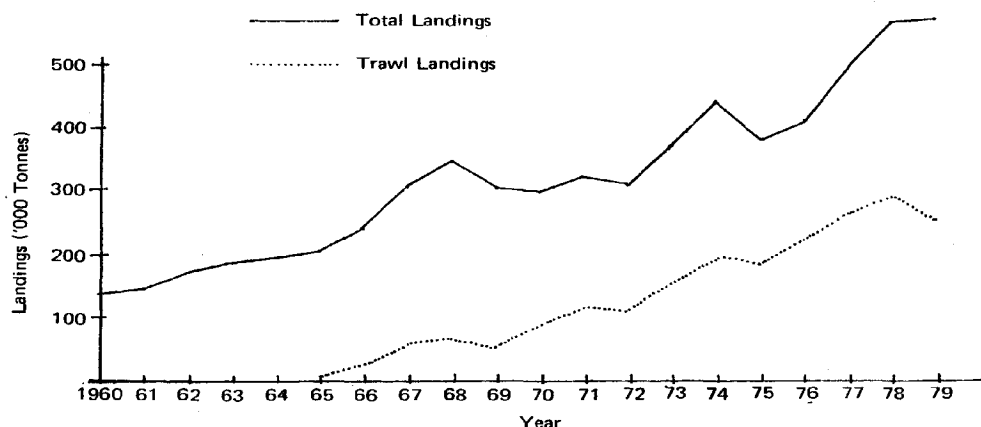


GENERAL REVIEW

PENINSULAR MALAYSIA

Trend of Annual Landings



The trend of annual marine fisheries landings and cultures (excluding freshwater fisheries) continues to increase although the increase during the last 3 years has been at a declining rate. Whereas the rate of increase in 1977 was 21%, in 1978 it was 13% and in 1979 it was only 1%.

Prior to 1968 the increase in annual landings has been continuous in nature culminating in the 1968 peak. Subsequent to 1968 the trend in landings has been following a 3 to 4 year cycle where every peak year is followed by a decline. It is also noted that each peak was on a higher level than the preceeding peak. The explanation for this trend in landings is that whereas the increase in landings prior to 1968 was brought about by an increase in fishing effort in the form of increased number of mechanized fishing vessels, especially trawlers, the increases since 1968 were mainly the result of periodic abundance in pelagic fish stocks. This explains the cyclical nature of the landings during this period. As to why each peak was higher than the preceeding one, even though there was no substantial increase in the number of fishing vessels corresponding to the increase in landings, the reason is due to the change in fishing pattern where effort was increased not so much through an increase in the fishing fleet, but rather through the use of bigger and better boats making fishing trips and hauls of longer duration. The increase of fishing effort in this way is especially evident among the trawl and purse seine fleets of the West Coast, which together are responsible for about 81% of the total West Coast landings (excluding shellfish). The density of abundance of pelagic fish stocks during each peak year is another reason for the increasing levels of landings at each peak.

Landings in 1979

Total landings by marine fisheries and cultures in 1979 was 570,905 tonnes, which is only an increase of 1% over 1978 landings. The poor performance of the industry in 1979 was due to poor landings of almost all the major species groups, with the exception of pelagic fish and cockles.

As in the last 3 years, pelagic fish landings continued to increase. The pelagic fish landings in 1979 increased by 12.3% from 169,511 tonnes in 1978 to 190,337 tonnes in 1979.

However, landings of demersal fish declined by 1.4% from 219,078 tonnes in 1978 to 216,043 tonnes in 1979. Trash fish, which constitutes about 70% of demersal landings, increased by 2.7% from 146,561 tonnes in 1978 to 150,454 tonnes in 1979, whereas demersal food fish landings declined by 9.6% from 72,517 tonnes in 1978 to 65,589 tonnes in 1979.

Unsorted and unidentified fishes also declined by 17.5% from 14,408 tonnes in 1978 to 11,885 tonnes in 1979.

Finfishes, as a group, increased by 3.8% from 402,297 tonnes in 1978 to 418,265 tonnes in 1979 and this increase was brought about by the increases in pelagic and trash fish landings.

Crustaceans also declined by 19% from 89,039 tonnes in 1978 to 72,174 tonnes in 1979. Prawns, which is the most important crustacean both quantity and value wise, declined by 10.6% from 67,548 tonnes in 1978 to 60,426 tonnes in 1979. In fact this is the first time in recent years where there was a decline in prawn landings. Sergestid shrimps also declined by a hefty 52.9% from 16,772 tonnes in 1978 to 7,897 tonnes in 1979. Crabs too declined by 18.4% from 4,719 tonnes in 1978 to 3,851 tonnes in 1979.

Among molluscs, the only decline was in squids and cuttlefish landings which declined by 4.6% from 16,634 tonnes in 1978 to 15,868 tonnes in 1979. Cockles and shellfish on the other hand increased by 14.1% and 134% respectively. As a group, mollusc landings increased by 10.6% from 72,739 tonnes in 1978 to 80,466 tonnes in 1979.

West Coast Landings

West Coast landings in 1979 increased by 5.3% over 1978. This increase was brought about by the relative abundance of pelagic fish and molluscs. Demersal fish and crustaceans on the other hand declined in 1979.

Pelagic fish landings increased by 31.2% from 84,914 tonnes in 1978 to 111,373 tonnes in 1979. The commercially more significant pelagic species currently landed are anchovies, mackerels, scads and sardines. Anchovy landings increased by 130.3% from 14,882 tonnes in 1978 to 34,270 tonnes in 1979; indian mackerel landings increased by 43.5% from 23,803 tonnes in 1978 to 34,153 tonnes in 1979; spanish mackerels increased by 13.7%

from 4,728 tonnes in 1978 to 5,375 tonnes in 1979; hardtail scads and roundscads increased by 20.9% and 9.5% from 7,644 tonnes and 6,025 tonnes in 1978 to 9,245 tonnes and 6,599 tonnes in 1979 respectively.

Selar scads (including yellow tail and gold banded scads) and sardines were the only significant pelagic species to decrease in 1979. Selar scads decreased by 27.8% from 7,948 tonnes in 1978 to 5,741 tonnes in 1979, while sardines decreased by 7.1% from 5,240 tonnes in 1978 to 4,867 tonnes in 1979. In fact there has been a continuous decline in sardine landings during the last 4 years or so.

As the bulk of pelagic fishes were caught by purse seines and drift/gillnets, both these fisheries thus had a good year in 1979. Purse seine landings increased by 58% from 54,334 tonnes in 1978 to 86,083 tonnes in 1979, while drift/gillnet landings increased by 8% from 19,983 tonnes in 1978 to 21,722 tonnes in 1979. The common pelagic species landed by fish purse seines were indian mackerel, hardtail, selar and round scads, and sardines. Anchovy was landed almost exclusively by anchovy purse seines. Drift/gill nets on the other hand mainly landed spanish mackerels, wolf herrings and pomfrets.

Trawlers also landed a sizeable quantity of pelagic fishes with the aid of the high-opening trawl net. While the landings of indian and spanish mackerels by trawlers increased this year, landings of selar scads and sardines declined.

Demersal fish landings on the other hand declined by 2% from 172,940 tonnes in 1978 to 169,562 tonnes in 1979. The demersal fish group is composed of a large number of species none of which is individually abundant. However the common ones are jewfish, tongue sole and indian halibut, threadfin bream, goatfish, marine catfishes and lizard fish.

About 73% of demersal landings is made up of trashfish, the quantity of which remained almost stagnant during the last 2 years. However, the foodfish content of demersal fishes declined by 6.1% in 1979 over 1978. Lizardfish landings declined by 64.3% from 5,649 tonnes in 1978 to 2,017 tonnes in 1979, goatfish landings declined by 68.6% from 1,899 tonnes in 1978 to 596 tonnes in 1979; marine catfishes declined by 5.6% from 3,033 tonnes in 1978 to 2,863 tonnes in 1979; jawfish landings declined by 3.3% from 6,321 tonnes in 1978 to 6,116 tonnes in 1979; and tongue sole/indian halibut landings declined by 2% from 3,027 tonnes in 1978 to 2,968 tonnes in 1979. Threadfin bream was the only significant demersal specie which showed an increase of 13.4% from 4,920 tonnes in 1978 to 5,577 tonnes in 1979.

With an insignificant drop in trashfish landings and a general decline of almost all the common demersal foodfishes in 1979 over 1978, the trawl fisheries, which lands the bulk of the demersal fishes, was badly affected with a decline in landings in 1979.

Unsorted and unidentified fishes increased by 3.2% from 7,317 tonnes in 1978 to 7,553 tonnes in 1979. The bulk of these are mainly landed by trawl and drift/gill net fisheries.

Crustacea landings also declined by 13.8% from 77,604 tonnes in 1978 to 66,890 tonnes in 1979. Prawn, which is the main crustacean, declined by 10.1% from 63,017 tonnes in 1978 to 56,686 tonnes in 1979. As prawns and demersal fishes comprise the bulk of trawl landings, therefore the decline in these two groups was the main reason for the decline in trawl landings in 1979. Bagnet is another fishery which lands a lot of prawns (besides trashfish and sergestid shrimps) and the decline in prawns also affected this fishery with reduced landings. Sergestid shrimps also declined by 34.9% from 10,673 tonnes in 1978 to 6,950 tonnes in 1979. As the bulk of these shrimps are landed by bagnets, therefore the decline in these shrimps further affected the bagnet fishery which already had a poor season for prawns in 1979. Crabs too declined in landings by 16.9% from 3,914 tonnes in 1978 to 3,254 tonnes in 1979.

Landings of molluscs increased by 13.4% from 67,876 tonnes in 1978 to 76,969 tonnes in 1979. The most important component of this group is the cockle whose production increased by 14.1% from 55,598 tonnes in 1978 to 63,412 tonnes in 1979. In fact, if cockles were excluded from marine landings, the west coast marine landings would have shown a decline in 1979. Squids and cuttlefish landings also increased by 5% from 11,778 tonnes in 1978 to 12,371 tonnes in 1979. The bulk of squids and cuttlefish were landed by trawlers and this helped to arrest the further decline in trawl landings in 1979. Other shellfish also increased by 137.2% from 500 tonnes in 1978 to 1,186 tonnes in 1979.

Thus despite ~~the~~ increases in pelagic fishes and molluscs, the general decline in demersal fishes and crustacea, which form the bulk of trawl and bagnet landings, brought about a decline in trawl and bagnet fisheries by 10% and 24% respectively; and as trawlers alone account for 49% of total west coast landings in 1979, the decline in their landings greatly restricted the overall growth of the industry to only 5% in 1979.

East Coast Landings

The east coast fisheries had a bad year in 1979 as landings declined by 10.1% from 154,124 tonnes in 1978 to 138,558 tonnes in 1979. With the exception of trashfish, all other fish species declined in 1979 over 1978.

Pelagic landings declined by 6.7% from 84,597 tonnes in 1978 to 78,964 tonnes in 1979. With the exception of indian mackerels, which increased by 21.9% from 14,964 tonnes in 1978 to 18,235 tonnes in 1979, all the other major pelagic species declined in 1979. Selar scads declined by 5.9% from 20,508 tonnes in 1978 to 19,309 tonnes in 1979; round-scads declined by 21.9% from 17,641 tonnes in 1978 to 13,783 tonnes in 1979; sardines declined by 15.5% from 10,941 tonnes in 1978 to 9,244 tonnes in 1979; and little tuna declined by 23.2% from 8,957 tonnes in 1978 to 6,878 tonnes in 1979.

Despite the good season for indian mackerels, the decline of all the major pelagic species in 1979 brought about a decrease in the landings of the major fisheries on the East Coast. Purse seine landings declined by 7% from 58,300 tonnes in 1978 to 53,756 tonnes in 1979; drift/gillnet landings declined by 20% from 11,525 tonnes in 1978 to 9,117 tonnes in 1979; and handline landings declined by 5% from 10,779 tonnes in 1978 to 10,182 tonnes in 1979. As these fisheries are dependent on the pelagic resources, the scarcity in pelagic fishes seriously affected the landings of these fisheries in 1979.

Total demersal fish landings on the other hand, remained almost constant at 46,481 tonnes in 1979 as compared to 46,138 tonnes in 1978 — i.e. an increase of 0.7%. Even this small increase was brought about by the 18.9% increase in trashfish landings which increased from 22,669 tonnes in 1978 to 26,943 tonnes in 1979. Demersal foodfish landings declined by 16.8% from 23,469 tonnes in 1978 to 19,538 tonnes in 1979. As on the west coast, the demersal landings on the East Coast is multispecies in nature. However, the more common ones are threadfin breams, red snappers, jewfishes, goat fishes and marine catfishes. Except for red snappers and goatfishes, the landings of all the other species declined in 1979. Threadfin bream landings declined by 20.8% from 5,736 tonnes in 1978 to 4,546 tonnes in 1979; jewfish landings declined by 25.4% from 2,163 tonnes in 1978 to 1,613 tonnes in 1979; and marine catfishes declined by 42.7% from 1,648 tonnes in 1978 to 944 tonnes in 1979. Redsnappers on the other hand increased by 11.4% from 1,521 tonnes in 1978 to 1,694 tonnes in 1979; and goatfish landings increased by 2.6% from 1,139 tonnes in 1978 to 1,169 tonnes in 1979.

With the exception of red snappers, which are mainly caught by traps, all the other demersal species are mainly landed by trawlers. Thus the poor catches of these species in 1979 greatly contributed to the 4% decline in trawl landings from 49,672 tonnes in 1978 to 47,439 tonnes in 1979.

Unsorted and unidentified fishes also declined by 38.9% from 7,091 tonnes in 1978 to 4,333 tonnes in 1979, thus contributing to the overall decline in east coast landings in 1979.

It was a bad year too for crustaceans whose landings declined by 53.8% from 11,435 tonnes in 1978 to 5,284 tonnes in 1979. Prawns declined by 17.5% from 4,531 tonnes in 1978 to 3,740 tonnes in 1979, thus contributing to the 4% and 68% decline in trawl and bagnet fisheries respectively. However the big decline in bagnet fishery was mainly the result of the 84.5% decline in Sergestid shrimps from 6,099 tonnes in 1978 to only 947 tonnes in 1979. Crabs, a minor crustacean, declined too by 25.8% from 805 tonnes in 1978 to 597 tonnes in 1979.

Squids and cuttlefish are the only molluscs landed on the east coast, and these are mainly landed by trawlers. Their landings too declined by 28% from 4,856 tonnes in 1978 to 3,497 tonnes in 1979.

The poor season for almost all the major species on the east coast resulted in nearly all the fisheries showing a decline in landings in 1979, thus causing a 10% decrease in 1979 over 1978 landings on the east coast. Whereas the decrease in demersal fishes, prawns, squids and cuttlefish reduced trawl landings, the decrease in pelagic fishes and sergestid shrimps reduced purse seine and other traditional fisheries landings. The poor season in 1979 was especially felt in Trengganu and East Johore where the main fisheries, such as the purse seine fishery, is dependent on pelagic fishes. Thus decline in pelagic fishes had a greater impact on Trengganu and East Johore than on the other east coast states. In fact the 10% decline in east coast landings in 1979 was brought about by a 13% and 15% decline in Trengganu and East Johore landings respectively.

Total imports into Peninsular Malaysia in 1979 was \$131 million which is a 19% increase over 1978. The main imports were fresh/chilled/frozen fish and prawns which accounted for \$54 million or 41% of total imports; dried/salted/smoked/boiled fish and prawns which accounted for \$17 million or 13% of total imports; and canned fish products accounting for \$35 million or 27% of total imports. The major exporting countries to Peninsular Malaysia are Thailand and Japan. Whereas the bulk of Thai exports are mainly fresh or chilled and dried or salted fish products, the Japanese exports are chiefly canned fish products.

Total exports in 1979 from Peninsular Malaysia was \$310 million which is a 55% increase over 1978. The major export items were fresh/chilled/frozen fish which accounted for \$20 million or 6% of total exports; fresh/chilled/frozen prawns which accounted for \$170 million or 55% of total exports; dried/salted/smoked/boiled fish produce which accounted for \$45 million or 15% of total exports, and canned fish products which accounted for \$41 million or 13% of total exports. The importing countries from Peninsular Malaysia were Singapore, Japan and the United Kingdom. Whereas the exports to Singapore were mainly fresh or chilled fish, prawns and molluscs, the exports to Japan and the United Kingdom were mainly frozen prawns, frozen fish and other frozen crustaceans and molluscs.

SABAH

Landings in 1979

Sabah's fish landings and cultures have been steadily increasing for the last 10 years with the exception of 1976 when there was a slight decline. This trend in landings and cultures indicates that the fisheries here is a stable fishery with very little development within the industry. Such a trend is natural in Sabah's case as there is a substantial fish resource in the waters around Sabah and the fishing effort on this resource is not only limited but also more or less constant over the years. As the east coast of Sabah has a fairly developed fishery, the bulk of landings is on the east coast. The most important fishery in Sabah is the prawn trawl fishery which is fairly developed not only in terms of the fishing fleet but also in terms of shore facilities supporting this fishery. All the other fisheries are mainly very small scale traditional fisheries.

Total landings and cultures in 1979 was 41,900 tonnes indicating a very marginal increase of 0.7% over 1978. About 96% or 40,200 tonnes of this landings comes from marine landings while freshwater fish production accounts for a mere 4% or 1,700 tonnes. The total value of landings in 1979 was about \$120 million out of which marine landings alone accounted for about \$114 million, with the balance of \$6 million accounted for by freshwater fish production.

The 1979 landings and cultures constituted of 30,400 tonnes of marine fish, 8,500 tonnes of crustaceans, 1,000 tonnes of molluscs, 300 tonnes of other aquatic plants and animals, and 1,700 tonnes of freshwater fish. On the whole there was very little change in the quantities and types of fish landed. However, there was a small decrease in the landings of flounders and soles, mackerels and billfishes, slipmouths, molluscs and inedible aquatic produce such as corals and pearls in 1979 as compared to 1978. The only exception in this group of fishes was the mackerels and billfishes group which decreased by a hefty 41% in 1979 over 1978. All the other species groups showed an increase in 1978 however these increases were only marginal.

Among the dominant species groups are redfishes, basses, congers etc.; jacks, mullets etc; mackerels, billfishes etc.; and crustaceans. The crustacean group, which is chiefly marine prawns, is the most important commercial species in Sabah. Total value of crustaceans in 1979 was \$49,500,000 which is 41% of the total value of Sabah's 1979 total landings.

Foreign Trade in Fishery Commodities

Total domestic consumption of fish in 1979 for Sabah was 45,058 tonnes. As total domestic production was only 41,600 tonnes, the shortfall in supply was overcome by imports.

Total fisheries imports into Sabah in 1979 was 7,719 tonnes valued at \$12.8 million, while total fisheries exports from Sabah for 1979 was 4,260 tonnes valued at \$45 million. Compared to 1978, imports increased by 2,524 tonnes and by \$1 million in 1979, while exports increased by 459 tonnes and by \$10 million.

From the above it is noted that not only is Sabah a net importer of fish (i.e. by 3,459 tonnes) in 1979, when compared to 1978, the quantity of imports have also increased indicating a growing domestic demand for fish. The main imports were in the form of canned fish products. This unfavourable terms of trade in 1979 in quantity terms was however offset by a very favourable surplus trade balance in value terms. Net exports in value terms was \$32 million in 1979. The single most important export item was prawns which showed a net export of 3,020 tonnes valued at \$41.6 million in 1979. Prawns alone accounted for 92% of the total value of exports of Sabah in 1979.

SARAWAK

Landings in 1979

Since 1972 Sarawak's marine landings had been steadily increasing with the exception of 1978 when there was a decline of 7% due mainly to the decline in jelly-fish landings. In 1979 total marine landings for Sarawak was 82,293 tonnes which is an increase of 6% over 1978. Even though the jelly-fish fishery has yet to recover, the increase in 1979 landings was brought about by the increase in fish landings.

The two major fisheries in Sarawak are the trawl and the drift/gill net fisheries. The trawl fishery is the more important of these two fisheries and landed 58,839 tonnes of fish in 1979. Trawl landings alone was 72% of the total landings in 1979. Compared to 1978, there was an increase of 12% in trawl landings in 1979. The drift/gill net fishery landed 12,034 tonnes in 1979 which is 15% of total landings. But unlike the trawl fishery, landings by drift/gill net fishery declined by 8% in 1979 as compared to 1978. Among the minor fisheries, which together accounted for 13% of total landings, there was very little changes in 1979. With the exception of fishing stakes, bag nets, barrier nets and hooks/lines which showed small increases in 1979 over 1978, all the other minor fisheries showed slight decreases in their landings this year.

The 1979 landings composed of 63,257 tonnes of fish, 17,717 tonnes of crustaceans, 878 tonnes molluscs and 441 tonnes of jelly fish. Similar to Peninsular Malaysia the number of fish species in Sarawak is numerous, but however, among the dominant species it was noted that most of the demersal species, mainly landed by trawlers, showed increases in 1979 over 1978. The most dominant fish group was trashfish which increased by 12% from 13,761 tonnes in 1978 to 15,392 tonnes in 1979; marine catfishes also increased in landings from 4,294 tonnes in 1978 to 5,070 tonnes in 1979 or by 18%; and jewfish landings increased by 24% from 3,513 tonnes in 1978 to 4,368 tonnes in 1979. Among crustaceans the most important is penaid prawn whose landings increased from 14,210 tonnes in 1978 to 16,252 tonnes in 1979 or by 15%.

Among the dominant pelagic fishes in Sarawak are little tunas, spanish mackerels and shads. These are mainly landed by the drift/gill nets and trawlers, with the exception of shads which increased by 149% from 1,039 tonnes in 1978 to 2,584 tonnes in 1979, the landings of spanish mackerel and little tuna decreased by 937 tonnes and 1,070 tonnes respectively and by 25% and 53% respectively. The decrease in these two dominant pelagic species and also the decreases in the other species, both demersal and pelagic, in 1979 over 1978 contributed to the decline in drift/gill net landings in 1979 and 1978.

Foreign Trade in Fishery Commodities

Like Sabah, Sarawak is also reasonably rich in marine resources, but inspite of this, she is still a net importer of fish in quantity terms although in value terms she has a surplus trade balance. Total imports in 1979 was 5,585 tonnes valued at \$10.8 million, while total exports were 3,695 tonnes valued at \$26 million. Quantity-wise, compared to 1978 there