs - fresh, frozen, dried, salted, etc.; (4) fish, canned; (5) oils and fats of aquatic origin; and (6) meals, solubles, and similar animal feedingstuffs of aquatic origin. The data are reported in terms of metric tons and U.S. dollar equivalents (Tables 5-8). This discussion assumes that the commodity categories are not totally exhaustive of the fishery products imported and exported by Cuba, but do represent the more important categories of seafood products traded. Unfortunately, the available data do not allow any species specific discussion regarding import and export trends.

Imports

Within the Western Hemisphere, Cuba ranks fourth in terms of seafood imported for further processing or domestic consumption in U.S. dollar equivalents (Table 5). Cuba imported seafood commodities in four categories with a total value of \$53.8 million U.S. in 1989. This import value was reportedly only exceeded by the United States, Canada, and Brazil. The dollar value of Cuban imports has been somewhat erratic during the 1980-89 period, while averaging about \$58.6 million in nominal terms. Import values reached \$86 million in 1981, declined to \$30.5 million in 1984, and then remained in the \$50 to \$60 million range during the 1985-89 period.

The relative importance of the imported commodity categories has shifted during the 1980-89 period (Table 6). In 1980, "meals and solubles" was the most important commodity category, with a value of \$43.6 million representing 88,440 metric tons of product. This was followed by "fish-fresh, chilled, or frozen", which was valued at \$21.4 million for 28,395 metric tons of product. Dried, salted, or smoked fish and canned fish were of approximate equal importance. However, by 1989 imports of "meals and solubles" had declined to only 11,000 metric tons, valued at \$4.5 million. This was exceeded by canned fish, of which 11,327 metric tons were imported and valued at \$17 million. The most important single commodity category was "fish - fresh, chilled or frozen", of which 36,427

metric tons were imported and valued at \$28.7 million. Dried, salted or smoked fish remained an import commodity of minor importance. Some imports were reported for "crustaceans and molluscs" and "oils and fats" during the 1981-1983 period, but these volumes and values were relatively insignificant.

Exports

In terms of exported products within the previously denoted six categories, Cuba ranks a distant tenth among all countries in the Western Hemisphere. Within the Caribbean region, Cuba exports more product than any other country. However, Cuba ranks seventh among other Latin American nations, exceeded by Chile, Peru, Mexico, Ecuador, Argentina, and Brazil (Table 7). Cuban fishery exports have remained relatively stable during the 1980-89 period. In terms of nominal U.S. dollars, export values averaged approximately \$128 million during the ten-year period. Export values peaked somewhat during the 1986-88 period.

Cuba exports primarily three fishery commodities. The most important, in terms of value, is "crustaceans and molluscs" (Table 8). Although somewhat stable in terms of volume, the value of crustacean and molluscs exports has exhibited a general upward trend during the 1980-89 period. The export value of crustaceans and molluscs increased from \$89.2 million in 1980 to \$123 million in 1989. This increase in value, however, is reported in nominal terms. Prior to 1989, the most important product category, in terms of volume, was fresh, chilled, or frozen fish. The export volume of crustaceans and molluscs only slightly exceeded that reported for fresh, chilled, or frozen fish products in 1989. Canned fish products represents a product category of only minor export importance for Cuba. Although variable, a general downward trend in the exportation of canned fish products occurred during the 1980-89 period. Exports of "oils and fats" and "meals and solubles" are of very minor significance.

Based on available data, Cuba has a favorable trade balance in terms of seafood products. During the 1980-89 period, Cuba was a net exporter. Cuba had a positive trade balance of \$75 million in 1989. However, seafood has historically only represented a minor component of the total

trade flow. For example, during the 1983-85 period, seafood exports only represented 1.9 percent of total exports and 2.3 percent of total agricultural related exports by value (FAO, 1988).

SUMMARY

Following the Revolution in 1959, the Cuban fishing industry underwent a considerable transformation. The fishery evolved from a local, small-scale industry providing products to the domestic market and tourists, to a modern fleet with a global scope to production efforts. This transformation occurred primarily due to a bilateral agreement with the Soviet Union, an agreement which was richly laden with financial subsidization for Cuban fishery development efforts. Although the extent of expansion in the Cuban fishing industry is documented and impressive, the actual economic profitability of these efforts is unknown. Whether the sustained level of fisheries development in Cuba during the late 1960's to mid-1980's could have been self-supported in financial terms seems doubtful. The industry has, however, established itself as a significant player in the world seafood market through the exportation of a variety of seafood products.

With the recent breakup of the Soviet Union, a major interruption has taken place in the shipments of low-cost fuel oil to Cuba by the Soviets. Some estimates place expected total Russian fuel shipments to Cuba as low as 5 million tons of oil for 1992, down from an estimated 13 million tons in the late 1980's (Weidner, 1992). Without the subsidized fuel imports, many of Cuba's distantwater vessels have reportedly seen very little service. In addition, without the Soviet oil subsidies to fuel sugar production (Cuba's leading export commodity), precious foreign exchange will likely drastically decline. This will severely hamper any efforts to maintain and operate the aging FLOCUBA and FAC fleets. As a result of these developments, Cuba's distantwater fishery production may experience a dramatic decline. To partially counter these possibilities, Cuba may be forced to dedicate more efforts in producing greater quantities of high-value, near-shore finfish and shellfish species for export, while facing the likely constraints of limitations in stock abundance and sustainable yields. However, Cuba's domestic demand for low-cost fish products, carefully developed over the last 25 years, may still not be met.

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APPENDIX

Table I: Total Landings of Fish, Crustaceans, Molluscs, Etc. by Region and Country in Western Hemisphere During 1980-89 (metric tons)

Region/Country	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
North America										
USA	3,634,522	3,767,433	3,986,304	4,258,442	4,814,295	4,766,805	5,166,619	5,986,120	5,936,618	5,744,318
Canada	1,347,233	1,416,767	1,403,596	1,348,800	1,273,100	1,426,775	1,510,223	1,562,266	1,597,053	1,554,233
Bermuda	4,073	1,999	2,196	541	547	670	820	820	773	774
Greenland	103,612	107,159	105,830	107,727	86,274	93,456	101,041	99,955	120,337	162,538
St Pier Miqu	10,181	11,111	10,474	10,099	12,330	12,580	23,771	23,679	13,970	18,515
Central America										
Belize	1,349	1,365	1,358	1,517	1,301	1,389	1,434	1,501	1,492	1,229
Costa Rica	18,273	15,023	10,902	10,567	16,569	20,481	20,993	20,260	20,389	20,410
El Salvador	13,958	20,254	13,517	7,603	12,189	16,098	20,456	21,542	11,728	11,625
Guatemala	3,507	4,265	4,284	2,376	2,963	2,707	2,119	2,425	2,800	3,294
Honduras	6,409	6,300	5,023	11,432	8,381	9,627	20,559	23,090	19,946	18,322
Mexico	1,222,450	1,536,190	1,321,028	1,064,612	1,104,976	1,226,491	1,315,710	1,419,187	1,372,145	1,416,784
Nicaragua	6,996	5,944	5,000	4,548	4,339	4,164	2,465	4,983	4,654	4,582
Panama	216,368	149,468	116,551	166,723	130,155	283,839	124,975	166,520	118,916	183,951

Table 1: Continued.

Region/Country	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Caribbean										
Anguilla	0	0	0	0	0	0	0	0	0	0
Antigua Brd	1,601	1,777	2,004	1,063	1,466	2,407	2,400	2,400	2,400	2,400
Aruba	770	770	770	770	770	770	780	780	790	800
Bahamas	5,026	4,372	4,686	5,211	5,341	7,629	5,893	7,091	7,236	8,149
Barbados	3,735	3,411	3,480	6,648	5,913	3,925	4,241	3,715	9,108	2,558
Br Virgin Is	318	318	318	655	423	396	478	1,097	386	386
Cayman Is	1,391	3,992	933	800	700	640	644	650	650	650
Cuba	186,481	164,814	195,246	198,331	199,572	219,831	244,673	214,999	231,247	192,062
Dominica	1,445	1,514	1,546	15,289	14,814	18,338	17,182	20,325	12,811	21,794
Dominican Rp	10,558	12,003	13,169	1,484	1,559	1,731	2,703	2,225	2,001	1,710
Grenada	2,021	943	1,221	8,836	8,980	8,421	8,546	8,606	8,233	8,360
Guadeloupe	8,000	8,300	8,240	6,500	7,000	7,500	8,000	8,050	8,050	8,050
Haiti	4,100	4,100	4,200	8,661	9,650	10,431	10,778	10,665	9,693	10,605
Jamaica	9,050	7,788	7,870	5,120	5,204	4,639	4,088	3,184	3,051	3,314
Martinique	4,891	4,700	5,500	110	110	110	110	115	115	115
Montserrat	120	120	120	1,030	1,030	1,030	1,060	1,100	1,200	1,200
Neth Antiles	1,090	990	1,030	2,655	2,354	1,496	1,327	1,191	1,697	1,963
Puerto Rico	2,557	1,784	2,202	1,177	1,415	1,595	1,551	1,724	1,700	1,700
St Chris Nev	1,850	1,880	1,880	910	946	1,052	840	651	945	945
Saint Lucia	2,400	2,404	2,404	480	480	483	599	703	4,607	5,884
St Vincent	547	547	547	4,240	3,593	2,862	3,000	3,200	3,200	3,200
Trinidad Tob	4,461	3,804	4,574	1,236	1,212	1,349	1,605	1,320	1,358	1,360
Turks Caicos	1,100	989	1,061	318	318	318	318	318	318	318
US Virgin Is	669	634	883	612	683	602	926	890	687	801

Table 1: Continued.

Region/Country	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
South America, Pacific										
Chile	2,816,706	3,385,398	3,672,997	3,978,172	4,499,272	4,804,430	5,571,938	4,814,641	5,209,883	6,454,142
Ecuador	643,476	563,882	665,471	371,866	882,780	1,087,005	1,003,380	680,096	771,362	723,624
Peru	2,734,895	2,741,191	3,528,609	1,569,496	3,318,117	4,156,533	5,614,483	4,584,261	6,637,956	6,832,465
South America, other										
Argentina	386,272	361,546	475,043	418,365	315,170	406,797	429,746	559,777	493,414	486,631
Bolivia	4,379	5,617	4,375	4,105	4,105	4,170	3,871	4,271	4,422	6,024
Brazil	817,550	820,010	830,639	875,919	954,343	966,808	940,869	933,811	829,491	850,000
Colombia	76,197	94,690	71,381	57,537	79,134	71,541	83,391	86,628	84,848	91,866
Falkland Is	0	0	0	0	0	8	8	23	2,628	4,624
Fr Guiana	1,150	1,436	1,992	2,118	2,194	2,491	3,305	5,320	4,890	5,237
Guyana	23,610	23,372	25,805	35,366	37,242	37,594	37,383	36,761	36,610	35,324

Data Source: FAO, Yearbook of Fisheries Statistics - Catches and Landings, 1980-1989.

Table 2: Cuban Fishery Landings by Oceanic Region During 1980-89 (metric tons)

Oceanic Region	Year									
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Atlantic										
Northwest	9,255	6,668	18,565	14,786	20,521	23,509	24,806	28,833	16,864	24,130
W. Central	68,853	59,992	68,087	74,374	76,818	79,651	78,415	80,927	78,213	77,391
E. Central	8,784	8,821	6,874	6,670	17,685	12,732	5,493	3,349	3,946	2,928
Southwest	0	0	0	0	56	4,557	3,993	7,213	5,043	2,223
Southeast	4,555	-	689	32,741	34,162	35,634	24,980	37,496	24,561	29,447
Pacific										
Southeast	88,650	78,971	86,771	55,639	34,131	46,867	89,406	40,442	87,031	37,778

Data Source: FAO, Yearbook of Fisheries Statistics - Catches and Landings, 1980-89.

Table 3: Total Cuban Landings of Fish, Crustaceans, Molluscs, Etc. by Species Groups During 1984-89 (metric tons).

Species Group	1984	1985	1986	1987	1988	1989
Grass carp	...	7	17	17	42	31
Silver carp	...	213	257	257	803	1,360
Cyprinids nei	252	239	140	198	395	469
Blue tilapia	14,042	14,890	15,224	15,432	13,268	15,744
Buffalofishes	...	...	...	...	34	22
Channel catfish	...	...	...	...	92	111
Freshwater fishes nei	235	124	134	453	159	137
American eel	0	0	0	0	0	1
Trouths nei	88	66	67	85	57	84
Flatfishes nei	11	40	37	14	0	0
Summer flounder	3	-	-	-	-	-
Atlantic halibut	4	40	42	3	0	1
Witch flounder	0	34	46	5	3	-
Amer. plaice (=Long rough dab)	20	61	30	5	13	5
Yellowtail flounder	14	18	4	1	1	-
Southeast Atlantic soles nei	-	-	10	-	3	-
Tusk (=Cusk)	-	24	4	-	7	-
Atlantic cod	40	136	51	36	22	31
Red hake	108	92	133	225	56	146
White hake	-	9	-	-	1	5
Haddock	236	91	79	74	98	176
Saithe (=Pollock)	123	70	389	343	225	568
Senegalese hake	104	-	-	-	-	-
Silver hake	14,496	17,727	16,321	20,277	9,014	14,541
South Pacific hake	0	3	5,610	1,355	20,826	2,580
Argentine hake	4	29	240	59	26	29
Benguela hake	-	-	-	-	-	-
Hakes nei	-	-	8	-	-	-
Cape hakes	23,482	13,202	5,779	1,578	566	1,113
Gadiformes nei	0	5	3	-	-	-
Argentines	152	177	55	6	29	5
Conger eels nei	-	-	-	-	-	-
Demersal percomorphs nei	54	284	26	101	25	10
Nassau grouper	341	403	262	332	262	263
Red grouper	2,070	1,815	1,914	2,076	2,189	2,580
Groupers nei	276	549	576	426	317	445
Peruvian rock seabass	-	-	6	-	-	-
Southern red snapper	1,092	1,443	1,226	1,698	1,405	1,380
Lane snapper	2,109	1,785	1,839	1,798	2,007	2,029
Yellowtail snapper	898	947	904	1,070	851	948
Snappers, jobfishes, nei	526	454	439	476	412	459
Ponyfishes (=Slipmouths) nei	1,265	1,201	1,095	1,170	1,333	1,247
Grunts, sweetlips, etc nei	1,934	1,895	1,827	1,940	1,805	2,196
Shi drum (=Corb)	1	0	0	-	-	-
Southern meagre (=Kob)	2	-	-	-	-	-
Cassava croaker	5	-	-	-	-	-
Croakers, drums nei	-	-	-	-	35	-
Sargo breams, nei	1	-	-	-	-	-
Porgies	518	500	456	520	494	527
Largeeye dentex	121	146	221	117	13	847

Table 3. Continued.

Species Group	1984	1985	1986	1987	1988	1989
Angolan dentex	-	-	-	-	-	-
Dentex nei	32	-	-	-	-	-
Pargo breams, nei	34	-	-	-	-	-
Porgies, seabreams, etc. nei	-	-	-	-	71	1,774
Wolffishes (=Catfishes) nei	-	3	-	-	-	-
Kingklip	-	-	-	-	-	-
South Pacific breams	-	-	115	-	-	-
Atlantic redfishes	5,209	4,785	7,454	7,624	7,009	6,810
Scorpionfishes etc. nei	-	-	-	-	7	-
American angler	-	15	34	13	4	2
Cape monk	-	25	-	-	-	-
Capelin	-	3	-	-	-	-
Lanternfish	10	-	-	-	-	-
Flyingfishes nei	-	-	3,692	-	-	-
Flathead grey mullet	12	-	-	-	-	-
Mulletts nei	713	318	379	391	196	223
Pelagic percomorphs nei	55	36	-	-	2,463	122
Chilean jack mackerel	34,008	32,258	46,833	35,980	44,209	24,486
Cape horse mackerel	10,508	21,647	18,689	35,470	23,637	27,146
Cunene horse mackerel	-	-	-	-	-	-
Jack and horse mackerels nei	8,248	3,803	47	-	0	0
Crevalle jack	0	17	-	-	-	-
Jacks, crevalles, nei	450	452	550	523	481	527
Blue butterflyfish	6	2	-	-	-	-
Atlantic butterflyfish	-	-	-	-	-	-
Atlantic herring	-	6	53	38	81	447
Round sardinella	1,070	499	-	-	-	-
Sardinellas nei	-	69	32	4	80	106
South American pilchard	49	102	8,515	1,474	178	669
Southern African pilchard	-	-	3	-	-	3
Scaled sardines	346	399	617	482	594	689
Atlantic thread herring	1,938	2,400	2,406	1,790	2,268	2,151
European pilchard	5	575	-	-	-	-
Araucanian herring	29	11,265	14,727	274	11,774	4,371
European anchovy	10	-	-	-	-	-
Anchovies nei	1	-	0	-	-	-
Atlantic bonito	-	-	-	23	173	26
Atlantic Spanish mackerel	544	443	621	1,806	802	746
Atlantic black skipjack	15	16	24	55	53	83
Skipjack tuna	1,558	1,878	1,860	1,182	1,897	1,821
Northern bluefin tuna	-	-	-	-	-	-
Blackfin tuna	487	157	486	634	332	318
Albacore	136	47	54	27	6	1
Yellowfin tuna	4,005	3,491	3,343	2,357	1,792	794
Bigeye tuna	447	239	170	190	151	87

Table 3. Continued.

Species Group	1984	1985	1986	1987	1988	1989
Atlantic sailfish	284	149	105	221	100	108
Atlantic blue marlin	373	451	204	205	285	233
Atlantic white marlin	394	512	417	92	37	43
Swordfish	1,387	1,463	731	1,083	991	917
Tuna-like fishes nei	-	-	-	-	-	-
Snoek	0	-	10	14	-	135
Largehead hairtail	122	9	35	-	-	23
Chub mackerel	36	244	172	175	64	6
Atlantic mackerel	32	131	80	30	144	114
Mackerel-like fishes nei	546	3,331	9,649	1,111	7,194	2,608
Dogfish sharks nei	-	0	0	134	0	0
Skates	-	31	-	-	0	0
Sharks, rays, skates, etc.	4,315	4,753	3,427	3,487	3,301	3,759
Groundfishes nei	50	14	11	0	1	22
Pelagic fishes nei	-	-	-	0	0	0
Marine fishes nei	31,928	33,381	34,820	33,662	33,926	34,122
Freshwater crustaceans nei	1,138	1,032	1,416	-	503	-
Black stone crab	177	159	122	104	86	35
Blue crab	1,010	1,052	1,197	905	1,481	1,555
Marine crabs nei	...	...	...	...	1,142	713
Caribbean spiny lobster	12,644	13,578	11,795	12,795	11,710	11,170
Northern pink shrimp	2,958	3,373	4,135	4,833	4,445	4,029
Penaeus shrimps nei	1,268	1,469	459	71	-	-
Natantian decapods nei	-	-	-	-	-	-
Marine crustaceans nei	18	20	46	1,308	156	64
Gastropods nei	30	63	221	20	4	32
Stromboid conchs	684	617	31	192	215	240
Mangrove cupped oyster	2,705	2,533	2,535	2,195	2,432	2,316
Ark clams	1,517	1,694	1,827	1,789	1,760	1,893
Clams nei	64	78	25	-	-	-
Longfin squid	-	-	-	-	-	-
Shortfin (Northern) squid	34	8	4	5	156	1,257
Argentine shortfin squid	52	4,523	3,689	7,151	5,010	2,185
Squids nei	12	18	28	22	19	94
Frogs	435	283	319	224	235	203
Green turtle	211	513	346	291	262	289
Hawksbill turtle	291	322	302	277	248	245
Loggerhead turtle	277	322	309	239	185	142
Marine turtles nei	39	30	25	28	8	15
River and lake turtles nei	9	6	6	2	1	3
Total	199,572	219,831	244,673	214,999	231,247	192,062

Data Source: FAO, Yearbook of Fisheries Statistics - Catches and Landings, 1984-89.

Table 4: Cuban Production of Processed Fish Commodities (metric tons)

Commodity Type	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Fish, fresh, chilled, frozen										
Marine fish fillets, frozen	11	638	2,645	3,272	4,771	5,381	6,544	6,075	4,883	2,649
Frozen fish, excluding fillets, frozen										
tunas	-	-	-	-	-	-	-	631	...	...
other marine fish	58,532	55,024	71,201	75,292	70,711	75,207	92,543	76,251	89,273	85,000
Total	58,543	55,662	73,846	78,564	75,482	80,588	99,087	82,957	94,156	87,649
Crustaceans and molluscs, fresh, frozen, dried, salted, etc.										
Spiny lobsters, whole, frozen	8,584	10,390	11,573	10,071	13,405	15,719	12,348	7,709	5,983	5,632
Spiny lobsters, meat or tails, frozen	2,016	1,511	1,761	1,747	1,733	1,463	1,645	1,818	1,424	1,892
Shrimps and prawns, frozen	3,742	3,525	4,077	3,518	3,217	3,845	3,700	3,887	3,931	3,277
Shrimps and prawns, tails, shell on, frozen	1,016	440	515	429	381	433	355	422	426	...
Total	15,358	15,866	17,926	15,765	18,736	21,460	18,048	13,836	11,764	10,801
Fish products and preparations										
Bonitos, canned	955	759	906	1,129	936	859	1,020	1,837	1,846	1,144
Tunas, canned	54	17	-	-	-	-	-	-	-	-
Other fish, canned	3,412	3,434	4,662	5,348	5,915	6,514	7,240	8,911	4,970	4,313
Total	4,421	4,210	5,568	6,477	6,851	7,373	8,260	10,748	6,816	5,457
Meals, solubles and similar animal feedingstuffs, of aquatic origin										
Oily-fish meal	6,180	5,470	7,813	6,029	5,974	9,317	10,172	5,580	9,525	6,750
Total	6,180	5,470	7,813	6,029	5,974	9,317	10,172	5,580	9,525	6,750

Data Source: FAO, *Yearbook of Fisheries Statistics - Catches and Landings, 1980-89*.

Table 5: Total Imports of Seven Fishery Commodity Groups by Region and Country.

Country or area	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
----- 1000 US\$ -----										
North America										
US	2,633,160	2,988,195	3,174,363	3,621,363	3,702,490	4,501,794	4,748,692	5,662,329	5,389,345	5,756,927
Canada	301,589	298,680	281,406	335,268	373,051	355,939	433,087	511,901	593,327	659,238
Bermuda	4,417	5,200	5,163	6,227	6,365	6,198	6,880	7,717	9,175	8,800
Greenland	778	702	700	696	3,881	597	962	3,005	1,413	3,628
St Pier Miqu	106	111	121	257	278	239	407	441	480	490
Total	2,940,050	3,292,888	3,461,753	3,963,811	4,086,065	4,864,767	5,189,665	6,185,993	5,993,740	6,429,083
Central America										
Belize	554	371	225	140	390	432	514	742	850	820
Costa Rica	4,693	1,243	908	2,931	5,342	5,211	5,270	5,340	6,630	4,710
El Salvador	3,738	2,417	948	570	1,541	1,470	984	963	941	1,489
Guatemala	2,446	2,301	2,213	1,917	2,200	1,905	945	2,733	2,073	4,438
Honduras	1,997	1,955	1,271	734	936	980	1,803	1,577	1,860	1,760
Mexico	35,214	33,866	27,566	3,672	8,792	11,290	5,981	6,277	37,914	48,275
Nicaragua	1,427	220	1,157	760	64	2	-	-	-	-
Panama	6,333	6,537	7,500	9,015	9,040	7,999	7,466	8,277	6,547	9,300
Total	56,402	48,910	41,788	19,739	28,305	29,289	22,963	25,909	55,815	68,792
Caribbean										
Antigua Barb	1,375	1,493	1,230	1,150	1,422	1,739	1,630	1,520	1,110	1,025
Aruba	...	...	...	...	3,549	4,090	4,175	4,467	4,574	4,290
Bahamas	4,334	2,244	3,405	3,048	3,520	4,156	4,473	3,430	3,500	3,450
Barbados	3,013	4,596	3,991	2,928	3,580	3,813	4,123	4,240	4,931	4,740
Cayman Is	765	1,102	1,150	1,180	1,200	1,210	1,203	2,255	2,860	2,510
Cuba	81,188	86,068	47,788	57,149	30,499	61,719	55,479	61,846	60,997	53,835
Dominica	357	324	230	540	659	685	664	648	730	1,030
Dominican Rp	24,205	19,027	16,348	15,984	7,901	15,256	15,855	12,630	13,560	15,140
Grenada	958	1,114	984	680	940	595	800	320	420	380
Guadeloupe	8,138	8,140	7,130	8,190	6,977	7,645	10,736	14,512	16,337	15,746
Haiti	4,784	2,050	3,560	3,650	6,580	5,760	5,290	5,790	5,503	5,650
Jamaica	17,736	23,158	29,052	24,983	26,296	18,389	25,665	22,682	31,452	34,107
Martinique	12,299	13,979	10,581	12,725	10,050	12,639	17,242	21,625	23,893	24,331
Neth Antilles	6,900	7,944	8,857	8,685	8,793	5,385	7,021	8,523	8,084	8,010
St Kitts Nev	459	486	585	563	661	578	582	693	720	640
Saint Lucia	1,473	1,202	1,431	1,522	1,567	1,260	1,340	2,028	2,321	2,263
St Vincent	523	615	688	525	557	563	452	573	607	550
Trinidad Tob	10,348	14,930	12,831	15,441	15,367	12,792	13,408	14,007	7,687	7,646
Turks Caicos	...	...	...	...	...	...	...	...	120	170
Total	178,835	188,472	150,341	158,944	130,118	158,454	170,138	171,789	188,906	185,493

Table 5. Continued.

Country or area	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
----- 1000 US\$ -----										
South America										
Argentina	23,907	25,900	13,907	7,668	9,464	8,077	10,780	21,562	13,438	11,998
Bolivia	4,724	6,321	1,423	1,133	1,860	2,616	1,151	2,204	431	533
Brazil	89,647	68,083	77,305	43,162	40,699	47,790	130,528	128,636	77,031	87,315
Chile	4,914	5,884	4,529	2,300	1,600	800	200	1,400	1,070	4,400
Colombia	62,983	84,249	84,183	46,928	76,697	43,715	46,142	36,182	48,573	30,411
Ecuador	69	61	28	0	10	123	5	-	-	-
Falkland Is	-	-	-	-	-	-	-	-	-	-
Fr Guiana	11,955	22,956	20,049	26,216	19,363	14,692	14,479	10,527	3,159	3,843
Guyana	17	6	2	2	-	-	-	-	-	-
Paraguay	...	...	...	278	335	401	...	...	...	...
Peru	3,744	2,779	741	20,275	8,340	2,230	170	8,370	9,660	2,320
Suriname	2,228	2,621	2,443	2,577	317	230	241	118	100	125
Uruguay	4,842	1,470	1,328	476	756	1,029	1,449	2,746	1,618	3,168
Venezuela	25,618	29,303	31,057	9,966	5,920	4,199	637	968	2,713	1,553
Total	234,648	249,633	236,995	160,981	165,361	135,902	207,762	212,703	157,793	145,666

Data Source: FAO, Yearbook of Fisheries Statistics - Commodities, 1980-89.

Table 6: Imports of Various Processed Fishery Commodities into Cuba (Q - metric tons; V - 1000 US dollars)

Commodity/Units	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Fish - fresh, chilled or frozen	28,395	32,002	29,309	33,646	22,402	39,079	35,130	40,916	31,371	36,427
	21,441	26,606	23,166	25,755	14,093	27,984	24,620	26,552	24,361	28,714
Fish - dried, salted or smoked	7,930	10,655	5,510	7,680	4,987	1,771	66	1,136	1,981	1,213
	8,658	10,717	7,464	11,216	6,378	3,472	162	1,793	2,893	3,659
Crustaceans and Molluscs - fresh, frozen, dried, salted, etc.	-	30	22	1	-	-	-	-	-	-
	-	15	11	0	-	-	-	-	-	-
Fish, canned	4,570	5,225	6,737	6,249	3,036	17,229	12,763	10,248	15,434	11,327
	7,518	11,258	11,290	12,135	5,548	26,903	22,901	14,993	22,394	16,972
Oils and fats of aquatic origin	-	26,901	-	-	-	-	-	-	-	-
	-	15,869	-	-	-	-	-	-	-	-
Meals, solubles and similar animal feedingstuffs of aquatic origin	88,440	52,962	15,780	20,110	12,000	12,000	24,711	23,193	25,355	11,000
	43,551	21,603	5,857	8,043	4,480	3,360	7,796	8,508	11,049	4,490

Data Source: FAO, Yearbook of Fisheries Statistics - Commodities, 1980-89.

Table 7: Total Exports of Seven Fishery Commodity Groups by Region and Country.

Country or area	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
----- 1000 US\$ -----										
Northern America										
US	1,001,725	1,163,031	1,068,649	1,047,901	1,002,932	1,102,372	1,480,990	1,824,788	2,441,176	2,532,444
Canada	1,094,489	1,260,809	1,299,651	1,277,287	1,271,844	1,359,248	1,751,809	2,092,170	2,206,439	2,051,251
Bermuda	7,600	-	-	-	-	-	-	-	-	-
Greenland	137,557	147,019	104,322	116,473	101,903	135,355	211,020	288,854	307,723	326,165
St Pier Miqu	5,539	7,115	6,167	5,898	7,836	11,868	16,352	22,414	12,435	18,628
Total	2,246,910	2,577,974	2,478,789	2,447,559	2,384,515	2,608,873	3,460,171	4,228,226	4,967,773	4,928,488
Central America										
Belize	4,468	6,434	5,982	6,943	6,670	7,351	7,193	8,436	6,238	6,144
Costa Rica	9,246	7,469	6,738	12,276	17,648	28,877	32,280	35,045	51,489	67,457
El Salvador	17,319	23,344	22,010	14,484	17,601	14,597	13,739	16,887	16,532	15,931
Guatemala	8,854	7,294	12,843	9,729	12,727	10,057	8,236	4,272	8,570	5,242
Honduras	18,700	26,441	28,228	36,144	33,455	27,353	46,054	53,008	56,130	16,689
Mexico	580,038	494,479	472,472	410,599	437,371	378,299	457,308	569,639	439,194	485,686
Nicaragua	27,531	18,536	16,482	12,435	12,608	12,859	8,688	10,950	9,575	12,085
Panama	66,042	57,899	64,118	73,302	67,061	92,332	122,666	120,697	80,124	93,275
Total	732,198	641,896	628,873	575,912	605,141	571,785	696,134	818,934	667,852	702,509

Table 7. Continued.

Country or area	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
----- 1000 US\$ -----										
Caribbean										
Antigua Barb	871	241	300	500	270	1,160	1,670	2,460	1,230	590
Aruba	...	...	...	...	17	135	281	853	123	190
Bahamas	11,131	12,247	13,035	14,023	15,273	19,044	20,042	17,910	16,725	23,640
Barbados	81	98	41	46	41	67	106	100	425	610
Cayman Is	5,770	11,230	8,920	6,880	5,690	4,310	6,120	17,000	4,590	9,470
Cuba	123,839	121,332	115,918	125,261	101,686	127,309	146,317	141,670	146,348	129,579
Dominica	-	-	-	-	-	-	-	-	-	-
Dominican Rp	1,098	1,271	1,287	1,443	1,108	2,771	2,180	1,274	1,106	1,160
Grenada	25	19	-	-	1	-	-	-	-	-
Guadeloupe	35	68	54	66	80	401	243	220	131	269
Haiti	612	637	948	697	930	796	1,390	2,510	2,160	1,950
Jamaica	36	340	95	330	388	1,986	2,389	2,620	2,217	2,150
Martinique	61	103	68	102	76	173	107	157	969	217
Neth Antilles	-	38	68	28	53	471	240	213	250	320
St Kitts Nev	151	133	58	98	239	161	151	123	155	220
Saint Lucia	1	17	2	0	-	16	230	156	139	130
St Vincent	0	9	229	62	56	176	218	361	9,506	12,840
Trinidad Tob	2,059	2,471	1,940	842	778	492	2,076	2,865	4,240	2,628
Turks Caicos	1,170	2,640	2,060	2,950	2,820	2,620	3,780	3,440	3,095	2,065
Total	146,940	152,894	145,023	153,328	129,506	162,088	187,540	193,932	193,409	188,028
South America										
Argentina	143,285	159,352	190,588	168,152	157,729	149,922	216,632	262,794	266,775	280,900
Bolivia	-	-	-	12	18	11	52	80	58	82
Brazil	132,759	155,859	161,600	137,290	179,316	174,276	153,333	180,999	187,671	150,167
Chile	322,982	326,551	386,335	419,027	419,364	438,627	516,023	635,583	804,746	895,780
Colombia	35,036	33,170	32,712	27,367	29,956	31,694	36,080	50,050	62,849	86,242
Ecuador	199,966	188,821	219,562	219,372	216,640	247,639	383,565	481,039	449,586	437,447
Falkland Is	...	...	...	...	...	...	...	...	1,970	3,500
Fr Guiana	9,368	26,078	21,069	28,711	23,206	20,862	23,792	33,507	30,972	30,137
Guyana	25,535	16,970	32,699	29,242	22,571	19,682	27,322	20,640	15,260	18,640
Paraguay	20	20	20	10	326	115	...	20	11	165
Peru	320,611	298,822	282,266	163,356	233,167	221,595	258,083	264,917	382,138	486,488
Suriname	2,240	5,995	4,841	5,132	4,235	4,141	4,250	5,273	3,060	3,440
Uruguay	50,892	61,295	47,500	46,694	48,859	54,149	65,141	82,772	63,880	71,183
Venezuela	4,890	12,427	24,099	55,449	80,396	127,794	192,914	25,756	14,368	111,880
Total	1,247,574	1,264,760	1,403,291	1,298,814	1,415,782	1,490,506	1,877,187	2,042,530	2,283,344	2,556,051

Data Source: FAO, Yearbook of Fisheries Statistics - Commodities, 1980-89.

Table 8: Exports of Various Processed Fishery Commodities from Cuba (Q - metric tons; V - 1000 US dollars)

Commodity/Units	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Fish - fresh, chilled or frozen										
	34,458 30,991	17,279 18,404	14,871 14,140	22,753 17,611	15,228 12,885	21,276 14,942	22,087 12,484	11,485 5,036	12,233 5,355	9,315 4,448
Fish - dried, salted or smoked										
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Crustaceans and Molluscs - fresh, frozen, dried, salted, etc.										
	10,199 89,293	10,601 100,447	10,495 101,546	9,730 105,127	9,985 87,361	12,371 109,956	14,104 132,319	11,976 135,769	11,267 139,501	10,637 123,983
Fish, canned										
	913 3,555	600 2,481	54 229	814 2,518	538 1,439	749 2,262	586 1,514	451 865	688 1,492	550 1,148
Oils and fats of aquatic origin										
	- -	- -	7 3	23 5	8 1	- -	- -	- -	- -	- -
Meals, solubles and similar animal feedingstuffs of aquatic origin										
	- -	- -	- -	- -	- -	426 149	- -	- -	- -	- -

Data Source: FAO, Yearbook of Fisheries Statistics - Commodities, 1980-89.

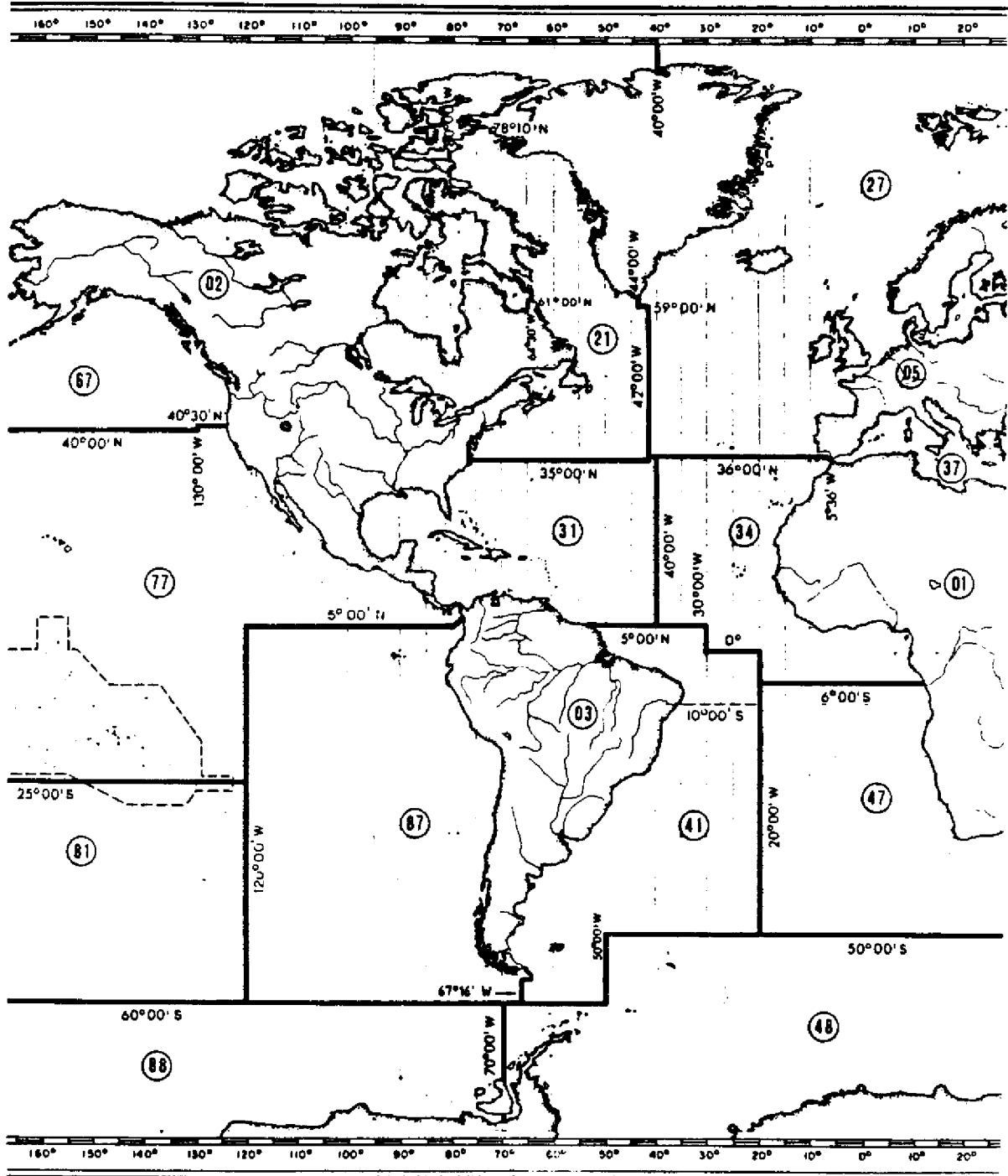


Figure 1. FAO Regions of Global Fisheries Production

