

A UNITED STATES
DEPARTMENT OF
COMMERCE
PUBLICATION



Foreign Fisheries Leaflet No. 72-10

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service

Fisheries of Mexico

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International
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WASHINGTON, D.C.

July 1972

FISHERIES OF MEXICO, 1969 AND 1970

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Fisheries of Mexico, 1969 and 1970

By George B. Gross

INTRODUCTION

Although earlier information indicated that official statistics for Mexico's fisheries in 1969 and 1970 would be issued in a combined report, this report has not yet been published. However, the Regional Fisheries Attache for Latin America has been able to obtain unpublished statistics for these 2 years from the Ministry of Industry and Commerce. They are included in the following report and, although unpublished to date, can be considered official.

MAJOR DEVELOPMENTS

In March 1969 a Fisheries Council was established in Campeche, one of two largest shrimp and fish producing centers on Mexico's gulf coast. Composed of representatives of the local fishery association, vessel owners, packers and processors, repair and maintenance facilities, fishermen's cooperatives, workers' unions, and state and federal offices, the Council set as its goals: (1) improvement of the economic conditions of the industry, and upgrading of its products; (2) improvement of sanitary conditions on vessels, docks and in plants; (3) upgrading of training and competence of the fishermen; and (4) improvement of knowledge of the resources, particularly shrimp. While starting in Campeche, the Council made plans to expand into other ports along Mexico's gulf coast.

Another development in Mexico's gulf coast shrimp industry was the purchase by International Basic Economy Corporation (IBEC) of an interest in shrimp and fish processing plants (Mariscos del Golfo) in Campeche and Progreso. The entry of a U. S. corporation of the size and scope of IBEC into Mexico's fishing industry was viewed with considerable interest in industry circles.

In mid-1969 announcement was made of the completion of an agreement between the National Bank for Cooperative Development (BANFOCO) and a British banking firm for a loan of US \$11.6 million for the construction of 100 shrimp boats in Mexico, as part of an overall program of modernization and improvement of the Mexican shrimp fleet and fishing industry. The 72-foot vessels were to be built in Mexican shipyards with steel hulls, on-board freezing, and Rolls Royce diesel engines. This project turned out to be extremely controversial. After

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several delays, study committees, and evaluations, some 50-odd boats were completed by the end of 1971. The remainder are in various stages of construction, and the final number to be completed is uncertain.

On Mexico's Pacific coast a program of cooperative shrimp research was begun in the summer of 1969. Working under the direction of the Mexican National Institute for Research in Fisheries Biology, the program involved vessels owned both by private interests and cooperatives. It was designed also to tie in with the estuarine improvement work started earlier and designed to increase the productivity of several of Mexico's west coast shrimp nursery grounds.

In the early fall of 1969 work was begun in Guaymas, Sonora, on the west coast, on a new fish meal plant and a new sardine cannery. Both constructed and operated by private interests, these new plants have a capacity to process 18 tons of raw fish per hour into fish meal and 30 to 40 tons of raw fish daily for canning.

In mid-1970 Mexico acquired its second fishery research vessel, the Alejandro de Humboldt, as a gift from West Germany. The 42-meter vessel is fully equipped for both fishery and oceanographic research work and joined the 24-meter Antonio Alzate on Mexico's Pacific coast in carrying out the 5-year FAO/UNDP fisheries project begun late in 1969.

The most significant development in Mexico's fisheries in recent years took place in December 1970, soon after the change of administration under newly elected President Luis Echeverria. Within the Ministry of Industry and Commerce a third Sub-Secretariat was created, the Sub-Secretariat for Fisheries (directed by Engineer Hector Medina Neri), under which the following five Directorates were established:

The National Fisheries Institute, which absorbed the former National Institute for Fishery Biological Research and took on additional activities such as fishery technology, fishing gear and methods, and sanitation and quality control.

The Directorate of Cooperative Development and Training, which directs and coordinates the programs of Mexico's four fishermen's training schools and directs the educational and development activities of fishermen's cooperatives.

The Directorate of Fishery Regions, which is responsible for management and control, licensing, fishery inspection, and general administration.

The Directorate of Technology, which is in charge of development of estuaries as nursery grounds, engineering projects for improved fishing, and fishing vessel design and upgrading.

The Directorate of Fishery Planning and Promotion, which has responsibility for publications, development planning, and market development work to stimulate domestic consumption of fishery products.

FISHERY PRODUCTION

Fish production in 1969 totaled 231,982 metric tons, a decrease of 3.3 percent from 1968. As shown in tables 1 and 2, this decrease was edible species, mostly shrimp and turtles. Among industrial products, production of fish meal increased to 14,648 tons, reflecting Mexico's continuing efforts to become more and more self-sufficient in this area.

In 1970 the downward trend of fish production was reversed and production went up by 9.7 percent to a total of 254,472 metric tons. Most important of the gains was shrimp, which totaled 43,672 tons, up about 30 percent from 1969. Sardine production also increased, totaling 35,296 tons. Among industrial products, which were up by some 15 percent to a total of 53,029 tons, the most significant increase was in fish meal, up some 32 percent to 19,417 tons.

FISH CONSUMPTION

In 1969 there was an apparent drop in per capita consumption, but in 1970 the figure was back up to 3.50 kilograms (7.70 pounds) per capita, where it was in 1967. Under Mexico's new administration which took office in December 1970, plans for expansion of fishery production include a market development and promotion campaign designed to substantially increase domestic consumption of fishery products. If this is combined with improved distribution into the interior population centers and streamlining of the marketing system, success should be achieved during the next 5 years.

FOREIGN TRADE

Mexico's principal trading partner in fishery products continued to be the United States in 1969 and 1970. While there was a drop in total value of exports in 1969 as compared with 1968, a substantial increase to over US \$71 million was achieved in 1970. This was accounted for largely by the increase in shrimp exports to 28,769 metric tons valued at US \$63 million, up substantially from the previous year. In both years shrimp maintained its position in fifth place among Mexico's exports, after tomatoes, sugar, cotton, and coffee.

Mexico also retained its position as No. 1 among the 60-odd nations exporting shrimp to the United States, accounting for about one-third

of all United States imports of shrimp. In the following year (1971) a small portion of Mexico's shrimp went directly to Japan and indications are that in subsequent years this movement will increase. It is therefore possible that India, the No. 2 exporter of shrimp to the United States, will equal or exceed Mexico's share in future years.

Imports of fishery products, of which fish meal was by far the largest single item (mostly from Peru), dropped slightly in 1969 and then increased sharply in 1970 to a total of 84,213 metric tons with a value of US \$21.5 million. A new item, dried or smoked hake, appeared among the imports, reaching a figure of over 3,000 metric tons in 1970. This presumably was used as "bacalao," the popular dried fish widely used throughout the country and traditionally made from cod.

Table 1.--Mexico's edible fish production, 1969 and 1970

Species	1968	1969	1970
	-----Metric tons-----		
Abalone	3,404	2,894	2,818
Anchovy	15,882	4,079	5,441
Angelfish	2,843	2,587	2,686
Catfish	663	814	671
Charal	1,196	1,518	1,096
Clams	1,841	2,050	2,068
Corvina	2,303	2,349	2,765
Crabs	833	788	896
Dried cod	-	941	1,402
Frogs	329	399	259
Grouper	5,717	7,670	8,598
Langostino	196	167	201
Lobster	1,337	1,364	1,554
Mackerel	7,056	6,469	6,653
Marine turtles	14,574	5,049	4,170
Mullet	4,095	3,881	2,591
Octopus	1,941	2,151	1,507
Oysters	24,484	32,418	32,764
Pargo	1,678	1,456	1,206
Rock bass	680	685	314
Sardines	27,889	30,023	35,296
Scallops	159	148	81
Shad	2,507	2,927	3,028
Shark	1,629	2,275	1,984
Shrimp	36,061	33,680	43,672
Skipjack	3,185	1,346	3,438
Snappers	6,130	5,189	4,347
Snook	2,832	2,566	2,575
Totuava (White sea bass)	776	487	473
Tuna	3,977	7,959	7,242
Wahoo	761	1,119	907
Others	17,470	18,412	18,740
<u>TOTAL</u>	<u>194,428</u>	<u>185,860</u>	<u>201,443</u>

Table 2.-- Mexico's production of industrial fishery products,
1969 and 1970

Product	1968	1969	1970
	-----Metric tons-----		
Abalone shells	749	625	757
Agar, dried	817	386	949
Fertilizer	1,053	-	771
Fish meal	11,433	14,648	19,417
Fish oil	549	473	483
Kelp	28,229	26,725	28,187
Marine turtle skins	338	67	134
Shark fins	75	85	92
Shark skins	265	212	186
Water insects, dried	453	322	7
Others	<u>1,682</u>	<u>2,579</u>	<u>2,046</u>
<u>TOTAL</u>	<u>45,643</u>	<u>46,122</u>	<u>53,029</u>

Table 3.--Mexico's fish production 1968, 1969, and 1970, by states

State	1968		1969		1970	
	<u>Metric tons</u>	<u>US \$1,000</u>	<u>Metric tons</u>	<u>US \$1,000</u>	<u>Metric tons</u>	<u>US \$1,000</u>
<u>PACIFIC</u>	<u>163,459</u>	<u>47,930.0</u>	<u>143,232</u>	<u>42,690.6</u>	<u>160,768</u>	<u>51,287.1</u>
A. California (State)	79,457	10,426.2	61,477	9,414.6	61,297	9,496.1
B. California (Terr.)	18,663	3,502.6	16,633	3,780.6	20,309	4,967.2
Chiapas	2,148	1,092.5	2,226	1,018.6	2,304	995.8
Colima	1,342	396.9	732	247.3	908	286.3
Guerrero	2,113	1,029.9	1,447	690.4	2,254	1,028.9
Jalisco	1,993	1,426.5	1,277	857.8	1,045	653.5
Nayarit	3,156	1,294.7	2,232	1,134.7	2,433	1,220.2
Oaxaca	3,069	1,746.3	5,408	2,331.1	6,606	3,516.4
Sinaloa	35,622	14,758.9	24,369	10,884.5	26,186	13,281.3
Sonora	15,896	12,255.5	27,431	12,331.0	37,426	15,841.4
<u>ATLANTIC</u>	<u>75,038</u>	<u>27,100.3</u>	<u>86,557</u>	<u>31,684.3</u>	<u>92,079</u>	<u>38,564.2</u>
Campeche	16,744	12,064.2	16,622	14,047.3	17,402	16,290.1
Quintana Roo	529	397.0	571	558.1	470	605.4
Tabasco	5,233	934.6	8,091	1,323.8	7,186	1,773.4
Tamaulipas	4,297	3,233.9	5,450	3,659.0	8,500	6,093.4
Veracruz	38,268	8,502.9	43,507	9,655.8	43,798	10,795.1
Yucatan	9,967	1,977.7	12,316	2,440.3	14,623	3,006.8
<u>INLAND STATES</u>	<u>1,574</u>	<u>530.4</u>	<u>2,193</u>	<u>888.9</u>	<u>1,625</u>	<u>961.9</u>
<u>TOTAL</u>	<u>240,071</u>	<u>75,560.7</u>	<u>231,982</u>	<u>75,263.8</u>	<u>254,472</u>	<u>90,813.5</u>

NOTE: The above table includes all edible and industrial fishery products reported in the source publication. Values have been converted to U.S. dollars at the rate of 12.50 pesos = 1.00 dollar.

The figures given include both marine and fresh-water species. The State of Michoacan has been included in the Inland States because almost all of this State's production is from inland waters.

Table 4.--Shrimp production by States

State	1969	1970
	-----Metric tons-----	
<u>PACIFIC</u>	<u>20,503</u>	<u>27,011</u>
Chiapas	937	1,140
Guerrero	107	231
Nayarit	560	682
Oaxaca	2,173	4,139
Sinaloa	9,475	12,597
Sonora	6,629	7,670
State of Baja California	540	506
Territory of Baja	82	46
<u>GULF</u>	<u>13,070</u>	<u>15,831</u>
Campeche	10,625	11,787
Tabasco	256	441
Tamaulipas	1,039	1,991
Veracruz	1,078	1,481
Yucatan	72	131
Other States	<u>107</u>	<u>830</u>
<u>TOTAL</u>	<u>33,680</u>	<u>43,672</u>

Note: The above figures include all forms of shrimp, most of it being green headless.

Table 5.--Mexico's consumption of edible fishery products, 1964-70

Year	Domestic production	Imports	Exports	Apparent domestic consumption
-----Metric tons-----				
1964	154,483	1,107	41,828	113,762
1965	161,476	1,426	36,448	126,454
1966	171,504	1,045	39,156	133,391
1967	197,667	1,420	38,639	160,448
1968	194,428	1,432	33,278	162,582
1969	185,860	3,564	33,846	155,578
1970	201,443	5,889	37,885	169,447

Table 6.--Mexico's per capita consumption of edible fishery products, 1964-70

Year	Apparent domestic consumption	Population	Per capita consumption
	<u>Metric tons</u>	<u>Thousands</u>	<u>Kilograms</u>
1964	113,762	41,253	2.76
1965	126,454	42,689	2.96
1966	133,391	44,145	3.02
1967	160,448	45,671	3.51
1968	162,582	47,267	3.44
1969	155,578	47,817	3.25
1970	169,447	48,377	3.50

Table 7.--Mexico's exports of edible marine products, 1969-70

Species	1969	1970	1969	1970
	<u>Metric tons</u>		<u>US \$1,000</u>	
Abalone	2,815	2,709	3,792	4,384
Catfish	319	238	217	171
Frogs	351	74	556	85
Lobsters	1,070	981	1,537	1,292
Marine algae	1,763	4,030	123	69
Marine fish fillets, frozen	2,343	2,889	1,280	1,721
Shells				
Shrimp	22,963	28,769	51,820	63,164
Snappers	72	79	32	26
Tuna	2,604	727	751	207
Others	<u>2,676</u>	<u>3,056</u>	<u>539</u>	<u>610</u>
<u>TOTAL</u>	<u>38,243</u>	<u>44,822</u>	<u>60,706</u>	<u>71,787</u>

Note: Above figures include all forms, including fresh, frozen, and canned.

Table 8a.--Mexico's exports of principal fishery species,
by country of destination, 1969

Species	Total		United States		Other countries	
	<u>Metric tons</u>	<u>US \$1,000</u>	<u>Metric tons</u>	<u>US \$1,000</u>	<u>Metric tons</u>	<u>US \$1,000</u>
Abalone	2,815	3,792	2,813	3,789	2	3
Catfish	319	217	319	217	-	-
Frogs	351	556	351	556	-	-
Lobster	1,070	1,537	1,070	1,537	-	-
Marine fish						
fillets	2,343	1,280	2,343	1,280	-	-
Shrimp	22,963	51,820	21,873	49,949	1,090	1,871
Snappers	72	32	72	32	-	-
Tuna	2,604	751	2,603	751	1	-

Table 8b.--Mexico's exports of principal fishery species,
by country of destination, 1970

Species	Total		United States		Other countries	
	<u>Metric tons</u>	<u>US \$1,000</u>	<u>Metric tons</u>	<u>US \$1,000</u>	<u>Metric tons</u>	<u>US \$1,000</u>
Abalone	2,709	4,384	2,696	4,374	13	10
Catfish	238	171	238	171	-	13
Frogs	74	85	74	85	-	-
Lobster	981	1,292	980	1,292	-	-
Marine fish						
fillets	2,889	1,721	2,889	1,721	-	-
Shrimp	28,769	63,164	27,699	61,336	1,070	1,828
Snappers	79	26	54	19	25	7
Tuna	727	207	727	207	-	-

Table 9.--Mexico's imports of principal fishery species, 1969 and 1970

Species or product	1969	1970	1969	1970
	---- Metric tons ----		---- US \$1,000 ----	
Agar agar	50	41	160.6	135.7
Anchovy, all forms	87	54	133.0	61.9
Codfish, dried	41	-	39.0	-
Cod liver oil	101	89	58.5	58.6
Cod oil	1,332	1,255	245.4	292.2
Eels, all forms	10	60	22.6	124.2
Fish meal	69,521	78,142	10,791.3	15,515.5
Hake, dried or smoked	610	3,224	929.8	4,740.0
Herring, all forms	33	-	21.6	-
Marine animal oil	1,117	974	274.0	340.0
Natural pearls	68	182	34.2	95.5
Sardines, all forms	12	38	6.0	17.0
Sole, all forms	12	39	7.4	35.1
Tuna	99	34	79.0	30.6
Others	60	81	26.7	31.1
<u>TOTAL</u>	<u>73,153</u>	<u>84,213</u>	<u>12,829.1</u>	<u>21,477.4</u>

Table 10.--Mexico's imports of principal fishery products, by country of origin

Product	Country	1969		1970		1969		1970	
		--- Metric tons	--- US \$1,000	--- Metric tons	--- US \$1,000	--- Metric tons	--- US \$1,000	--- Metric tons	--- US \$1,000
Agar-agar	Denmark	46	139.1	30	91.1				
	Others	4	21.5	11	44.6				
	TOTAL	50	160.6	41	135.7				
Codfish, dried	Norway	41	39.0	-	-				
	TOTAL	41	39.0	-	-				
Cod oil	Iceland	-	-	25	5.8				
	Norway	1,061	189.0	980	222.8				
	United Kingdom	39	8.2	57	17.4				
	United States	50	13.1	96	24.8				
	West Germany	117	27.3	82	18.6				
	Others	65	7.8	15	2.8				
	TOTAL	1,332	245.4	1,255	292.2				
Eels, all forms	France	10	22.6	60	124.2				
	TOTAL	10	22.6	60	124.2				
Fish meal	Chile	-	-	2,894	607.4				
	Panama	-	-	1,300	248.9				
	Peru	67,307	10,388.7	64,345	12,785.0				
	Switzerland	375	70.8	374	-				
	United States	1,839	331.8	9,229	1,803.9				
	TOTAL	69,521	10,791.3	78,142	15,515.5				

Table 10.--Continued

Product	Country	1969	1970	1969	1970
		-- Metric tons	--	---US \$1,000---	---
Anchovy, all forms	Argentina	5	1	5.5	.7
	Portugal	13	11	21.0	18.6
	Spain	62	35	98.3	35.0
	United States	7	7	8.2	7.6
	TOTAL	87	54	133.0	61.9
Cod liver oil	Iceland	55	4	32.2	1.4
	Norway	46	20	26.3	8.2
	United Kingdom	-	29	-	12.5
	United States	-	36	-	36.5
	TOTAL	101	89	58.5	58.6
Hake, dried or smoked	Norway	600	3,216	883.2	4,734.1
	Others	10	8	46.8	5.9
	TOTAL	610	3,224	930.0	4,740.0
Marine animal oil	Benelux Countries	-	216	-	76.6
	Norway	252	236	56.6	71.0
	Peru	230	55	50.9	12.2
	United Kingdom	127	96	29.2	35.0
	United States	203	148	66.2	62.5
	West Germany	305	223	71.1	82.7
	TOTAL	1,117	974	274.0	340.0
	Natural pearls	Benelux Countries	-	52	-
Japan	33	80	21.0	12.7	
United States	31	49	13.2	52.3	
Other	4	1	-	4.7	
TOTAL	68	182	34.2	95.5	
Soles, all forms	Benelux Countries	12	15	7.4	9.2
	United States	-	24	-	25.9
	TOTAL	12	39	7.4	35.1

Table 10.--Continued

Product	Country	1969 -- Metric tons	1970 --	1969 --US \$1,000--	1970 --
Herring, all forms	Benelux Countries	2	-	1.1	-
	United Kingdom	11	-	7.3	-
	United States	15	-	9.0	-
	West Germany	5	-	4.2	-
TOTAL	33	-	21.6	-	
Sardines, all forms	Portugal	12	21	6.0	9.5
	Spain	-	17	-	7.5
	TOTAL	12	38	6.0	17.0
Tuna	Ecuador	99	34	79.0	30.6
	TOTAL	99	34	79.0	30.6
Other		60	81	26.7	31.1
<u>TOTAL</u>		<u>73,153</u>	<u>84,213</u>	<u>12,829.3</u>	<u>21,477.4</u>