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# Foreign Fisheries Leaflet No. 72-11

U.S. DEPARTMENT OF COMMERCE  
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## Thailand Fishery Trends

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Activities  
Staff

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## THAILAND FISHERY TRENDS .

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# THAILAND FISHERY TRENDS<sup>1/</sup>

## SUMMARY

Thailand's marine fisheries in the coastal areas have been expanding for the past 10 years. To protect the coastal resources which are being rapidly depleted, the Thai Government is restricting effort in the coastal fishery and promoting deep-sea fishing. Fleet and gear are being improved and modernized, and fishermen are being trained in modern fishing techniques and high-seas navigation. On the other hand, the freshwater fisheries are becoming relatively less important.

The total fisheries catch has increased nearly eightfold to about 1.6 million tons during the past decade. Exports of fishery products have also increased due largely to the development of a shrimp processing industry. Since shrimp exports could help reduce Thailand's present trade deficit, the Thai Government is planning to place further emphasis on shrimp production as part of the Third 5-Year Economic Development Plan (1972-76).

## CATCH, FISHING GROUNDS, AND GEAR

Thailand's total fisheries catch (marine and freshwater) has increased from 221,000 tons in 1960 to nearly 1.6 million tons in 1970. The marine catch, which comprised 66 percent of the total fisheries catch in 1960, constituted 93 percent of the total catch in 1970. (See table 1.) In terms of Gross National Product (GNP), the fishing industry ranks second in the agriculture sector of the Thai economy, accounting for 3.5 percent of the GNP in 1969; a target of 3.9 percent has been established for 1976, when the Third Economic Development Plan is to end.

The traditional marine fishing grounds extend about 2,600 kilometers<sup>2/</sup> along the entire coastline of Thailand, of which 1,825 kilometers are along the shore of the Gulf of Siam. Some 775 kilometers are on the coast of the Andaman Sea (Indian Ocean) between Burma and Malaysia (Fig. 1). About 80 percent of the total marine catch comes from the Gulf of Siam.

The increased use of trawl gear has had a great influence on the fishing industry in Thailand, and is responsible for most of its growth in the 1960's. (Many Thais, however, continue to fish for subsistence only, employing such traditional fishing methods as

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<sup>1/</sup> Information supplied by Amphorn Loharjun, United States Embassy, Bangkok, Thailand.  
Edited by A.N. Obolensky, International Activities Staff, NMFS.

<sup>2/</sup> One kilometer equals 0.62 miles.

bamboo stake traps and seines.) The shift to demersal species is illustrated in table 2 (column "other"), the catch of which increased ninefold in 10 years: from 102,000 tons in 1961 to 919,000 tons in 1970, constituting 58 percent of Thailand's total catch, compared to 34 percent in 1961.

On the other hand, intensive trawling possibly may have caused the decrease in the catch rate for demersal species from 300 kilograms an hour in 1961 to 100 kilograms an hour at present. This development may imply that the existing stock of bottom fish in the area fished at present is barely 30 percent of what it was 10 years ago.

#### FOREIGN TRADE IN FISHERY PRODUCTS

Imports of fishery products ranged from \$2 to \$4 million each year for the past 10 years. The principal items were dried and salted fish and shrimp paste mainly supplied by neighboring countries.

Exports of fish and fishery products were insignificant until 1963 when the export of frozen products, mostly shrimp, began to increase. In 1970, fishery export earnings were \$16 million, of which \$11 million came from some 6,000 tons of shrimp. Major export markets for Thai shrimp are Japan, the United States, Hong Kong, and Malaysia, with about 60 percent going to Japan.

The Thai Government hopes that shrimp will become one of Thailand's main foreign exchange earners. The Third 5-Year Economic Development Plan has a target of 14,000 tons of shrimp exports by 1976, about double the amount of shrimp exported in 1971. It is expected that shrimp demand in world markets will continue to increase at the same rate as in the past.

#### FUTURE OUTLOOK FOR FISHERY

The Economic Development Plan provides for the expansion of coastal and deep-sea fisheries, with the objective of increasing production sufficiently to supply domestic markets and at the same time increase exports. Research, promotion, and demonstration activities in freshwater fishing and brackish water culture are to be developed and increased, and conservation made more effective.

Because of the growing importance of shrimp in export and home markets, the Thai Government is supporting the accelerated production project which provides for an increase in the shrimp catch of 10,000 tons a year. The catch by 1976 is expected to reach 112,000 tons. Other targets for fisheries in the Third Plan are (for 1976): marine catch--1,860,000 tons, freshwater fish catch--108,000 tons. On the

basis of FAO data, the marine catch would increase some 25 percent over 1970, when the Thais caught 1,487,800 tons. The increase in freshwater catch will be negligible: 107,300 tons were landed in 1970.

## ADMINISTRATIVE ORGANIZATION OF THAI FISHERIES AND FUTURE DEVELOPMENT

### PROJECTS

Three organizations are responsible for fishery administration and services: the Department of Fisheries of the Ministry of Agriculture, the Cold Storage Organization, and the Fish Marketing Organization.

A. The Fisheries Department has the following major development projects:

1. Marine Fishery Development Project - To conserve coastal fishery resources (because of the rapid depletion of demersal fish and shrimp stocks in coastal areas caused by intensive small-boat trawling), the Government is promoting deep-sea fishing in international waters such as the South China Sea and the Indian Ocean. Coastal trawling will be limited to the existing number of boats. Research in the three marine fishery stations at Phuket, Rayong, and Songkhla (fig. 1) will be expanded to include research and design of fishing vessels and gear. Fishermen will be trained in deep-sea fishing, navigation, and use of modern fishing gear. Surveys of fishing grounds will be conducted in the Gulf of Siam, the South China Sea, and the Indian Ocean to complete the mapping of fishing areas available to Thai fishermen. Fishery information services and communication facilities will be improved and expanded. Other projects include the development of improved fish storage and processing methods, and a survey of the fishermen's economic situation.
2. Coastal Aquaculture Development Project - This is the main project involving shrimp production. It provides for the development of approximately one million rai\* of coastal area for aquaculture, and the organization of a research center to study methods of reducing shrimp production costs. A shrimp culture training program will be set up in Chantaburi Province.
3. Brackish Water Fishery Development Project - This project includes the improvement of research facilities in the two existing stations (fig. 1) and the establishment of additional mobile extension units to demonstrate culture techniques to fishermen.

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\* One rai equals 0.395 acres

4. Fresh Water Fishery Development Project - Under this project, research on fish breeding will be carried out at 15 freshwater fishery stations (fig. 1). Public fishery grounds will be rehabilitated, and fish will be stocked in irrigation tanks, dam reservoirs, lakes, and ponds.

#### B. Cold Storage Organization

The objectives of the Cold Storage Organization are to increase the income of fishermen and to aid consumers by reducing seasonal fluctuations in the price of fish. The organization has been operating at a loss during the past few years because of rising administrative costs.

#### C. Fish Marketing Organization (FMO)

The FMO is an autonomous independent administration under the Ministry of Agriculture. It operates two fish markets (in Bangkok and Samutsakorn) and seven fishery piers. Only the fish market in Bangkok and a few of the fishery piers operate at a profit. This is because the objective of the Organization is to provide service to the fishermen and improve their living standard rather than making a profit. During the 5-Year Plan 1972-76, the building of three additional fishery piers at Phuket, Satul, and Chumporn, the enlargement of fishery piers at Songkhla and Hua-Hin, and additions to the fish market at Samutsakorn are planned.

Table 1.--Thailand's fisheries catch, 1938, 1948, 1950-70

Year	Catch			Marine catch as % of total catch
	Fresh- water <sup>1/</sup>	Marine <sup>2/</sup>	Total	
	1,000 metric tons			Percent
1938	n.a.	n.a.	n.a.	n.a.
1948	38.0	123.0	161.0	76.4
1950	n.a.	n.a.	n.a.	n.a.
1951	n.a.	n.a.	n.a.	n.a.
1952	50.0	141.5	191.6	73.9
1953	56.3	148.7	205.0	72.5
1954	63.4	166.4	229.8	72.4
1955	61.6	151.4	213.0	71.1
1956	65.7	152.2	217.9	69.8
1957	68.1	166.4	234.5	71.0
1958	51.3	145.0	196.3	73.9
1959	57.0	147.7	204.7	72.2
1960	75.3	145.6	220.9	65.9
1961	72.4	233.2	305.6	76.3
1962	70.0	269.7	339.7	79.4
1963	92.0	326.7	418.7	78.0
1964	78.9	498.1	577.0	86.3
1965	81.7	533.4	615.1	86.7
1966	83.5	624.6	708.1	88.2
1967	81.5	765.6	847.1	90.4
1968	81.1	1,007.7	1,088.8	92.6
1969	85.8	1,183.8	1,269.6	93.2
1970	107.3	1,487.8	1,595.1	93.3

Source: FAO Yearbook of Fishery Statistics. Various years.

<sup>1/</sup> Does not include freshwater prawns.

<sup>2/</sup> Includes freshwater prawns.

Table 2.- Thailand's fisheries catch by type of species; 1938, 1948, 1950-70

Year	Species							Total
	Fresh water <sup>1/</sup>	Indian mackerel	Sharks & rays	Shrimp & prawns <sup>2/</sup>	Crabs <sup>3/</sup>	Molluscs	Other	
	1,000 metric tons							
1938	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1948	38.0	29.0	2.0	13.0	n.a.	58.0	21.0	161.0
1950	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1951	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1952	50.0	45.0	2.0	12.5	n.a.	55.0	27.0	191.5
1953	56.3	48.0	2.2	10.5	n.a.	58.0	30.0	205.0
1954	63.4	55.0	2.3	12.8	n.a.	60.7	35.6	229.8
1955	61.6	48.0	1.6	11.9	n.a.	57.2	32.7	213.0
1956	65.7	48.4	1.6	11.5	n.a.	57.6	33.1	217.9
1957	68.1	57.5	3.1	11.8	n.a.	59.9	34.1	234.5
1958	51.3	44.3	2.7	10.3	n.a.	50.6	37.1	196.3
1959	57.0	36.1	2.8	13.5	n.a.	53.2	42.1	204.7
1960	75.3	29.9	4.3	14.5	n.a.	52.0	44.9	220.9
1961	72.4	23.3	4.0	16.5	n.a.	86.9	102.5	305.6
1962	70.0	36.1	4.5	20.1	n.a.	82.2	126.8	339.7
1963	92.0	23.3	5.1	26.7	9.1	72.3	190.2	418.7
1964	78.9	52.5	5.8	33.3	9.2	70.1	327.2	577.0
1965	81.7	69.9	12.4	39.2	11.0	62.6	338.3	615.1
1966	83.5	87.6	12.8	48.8	13.3	102.1	360.0	708.1
1967	81.5	93.1	8.0	65.4	13.3	105.6	480.2	847.1
1968	81.1	148.1	12.3	79.0	24.2	141.8	602.3	1,088.8
1969	85.8	131.9	18.8	81.2	14.1	164.4	773.4	1,269.6
1970	107.3	139.6	26.0	87.9	48.6	266.5	919.2	1,595.1

Source: FAO Yearbook of Fishery Statistics, Rome. Various years.

<sup>1/</sup> Does not include freshwater prawns.

<sup>2/</sup> Includes freshwater prawns.

<sup>3/</sup> Crabs are included in the catch data for shrimp and prawns until 1963.



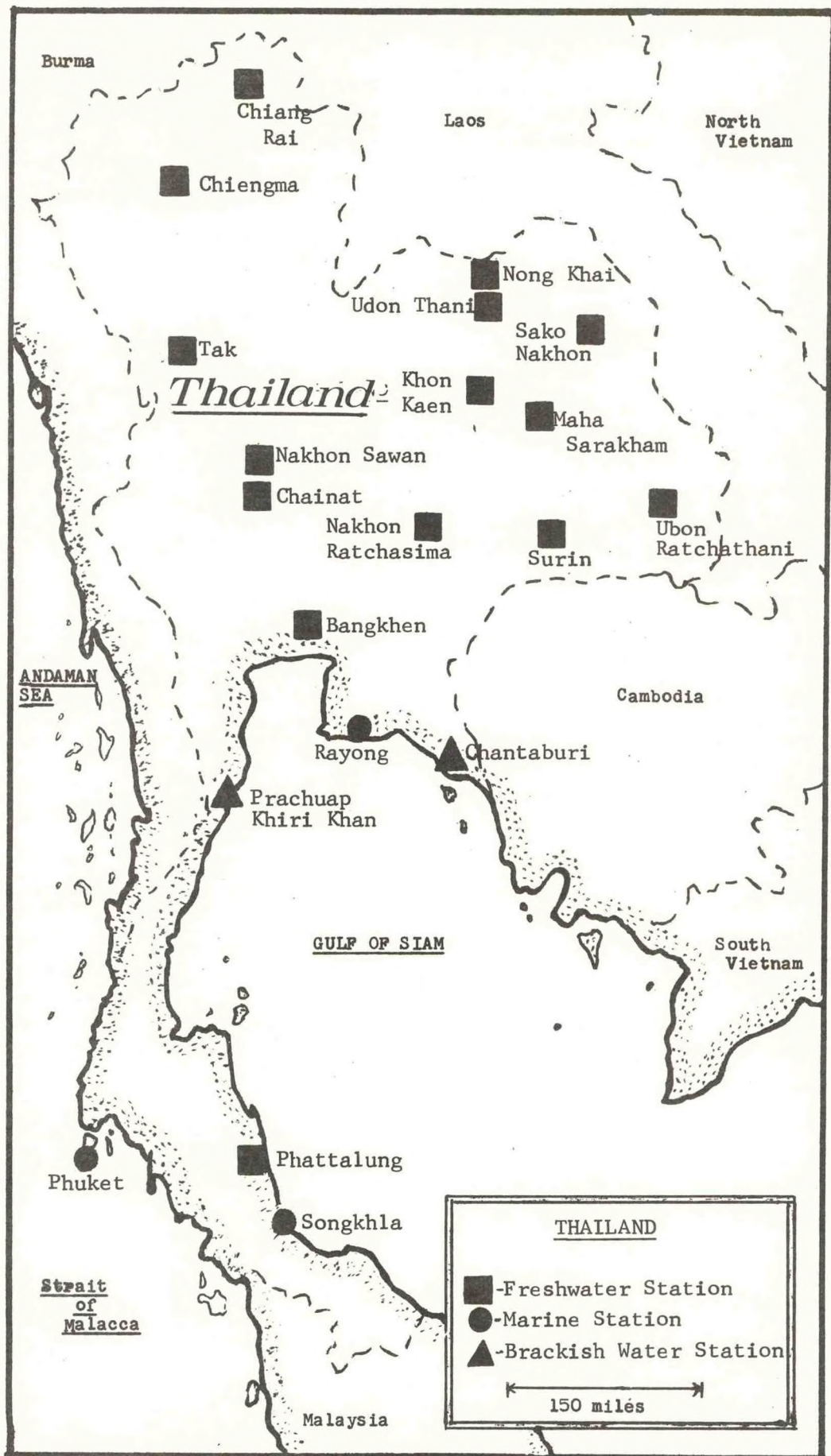


Fig. 1.--Map of Thailand with fishery research stations.