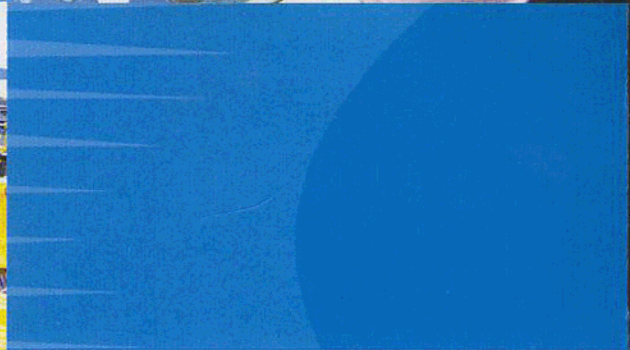




# PERANGKAAN TAHUNAN PERIKANAN

## ANNUAL FISHERIES STATISTICS

**1988  
(Volume 1)**



### JABATAN PERIKANAN MALAYSIA

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**PERANGKAAN TAHUNAN PERIKANAN**  
**(ANNUAL FISHERIES STATISTICS)**

**1988**

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**JILID 1**  
**(VOLUME 1)**

## PENDAHULUAN

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Perangkaan Tahunan Perikanan adalah pengeluaran tahunan Jabatan Perikanan sebagai satu sumber bahan rujukan utama mengenai maklumat-maklumat terhadap industri perikanan Malaysia. Maklumat-maklumat ini termasuk butir-butir bot menangkap ikan, nelayan, perkakas menangkap ikan, usaha menangkap ikan dan pengeluaran industri perikanan.

Memandangkan maklumat-maklumat ini disusun dan diproses dari data-data yang banyak serta dikutip dari seluruh negara, biasanya banyak masa diperlukan untuk menyediakan buku ini. Oleh itu pada lazimnya buku ini dikeluarkan hampir akhir tahun. Walau bagaimanapun oleh sebab keperluan segera kepada perangkaan ini, maka masa pemprosesan data dipercepatkan tanpa menjejaskan ketepatan maklumat, kecuali data import/eksport komoditi perikanan yang mana kita bergantung kepada sumber-sumber lain.

Berasaskan kepada kepentingan perangkaan perikanan serta kelambatan data import/eksport, buku ini dikeluarkan dalam dua jilid berasingan. Jilid pertama merupakan buku ini yang meliputi semua aspek industri perikanan kecuali maklumat-maklumat import/eksport komoditi perikanan. Jilid kedua yang akan meliputi perangkaan data-data akhir ini akan diedarkan kelak.

Dalam usaha kami untuk meningkat perkhidmatan kepada industri perikanan, kami berharap bahawa edaran buku ini yang lebih awal dapat memberi munafaat kepada semua.

Sekian, terima kasih.

**Ketua Pengarah Perikanan,  
Jabatan Perikanan Malaysia,  
Kuala Lumpur.**

## FOREWORD

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The Annual Fisheries Statistics is an annual bulletin produced by the Department of Fisheries as the main source of reference on vital informations on the Malaysian fisheries industry. These informations include figures on fishing boats, fishermen, fishing gears, fishing efforts and productions of the industry.

Since these informations are compiled and processed from large data collected throughout the country, considerable amount of time is involved. As such this bulletin was normally produced at the end of the year. However due to early requirement, the processing time is reduced at no expense of accuracy except for data on import/ export of fishery commodities which we have to depend on other sources.

Due to the urgency of the fisheries statistics and the inavailability of the import/export data as yet, this bulletin is produced in two seperate volumes. The first volume, which is this book, covers all aspects of the fishing industry except informations on the import/export of fishery commodities. The second volume which consists of the latter statistics will be circulated later.

In our effort to improve our service to the industry, we hope that the early circulation of this bulletin could be beneficial to all.

Thank You.

**Director-General of Fisheries,  
Department of Fisheries Malaysia,  
Kuala Lumpur.**



# MALAYSIA — DAERAH-DAERAH PERIKANAN ( Malaysia — Fisheries Districts )

## SEMENANJUNG MALAYSIA (Peninsular Malaysia)



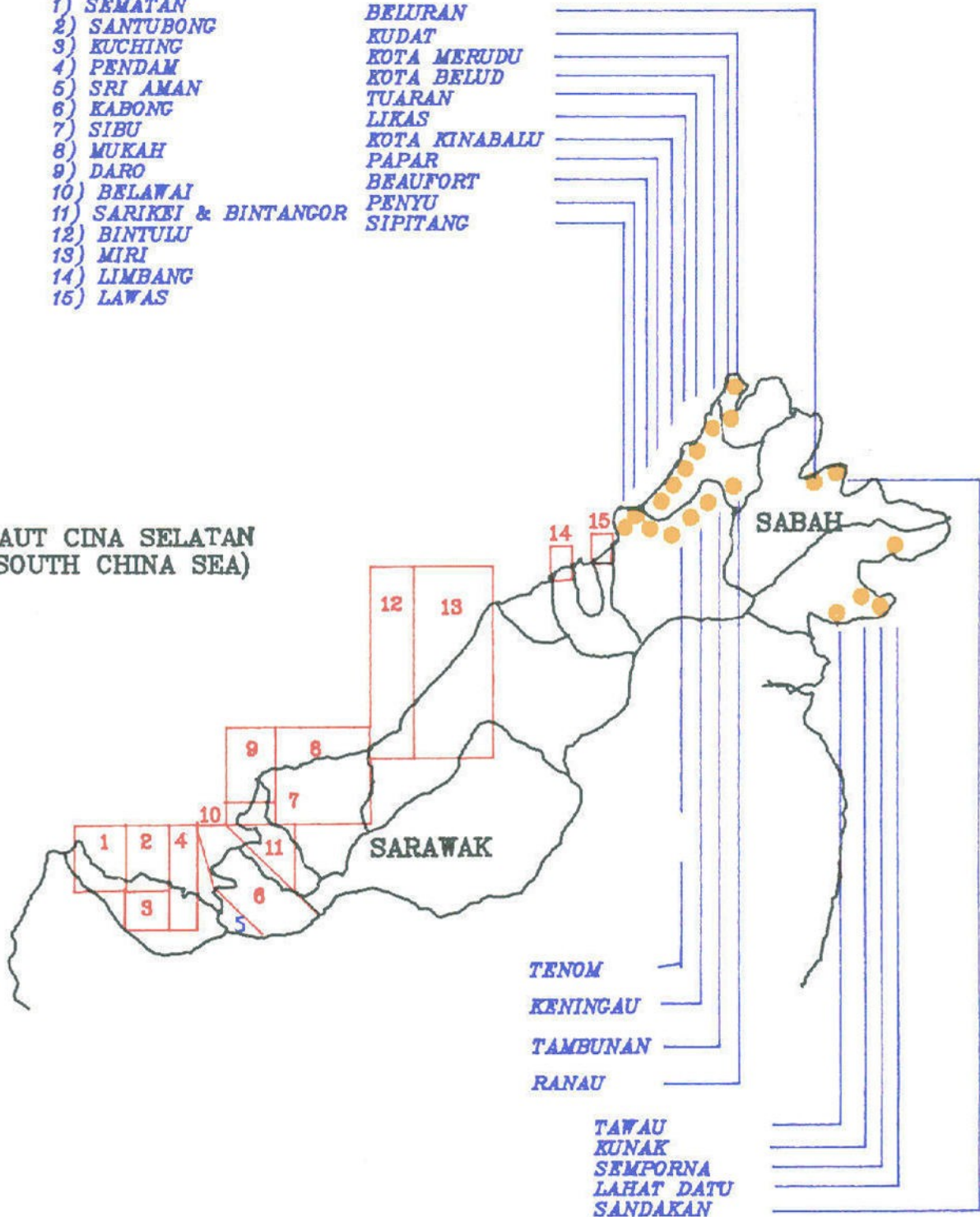
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- SIPITANG

LAUT CINA SELATAN  
(SOUTH CHINA SEA)





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## KEDUDUKAN SEKTOR PERIKANAN DI MALAYSIA DARI TAHUN 1987 DAN 1988

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### 1. Latarbelakang Industri Perikanan

1.1. Malaysia mempunyai garisan pantai sepanjang 3,400 km yang meliputi pantai di Semenanjung, Sarawak dan Sabah. Sejajar dengan pengisytiharaan Zon Ekonomi Eksklusif, keluasan perairan negara telah bertambah daripada 47,000 ke 160,000 batu notika persegi. Oleh itu, perusahaan perikanan menjadi salah satu sektor ekonomi penting dalam pembangunan negara.

1.2 Industri perikanan memainkan peranan penting di dalam pembangunan ekonomi negara. Ia boleh dibahagikan kepada perusahaan perikanan laut dan akuakultur. Pada tahun 1988, sektor perikanan laut telah memberikan sejumlah 825,631 tan metrik ikan bernilai \$1,375.9 juta. Manakala pengeluaran hasil dari kegiatan akuakultur ialah 46,957 tan metrik bernilai \$89.6 juta. Oleh itu, nilai keseluruhan pengeluaran ikan negara berjumlah \$1,465.5 juta iaitu menyumbangkan kira-kira 2.3% daripada Keluaran Dalam Negeri Kasar (KDNK).

- 1.3 Industri perikanan (perikanan laut dan akuakultur) telah menyumbangkan peluang pekerjaan secara langsung kira-kira 1.7% daripada keseluruhan tenaga kerja negara. Pecahannya ialah perikanan laut telah mengujudkan sejumlah 88,963 peluang pekerjaan sebagai nelayan. Manakala industri akuakultur pula telah menyediakan peluang pekerjaan sebanyak 15,860 orang penternak.
- 1.4 Galakan Kerajaan terhadap pembangunan perusahaan perikanan laut dalam dan akuakultur telah memberikan kesan yang baik. Bilangan bot laut dalam telah meningkat daripada 328 pada tahun 1987 kepada 399 buah bot pada tahun 1988 dan telah menyumbangkan kira-kira 11.1% daripada jumlah pendaratan keseluruhan. Bagi perusahaan akuakultur pula, perkembangan penternakan dalam spesis-spesis terpilih seperti Udang Harimau, Ikan Siakap dan siput Sudu adalah sangat nyata. Pada tahun 1988, pengeluaran daripada ternakan Udang Harimau, Ikan Siakap dan Siput Sudu di Semenanjung Malaysia, masing-masing telah meningkat sebanyak 17.9%, 18.8% dan 126.3% kepada 754.8 tan metrik, 1,267.1 tan metrik dan 1,368 tan metrik. Disamping itu, pengeluaran hasil ternakan Udang Harimau di Sabah telah mencatatkan 350 tan metrik.

## **2. Gunatenaga**

- 2.1 Pada tahun 1988, bilangan nelayan di Malaysia telah berkurangan sebanyak 2.6% kepada 88,963 orang. Penurunan bilangan nelayan ini adalah selaras dengan langkah-langkah pengurangan lebihan nelayan pantai dengan membawa mereka kepada sub-sektor ekonomi yang lain.
- 2.2 Di Semenanjung Malaysia, bilangan nelayan telah berkurang sebanyak 3.8% menjadi 58,283 orang (Jadual 1). Penurunan bilangan nelayan adalah disebabkan bilangan bot menangkap ikan berkurangan daripada tahun 1987.
- 2.3 Komposisi nelayan mengikut keturunan adalah seperti berikut: Melayu 32,386 orang (55.6%) berkurang 4.2%, Cina 21,367 orang (36.7%) bertambah 1.2%, Thai 3,754 orang (6.4%) dan lain-lain keturunan 776 orang (1.3%). Dari segi taburan, nelayan Melayu lebih ramai di pantai timur (55.5%) sementara nelayan Cina kebanyakannya tinggal dipantai barat (92.0%) terutamanya di negeri Pulau Pinang, Perak dan Selangor. Nelayan Thai yang dibenarkan bekerja diatas bot menangkap ikan adalah bagi mencukupi kekurangan tenaga mahir dan berpengalaman dalam sub-sektor perikanan laut dalam khususnya.

Jadual 1 : Bilangan Nelayan Yang Bekerja Diatas  
Bot-Bot Berlesen 1987 dan 1988

| Negeri      | Bilangan Nelayan |        |             |
|-------------|------------------|--------|-------------|
|             | 1987             | 1988   | % perubahan |
| Semenanjung | 60,569           | 58,283 | - 3.8       |
| Sarawak     | 12,690           | 12,579 | - 0.9       |
| Sabah       | 17,730           | 17,730 | 0           |
| Labuan      | 330              | 371    | + 12.4      |
| Jumlah      | 91,319           | 88,963 | - 2.6       |

2.4 Bilangan nelayan di Sarawak, Sabah dan Labuan masing-masing adalah 12,579, 17,730, dan 371 orang. Bilangan nelayan di Sarawak berkurang sedikit iaitu 0.9%, manakala di Sabah pula tidak berubah. Tetapi, di Labuan pula, bilangan nelayan telah bertambah sebanyak 12.4% kerana pembangunan perusahaan perikanan laut dalam. Komposisi nelayan di Sarawak, Sabah dan Labuan terdiri dari kaum Bumiputera, Cina dan lain-lain keturunan seperti Indonesia dan Filipina.

### **3. Bot-bot Menangkap Ikan**

3.1 Pada tahun 1988, bilangan bot menangkap ikan yang dilesenkan di Malaysia telah berkurangan sebanyak 2.6% kepada 37,802 buah bot berbanding pada tahun lalu.

- 3.2 Bilangan bot menangkap ikan di Semenanjung dalam tahun 1988 ialah 21,341 buah iaitu berkurang sebanyak 3.6% berbanding tahun 1987. Penurunan bilangan bot, terutama bot-bot kecil berjentera sangkut dan tanpa jentera adalah selaras dengan dasar Kerajaan untuk mengurangkan tahap eksploitasi sumber perikanan di perairan laut pantai (Jadual 2).
- 3.3 Walau bagaimanapun, bilangan bot laut dalam telah bertambah sebanyak 21.6% kepada 399 buah bot. Pertambahan bilangan bot adalah kerana galakan kerajaan untuk membangunkan perusahaan perikanan laut dalam.
- 3.4 Pecahan jenis-jenis bot perikanan pada tahun 1988 adalah seperti berikut:-
- i. Bot berjentera dalam telah menurun sebanyak 0.4% kepada 14,760 buah. Tetapi bilangan bot laut dalam telah meningkat daripada 328 buah kepada 399 buah iaitu pertambahan sebanyak 21.65%.
  - ii. Bot berjentera sangkut pula telah menurun sebanyak 9.3% kepada 5,832 buah.
  - iii. Bot tidak berjentera telah berkurang sebanyak 15.5% kepada 749 buah.

**Jadual 2: Bilangan Bot Menangkap Ikan Yang Dilesenkan Tahun 1987 dan 1988**

| Jenis Bot     | Bilangan Bot Perikanan |        |             |
|---------------|------------------------|--------|-------------|
|               | 1987                   | 1988   | % perubahan |
| SEMENANJUNG   | 22,138                 | 21,341 | - 3.6       |
| Injin dalam   | 14,822                 | 14,760 | - 0.4       |
| Injin sangkut | 6,430                  | 5,832  | - 9.3       |
| Tanpa jentera | 886                    | 749    | - 15.5      |
| SARAWAK *     | 7,482                  | 7,030  | - 6.0       |
| SABAH         | 9,026                  | 9,250  | + 2.5       |
| LABUAN        | 174                    | 181    | + 4.0       |
| Jumlah:       | 38,820                 | 37,802 | - 2.6       |

\* termasuk bilangan bot yang tidak dilesenkan.

3.5 Bilangan bot menangkap ikan di Sarawak ialah 7,030, di Sabah 9,250 dan di Labuan 181 buah. Bilangan bot yang dilesenkan di Sabah dan Labuan mencatatkan pertambahan, masing-masing sebanyak 2.5% dan 4.0%. Manakala di Sarawak, bilangan bot merosot sebanyak 6.0% daripada tahun 1987.

#### **4. Bilangan Bot Mengikut Kumpulan Perkakas Utama**

4.1 Jadual 3 menunjukkan pecahan bilangan bot mengikut kumpulan perkakas utama yang dilesenkan di Semenanjung Malaysia pada tahun 1988;

- i. Bilangan bot pukat tunda telah meningkat sebanyak 2.4% kepada 4,200 buah.
- ii. Bot pukat jerut pula berjumlah 660 unit iaitu berkurang sebanyak 2.2% daripada tahun 1987.
- iii. Manakala, pelbagai jenis perkakas tradisional telah berkurang sebanyak 5.1% kepada 16,481 buah. Penurunan bilangan bot pukat tradisional adalah selaras dengan langkah Kerajaan untuk mengurangkan nelayan pantai dengan membawa keluar lebihan nelayan kepada lain-lain sektor ekonomi dan perikanan laut dalam.

Jadual 3: Bilangan Bot Yang Dilesenkan Mengikut Kumpulan Perkakas Di Semenanjung Malaysia

| Kumpulan Perkakas | Bilangan Bot Perikanan |        |             |
|-------------------|------------------------|--------|-------------|
|                   | 1987                   | 1988   | % perubahan |
| Pukat Tunda       | 4,101                  | 4,200  | + 2.4       |
| Pukat Jerut Ikan  | 675                    | 660    | - 2.2       |
| Pukat Tradisional | 17,362                 | 16,481 | - 5.1       |
| Jumlah:           | 22,138                 | 21,341 | - 3.6       |



4.2 Pecahan bilangan bot mengikut lesen perkakas yang dikeluarkan di Sarawak ialah 727 buah bot pukat tunda, 23 buah bot pukat jerut ikan dan 6,280 buah bot pukat tradisional. Di Sabah pula, sebanyak 2,021 buah pukat tunda, 210 buah bot pukat jerut dan 7,019 buah bot pukat tradisional telah dilesenkan. Manakala di Labuan pula, sejumlah 181 buah bot pukat tradisional telah dilesenkan pada tahun 1988.

## **5. Perkakas Menangkap Ikan**

5.1 Jumlah perkakas menangkap ikan yang dilesenkan (perkakas utama dan tambahan) telah meningkat sebanyak 5.7% kepada 31,272 unit. Peningkatan ini disebabkan pertambahan bilangan lesen perkakas menangkap ikan di Sarawak sebanyak 85.7% berbanding pada tahun 1987.

5.2 Bilangan perkakas menangkap ikan yang dilesenkan pada tahun 1988 di Semenanjung Malaysia menurun sebanyak 6.0% kepada 21,341 unit. Pecahan mengikut kumpulan perkakas adalah seperti berikut: pukat tunda 4,200 unit (19.7%), pukat jerut ikan 660 (3.1%), dan bakinya terdiri dari pelbagai jenis perkakas tradisional sebanyak 16,481 (77.2%).

5.3 Manakala, bilangan lesen perkakas yang dikeluarkan di Sarawak adalah 7,450 unit, 2,300 unit di Sabah dan 181 unit di Labuan. Sejumlah 727 (9.8%) unit pukot tunda, 23 (0.3%) unit pukot jerut ikan dan 6,700 (89.9%) unit pelbagai perkakas tradisional dilesenkan di Sarawak. Di Sabah pula, sebanyak 852 (37.0%) unit pukot tunda, 77 (3.4%) unit pukot jerut ikan dan 1,371 (59.6%) unit perkakas tradisional telah dilesenkan. Kesemua 181 unit lesen perkakas yang dilesenkan di Labuan adalah kumpulan perkakas tradisional.

## **6. Usaha Menangkap Ikan**

6.1 Usaha menangkap ikan adalah berkait rapat dengan bilangan trip, bilangan hari dan bilangan kali memukat. Purata bilangan trip ke laut setahun bagi bot pukot tunda dan pukot jerut ikan di Semenanjung Malaysia ialah masing-masing sebanyak 228 trip dan 161 trip. Bilangan trip ke laut di pantai timur Semenanjung Malaysia bagi pukot tunda dan pukot jerut ikan adalah lebih rendah dari pantai barat kerana dipengaruhi oleh musim tengkujuh. Bilangan trip setahun bagi pukot tunda dan pukot jerut ikan di pantai barat ialah masing-masing sebanyak 252 trip dan 165 trip berbanding 228 trip dan 161 trip di pantai timur.

6.2 Bilangan hari ke laut bagi kumpulan perkakas terpenting di Semenanjung Malaysia adalah seperti berikut: pukot tunda 271 hari, pukot jerut ikan 207 hari dan pukot hanyut 229 hari setahun. Purata hari ke laut di pantai barat adalah lebih tinggi berbanding dengan pantai timur Semenanjung Malaysia kerana di pantai timur mengalami musim tengkujuh.

### **Pendaratan Ikan Laut**

- 7.1 Pada keseluruhannya jumlah pendaratan ikan di Malaysia menurun sebanyak 3.9% tetapi dari segi nilai pendaratan pada harga borong telah meningkat sebanyak 1.4% berbanding pada tahun 1987.
- 7.2 Kuantiti pendaratan ikan laut di Semenanjung Malaysia pada tahun 1988 ialah 694,449 tan metrik iaitu menurun sebanyak 6.2% daripada tahun 1987. Penurunan pendaratan ikan disebabkan penurunan pendaratan oleh ikan pelagik (ikan selayang, kembong, selar, dll) dan ikan baja masing-masing sebanyak 17.1% dan 10.1% (Jadual 4). Fakta ini disokong oleh data pendaratan bot-bot pukot jerut ikan menurun sebanyak 20.3% berbanding tahun 1987. Ini kerana sumber ikan pelagik yang sentiasa bergerak itu berkurangan pada tahun 1988 diperairan Semenanjung Malaysia. Disamping itu,

penurunan jumlah pendaratan ikan di Semenanjung adalah juga disebabkan kejatuhan pendaratan ikan baja dan siput-siput masing-masing sebanyak 10.1% dan 92.5% dari jumlah pendaratan tahun 1987. Ini kerana adanya pengawalselian yang rapat terhadap aktiviti penangkapan ikan terutama terhadap bot-bot pukut tunda dan juga kekurangan sumber semula jadi siput retak seribu akibat keadaan iklim.

Jadual 4: Pendaratan Ikan Mengikut Spesis Utama (Tan Metrik) 1987 Dan 1988 - Semenanjung Malaysia

| Spesis        | 1987    | 1988    | % perubahan |
|---------------|---------|---------|-------------|
| Pelagik       | 284,344 | 235,662 | - 17.1      |
| Demersal      | 151,926 | 181,213 | + 19.3      |
| Udang         | 67,048  | 81,265  | + 21.2      |
| Ikan baja     | 216,780 | 194,780 | - 10.1      |
| Siput-siput   | 20,467  | 1,529   | - 92.5      |
| Jumlah (t.m.) | 740,565 | 694,449 | - 6.2       |

7.3 Jadual 5 menunjukkan pecahan pendaratan ikan di Semenanjung mengikut kumpulan perkakas, iaitu:-

- i. Pendaratan oleh pukut tunda yang merupakan 56.8% daripada jumlah telah bertambah sebanyak 1.2% berbanding tahun 1987 kepada 394,200 tan metrik. Pertambahan ini juga disebabkan bilangan bot pukut tunda telah bertambah sebanyak 2.4%.

ii. Pukat jerut ikan pula, yang mendarat 18.7% daripada jumlah pendaratan, telah menyumbang 129,980 tan metrik, berkurangan sebanyak 20.3%. Kejatuhan ini tidak selaras dengan tahap kekurangan bilangan bot pukat jerut ikan, yang menurun sebanyak 2.5%.

iii. Manakala pendaratan oleh perkakas tradisional pula pula menurun sebanyak 9.4% kepada 170,269 tan metrik. Ini kerana penurunan pendaratan daripada kegiatan memungut siput.

Jadual 5: Pendaratan Ikan Mengikut Kumpulan Perkakas Di-Semenanjung Malaysia, 1987 dan 1988

| Kumpulan Perkakas | Jumlah Pendaratan Ikan (t.m.) |         |             |
|-------------------|-------------------------------|---------|-------------|
|                   | 1987                          | 1988    | % perubahan |
| Pukat Tunda       | 389,688                       | 394,200 | + 1.2       |
| Pukat Jerut Ikan  | 163,012                       | 129,980 | - 20.3      |
| Pukat Tradisi     | 187,865                       | 170,269 | - 9.4       |
| Jumlah (t.m.)     | 740,565                       | 694,449 | - 6.2       |

7.4 Spesis-spesis ikan di Semenanjung Malaysia digredkan kepada tiga kumpulan, selain daripada kumpulan udang, siput-siput dan ikan baja. Kumpulan gred-gred ikan tersebut ialah gred I terdiri daripada ikan Bawal Tambak, Bawal Putih, Bawal Hitam, Senangin/Kurau, Tenggiri, Parang, Kerapu dan Jenahak.

tersebut ialah gred I terdiri daripada ikan Bawal Tambak, Bawal Putih, Bawal Hitam, Senangin/Kurau, Tenggiri, Parang, Kerapu dan Jenahak.

Ikan gred II pula adalah seperti ikan Terubuk, Puput, Merah, Kaci, Cermin, Demuduk dan Siakap. Manakala ikan gred III ialah ikan bilis, sotong, ketam, obor-obor dan lain-lain jenis ikan. Peratusan ikan gred I dan II daripada jumlah pendaratan ikan keseluruhan telah meningkat iaitu masing-masing telah menyumbangkan 3.8% dan 2.5% daripada jumlah pendaratan keseluruhan, sementara sumbangan ikan gred III pula telah menurun kepada 53.6%. Kumpulan udang juga telah meningkat sebanyak 21.2% kepada 81,265 tan metrik. Manakala kumpulan siput-siput dan ikan baja masing-masing telah menurun sebanyak 92.5% dan 10.1% berbanding pada tahun 1987.

- 7.5 Walaupun jumlah pendaratan ikan di Semenanjung Malaysia telah menurun sebanyak 6.2%, tetapi dari segi nilai pendaratan pada harga borong hanya menurun sedikit iaitu sebanyak 1.4% kepada \$978.5 juta. Ini kerana purata harga borong bagi pendaratan telah meningkat daripada \$1,330/tan metrik pada tahun 1987 kepada \$1,409/tan metrik pada tahun 1988. Kenaikan harga ini adalah dipengaruhi oleh komposisi gred ikan dimana peratusan komposisi ikan gred I dan II yang mendapat harga yang tinggi telah meningkat (Jadual 6)

Jadual 6: Kuantiti Dan Nilai Pendaratan Ikan Laut,  
1987 dan 1988 Malaysia

| Negeri/<br>Gred Ikan | Kuantiti (t.m.) / Nilai (\$juta) |                        |                    |
|----------------------|----------------------------------|------------------------|--------------------|
|                      | 1987                             | 1988                   | % perubahan        |
| SEMENANJUNG          |                                  |                        |                    |
| Ikan gred I          | 26,603<br>(\$163.3)              | 27,006<br>(\$165.8)    | + 1.5<br>(+ 1.5)   |
| Ikan gred II         | 14,973<br>(\$ 43.4)              | 17,450<br>(\$ 50.6)    | + 16.5<br>(+ 16.6) |
| Ikan gred III        | 394,694<br>(\$501.3)             | 372,416<br>(\$473.0)   | - 5.6<br>(- 5.6)   |
| Udang                | 67,048<br>(\$231.9)              | 81,267<br>(\$253.7)    | + 21.2<br>(+ 9.4)  |
| Ikan baja            | 216,780<br>(\$ 39.0)             | 194,780<br>(\$ 35.1)   | - 10.1<br>(- 10.0) |
| Siput-siput          | 20,467<br>(\$ 6.1)               | 1,529<br>(\$ 0.5)      | - 92.5<br>(- 91.8) |
| SARAWAK              | 69,443<br>(\$187.9)              | 79,642<br>(\$ 190.1)   | + 14.7<br>(+ 1.2)  |
| SABAH                | 47,640<br>(\$165.5)              | 48,000<br>(\$197.0)    | + 0.8<br>(+ 19.0)  |
| LABUAN               | 1,360<br>(\$ 4.7)                | 3,540<br>(\$ 10.2)     | +160.3<br>(+117.0) |
| Kuantiti (t.m.)      | 859,443<br>(\$1,343.1)           | 825,631<br>(\$1,375.9) | - 3.9<br>(+ 2.4)   |

- 7.6 Kuantiti pendaratan ikan laut di Sarawak dalam tahun 1988 adalah sebanyak 79,642 tan metrik yang bertambah sebanyak 14.7%. Pendaratan ikan laut di Sabah adalah sebanyak 48,000 tan metrik yang juga telah mencatatkan kenaikan sebanyak 0.8% berbanding dengan tahun 1987. Pendaratan bagi Labuan ialah 3,540 tan metrik, yang juga meningkat sebanyak 160.3%.
- 7.7 Nilai pendaratan bagi Sarawak, Sabah dan Labuan meningkat masing-masing sebanyak 1.3%, 12.0% dan 130.0% kepada \$190.1 juta, \$197.7 juta dan 10.2 juta.

## **8. Akuakultur**

- 8.1 Perusahaan akuakultur di Semenanjung dibahagikan mengikut sistem ternakan ialah:-
- i. Ternakan ikan airtawar dalam kolam dan bekas lombong telah berkurang dari segi bilangan dan keluasan sebanyak masing-masing 12.0% dan 23.3% berbanding pada tahun 1987. Tetapi jumlah pengeluaran dan nilai hasil ternakan ikan airtawar telah meningkat masing-masing sebanyak



30.5% dan 50.2% . Peningkatan hasil pengeluaran ini disebabkan penggunaan teknologi penternakan dan spesis ikan yang lebih baik (Jadual 7).

- ii. Ternakan ikan sangkar airtawar pula telah menunjukkan pertambahan dari semua aspek iaitu bilangan, keluasan dan pengeluaran masing-masing bertambah sebanyak 39.6%, 103.7% dan 477.8%. Pertambahan besar berlaku kerana pengurusan sistem ternakan ini lebih cekap dan dijalankan secara lebih intensif.

Jadual 7: Bilangan, Keluasan Kawasan Yang Diusahakan dan Pengeluaran dan Nilai Hasil Ternakan Ikan Airtawar Di-Semenanjung, Tahun 1987 dan 1988

|                                | 1987   | 1988   | % perubahan |
|--------------------------------|--------|--------|-------------|
| A. Kolam dan lombong:<br>===== |        |        |             |
| Bilangan                       | 13,804 | 12,151 | - 12.0      |
| keluasan (ha)                  | 3,270  | 2,508  | - 23.3      |
| Pengeluaran (t.m.)             | 2,734  | 3,567  | + 30.5      |
| Nilai (\$,000)                 | 8,255  | 12,400 | + 50.2      |
| B. Sangkar:<br>=====           |        |        |             |
| Bilangan                       | 656    | 916    | + 39.6      |
| Keluasan (m. psg)              | 6,353  | 12,944 | + 103.7     |
| Pengeluaran (t.m.)             | 9      | 52     | + 477.8     |
| Nilai (\$,000)                 | 35     | 171    | + 388.6     |

iii. Ternakan ikan/udang dalam kolam airpayau pula telah menunjukkan pertambahan dari segi bilangan, keluasan dan pengeluaran hasil yang masing-masing bertambah sebanyak 17.9%, 10.6% dan 20.8%. Pembangunan ini adalah kerana peningkatan penglibatan sektor swasta dengan sistem ternakan ini (Jadual 8).

iv. Ternakan ikan dalam sangkar airpayau pula telah meningkat dari semua aspek samada dari segi bilangan, keluasan dan pengeluaran iaitu masing-masing meningkat sebanyak 26.1%, 36.7% dan 25.3%. Ini kerana perkembangan sistem ternakan ini keseluruhan Semenanjung Malaysia.

Jadual 8: Bilangan, Keluasan, Pengeluaran dan Nilai Hasil Ternakan Ikan Airpayau, Di-Semenanjung Malaysia Tahun 1987 dan 1988

|                    | 1987    | 1988    | % perubahan |
|--------------------|---------|---------|-------------|
| <b>A. Kolam:</b>   |         |         |             |
| =====              |         |         |             |
| Bilangan           | 636     | 750     | + 17.9      |
| keluasan (ha)      | 558     | 617     | + 10.6      |
| Pengeluaran (t.m.) | 798     | 964     | + 20.8      |
| Nilai (\$,000)     | 14,765  | 17,624  | + 19.4      |
| <b>B. Sangkar:</b> |         |         |             |
| =====              |         |         |             |
| Bilangan           | 13,071  | 16,488  | + 26.1      |
| Keluasan (m. psg)  | 111,481 | 152,385 | + 36.7      |
| Pengeluaran (t.m.) | 1,260   | 1,579   | + 25.3      |
| Nilai (\$,000)     | 12,005  | 15,877  | + 32.3      |

- v. Keluasan kawasan dan pengeluaran ternakan siput sudu juga telah meningkat masing-masing sebanyak 70.1% dan 126.1%. Peningkatan ini kerana perluasan sistem ternakan ini keseluruh Semenanjung Malaysia (Jadual 9).
- vi. Bagi ternakan kerang pula, pengeluaran telah menurun sebanyak 14.5%, walaupun keluasan kawasan tidak banyak berubah dan bilangan kawasan ternakan meningkat kepada 216 (Jadual 9).

Jadual 9: Bilangan, Keluasan, Pengeluaran dan Nilai Hasil Ternakan Siput Sudu dan Kerang, Di-Semenanjung Malaysia Tahun 1987 dan 1988

|                               | 1987   | 1988   | % perubahan |
|-------------------------------|--------|--------|-------------|
| C. Rakit Siput Sudu:<br>===== |        |        |             |
| Bilangan                      | 60     | 42     | - 30.0      |
| keluasan (m.psg)              | 15,000 | 25,521 | + 70.1      |
| Pengeluaran (t.m.)            | 605    | 1,368  | + 126.1     |
| Nilai (\$,000)                | 184    | 471    | + 156.0     |
| B. Kerang:<br>=====           |        |        |             |
| Bilangan                      | 166    | 216    | + 30.1      |
| Keluasan (ha)                 | 4,187  | 4,178  | - 0.2       |
| Pengeluaran (t.m.)            | 40,794 | 34,867 | - 14.5      |
| Nilai (\$,000)                | 13,556 | 11,535 | - 14.9      |

8.2 Pada keseluruhan, pengeluaran akuakultur di Semenanjung Malaysia pada tahun 1988, merosot sebanyak 8.2% daripada 46,200 kepada 42,397 tan metrik. Kemerosotan tersebut adalah disebabkan kejatuhan pengeluaran ternakan kerang sebanyak 14.5% berbanding tahun 1987. Bagaimanapun pengeluaran lain-lain sistem ternakan telah meningkat.

8.3 Walaupun jumlah keseluruhan pengeluaran akuakultur di Semenanjung Malaysia menurun tetapi jumlah nilai pengeluaran bagi ternakan airtawar dan ternakan airpayau telah meningkat kepada \$58.1 juta kerana kuantiti hasil akuakultur bernilai tinggi telah bertambah. Pecahan nilai pengeluaran akuakultur ialah akuakultur airtawar memberikan sejumlah \$12.6 juta, iaitu meningkat sebanyak 51.6% dan nilai ternakan airpayau meningkat sebanyak 25.1% kepada \$45.5 juta.

8.4 Bilangan penternak yang terlibat secara langsung dengan kegiatan akuakultur di Semenanjung Malaysia ialah 11,520 orang. Pecahan bilangan penternak mengikut sistem ternakan ialah seperti berikut:-

- i. Bilangan penternak yang terlibat dengan ternakan airtawar ialah 9,077 orang iaitu berkurang 7.2%,

- ii. Bilangan penternak yang terlibat dengan ternakan airpayau meningkat 13.6% menjadi 900 orang.
- iii. Manakala bilangan penternak siput sudu dan kerang pula masing-masing meningkat sebanyak 123.3% dan 764.4% kepada 134 dan 1,409 orang penternak.

8.5 Perkembangan perusahaan akuakultur di Sabah adalah menggalakkan. Pada tahun 1988, terdapat sejumlah 7,445 buah kolam ternakan ikan air tawar yang mengusahakan ternakan seluas 825.4 ha. dan hasil pengeluaran ternakan ikan air tawar berjumlah 4,100 tan matrik bernilai \$25 juta. Manakala perusahaan ternakan ikan air payau pula, terdapat sejumlah 359 buah kolam yang mengusahakan kawasan ternakan seluas 300 ha. Pengeluaran hasil ternakan air payau (udang harimau) berjumlah 350 tan matrik bernilai \$6 juta.

8.6 Di Sarawak pula, pengeluaran hasil ternakan ikan air tawar berjumlah 110 tan matrik bernilai \$0.5 juta. Manakala di Labuan, perusahaan akuakultur masih belum membangun.

# STATUS OF THE FISHERIES SECTOR IN MALAYSIA FROM 1987 AND 1988

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## 1. Background of the Fisheries Sector

- 1.1 Malaysia has a total coastline of 3,400 km inclusive of Peninsular Malaysia, Sabah and Sarawak. With the declaration of the Exclusive Economic Zone (EEZ), Malaysian waters has increased from 47,000 to 160,000 square nautical miles. With the expansion, the fisheries industry become an important economic sector in the development of the country.
- 1.2 The fisheries industry can be divided into marine captured fishery and aquaculture. In 1988, the marine captured fishery sector produced 825,631 tonnes of fish valued at \$1,375.9 million. The aquaculture industry in the same year produced 46,957 tonnes valued at \$89.6 million. On the whole, the total production of the fisheries industry was at \$1,465.5 million contributing about 2.3% to the Gross Domestic Product (GDP).
- 1.3 The fisheries industry (captured and aquaculture) had directly contributed employment opportunities totalling about 1.7% of the nation's manpower. Captured fisheries created a total of 88,963 employment as fishermen whilst the aquaculture industry provided a total of 15,860 employment as culturists.

1.4 Promotion and encouragement by the Government to develop the deep sea fishing industry and aquaculture had positive results. The number of deep sea fishing boats increased from 328 units in 1987 to 399 units in 1988 and contributed about 11.1% of the total landings. For aquaculture, productions of selected species like Tiger Prawns, Sea Bass and Mussels in Peninsular Malaysia increased by 17.9%, 18.8% and 126.3% to 754.8 tonnes, 1,267.1 tonnes and 1,368 tonnes respectively. At the same time, the production of cultured Tiger Prawns in Sabah recorded a harvest of 350 tonnes.

## **2. Employment**

2.1 In 1988, the number of fishermen in Malaysia dropped by 2.6% to 88,963. The decrease is in-line with steps taken to reduce surplus in-shore fishermen by reallocating them to other more productive economic sub-sectors.

2.2 In Peninsular Malaysia, the number of fishermen dropped by 3.8%, to only 58,283 fishermen, (Table 1). The reduction is mainly due to the decrease in the number of fishing boats as compared to 1987.

2.3 The composition of fishermen according to ethnic groups are as follows :-

Malays 32,386 (55.6%) reduced by 4.2%, Chinese 21,367

(36.7%) increased by 1.2%, Thais 3,754 (6.4%) and others 776 (1.3%). By geographical distribution, most Malay fishermen were concentrated in the East Coast of Peninsular Malaysia (55.5%) whilst the Chinese were more in the West Coast (92.0%) especially in the states of Penang, Perak and Selangor. The Thais were involved mainly in the deep-sea fishing sub-sector as skilled workers.

Table 1: Number of Fishermen Working on  
Licensed Boats, 1987 and 1988

| State         | Number of Fishermen |        |          |
|---------------|---------------------|--------|----------|
|               | 1987                | 1988   | % Change |
| Pen. Malaysia | 60,569              | 58,283 | - 3.8    |
| Sarawak       | 12,690              | 12,579 | - 0.9    |
| Sabah         | 17,730              | 17,730 | 0        |
| Labuan        | 330                 | 371    | +12.4    |
| Total         | 91,319              | 88,963 | - 2.6    |

2.4 The total number of fishermen in Sarawak, Sabah and Labuan were 12,379, 17,730 and 371 respectively. The number decreased a little in Sarawak (0.9%), remained the same in Sabah and increased by 12.4% in Labuan. The increased in Labuan was mainly due to the development of the deep sea fishery in this area. The composition of fishermen in



Sarawak, Sabah and Labuan consisted of Bumiputra, Chinese and others like Indonesia and Philipinos.

### **3. Fishing Boats**

3.1 On the whole, the number of fishing boats licensed in Malaysia (1988) dropped by 2.6% to 37,802 units as compared to 1987.

3.2 The number of fishing boats in Peninsular Malaysia in 1988 was 21,341 units decreasing by 3.6% as compared to 1987. The decrease, especially for small out-board boats and non-powered boats coincided with the government's policy to reduce the level of exploitation of resources in the in-shore waters. (Table 2).

3.3 On the other hand the number of deep sea fishing boats increased from 328 units to 399 units that is by 21.6% as compared to 1987. The increase is mainly due to the intense encouragement and promotion by the government to develop our deep sea fishing industry.

3.4 Changes in the number of fishing boats in 1988 by types were as follow:

- i. The number of inboard boats decreased by 0.4% to 14,760 units. However the number of deep sea fishing units shot up to 399 units from 328 units in 1987 registering a growth of 21.65%.

ii. The number of outboard boats also decreased by 9.3% to 5,832 units.

iii. The number of non-powered boats decreased by 15.5% to 749 units.

Table 2: Number of Licensed Fishing Boats,  
1987 and 1988

| Type of Boat | Number of fishing boats |        |         |
|--------------|-------------------------|--------|---------|
| Year         | 1987                    | 1988   | %change |
| SEMENANJUNG  | 22,138                  | 21,341 | - 3.6   |
| Inboard      | 14,822                  | 14,760 | - 0.4   |
| Out-board    | 6,430                   | 5,832  | - 9.3   |
| Non-Powered  | 886                     | 749    | - 15.5  |
| SARAWAK*     | 7,482                   | 7,030  | - 6.0   |
| SABAH        | 9,026                   | 9,250  | + 2.5   |
| LABUAN       | 174                     | 181    | + 4.0   |
| TOTAL        | 38,820                  | 37,802 | - 2.6   |

\*Inclusive of boat not licensed.

in Sabah 9,250 units and in Labuan 181 units. The number fishing of boats in Sabah and Labuan recorded an increase of 2.5% and 4.0% respectively. On the other hand, the number of units in Sarawak dropped by 6.0%.

#### 4. Number of Fishing Boats by Gear Groups

4.1 Table 3 shows the breakdown of the number of fishing boats licensed in Peninsular Malaysia by Gear Groups in 1988.

Table 3: Number of Licensed Boats By Gear Groups  
Peninsular Malaysia, 1987 and 1988

| Gear Group        | Number of fishing boats |        |          |
|-------------------|-------------------------|--------|----------|
|                   | 1987                    | 1988   | % Change |
| Trawlers          | 4,101                   | 4,200  | + 2.4    |
| Fish Purse Seiner | 675                     | 660    | - 2.2    |
| Tradisional Gear  | 17,362                  | 16,481 | - 5.1    |
| Total             | 22,138                  | 21,341 | - 3.6    |

It can be seen that the number of trawlers increased by 2.4% to 4,200 units. The number of fish purse seiners dropped by 2.2% and the number of tradisional gears dropped by 3.1% to 16,481 units as compared to the year 1987. The decrease in tradisional boats coincided with the steps taken by the Government to reduce the number of in-shore fishermen by reallocating them to other economic sectors and also to the deep sea fishing industry.

4.2 The breakdown of fishing boats by gear licensed in Sarawak is as follows :-

| Gear Type          | Number of Units in Sarawak | Number of Units in Sabah | Number of Units in Labuan |
|--------------------|----------------------------|--------------------------|---------------------------|
| Trawlers           | 727                        | 2,021                    | -                         |
| Fish Purse Seiners | 23                         | 210                      | -                         |
| Traditional        | 6,280                      | 7,019                    | 181                       |
| Total              | 7,030                      | 9,250                    | 181                       |

## **5. Fishing Gears**

- 5.1 The total number of gears licensed in 1988 increased by 5.7% to 31,272 units. This increase was mainly due to the steep increase in the number of licences issued in Sarawak that is by 85.7% as compared to 1987.
- 5.2 The number of fishing gears licensed in 1988 in Peninsular Malaysia dropped by 6.0% to 21,341 units. The break-down by gears are as follows: Trawlers 4,200 units (19.7%), Fish Purse Seiners 660 units (3.1%), and others mainly traditional gears 16,481 units (77.2%).
- 5.3 Gear licences issued in Sarawak was 7,597 units, in Sabah 2,300 units and in Labuan 181 units. A total of 727 (9.8%) trawler licences, 23 (0.3%) purse seiner licences and 6,700 (89.9%) traditional gear licences were issued in Sarawak. In Sabah a total of 852 (37.0%) trawler licences, 77 (3.4%) fish purse seiner licences and 1,371 (59.6%) traditional gear licences were issued in 1988. On the other hand all 181 gear licences issued in Labuan were for traditional gears.

## **6. Fishing Efforts**

- 6.1 Fishing efforts relate closely to the number of trips, number of days and number of hauls. The annual average

fishing trips for trawlers and fish purse seiners in Peninsular Malaysia was 228 trips and 161 trips respectively. The total number of fishing trips in the East Coast Peninsular Malaysia was lower than those in the West Coast mainly because of the monsoon in the area. The number of fishing trips per year for trawlers and fish purse seiners in the West Coast were 252 trips and 165 trips as compared to 228 trips and 161 trips in the East Coast respectively.

- 6.2 The total number of fishing days by major gears in Peninsular Malaysia are as follows :-

Trawlers 271 days, Fish Purse Seinners 207 days and drift netters 229 days per annum. The average fishing days was more for the West Coast, Peninsular Malaysia as compared to the East Coast also because of the monsoon period in the later.

## **7. Landings of Marine Fish**

- 7.1 On the whole, the total marine fish landings in Malaysia dropped by 3.9% but the wholesale value increased by 1.4% as compared to last year.

7.2 The landings in Peninsular Malaysia in 1988 was 694,449 tonnes dropping by 1.4%. The decline is mainly due to poor landings of pelagic fishes (round scads, mackerels, selar scads and others) and trash fish, which dropped by 17.1% and 10.1% respectively. (Table 4).

The decline was further evidenced by the lesser catch of fish purse-seines, dropping by 20.3% as compared to that in 1987. This could be due to the migratory patterns of pelagic fishes. Apart from that, the decline in Peninsular Malaysia was also due to the decreased landings of trash fish and poor harvest of mussels dipping by as much as 10.1% and 92.5% respectively. The poor landings of trash fish could mainly be due to tight enforcement on trawler boats which normally caught the most trash fish. On the other hand poor harvest of mussels was mainly due to adverse climatic situation.

Table 4: Landings of Marine Fish by Main Species (tonnes) 1987 and 1988 - Peninsular Malaysia

| Species    | 1987    | 1988    | % Change |
|------------|---------|---------|----------|
| Pelagic    | 284,344 | 235,662 | - 17.1   |
| Demersal   | 151,926 | 181,213 | + 19.3   |
| Prawns     | 67,048  | 81,265  | + 21.2   |
| Trash Fish | 216,780 | 194,780 | - 10.1   |
| Mussel     | 20,467  | 1,529   | - 92.5   |
| Total      | 740,565 | 694,449 | - 6.2    |

7.3 Table 5 shows the break-down of fish landings in Peninsular Malaysia by gear groups:-

- i. The trawler landings increased by 1.2% to contribute 56.8% of the total landings. The increment was due to more trawlers operating in 1988 as compared to 1987 (increase of 2.4%).
- ii. Fish Purse Seiners contributed 129,980 tonnes, dropping by 20.3% thus comprising only 18.7% of the total marine fish landings in 1988. The decrease did not coincide with the 2.5% drop in the number of Fish Purse Seiners.
- iii. Landings by traditional boats dipped by 9.4% to 170,269 tonnes. This was mainly due to the poor harvesting of mussels.

Table 5: Landings of Marine fish by Gear Group in Peninsular Malaysia 1987 and 1988

| Gear Group        | Total Landings (tonnes) |         |          |
|-------------------|-------------------------|---------|----------|
|                   | 1987                    | 1988    | % Change |
| Trawlers          | 389,688                 | 394,200 | + 1.2    |
| Fish Purse Seiner | 163,012                 | 129,980 | -20.3    |
| Tradisional       | 187,865                 | 170,269 | - 9.4    |
| Total             | 740,565                 | 694,449 | - 6.2    |

7.4 The fishes in Peninsular Malaysia were graded into 3 main categories apart from groups like prawns, mussels and trash fish. Grade I fishes include, Chinese Pomfret, Silver Pomfret, Black Pomfret, Thread Fins, Spanish Mackerel, Groupers and Snappers. Grade II fishes include Longtail Shads, Other Shads, Red Snapper, Sweetlip, Horse Mackerel and Sea Perch. Grade III fishes include Anchovies, Squids/Cuttlefish, Crabs, Jelly Fishes and others. The landings of Grade I and Grade II fishes increased, both contributing 3.8% and 2.5% of the overall total landings. On the other hand the contribution of Grade III fishes decreased to only 53.6% of the total. Landings of prawns increased by 21.2% to 81,265 tonnes, whilst the landings of molluscs and trash fish dropped by 92.5% and 10.1% respectively compared to 1987.

7.5 However, even though the landings in Peninsular Malaysia dipped by 6.2%, the wholesale value of the landings dropped only by 1.4% to \$978.5 million. This was because the average wholesale price increased from \$1,330/tonnes in 1987 to \$1,409/tonnes in 1988. This improvement was mainly due to more Grade I and Grade II fishes being landed and as such, pushed up the average price and thus the value. (Table 6).



7.6 The landings in Sarawak in 1988 was 79,642 tonnes increasing by 14.7%. Landings in Sabah was 48,000 tonnes, recording an increase of 0.8% as compared to 1987 whilst landings in Labuan increased by 160.3% to 3,540 tonnes.

7.7 The value for Sarawak, Sabah and Labuan increased by 1.3%, 12.0% and 130.0% to \$190.1 million, \$197.7 million and \$10.2 million respectively.

Table 6: Quantity and Value of Marine Fish Landings  
1987 and 1988, Malaysia

| State/Grade           | Quantity (tonnes)/Value (\$Million) |                        |                    |
|-----------------------|-------------------------------------|------------------------|--------------------|
|                       | 1987                                | 1988                   | % Change           |
| Peninsular Malaysia   |                                     |                        |                    |
| Grade I Fish          | 26,603<br>(\$163.3)                 | 27,006<br>(\$165.8)    | + 1.3<br>(+1.5)    |
| Grade II Fish         | 14,973<br>(\$ 43.4)                 | 17,450<br>(\$ 50.6)    | +16.5<br>(+16.6)   |
| Grade III Fish        | 394,694<br>(\$501.3)                | 372,416<br>(\$473.0)   | - 5.6<br>(-5.6)    |
| Prawns                | 67,048<br>(\$231.9)                 | 81,267<br>(\$253.7)    | +21.2<br>(+9.4)    |
| Trash Fish            | 216,780<br>(\$ 39.0)                | 194,780<br>(\$ 35.1)   | -10.1<br>-10.0)    |
| Mussels               | 20,467<br>(\$ 6.1)                  | 1,529<br>(\$ 0.5)      | -92.5<br>(91.8)    |
| SARAWAK               | 69,443<br>(\$187.9)                 | 79,642<br>(\$ 190.1)   | +14.7<br>(+ 1.2)   |
| SABAH                 | 47,640<br>(\$165.5)                 | 48,000<br>(\$197.0)    | + 0.8<br>(+19.0)   |
| LABUAN                | 1,360<br>(\$ 4.7)                   | 3,540<br>(\$ 10.2)     | +160.3<br>(+117.0) |
| Quantity/<br>(tonnes) | 859,443<br>(\$1,343.1)              | 825,631<br>(\$1,375.9) | - 3.0<br>(+ 2.4)   |

## 8. Aquaculture

8.1 The aquaculture industry in Peninsular Malaysia can be grouped into various culture systems.

- i) Freshwater fish culture in ponds and ex-mining pools declined in terms of numbers and area by 12.0% and 23.3% respectively as compared to 1987. On the other hand the total production and value increased by 30.5% and 50.2% respectively. This improvement was mainly due to better technology and the usage of superior fish species (Table 7).
- ii) Freshwater fish culture in cages increased from all aspects that is number, area and production by 39.6%, 103.7% and 477.8% respectively. The remarkable improvement occurred because of better management and the practice of intensive culture system..

Table 7: Number, Area, Production and Values of Fresh Water Fish Culture in Peninsular Malaysia 1987 and 1988

|                              | 1987   | 1988   | % Change |
|------------------------------|--------|--------|----------|
| A. Ponds and ex-mining Ponds |        |        |          |
| Numbers                      | 13,804 | 12,151 | - 12.0   |
| Area (ha)                    | 3,270  | 2,508  | - 23.3   |
| Production (mt)              | 2,734  | 3,567  | + 30.5   |
| Value (\$ ,000)              | 8,255  | 12,400 | + 50.2   |
| Cages                        |        |        |          |
| Numbers                      | 656    | 916    | + 39.6   |
| Area (sq.m)                  | 6,353  | 12,944 | +103.7   |
| Production (mt)              | 9      | 52     | +477.8   |
| Value (\$ ,000)              | 35     | 171    | +388.6   |

- iii) Fish/Prawn culture in brackish water ponds also improved. The number, area and productions increased by 17.9%, 10.6% and 20.8% respectively. This development was made possible with the greater involvement of private sector in this culture system. (Table 8)
- iv) Fish culture in brackish water cages also recorded a rapid expansion. The number, area and productions increased by 26.1%, 36.7% and 25.3% respectively. The improvement was mainly due to accelerated development of this system throughout Peninsular Malaysia.

Table 8: Numbers, Areas, Production and Values  
of Fish Culture in Brackish Water -  
in Peninsular Malaysia, 1987 and 1988

|                  | 1987    | 1988    | % Change |
|------------------|---------|---------|----------|
| <b>A. Ponds</b>  |         |         |          |
| Numbers          | 636     | 750     | +17.9    |
| Area (ha)        | 558     | 617     | +10.6    |
| Productions (mt) | 798     | 964     | +20.8    |
| Values (\$,000)  | 14,765  | 17,624  | +19.4    |
| <b>B. Cages</b>  |         |         |          |
| Numbers          | 13,071  | 16,488  | +26.1    |
| Area (sq.m)      | 111,481 | 152,385 | +36.7    |
| Productions (mt) | 1,260   | 1,579   | +25.3    |
| Values (\$,000)  | 12,005  | 15,877  | +32.3    |

v. The total area for and the production of mussel culture system increased by 70.1% and 126.1% respectively mainly due to expansion of this system throughout Peninsular Malaysia. (Table 9)

vi For cockle culture, production dropped by 14.5%, even though the total area remained the same and the number of areas increased to 216.

Table 9: Numbers, Areas, Productions and Values of Mussels and Cockle System in Peninsular Malaysia 1987 and 1988

|                          | 1987   | 1988   | % Change |
|--------------------------|--------|--------|----------|
| <b>A. Mussels (Raft)</b> |        |        |          |
| Numbers                  | 60     | 42     | - 30.0   |
| Area (sq.m)              | 15,000 | 25,521 | + 70.1   |
| Productions (mt)         | 605    | 1,368  | +126.1   |
| Values (\$ ,000)         | 184    | 471    | +156.0   |
| <b>B Cockles</b>         |        |        |          |
| Numbers                  | 166    | 216    | + 30.1   |
| Area (ha)                | 4,187  | 4,178  | - 0.2    |
| Productions (mt)         | 40,794 | 34,867 | - 14.5   |
| Value (\$ ,000)          | 13,556 | 11,535 | - 14.9   |

8.2 On the whole, the production of aquaculture in Peninsular Malaysia declined by 8.2% from 46,200 tonnes in 1987 to 42,387 tonnes in 1988. This decline was caused by poor harvesting of cockles, sliding by 14.5% as compared to 1987.

Nevertheless, the production of other culture systems increased.

8.3 Even though the total aquaculture production in Peninsular Malaysia declined, the total production value for both freshwater and brackishwater systems increased to \$58.1 million because of better performance of high quality culture systems. Overall, the value of freshwater aquaculture production was \$12.6 million increasing by 51.6% and the value of brackish water production was \$45.5 million increasing by 25.1%.

8.4 The number of culturists involved directly with the industry in Peninsular Malaysia was 10,750. The break-down figures by culture systems were as follows:-

(i) Fresh water culture system - 9,077<sup>3</sup> declining by 7.2%;

(ii) Brackish water culture - 900 increasing by 13.6%.

(iii) The total number of mussels and cockles culturists on the other hand increased by 123.3% and 764.4% to 134 and 1,409 respectively.

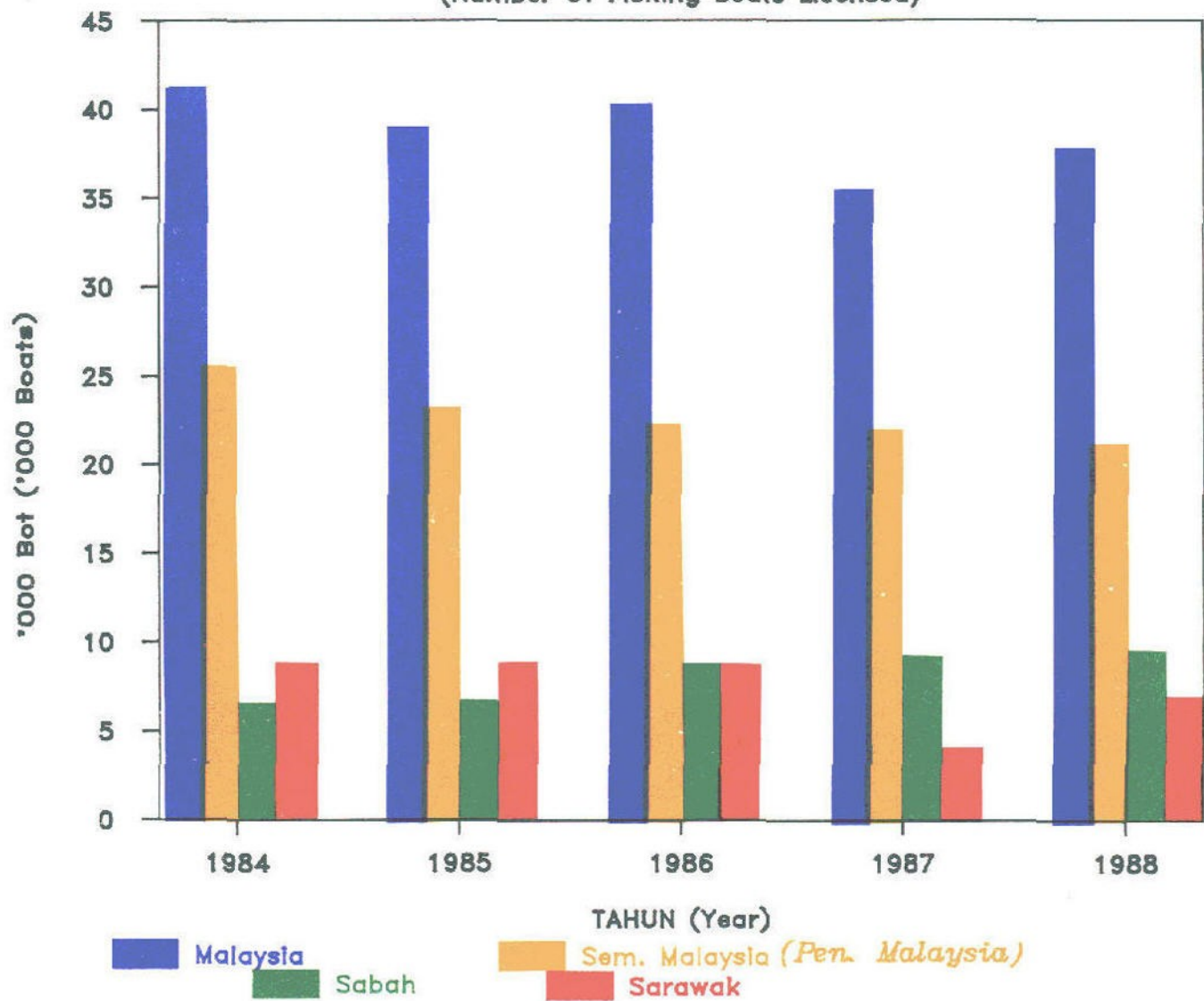
8.5 The expansion of aquaculture in Sabah was encouraging. In 1988, there were 7,445 freshwater ponds covering 825.4 ha producing 4,100 tonnes valued at \$25 million. Apart from that there, were 359 brackishwater ponds covering an area of

300 ha with a production of 350 tonnes (Tiger Prawns) valued at \$6 million.

8.6 In Sarawak, the fresh water aquaculture productions was 110 tonnes valued at \$0.5 million. In contrast the aquaculture industry in Labuan has yet to take off.

CARTA A  
**BIL. BOT MENANGKAP IKAN YANG DILESENKAN**

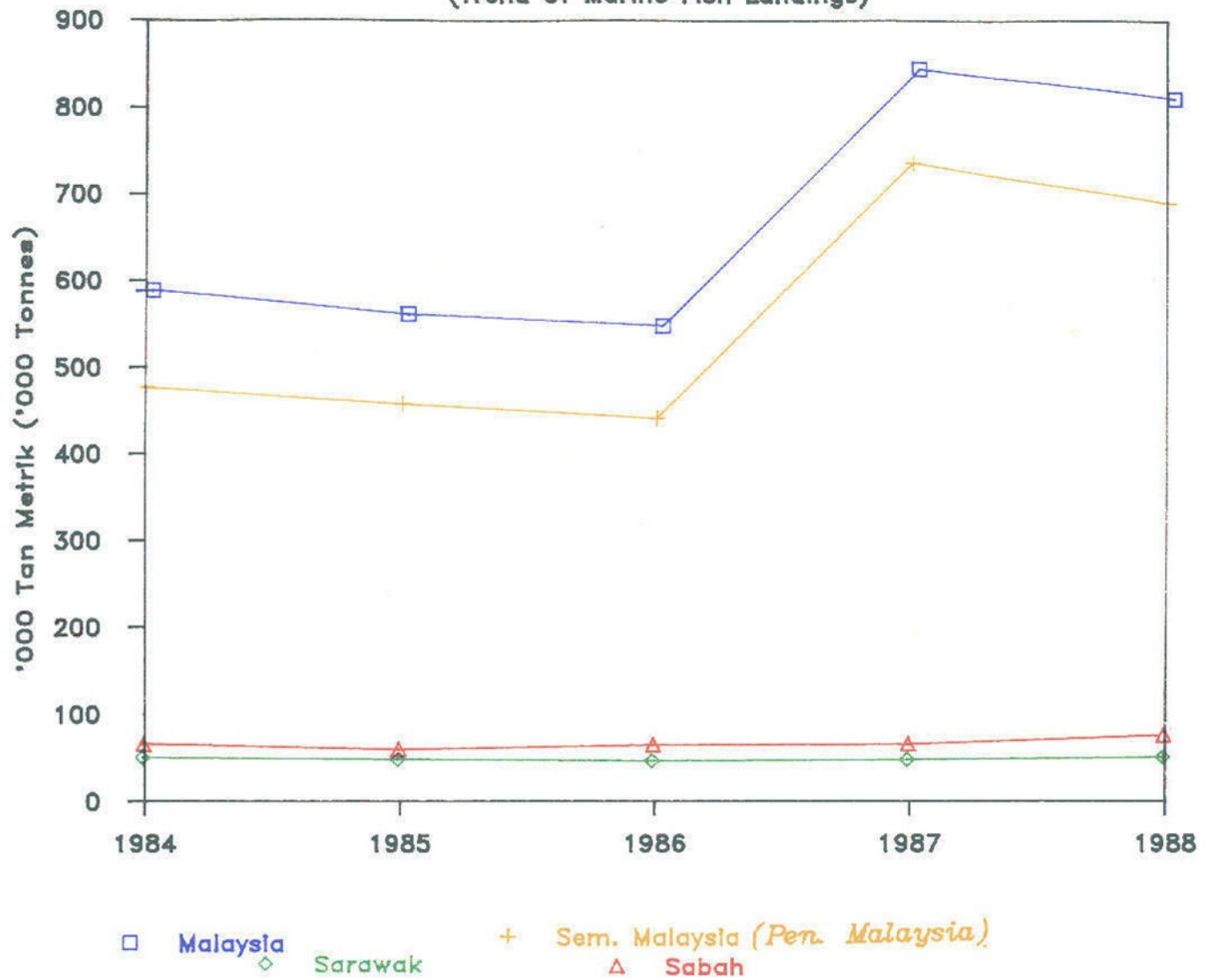
(Number Of Fishing Boats Licensed)



CARTA B

## ARAH ALIRAN PENDARATAN IKAN LAUT

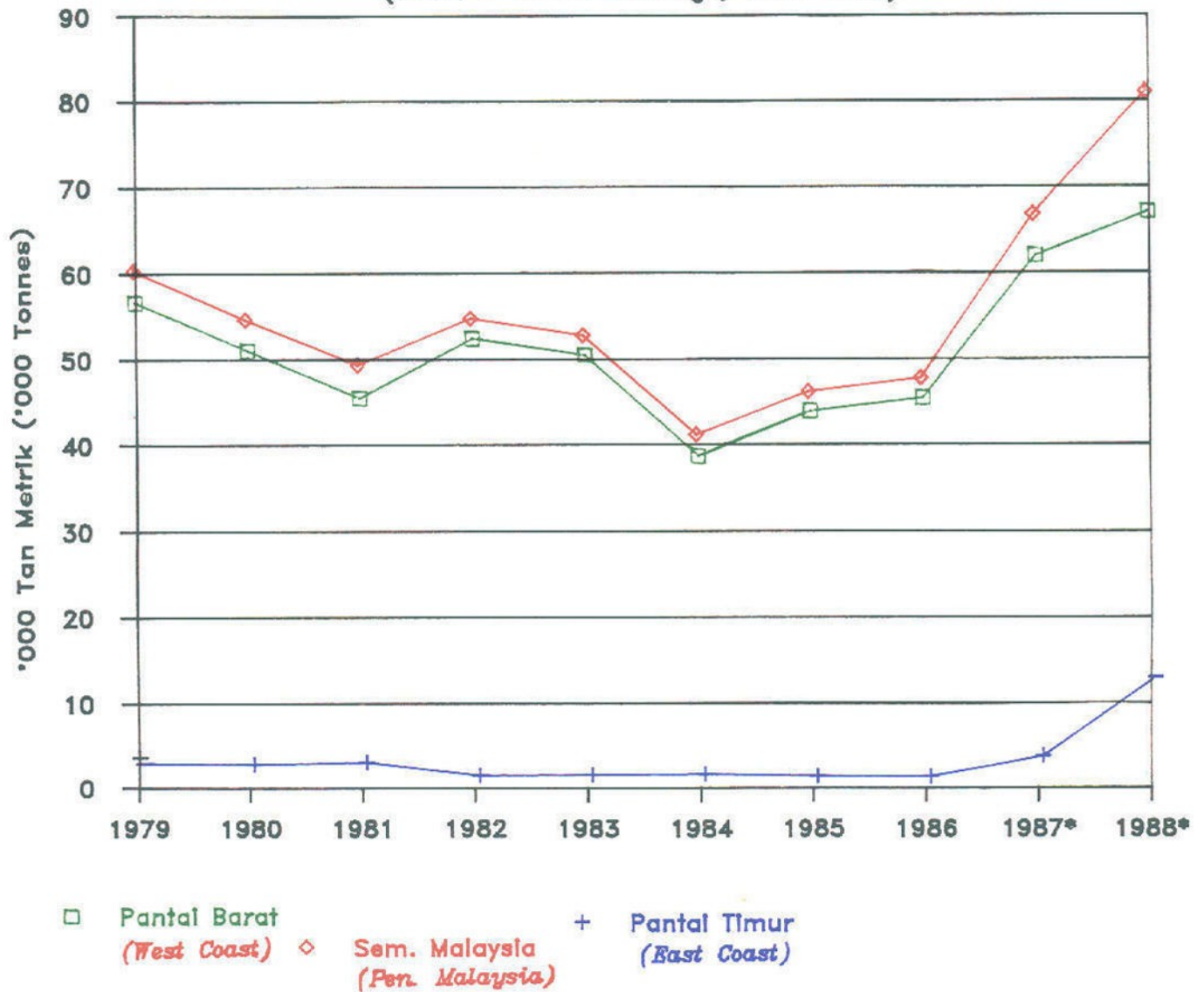
(1984 - 1988)  
(Trend Of Marine Fish Landings)





CARTA C  
SEMENANJUNG MALAYSIA  
(Peninsular Malaysia)  
**ARAH ALIRAN PENDARATAN UDANG, 1979-1988**

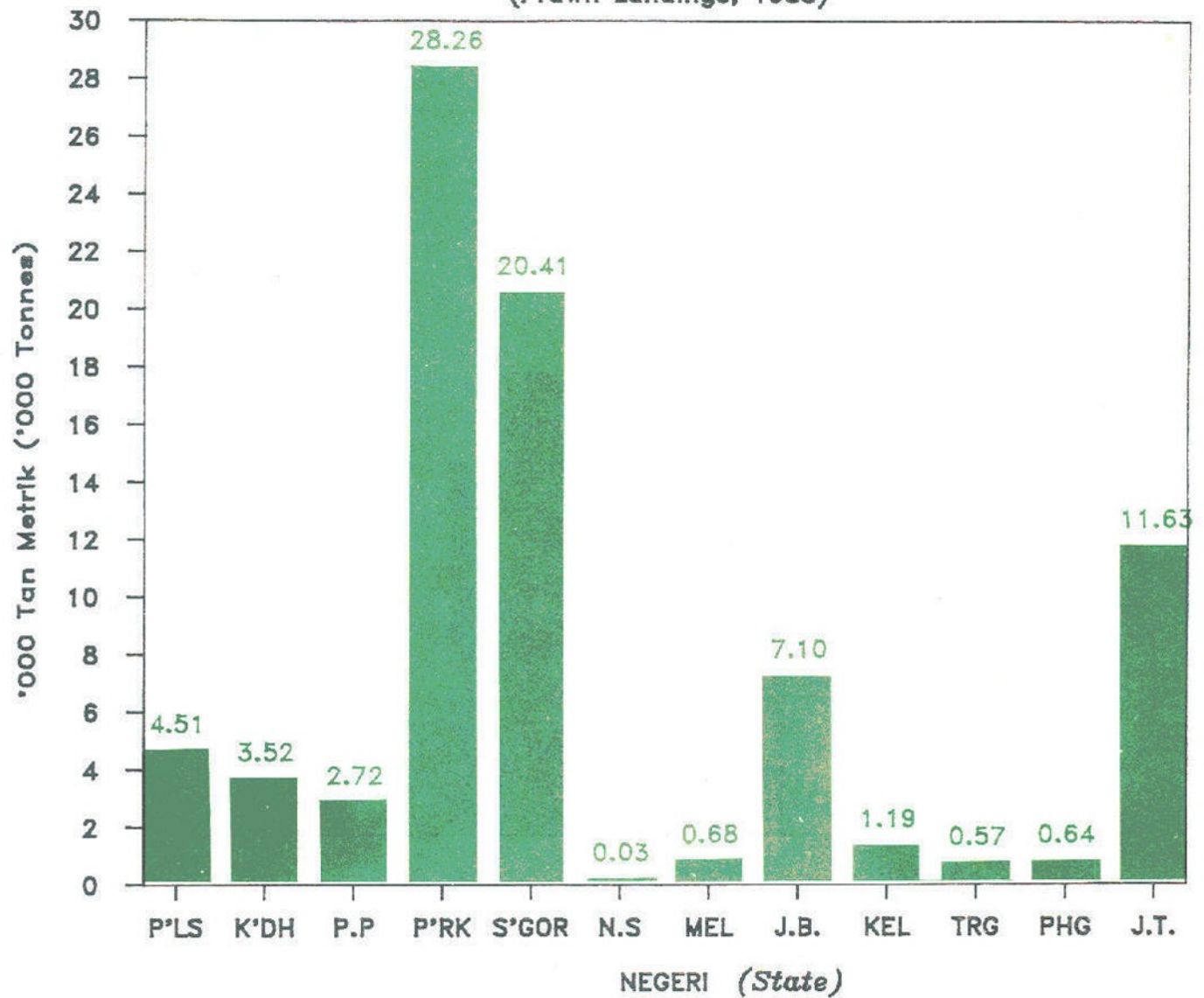
(Trend of Prawn Landings, 1979-1988)



*Nilai Untuk 1987 dan 1988 Termasuk Udang Baring  
(Values for 1987 and 1988 including shrimps)*

CARTA D  
SEMENANJUNG MALAYSIA  
(*Peninsular Malaysia*)  
**PENDARATAN UDANG, 1988**

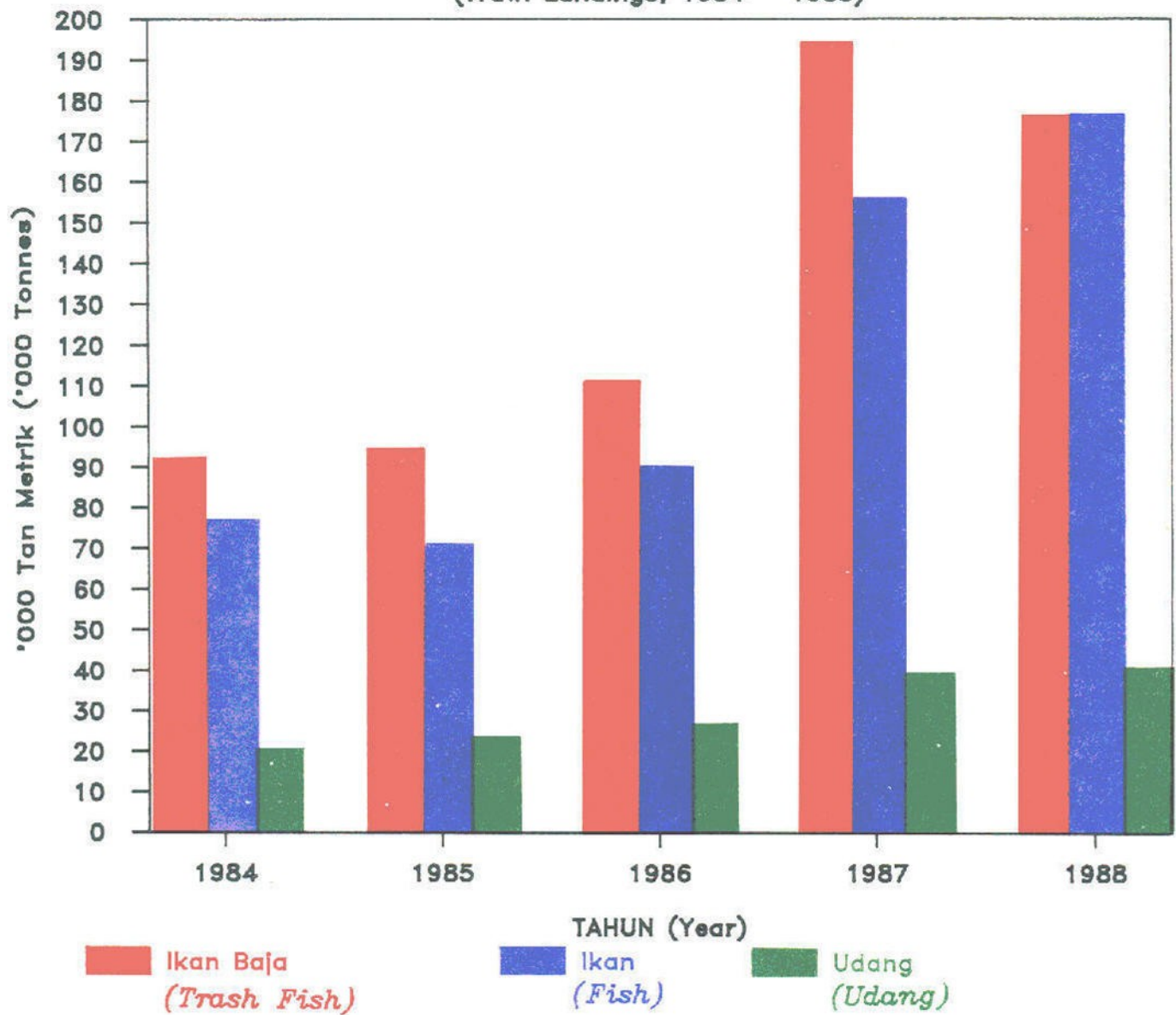
(Prawn Landings, 1988)



CARTA E  
SEMENANJUNG MALAYSIA  
(Peninsular Malaysia)

**PENDARATAN PUKAT TUNDA, 1984 - 1988**

(Trawl Landings, 1984 - 1988)

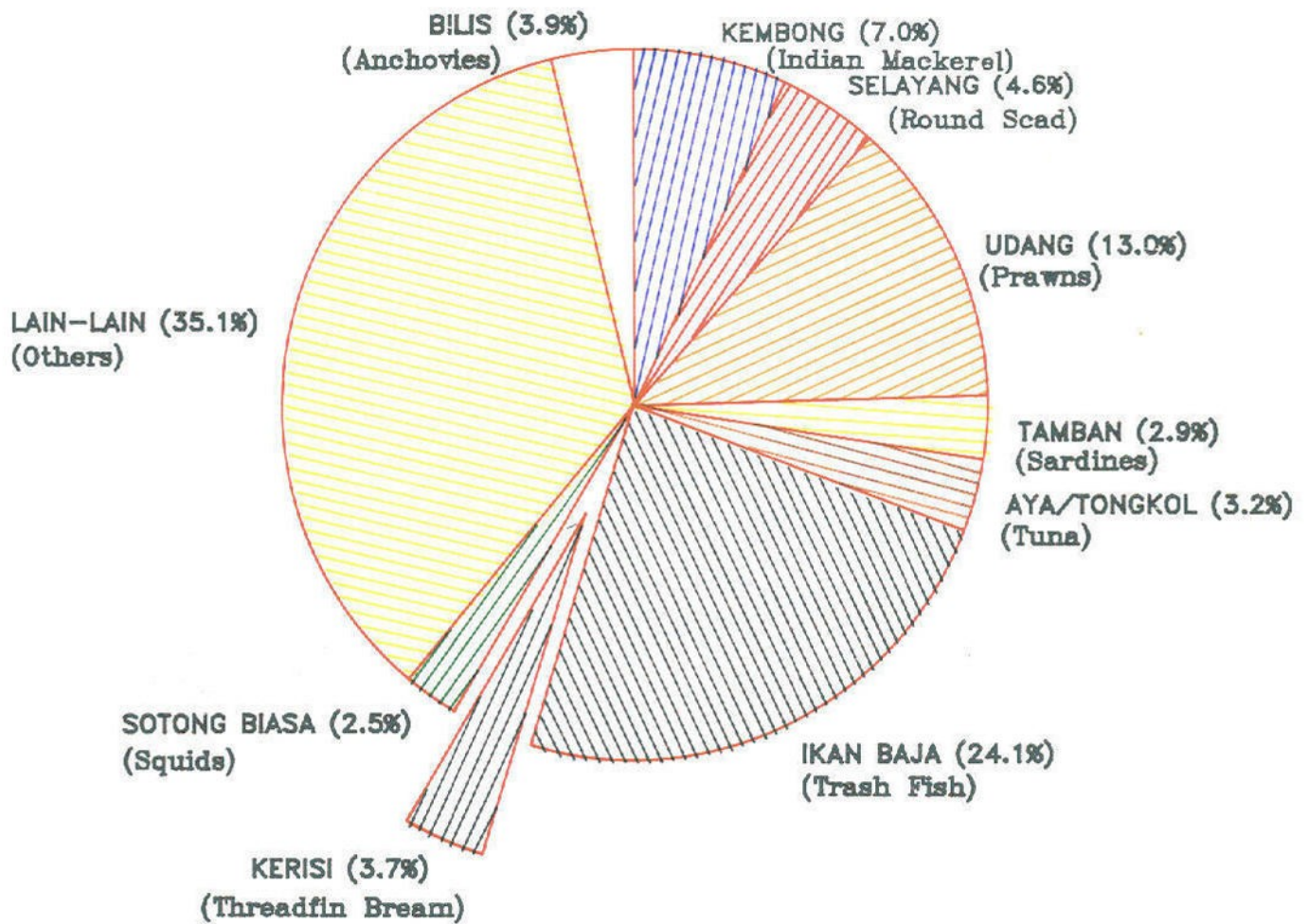




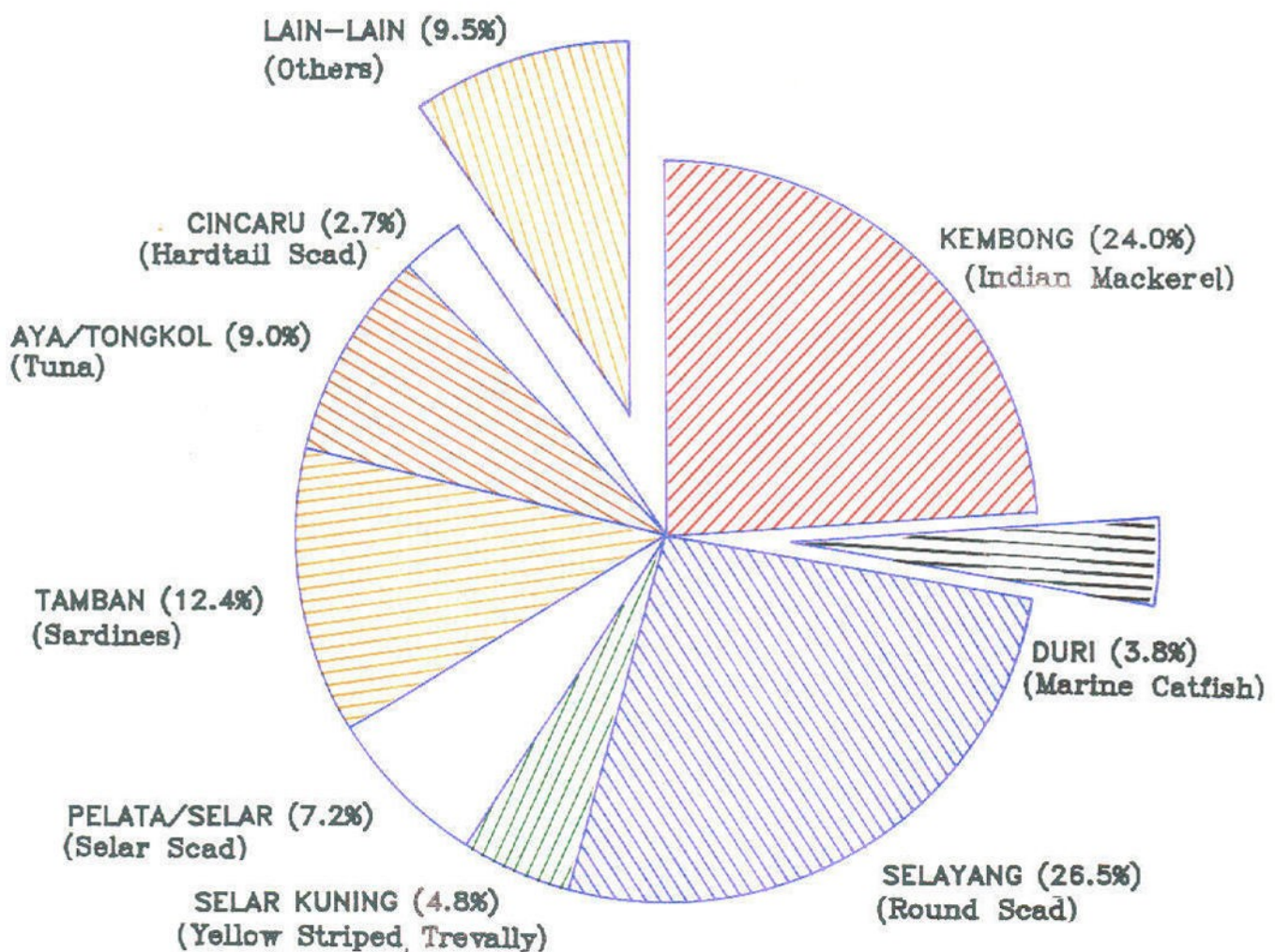
CARTA F

## PENDARATAN MENGIKUT SPESIS UTAMA, 1988

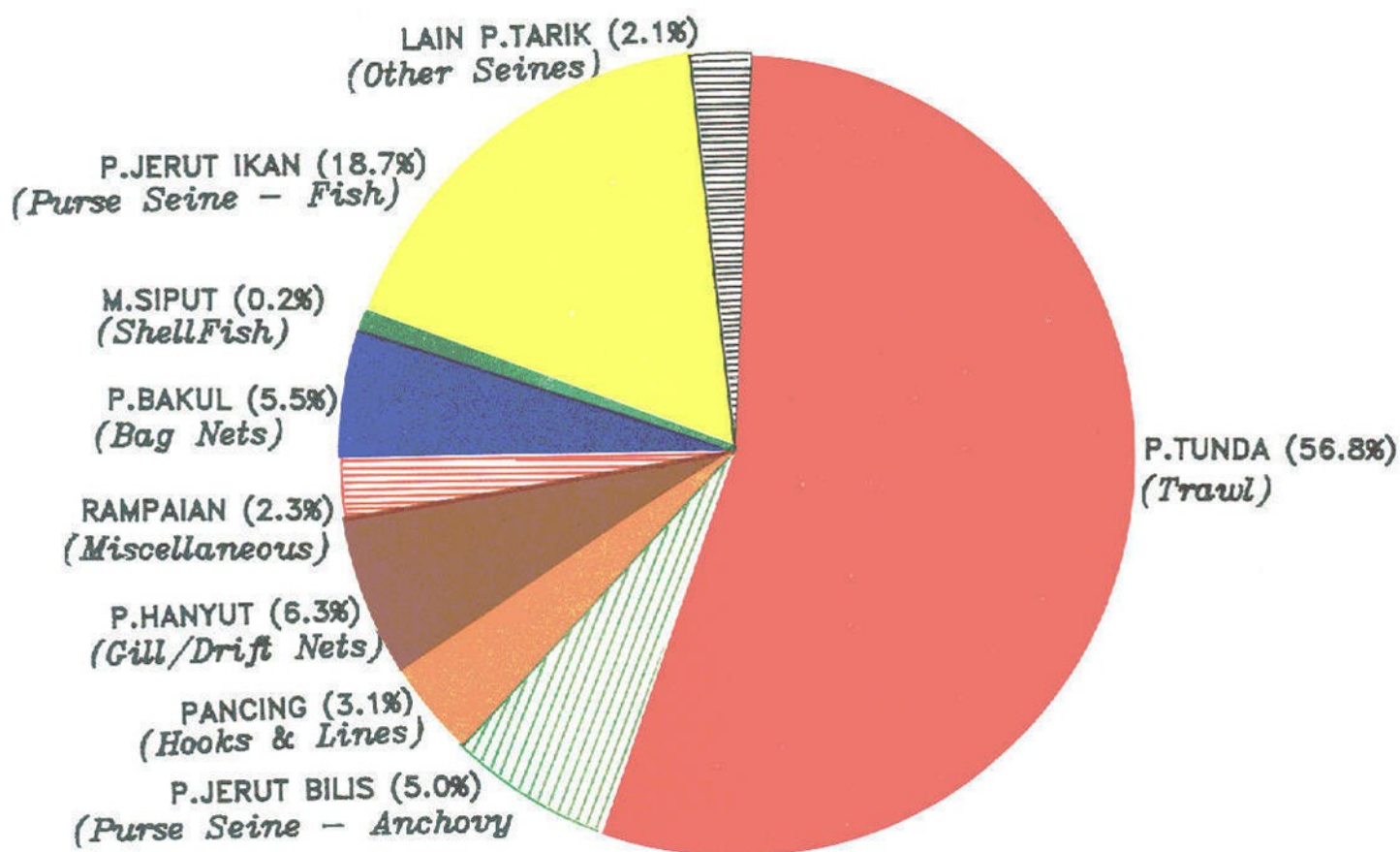
(Landings Of Fish By Main Species, 1988)



CARTA G  
SEMENANJUNG MALAYSIA  
(*Peninsular Malaysia*)  
**PENDARATAN PUKAT JERUT, 1988**  
(MENGIKUT SPESIES UTAMA)  
(Purse Seine Landings, 1988)  
(*By Main Species*)



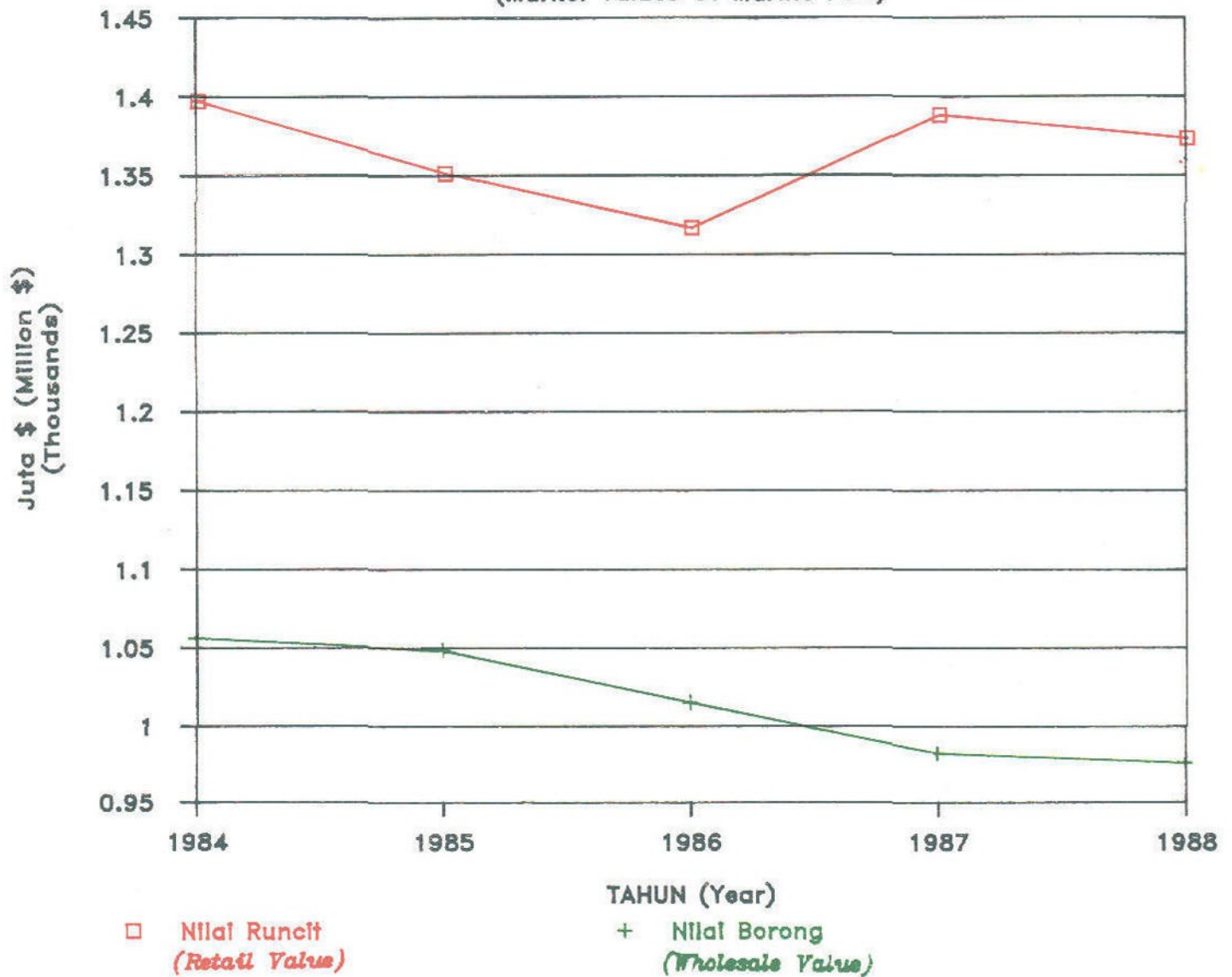
CARTA H  
SEMENANJUNG MALAYSIA  
(*Peninsular Malaysia*)  
**PENDARATAN IKAN LAUT, 1988**  
MENGIKUT KUMPULAN PERKAKAS  
(Landings of Marine Fish by Gear Group, 1988)



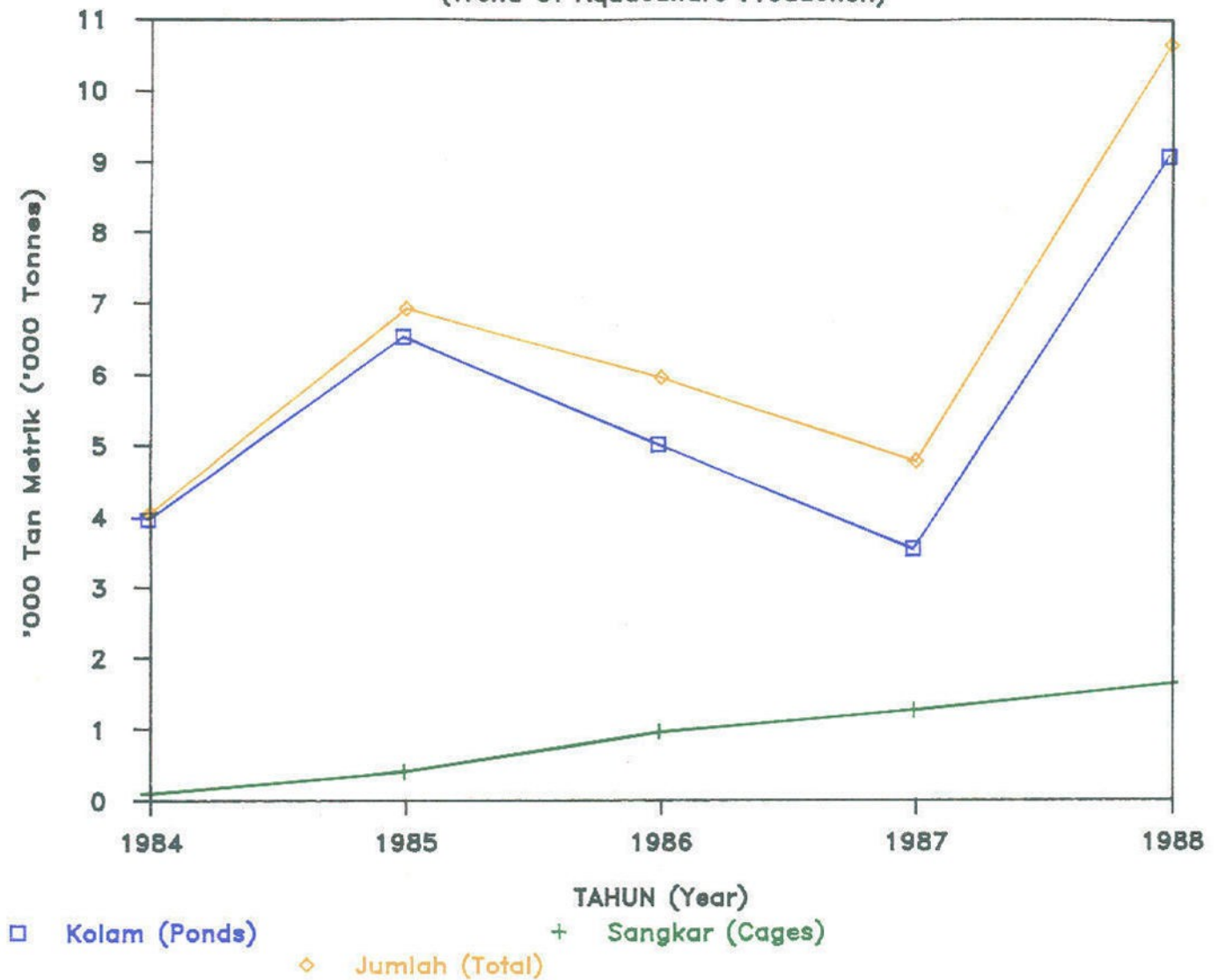


CARTA I  
SEMENANJUNG MALAYSIA  
(*Peninsular Malaysia*)

**ARAH ALIRAN NILAI PASARAN IKAN LAUT**  
(1984 - 1988)  
(*Market Values Of Marine Fish*)



CARTA J  
**ARAH ALIRAN PENGELUARAN IKAN TERNAKAIR**  
 (1984 - 1988)  
 (Trend Of Aquaculture Production)



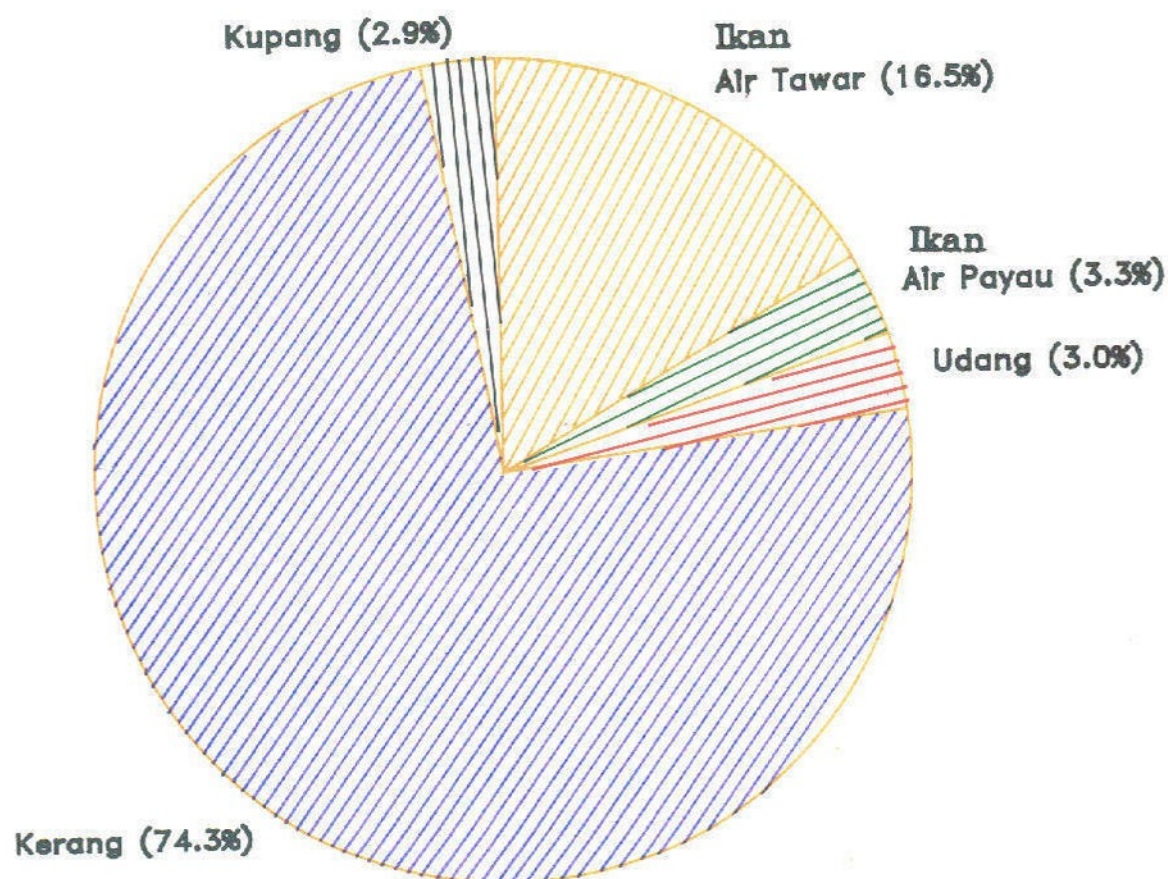


CARTA K

**PENDARATAN SEKTOR AKUAKULTUR, 1988**

MENGIKUT JENIS TERNAKAN

(Production of Aquaculture by Type)



MALAYSIA  
BILANGAN NELAYAN-NELAYAN YANG BEKERJA DI ATAS BOT-BOT BERLESEN 1988  
NUMBER OF FISHERMEN WORKING ON LICENSED BOATS, 1988

JADUAL (TABLE) 1.1

| Negeri/State<br>Keturunan/<br>Ethnic Group | Pantai Barat/West Coast |       |                           |       |                      |                    |                   |                                  |                              | Pantai Timur/East Coast |            |                           |                                  |                              | Sarawak | Sabah  | W.P.<br>Labuan,<br>Federal<br>Territory | Jumlah<br>Kecil<br>Sub-Total | Jumlah<br>Besar<br>Grand Total |
|--------------------------------------------|-------------------------|-------|---------------------------|-------|----------------------|--------------------|-------------------|----------------------------------|------------------------------|-------------------------|------------|---------------------------|----------------------------------|------------------------------|---------|--------|-----------------------------------------|------------------------------|--------------------------------|
|                                            | Perlis                  | Kedah | Pulau<br>Pinang<br>Penang | Perak | Selangor<br>D. Ehsan | Negeri<br>Sembilan | Melaka<br>Malacca | Johor<br>Barat<br>West<br>Johore | Jumlah<br>Kecil<br>Sub-Total | Kelantan                | Terengganu | Pahang<br>Darul<br>Makmur | Johor<br>Timur<br>East<br>Johore | Jumlah<br>Kecil<br>Sub-Total |         |        |                                         |                              |                                |
| Bumiputera<br>Bumiputras                   | 1,775                   | 5,034 | 1,866                     | 1,575 | 922                  | 116                | 1,025             | 2,683                            | 14,996                       | 3,432                   | 8,253      | 3,239                     | 2,648                            | 17,572                       | 11,159  | 10,215 | 304                                     | 21,678                       | 54,246                         |
| China<br>Chinese                           | 273                     | 685   | 2,582                     | 8,135 | 4,903                | 216                | 404               | 2,265                            | 19,463                       | 6                       | 15         | 382                       | 1,501                            | 1,904                        | 1,381   | 1,655  | 17                                      | 3,053                        | 24,420                         |
| India<br>Indians                           | 0                       | 0     | 59                        | 258   | 55                   | 29                 | 1                 | 4                                | 406                          | 0                       | 1          | 0                         | 2                                | 3                            | 0       | 0      | 0                                       | 0                            | 409                            |
| Portugis<br>Portuguese                     | 0                       | 0     | 0                         | 5     | 0                    | 2                  | 71                | 0                                | 78                           | 0                       | 0          | 0                         | 0                                | 0                            | 0       | 0      | 0                                       | 0                            | 78                             |
| Thai<br>Thais                              | 1,619                   | 803   | 15                        | 0     | 0                    | 0                  | 0                 | 0                                | 2,437                        | 0                       | 0          | 1,217                     | 100                              | 1,317                        | 0       | 0      | 0                                       | 0                            | 3,754                          |
| Indonesia<br>Indonesians                   | 0                       | 0     | 0                         | 0     | 0                    | 15                 | 61                | 0                                | 76                           | 0                       | 0          | 0                         | 0                                | 0                            | 0       | 1,780  | 0                                       | 1,780                        | 1,856                          |
| Lain-lain<br>Others                        | 28                      | 0     | 0                         | 0     | 0                    | 0                  | 1                 | 2                                | 31                           | 0                       | 0          | 0                         | 0                                | 0                            | 39      | 4,080  | 50                                      | 4,169                        | 4,200                          |
| Jumlah Besar<br>Grand Total                | 3,695                   | 6,522 | 4,522                     | 9,973 | 5,880                | 378                | 1,563             | 4,954                            | 37,487                       | 3,438                   | 8,269      | 4,838                     | 4,251                            | 20,796                       | 12,579  | 17,730 | 371                                     | 30,680                       | 88,963                         |

## MALAYSIA

JADUAL (TABLE) 1.2

BILANGAN NELAYAN-NELAYAN BEKERJA DI ATAS BOT-BOT BERLESEN MENGIKUT KUMPULAN PERKAKAS DAN NEGERI, 1988  
NUMBER OF FISHERMEN WORKING ON LICENSED BOATS BY GEAR GROUP AND STATE, 1988

| Negeri/State<br>Kumpulan Perkakas/<br>Gear Group | Perlis | Kedah | P. Pinang<br>Penang | Perak | Selangor | Negeri<br>Sembilan | Melaka<br>Malacca | Johor Barat<br>West Johore | Kelantan | Terengganu | Pahang | Johor Timur<br>East Johore | Jumlah<br>Kecil<br>Sub-<br>Total | Sarawak | Sabah  | W.P.<br>Labuan<br>* | Jumlah<br>Kecil<br>Sub-<br>Total | Jumlah<br>Besar<br>Grand<br>Total |
|--------------------------------------------------|--------|-------|---------------------|-------|----------|--------------------|-------------------|----------------------------|----------|------------|--------|----------------------------|----------------------------------|---------|--------|---------------------|----------------------------------|-----------------------------------|
| Pukat Tunda/Trawl Nets                           | 825    | 1,858 | 407                 | 3,718 | 1,295    | 0                  | 0                 | 781                        | 264      | 904        | 1,146  | 1,307                      | 12,505                           | 3,316   | 5,590  | -                   | 8,906                            | 21,411                            |
| Pukat Tarik/Seine Nets:                          |        |       |                     |       |          |                    |                   |                            |          |            |        |                            |                                  |         |        |                     |                                  |                                   |
| Pukat Jerut Ikan                                 |        |       |                     |       |          |                    |                   |                            |          |            |        |                            |                                  |         |        |                     |                                  |                                   |
| Purse Seine-Fish                                 | 2,257  | 300   | 542                 | 971   | 295      | 0                  | 0                 | 0                          | 739      | 2,295      | 1,618  | 764                        | 9,781                            | 289     | 2,461  | -                   | 2,750                            | 12,531                            |
| Pukat Jerut Bilis                                | 0      | 2,030 | 0                   | 187   | 0        | 0                  | 0                 | 0                          | 60       | 492        | 245    | 0                          | 3,014                            | 0       | 0      | -                   | 0                                | 3,014                             |
| Purse Seine-Anchovy                              |        |       |                     |       |          |                    |                   |                            |          |            |        |                            |                                  |         |        |                     |                                  |                                   |
| Lain-Lain/Other Seines                           | 17     | 107   | 570                 | 1,324 | 22       | 11                 | 19                | 32                         | 151      | 30         | 7      | 4                          | 2,294                            | 15      | 0      | -                   | 15                               | 2,309                             |
| Pukat Hanyut                                     | 560    | 1,907 | 2,700               | 2,792 | 3,470    | 323                | 1,379             | 3,434                      | 1,453    | 1,318      | 546    | 1,662                      | 21,544                           | 6,383   | 4,758  | -                   | 11,141                           | 32,685                            |
| Gill/Drift Nets                                  |        |       |                     |       |          |                    |                   |                            |          |            |        |                            |                                  |         |        |                     |                                  |                                   |
| Pukat Tangguk/Lift Nets                          | 9      | 88    | 0                   | 0     | 3        | 0                  | 0                 | 2                          | 115      | 218        | 168    | 11                         | 614                              | 27      | 1,110  | -                   | 1,137                            | 1,751                             |
| Perangkap/Traps:                                 |        |       |                     |       |          |                    |                   |                            |          |            |        |                            |                                  |         |        |                     |                                  |                                   |
| Belat-Belat (Stationary)                         | 0      | 0     | 1                   | 0     | 5        | 0                  | 5                 | 55                         | 0        | 0          | 0      | 26                         | 92                               | 163     | 255    | -                   | 418                              | 510                               |
| Bubu (Portable)                                  | 0      | 3     | 89                  | 153   | 0        | 24                 | 0                 | 215                        | 56       | 470        | 419    | 65                         | 1,494                            | 132     | 263    | -                   | 395                              | 1,889                             |
| Pancing/Hooks & Lines                            | 27     | 62    | 96                  | 335   | 114      | 20                 | 148               | 126                        | 600      | 2,414      | 648    | 317                        | 4,907                            | 232     | 2,103  | -                   | 2,335                            | 7,242                             |
| Pukat Bakul/Bag Nets                             | 0      | 40    | 97                  | 137   | 395      | 0                  | 0                 | 122                        | 0        | 0          | 0      | 16                         | 807                              | 1,227   | 0      | -                   | 1,227                            | 2,034                             |
| Pukat Surung                                     | 0      | 0     | 8                   | 6     | 0        | 0                  | 0                 | 28                         | 0        | 0          | 0      | 0                          | 42                               | 252     | 0      | -                   | 252                              | 294                               |
| Push/Scoop Nets                                  |        |       |                     |       |          |                    |                   |                            |          |            |        |                            |                                  |         |        |                     |                                  |                                   |
| Pukat Rentang                                    | 0      | 38    | 0                   | 0     | 44       | 0                  | 12                | 55                         | 0        | 0          | 0      | 10                         | 159                              | 523     | 0      | -                   | 523                              | 682                               |
| Barrier Nets                                     |        |       |                     |       |          |                    |                   |                            |          |            |        |                            |                                  |         |        |                     |                                  |                                   |
| Memungut Siput                                   | 0      | 0     | 0                   | 184   | 7        | 0                  | 0                 | 99                         | 0        | 0          | 0      | 0                          | 290                              | 0       | 0      | -                   | 0                                | 290                               |
| Shellfish Collection                             |        |       |                     |       |          |                    |                   |                            |          |            |        |                            |                                  |         |        |                     |                                  |                                   |
| Pembawa Ikan                                     | 0      | 84    | 2                   | 95    | 209      | 0                  | 0                 | 2                          | 0        | 128        | 37     | 9                          | 566                              | 0       | 0      | -                   | 0                                | 566                               |
| Fish Carriers                                    |        |       |                     |       |          |                    |                   |                            |          |            |        |                            |                                  |         |        |                     |                                  |                                   |
| Rampaian/Miscellaneous                           | 0      | 5     | 10                  | 71    | 21       | 0                  | 0                 | 3                          | 0        | 0          | 4      | 60                         | 174                              | 20      | 1,190  | 371                 | 1,581                            | 1,755                             |
| Jumlah/Total                                     | 3,695  | 6,522 | 4,522               | 9,973 | 5,880    | 378                | 1,563             | 4,954                      | 3,438    | 8,269      | 4,838  | 4,251                      | 58,283                           | 12,579  | 17,730 | 371                 | 30,680                           | 88,963                            |

\* Data pecahan tidak diperolehi  
Breakdown figures not available

MALAYSIA  
BILANGAN NELAYAN YANG BEKERJA DI ATAS BOT YANG DILESENKAN MENGIKUT  
DAERAH-DAERAH PERIKANAN, 1988  
NUMBER OF FISHERMEN WORKING ON LICENSED FISHING BOATS BY FISHERIES DISTRICTS, 1988

| Daerah-Daerah Perikanan<br>(Fisheries Districts) | Nelayan-Nelayan (Fishermen) |                 |                  |                     |                 |
|--------------------------------------------------|-----------------------------|-----------------|------------------|---------------------|-----------------|
|                                                  | Bumiputera<br>Bumiputras    | Cina<br>Chinese | India<br>Indians | Lain-Lain<br>Others | Jumlah<br>Total |
| SEM. MALAYSIA/PEN. MALAYSIA:                     |                             |                 |                  |                     |                 |
| 1) Kuala Perlis                                  | 1,775                       | 273             | 0                | 1,647               | 3,695           |
| 2) Langkawi                                      | 798                         | 16              | 0                | 768                 | 1,582           |
| 3) Kedah Utara                                   | 2,073                       | 532             | 0                | 2                   | 2,607           |
| 4) Kedah Selatan                                 | 2,163                       | 137             | 0                | 33                  | 2,333           |
| 5) Timur Laut/P. Pinang                          | 91                          | 340             | 15               | 0                   | 446             |
| 6) Barat Daya/P. Pinang                          | 680                         | 1,013           | 13               | 0                   | 1,706           |
| 7) Seberang Prai Utara                           | 677                         | 231             | 6                | 0                   | 914             |
| 8) Seberang Prai Tengah                          | 145                         | 65              | 0                | 0                   | 210             |
| 9) Seberang Prai Selatan                         | 273                         | 933             | 25               | 15                  | 1,246           |
| 10) Krian                                        | 305                         | 2,028           | 6                | 0                   | 2,339           |
| 11) Larut & Matang                               | 184                         | 2,027           | 5                | 0                   | 2,216           |
| 12) Manjong                                      | 829                         | 2,337           | 241              | 5                   | 3,412           |
| 13) Hilir Perak                                  | 257                         | 1,743           | 6                | 0                   | 2,006           |
| 14) Selangor Utara                               | 234                         | 1,837           | 4                | 0                   | 2,075           |
| 15) Selangor Tengah                              | 264                         | 946             | 12               | 0                   | 1,222           |
| 16) Pelabuhan Klang I                            | 6                           | 1,087           | 0                | 0                   | 1,093           |
| 17) Pelabuhan Klang II                           | 249                         | 593             | 10               | 0                   | 852             |
| 18) Selangor Selatan                             | 169                         | 440             | 29               | 0                   | 638             |
| 19) Port Dickson                                 | 116                         | 216             | 29               | 17                  | 378             |
| 20) Melaka                                       | 1,025                       | 404             | 1                | 133                 | 1,563           |
| 21) Muar                                         | 529                         | 432             | 0                | 0                   | 961             |
| 22) Batu Pahat                                   | 270                         | 566             | 0                | 1                   | 837             |
| 23) Pontian                                      | 553                         | 951             | 0                | 1                   | 1,505           |
| 24) Johor Bahru                                  | 1,331                       | 316             | 4                | 0                   | 1,651           |
| 25) Pengerang (Kota Tinggi)                      | 477                         | 450             | 1                | 0                   | 928             |
| 26) Sedeli                                       | 780                         | 332             | 1                | 0                   | 1,113           |
| 27) Mersing                                      | 1,391                       | 719             | 0                | 100                 | 2,210           |
| 28) Kuantan                                      | 1,603                       | 151             | 0                | 1,217               | 2,971           |
| 29) Pekan                                        | 1,123                       | 44              | 0                | 0                   | 1,167           |
| 30) Kuala Rompin                                 | 513                         | 187             | 0                | 0                   | 700             |
| 31) Kemaman                                      | 1,476                       | 2               | 0                | 0                   | 1,478           |
| 32) Dungun                                       | 1,163                       | 3               | 1                | 0                   | 1,167           |
| 33) Marang                                       | 809                         | 0               | 0                | 0                   | 809             |
| 34) Kuala Terengganu Utara                       | 1,039                       | 0               | 0                | 0                   | 1,039           |
| 35) Kuala Terengganu Selatan                     | 1,432                       | 0               | 0                | 0                   | 1,432           |
| 36) Besut                                        | 1,724                       | 0               | 0                | 0                   | 1,724           |
| 37) Setiu                                        | 610                         | 10              | 0                | 0                   | 620             |
| 38) Kota Bharu                                   | 1,191                       | 0               | 0                | 0                   | 1,191           |
| 39) Bacok & Pasir Putih                          | 997                         | 0               | 0                | 0                   | 997             |
| 40) Tumpat                                       | 1,244                       | 6               | 0                | 0                   | 1,250           |
| Jumlah Kecil (Sub-Total)                         | 32,568                      | 21,367          | 409              | 3,939               | 58,283          |

Samb. (Cont'd) Jadual (Table) 1.3

| Daerah-Daerah Perikanan<br>(Fisheries Districts) | Nelayan-Nelayan (Fishermen) |                 |                  |                     |                 |
|--------------------------------------------------|-----------------------------|-----------------|------------------|---------------------|-----------------|
|                                                  | Bumiputera<br>Bumiputras    | Cina<br>Chinese | India<br>Indians | Lain-Lain<br>Others | Jumlah<br>Total |
| <b>SARAWAK</b>                                   |                             |                 |                  |                     |                 |
| 1) B. Kuching                                    | 1,132                       | 411             | 0                | 0                   | 1,543           |
| 2) Santubong                                     | 718                         | 42              | 0                | 0                   | 760             |
| 3) Pendam (Sadong Jaya)                          | 595                         | 14              | 0                | 0                   | 609             |
| 4) Sematan                                       | 311                         | 24              | 0                | 0                   | 335             |
| 5) Batang Lupar                                  | 973                         | 34              | 0                | 0                   | 1,007           |
| 6) Saribas/Kalaka                                | 844                         | 18              | 0                | 0                   | 862             |
| 7) Sibu/Igan                                     | 654                         | 305             | 0                | 0                   | 959             |
| 8) Sarikei/Bitangor                              | 373                         | 118             | 0                | 0                   | 491             |
| 9) Mukah/Oya                                     | 1,100                       | 39              | 0                | 0                   | 1,139           |
| 10) Belawai                                      | 554                         | 34              | 0                | 0                   | 588             |
| 11) Matu Daro                                    | 1,751                       | 33              | 0                | 0                   | 1,784           |
| 12) Bintulu                                      | 656                         | 66              | 0                | 3                   | 725             |
| 13) Miri                                         | 852                         | 242             | 0                | 36                  | 1,130           |
| 14) Limbang                                      | 69                          | 0               | 0                | 0                   | 69              |
| 15) Lawas                                        | 577                         | 1               | 0                | 0                   | 578             |
| <b>Jumlah Kecil (Sub-Total)</b>                  | <b>11,159</b>               | <b>1,381</b>    | <b>0</b>         | <b>39</b>           | <b>12,579</b>   |
| <b>SABAH</b>                                     |                             |                 |                  |                     |                 |
| 1) Tawau                                         | 580                         | 180             | 0                | 400                 | 1,160           |
| 2) Semporna                                      | 3,500                       | 40              | 0                | 2,920               | 6,460           |
| 3) Kunak                                         | 135                         | 15              | 0                | 50                  | 200             |
| 4) Lahad Datu                                    | 270                         | 10              | 0                | 220                 | 500             |
| 5) Sandakan                                      | 800                         | 1,000           | 0                | 1,000               | 2,800           |
| 6) Beluran                                       | 495                         | 55              | 0                | 100                 | 650             |
| 7) Kudat                                         | 1,600                       | 100             | 0                | 700                 | 2,400           |
| 8) Kota Marudu                                   | 85                          | 15              | 0                | 100                 | 200             |
| 9) Kota Belut                                    | 600                         | 0               | 0                | 0                   | 600             |
| 10) Tuaran                                       | 400                         | 0               | 0                | 0                   | 400             |
| 11) Kota Kinabalu                                | 500                         | 100             | 0                | 300                 | 900             |
| 12) Papar                                        | 400                         | 30              | 0                | 70                  | 500             |
| 13) Beaufort                                     | 370                         | 30              | 0                | 0                   | 400             |
| 14) Kuala Penyu                                  | 280                         | 80              | 0                | 0                   | 360             |
| 15) Sipitang                                     | 200                         | 0               | 0                | 0                   | 200             |
| <b>Jumlah Kecil (Sub-Total)</b>                  | <b>10,215</b>               | <b>1,655</b>    | <b>0</b>         | <b>5,860</b>        | <b>17,730</b>   |
| <b>W. P. LABUAN/LABUAN F. T.</b>                 |                             |                 |                  |                     |                 |
| 1) Kg. Bebuloh/Belukut                           | 60                          | 10              | 0                | 0                   | 70              |
| 2) Kg. Ranca-Ranca                               | 34                          | 0               | 0                | 1                   | 35              |
| 3) Kg. Lubok Temiang                             | 55                          | 0               | 0                | 0                   | 55              |
| 4) Kg. Batu Manikar                              | 28                          | 0               | 0                | 0                   | 28              |
| 5) Kg. Tg. Aru                                   | 36                          | 0               | 0                | 0                   | 36              |
| 6) Kg. Sg. Miri                                  | 36                          | 0               | 0                | 0                   | 36              |
| 7) Kg. Patau-Patau                               | 35                          | 0               | 0                | 8                   | 43              |
| 8) Lain-Lain Kampong                             | 20                          | 7               | 0                | 41                  | 68              |
| <b>Jumlah Kecil (Sub-Total)</b>                  | <b>304</b>                  | <b>17</b>       | <b>0</b>         | <b>50</b>           | <b>371</b>      |
| <b>JUMLAH BESAR (GRAND TOTAL)</b>                | <b>54,246</b>               | <b>24,420</b>   | <b>409</b>       | <b>9,888</b>        | <b>88,963</b>   |

MALAYSIA  
BILANGAN BOT-BOT MENANGKAP IKAN YANG DILESENKAN MENGIKUT NEGERI DAN KELAS MUATAN, 1988  
NUMBER OF LICENSED FISHING BOATS BY STATE AND TONNAGE CLASS, 1988

| Jenis/Type<br>Negeri/State                       | Jumlah<br>Total | Bot Tiada<br>Berjentera<br>Non-Powered | Bot Berjentera<br>Sangkut<br>Outboard-Powered | BOT BERJENTERA DALAM/INBOARD-POWERED |              |              |                |                |                |                |                |                                  |
|--------------------------------------------------|-----------------|----------------------------------------|-----------------------------------------------|--------------------------------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------------------------|
|                                                  |                 |                                        |                                               | Jumlah Kecil<br>Sub-Total            | 0-4.9<br>GRT | 5-9.9<br>GRT | 10-14.9<br>GRT | 15-19.9<br>GRT | 20-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 GRT<br>& Ke atas<br>(& Above) |
| Pantai Barat/West Coast:                         |                 |                                        |                                               |                                      |              |              |                |                |                |                |                |                                  |
| Perlis                                           | 610             | 1                                      | 115                                           | 494                                  | 81           | 54           | 66             | 90             | 36             | 89             | 51             | 27                               |
| Kedah                                            | 1,746           | 19                                     | 730                                           | 997                                  | 213          | 200          | 56             | 59             | 69             | 190            | 145            | 65                               |
| Pulau Pinang/Penang                              | 1,994           | 73                                     | 1,069                                         | 852                                  | 270          | 399          | 6              | 9              | 7              | 118            | 36             | 7                                |
| Perak                                            | 4,451           | 100                                    | 696                                           | 3,655                                | 759          | 1,155        | 677            | 451            | 114            | 136            | 301            | 62                               |
| Selangor                                         | 2,769           | 114                                    | 421                                           | 2,234                                | 105          | 1,425        | 252            | 120            | 35             | 188            | 103            | 6                                |
| Negeri Sembilan                                  | 183             | 13                                     | 114                                           | 56                                   | 8            | 45           | 3              | 0              | 0              | 0              | 0              | 0                                |
| Melaka/Malacca                                   | 783             | 53                                     | 482                                           | 248                                  | 15           | 233          | 0              | 0              | 0              | 0              | 0              | 0                                |
| Johor Barat/West Johore                          | 2,673           | 215                                    | 1,366                                         | 1,092                                | 211          | 614          | 72             | 152            | 37             | 5              | 1              | 0                                |
| Jumlah/Total                                     | 15,209          | 588                                    | 4,993                                         | 9,628                                | 1,662        | 4,125        | 1,132          | 881            | 298            | 726            | 637            | 167                              |
| Pantai Timur/East Coast:                         |                 |                                        |                                               |                                      |              |              |                |                |                |                |                |                                  |
| Kelantan                                         | 1,195           | 16                                     | 236                                           | 943                                  | 422          | 144          | 189            | 105            | 23             | 38             | 18             | 4                                |
| Terengganu                                       | 2,354           | 46                                     | 21                                            | 2,287                                | 380          | 737          | 556            | 379            | 85             | 82             | 46             | 22                               |
| Pahang                                           | 1,028           | 30                                     | 49                                            | 949                                  | 100          | 406          | 177            | 41             | 11             | 62             | 66             | 86                               |
| Johor Timur/East Johore                          | 1,555           | 69                                     | 533                                           | 953                                  | 136          | 312          | 124            | 37             | 24             | 107            | 176            | 37                               |
| Jumlah/Total                                     | 6,132           | 161                                    | 839                                           | 5,132                                | 1,038        | 1,599        | 1,046          | 562            | 143            | 289            | 306            | 149                              |
| Malaysia:                                        |                 |                                        |                                               |                                      |              |              |                |                |                |                |                |                                  |
| Semenanjung Malaysia/<br>Peninsular Malaysia     | 21,341          | 749                                    | 5,832                                         | 14,760                               | 2,700        | 5,724        | 2,178          | 1,443          | 441            | 1,015          | 943            | 316                              |
| Sarawak                                          | 7,030           | 167                                    | 2,355                                         | 4,508                                | 1,966        | 1,237        | 633            | 194            | 150            | 101            | 128            | 99                               |
| Sabah                                            | 9,250           | 950                                    | 5,000                                         | 3,300                                | 413          | 911          | 982            | 434            | 275            | 157            | 83             | 45                               |
| W. Persekutuan Labuan/<br>Labuan, F. Territory * | 181             | 0                                      | 175                                           | 6                                    | -            | -            | -              | -              | -              | -              | -              | -                                |
| Jumlah/Total                                     | 37,802          | 1,866                                  | 13,362                                        | 22,574                               | 5,079        | 7,872        | 3,793          | 2,071          | 866            | 1,273          | 1,154          | 460                              |

\* Data pecahan tidak diperolehi  
Breakdown figures not available

+ GRT - Gross Relative Tonnage

JADUAL (TABLE) 2.2

MALAYSIA  
BILANGAN BOT-BOT MENANGKAP IKAN YANG DILESENKAN MENGIKUT NEGERI DAN KUASA KUDA, 1988  
NUMBER OF LICENSED FISHING BOATS BY STATE AND HORSEPOWER, 1988

| Negeri/State<br>Kuasa Kuda/Horsepower Of Engine | Perlis     | Kedah        | P. Pinang<br>Penang | Perak        | Selangor     | Negeri<br>Sembilan | Melaka<br>Malacca | Johor<br>Barat<br>W. Johore | Jumlah<br>Kecil<br>Sub-Total | Kelantan     | Terengganu   | Pahang     | Johor<br>Timur<br>E. Johore | Jumlah<br>Kecil<br>Sub-Total | Sarawak      | Sabah        | W.P.<br>Labuan | Jumlah<br>Kecil<br>Sub-Total | Jumlah<br>Besar<br>Grand-Total |
|-------------------------------------------------|------------|--------------|---------------------|--------------|--------------|--------------------|-------------------|-----------------------------|------------------------------|--------------|--------------|------------|-----------------------------|------------------------------|--------------|--------------|----------------|------------------------------|--------------------------------|
| <b>Enjin Dalam/Inboard-Powered</b>              |            |              |                     |              |              |                    |                   |                             |                              |              |              |            |                             |                              |              |              |                |                              |                                |
| Kurang dari 5 k.k. (under 5 h.p.)               | 1          | 21           | 4                   | 20           | 3            | 0                  | 2                 | 23                          | 74                           | 87           | 84           | 6          | 3                           | 180                          | 442          | 200          | 0              | 642                          | 896                            |
| 5 - 9 k.k. (h.p.)                               | 37         | 73           | 19                  | 117          | 12           | 1                  | 31                | 76                          | 366                          | 310          | 226          | 23         | 29                          | 588                          | 1,709        | 515          | 0              | 2,224                        | 3,178                          |
| 10 - 19 "                                       | 68         | 168          | 138                 | 305          | 337          | 18                 | 144               | 262                         | 1,440                        | 108          | 479          | 182        | 225                         | 994                          | 857          | 310          | 0              | 1,167                        | 3,601                          |
| 20 - 39 "                                       | 57         | 154          | 246                 | 804          | 1,094        | 32                 | 71                | 349                         | 2,807                        | 332          | 1,160        | 490        | 297                         | 2,279                        | 789          | 625          | 6              | 1,420                        | 6,506                          |
| 40 - 59 "                                       | 94         | 47           | 151                 | 1,567        | 246          | 1                  | 0                 | 57                          | 2,183                        | 26           | 145          | 11         | 13                          | 195                          | 289          | 610          | 0              | 899                          | 3,257                          |
| 60 - 99 "                                       | 15         | 31           | 119                 | 209          | 69           | 4                  | 0                 | 93                          | 540                          | 20           | 86           | 10         | 21                          | 137                          | 148          | 305          | 0              | 453                          | 1,130                          |
| 100 - 149 "                                     | 34         | 68           | 19                  | 89           | 75           | 0                  | 0                 | 109                         | 394                          | 27           | 28           | 30         | 45                          | 130                          | 70           | 266          | 0              | 336                          | 860                            |
| 150 - 249 "                                     | 147        | 312          | 133                 | 341          | 203          | 0                  | 0                 | 95                          | 1,231                        | 22           | 43           | 86         | 190                         | 341                          | 129          | 365          | 0              | 494                          | 2,066                          |
| 250 k.k. ke atas (250 h.p. & above)             | 41         | 123          | 23                  | 203          | 195          | 0                  | 0                 | 28                          | 613                          | 11           | 36           | 111        | 130                         | 288                          | 75           | 104          | 0              | 179                          | 1,080                          |
| <b>Jumlah Kecil (Sub-Total)</b>                 | <b>494</b> | <b>997</b>   | <b>852</b>          | <b>3,655</b> | <b>2,234</b> | <b>56</b>          | <b>248</b>        | <b>1,092</b>                | <b>9,628</b>                 | <b>943</b>   | <b>2,287</b> | <b>949</b> | <b>953</b>                  | <b>5,132</b>                 | <b>4,508</b> | <b>3,300</b> | <b>6</b>       | <b>7,814</b>                 | <b>22,574</b>                  |
| <b>Enjin Sangkut/Outboard-Powered</b>           |            |              |                     |              |              |                    |                   |                             |                              |              |              |            |                             |                              |              |              |                |                              |                                |
| Kurang dari 5 k.k. (under 5 h.p.)               | 30         | 151          | 496                 | 439          | 115          | 39                 | 105               | 502                         | 1,877                        | 164          | 5            | 19         | 149                         | 337                          | 796          | 230          | 175            | 1,201                        | 3,415                          |
| 5 - 9 k.k. (h.p.)                               | 83         | 553          | 372                 | 226          | 251          | 61                 | 286               | 608                         | 2,440                        | 65           | 15           | 30         | 254                         | 364                          | 446          | 1,530        | 0              | 1,976                        | 4,780                          |
| 10 - 19 "                                       | 2          | 23           | 129                 | 26           | 32           | 8                  | 75                | 125                         | 420                          | 5            | 0            | 0          | 59                          | 64                           | 225          | 1,600        | 0              | 1,825                        | 2,309                          |
| 20 - 39 "                                       | 0          | 3            | 66                  | 5            | 23           | 6                  | 15                | 108                         | 226                          | 2            | 0            | 0          | 61                          | 63                           | 493          | 1,390        | 0              | 1,883                        | 2,172                          |
| 40 - 59 "                                       | 0          | 0            | 6                   | 0            | 0            | 0                  | 1                 | 23                          | 30                           | 0            | 1            | 0          | 10                          | 11                           | 297          | 235          | 0              | 532                          | 573                            |
| 60 - 99 "                                       | 0          | 0            | 0                   | 0            | 0            | 0                  | 0                 | 0                           | 0                            | 0            | 0            | 0          | 0                           | 0                            | 92           | 15           | 0              | 107                          | 107                            |
| 100 - 149 "                                     | 0          | 0            | 0                   | 0            | 0            | 0                  | 0                 | 0                           | 0                            | 0            | 0            | 0          | 0                           | 0                            | 6            | 0            | 0              | 6                            | 6                              |
| 150 - 249 "                                     | 0          | 0            | 0                   | 0            | 0            | 0                  | 0                 | 0                           | 0                            | 0            | 0            | 0          | 0                           | 0                            | 0            | 0            | 0              | 0                            | 0                              |
| 250 k.k. ke atas (250 h.p. & above)             | 0          | 0            | 0                   | 0            | 0            | 0                  | 0                 | 0                           | 0                            | 0            | 0            | 0          | 0                           | 0                            | 0            | 0            | 0              | 0                            | 0                              |
| <b>Jumlah Kecil (Sub-Total)</b>                 | <b>115</b> | <b>730</b>   | <b>1,069</b>        | <b>696</b>   | <b>421</b>   | <b>114</b>         | <b>482</b>        | <b>1,366</b>                | <b>4,993</b>                 | <b>236</b>   | <b>21</b>    | <b>49</b>  | <b>533</b>                  | <b>839</b>                   | <b>2,355</b> | <b>5,000</b> | <b>175</b>     | <b>7,530</b>                 | <b>13,362</b>                  |
| <b>Jumlah Besar (Grand Total)</b>               | <b>609</b> | <b>1,727</b> | <b>1,921</b>        | <b>4,351</b> | <b>2,655</b> | <b>170</b>         | <b>730</b>        | <b>2,458</b>                | <b>14,621</b>                | <b>1,179</b> | <b>2,308</b> | <b>998</b> | <b>1,486</b>                | <b>5,971</b>                 | <b>6,863</b> | <b>8,300</b> | <b>181</b>     | <b>15,344</b>                | <b>35,936</b>                  |

MALAYSIA  
BILANGAN BOT-BOT IKAN YANG BERLESEN MENGIKUT KUMPULAN PERKAKAS, JENIS DAN KELAS MUATAN, 1988  
NUMBER OF LICENSED FISHING BOATS BY GEAR GROUP, TYPE AND TONNAGE CLASS, 1988

JADUAL (TABLE) 2.3

| Jenis Dan Kelas Muatan/<br>Type And Tonnage Class | Jumlah<br>Besar<br>Grand<br>Total | Tiada<br>Berjentera<br>Non-Powered | Berjentera<br>Sangkut<br>Out-Board<br>Powered | BOT BERJENTERA DALAM/INBOARD-POWERED (SEM. MALAYSIA/PEN. MALAYSIA) |                 |                 |                   |                   |                   |                   |                   |                                  |         | BILANGAN BOT/NO. OF BOATS |                     |  |
|---------------------------------------------------|-----------------------------------|------------------------------------|-----------------------------------------------|--------------------------------------------------------------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------------------|---------|---------------------------|---------------------|--|
|                                                   |                                   |                                    |                                               | Jumlah Kecil<br>Sub-Total                                          | 0 - 4.99<br>GRT | 5 - 9.99<br>GRT | 10 - 14.99<br>GRT | 15 - 19.99<br>GRT | 20 - 24.99<br>GRT | 25 - 39.99<br>GRT | 40 - 69.99<br>GRT | 70 GRT<br>& ke atas<br>(& Above) | SARAWAK | SABAH                     | W.P.<br>LABUAN<br>* |  |
| Pukat Tunda/Trawl Nets                            | 6,948                             | 0                                  | 0                                             | 4,200                                                              | 46              | 344             | 969               | 939               | 304               | 810               | 624               | 164                              | 727     | 2,021                     | -                   |  |
| Pukat Tarik/Seine Nets:                           |                                   |                                    |                                               |                                                                    |                 |                 |                   |                   |                   |                   |                   |                                  |         |                           |                     |  |
| Pukat Jerut Ikan                                  | 893                               | 2                                  | 0                                             | 658                                                                | 2               | 11              | 30                | 52                | 39                | 159               | 278               | 87                               | 23      | 210                       | -                   |  |
| Purse Seine-Fish                                  |                                   |                                    |                                               |                                                                    |                 |                 |                   |                   |                   |                   |                   |                                  |         |                           |                     |  |
| Pukat Jerut Bilis                                 | 168                               | 3                                  | 0                                             | 165                                                                | 0               | 12              | 35                | 22                | 7                 | 8                 | 25                | 56                               | 0       | 0                         | -                   |  |
| Purse Seine-Anchovy                               |                                   |                                    |                                               |                                                                    |                 |                 |                   |                   |                   |                   |                   |                                  |         |                           |                     |  |
| Lain-Lain/Other Seines                            | 942                               | 25                                 | 229                                           | 682                                                                | 230             | 442             | 4                 | 3                 | 3                 | 0                 | 0                 | 0                                | 6       | 0                         | -                   |  |
| Pukat Hanyut                                      | 18,805                            | 419                                | 4,805                                         | 6,190                                                              | 1,654           | 3,726           | 596               | 170               | 28                | 12                | 3                 | 1                                | 4,409   | 2,982                     | -                   |  |
| Gill/Drift Nets                                   |                                   |                                    |                                               |                                                                    |                 |                 |                   |                   |                   |                   |                   |                                  |         |                           |                     |  |
| Pukat Tangguk/Lift Nets                           | 889                               | 1                                  | 29                                            | 129                                                                | 26              | 55              | 40                | 6                 | 1                 | 1                 | 0                 | 0                                | 48      | 682                       | -                   |  |
| Perangkap/Traps:                                  |                                   |                                    |                                               |                                                                    |                 |                 |                   |                   |                   |                   |                   |                                  |         |                           |                     |  |
| Belat-Belat (Stationary)                          | 405                               | 5                                  | 33                                            | 11                                                                 | 3               | 7               | 1                 | 0                 | 0                 | 0                 | 0                 | 0                                | 116     | 240                       | -                   |  |
| Bubu (Portable)                                   | 648                               | 13                                 | 98                                            | 392                                                                | 22              | 156             | 125               | 51                | 25                | 12                | 1                 | 0                                | 145     | 0                         | -                   |  |
| Pancing/Hooks & Lines                             | 4,168                             | 90                                 | 312                                           | 1,758                                                              | 416             | 743             | 357               | 200               | 27                | 9                 | 3                 | 3                                | 164     | 1,844                     | -                   |  |
| Pukat Bakul/Bag Nets                              | 1,439                             | 6                                  | 87                                            | 347                                                                | 186             | 160             | 0                 | 0                 | 1                 | 0                 | 0                 | 0                                | 999     | 0                         | -                   |  |
| Pukat Surung                                      | 68                                | 5                                  | 33                                            | 2                                                                  | 2               | 0               | 0                 | 0                 | 0                 | 0                 | 0                 | 0                                | 28      | 0                         | -                   |  |
| Push/Scoop Nets                                   |                                   |                                    |                                               |                                                                    |                 |                 |                   |                   |                   |                   |                   |                                  |         |                           |                     |  |
| Pukat Rentang                                     | 435                               | 14                                 | 59                                            | 17                                                                 | 1               | 14              | 2                 | 0                 | 0                 | 0                 | 0                 | 0                                | 345     | 0                         | -                   |  |
| Barrier Nets                                      |                                   |                                    |                                               |                                                                    |                 |                 |                   |                   |                   |                   |                   |                                  |         |                           |                     |  |
| Memungut Siput                                    | 198                               | 38                                 | 45                                            | 115                                                                | 98              | 17              | 0                 | 0                 | 0                 | 0                 | 0                 | 0                                | 0       | 0                         | -                   |  |
| Shellfish Collection                              |                                   |                                    |                                               |                                                                    |                 |                 |                   |                   |                   |                   |                   |                                  |         |                           |                     |  |
| Pembawa Ikan                                      | 219                               | 100                                | 28                                            | 91                                                                 | 14              | 34              | 19                | 0                 | 6                 | 4                 | 9                 | 5                                | 0       | 0                         | -                   |  |
| Fish Carriers                                     |                                   |                                    |                                               |                                                                    |                 |                 |                   |                   |                   |                   |                   |                                  |         |                           |                     |  |
| Rampaian/Miscellaneous                            | 1,577                             | 28                                 | 74                                            | 3                                                                  | 0               | 3               | 0                 | 0                 | 0                 | 0                 | 0                 | 0                                | 20      | 1,271                     | 181                 |  |
| Jumlah/Total                                      | 37,802                            | 749                                | 5,832                                         | 14,760                                                             | 2,700           | 5,724           | 2,178             | 1,443             | 441               | 1,015             | 943               | 316                              | 7,030   | 9,250                     | 181                 |  |

\* Data pecahan tidak diperolehi  
Breakdown figures not available

+ GRT - Gross Relative Tonnage



MALAYSIA  
BILANGAN BOT-BOT MENANGKAP IKAN YANG DILESENKAN MENGIKUT  
DAERAH-DAERAH PERIKANAN, 1988  
NUMBER OF LICENSED FISHING BOATS BY FISHERIES DISTRICTS, 1988

| Daerah-Daerah Perikanan<br>(Fisheries Districts) | Bot-Bot (Fishing Boats)        |                                   |                                    | Jumlah<br>Total |
|--------------------------------------------------|--------------------------------|-----------------------------------|------------------------------------|-----------------|
|                                                  | Berjentera<br>Dalam<br>Inboard | Berjentera<br>Sangkut<br>Outboard | Tidak<br>Berjentera<br>Non-Powered |                 |
| SEM. MALAYSIA/PEN. MALAYSIA                      |                                |                                   |                                    |                 |
| 1) Kuala Perlis                                  | 494                            | 115                               | 1                                  | 610             |
| 2) Langkawi                                      | 113                            | 192                               | 2                                  | 307             |
| 3) Kedah Utara                                   | 655                            | 177                               | 10                                 | 842             |
| 4) Kedah Selatan                                 | 229                            | 361                               | 7                                  | 597             |
| 5) Timur Laut/P. Pinang                          | 59                             | 197                               | 13                                 | 269             |
| 6) Barat Daya/P. Pinang                          | 300                            | 431                               | 13                                 | 744             |
| 7) Seberang Prai Utara                           | 226                            | 142                               | 26                                 | 394             |
| 8) Seberang Prai Tengah                          | 21                             | 123                               | 17                                 | 161             |
| 9) Seberang Prai Selatan                         | 246                            | 176                               | 4                                  | 426             |
| 10) Krian                                        | 982                            | 172                               | 18                                 | 1,172           |
| 11) Larut & Matang                               | 1,031                          | 117                               | 18                                 | 1,166           |
| 12) Manjong                                      | 942                            | 262                               | 49                                 | 1,253           |
| 13) Hilir Perak                                  | 700                            | 145                               | 15                                 | 860             |
| 14) Selangor Utara                               | 681                            | 176                               | 3                                  | 860             |
| 15) Selangor Tengah                              | 523                            | 39                                | 25                                 | 587             |
| 16) Pelabuhan Klang I                            | 534                            | 4                                 | 3                                  | 541             |
| 17) Pelabuhan Klang II                           | 235                            | 143                               | 77                                 | 455             |
| 18) Selangor Selatan                             | 261                            | 59                                | 6                                  | 326             |
| 19) Port Dickson                                 | 56                             | 114                               | 13                                 | 183             |
| 20) Melaka                                       | 248                            | 482                               | 53                                 | 783             |
| 21) Muar                                         | 252                            | 255                               | 65                                 | 572             |
| 22) Batu Pahat                                   | 307                            | 107                               | 18                                 | 432             |
| 23) Pontian                                      | 513                            | 295                               | 35                                 | 843             |
| 24) Johor Bahru                                  | 20                             | 709                               | 97                                 | 826             |
| 25) Pengerang (Kota Tinggi)                      | 161                            | 491                               | 65                                 | 717             |
| 26) Sedeli                                       | 264                            | 36                                | 2                                  | 302             |
| 27) Mersing                                      | 528                            | 6                                 | 2                                  | 536             |
| 28) Kuantan                                      | 415                            | 10                                | 16                                 | 441             |
| 29) Pekan                                        | 360                            | 38                                | 14                                 | 412             |
| 30) Kuala Rompin                                 | 174                            | 1                                 | 0                                  | 175             |
| 31) Kemaman                                      | 467                            | 0                                 | 9                                  | 476             |
| 32) Dungun                                       | 363                            | 1                                 | 4                                  | 368             |
| 33) Marang                                       | 242                            | 10                                | 13                                 | 265             |
| 34) Kuala Terengganu Utara                       | 328                            | 2                                 | 14                                 | 344             |
| 35) Kuala Terengganu Selatan                     | 400                            | 5                                 | 3                                  | 408             |
| 36) Besut                                        | 332                            | 1                                 | 1                                  | 334             |
| 37) Setiu                                        | 155                            | 2                                 | 2                                  | 159             |
| 38) Kota Bharu                                   | 208                            | 142                               | 7                                  | 357             |
| 39) Bacok & Pasir Putih                          | 304                            | 33                                | 7                                  | 344             |
| 40) Tumpat                                       | 431                            | 61                                | 2                                  | 494             |
| Jumlah Kecil/Sub-Total                           | 14,760                         | 5,832                             | 749                                | 21,341          |

Samb. (Cont'd) Jadual (Table) 2.4

| Daerah-Daerah Perikanan<br>(Fisheries Districts) | Bot-Bot (Fishing Boats)        |                                   |                                    | Jumlah<br>Total |
|--------------------------------------------------|--------------------------------|-----------------------------------|------------------------------------|-----------------|
|                                                  | Berjentera<br>Dalam<br>Inboard | Berjentera<br>Sangkut<br>Outboard | Tidak<br>Berjentera<br>Non-Powered |                 |
| <b>SARAWAK</b>                                   |                                |                                   |                                    |                 |
| 1) B. Kuching                                    | 364                            | 30                                | 9                                  | 403             |
| 2) Santubong                                     | 438                            | 230                               | 29                                 | 697             |
| 3) Pendam (Sadong Jaya)                          | 402                            | 215                               | 74                                 | 691             |
| 4) Sematan                                       | 61                             | 196                               | 0                                  | 257             |
| 5) Batang Lupar                                  | 446                            | 216                               | 0                                  | 662             |
| 6) Saribas/Kalaka                                | 648                            | 113                               | 2                                  | 763             |
| 7) Sibu/Igan                                     | 269                            | 30                                | 8                                  | 307             |
| 8) Sarikei/Bitangor                              | 229                            | 46                                | 0                                  | 275             |
| 9) Mukah/Oya                                     | 170                            | 189                               | 8                                  | 367             |
| 10) Belawai                                      | 338                            | 61                                | 0                                  | 399             |
| 11) Matu Daro                                    | 871                            | 181                               | 29                                 | 1,081           |
| 12) Bintulu                                      | 96                             | 114                               | 0                                  | 210             |
| 13) Miri                                         | 176                            | 173                               | 7                                  | 356             |
| 14) Limbang                                      | 0                              | 69                                | 0                                  | 69              |
| 15) Lawas                                        | 0                              | 492                               | 1                                  | 493             |
| Jumlah Kecil/Sub-Total                           | 4,508                          | 2,355                             | 167                                | 7,030           |
| <b>SABAH</b>                                     |                                |                                   |                                    |                 |
| 1) Tawau                                         | 277                            | 431                               | 0                                  | 708             |
| 2) Semporna                                      | 1,160                          | 889                               | 400                                | 2,449           |
| 3) Kunak                                         | 23                             | 160                               | 30                                 | 213             |
| 4) Lahad Datu                                    | 147                            | 350                               | 35                                 | 532             |
| 5) Sandakan                                      | 659                            | 300                               | 110                                | 1,069           |
| 6) Baluran                                       | 180                            | 70                                | 20                                 | 270             |
| 7) Kudat                                         | 438                            | 750                               | 100                                | 1,288           |
| 8) Kota Marudu                                   | 58                             | 55                                | 10                                 | 123             |
| 9) Kota Belut                                    | 30                             | 442                               | 38                                 | 510             |
| 10) Tuaran                                       | 17                             | 260                               | 80                                 | 357             |
| 11) Kota Kinabalu                                | 232                            | 415                               | 30                                 | 677             |
| 12) Papar                                        | 7                              | 410                               | 25                                 | 442             |
| 13) Papar                                        | 34                             | 268                               | 0                                  | 302             |
| 14) Kuala Penyu                                  | 30                             | 100                               | 12                                 | 142             |
| 15) Sipitang                                     | 8                              | 100                               | 60                                 | 168             |
| Jumlah Kecil/Sub-Total                           | 3,300                          | 5,000                             | 950                                | 9,250           |
| <b>WIL. PER. LABUAN/LABUAN F.T.</b>              |                                |                                   |                                    |                 |
| 1) Kg. Bebuloh                                   | 0                              | 57                                | 0                                  | 57              |
| 2) Kg. Ranca-Ranca                               | 0                              | 8                                 | 0                                  | 8               |
| 3) Kg. Lubok Temiang                             | 0                              | 16                                | 0                                  | 16              |
| 4) Kg. Batu Manikam                              | 0                              | 3                                 | 0                                  | 3               |
| 5) Kg. Tg. Aru                                   | 0                              | 5                                 | 0                                  | 5               |
| 6) Kg. Sg. Miri/Lada/Pagar                       | 0                              | 10                                | 0                                  | 10              |
| 7) Kg. Patau-Patau                               | 0                              | 15                                | 0                                  | 15              |
| 8) Lain-Lain Kampong                             | 6                              | 61                                | 0                                  | 67              |
| Jumlah Kecil/Sub-Total                           | 6                              | 175                               | 0                                  | 181             |
| <b>Jumlah Besar/Grand Total</b>                  | <b>22,574</b>                  | <b>13,362</b>                     | <b>1,866</b>                       | <b>37,802</b>   |

SEMENANJUNG MALAYSIA/PENINSULAR MALAYSIA  
BILANGAN BOT-BOT YANG DILESENKAN DAN BILANGAN NELAYAN-NELAYAN  
YANG BEKERJA DIBOT-BOT BERLESEN, 1966 - 1988  
NUMBER OF FISHING BOATS LICENSED AND NUMBER OF FISHERMEN  
OPERATING LICENSED BOATS, 1966 - 1988

JADUAL (TABLE) 2.5

| Tahun<br>Year | Bilangan Bot-Bot Yang Dilesenkan<br>Number Of Fishing Boats Licensed |                                   |                                    |                 | Bilangan Nelayan-Nelayan<br>Number of Fishermen |                 |                  |                     |                 |
|---------------|----------------------------------------------------------------------|-----------------------------------|------------------------------------|-----------------|-------------------------------------------------|-----------------|------------------|---------------------|-----------------|
|               | Berjentera<br>Dalam<br>Inboard                                       | Berjentera<br>Sangkut<br>Outboard | Tidak<br>Berjentera<br>Non-Powered | Jumlah<br>Total | Melayu<br>Malays                                | Cina<br>Chinese | India<br>Indians | Lain-Lain<br>Others | Jumlah<br>Total |
| 1966          | 9,298                                                                | 3,237                             | 8,371                              | 20,906          | 36,508                                          | 25,252          | 215              | 482                 | 62,457          |
| 1967          | 10,145                                                               | 2,887                             | 7,204                              | 20,236          | 34,833                                          | 26,402          | 212              | 706                 | 62,153          |
| 1968          | 10,629                                                               | 2,531                             | 6,293                              | 19,453          | 34,414                                          | 26,398          | 195              | 494                 | 61,501          |
| 1969          | 11,399                                                               | 2,177                             | 5,608                              | 19,184          | 34,845                                          | 28,258          | 160              | 351                 | 63,614          |
| 1970          | 12,865                                                               | 2,164                             | 5,277                              | 20,306          | 36,472                                          | 31,078          | 253              | 351                 | 68,154          |
| 1971          | 14,284                                                               | 2,036                             | 4,821                              | 21,141          | 36,295                                          | 31,096          | 256              | 314                 | 67,961          |
| 1972          | 14,945                                                               | 2,009                             | 4,665                              | 21,619          | 38,589                                          | 29,892          | 310              | 461                 | 69,252          |
| 1973          | 15,596                                                               | 2,004                             | 4,567                              | 22,167          | 38,048                                          | 29,192          | 342              | 726                 | 68,308          |
| 1974          | 16,205                                                               | 2,100                             | 4,072                              | 22,377          | 38,973                                          | 30,619          | 424              | 789                 | 70,805          |
| 1975          | 16,081                                                               | 2,138                             | 3,928                              | 22,147          | 40,335                                          | 31,992          | 452              | 525                 | 73,304          |
| 1976          | 16,142                                                               | 2,342                             | 4,151                              | 22,635          | 41,997                                          | 30,479          | 450              | 610                 | 73,536          |
| 1977          | 16,977                                                               | 2,775                             | 4,329                              | 24,081          | 44,373                                          | 30,131          | 541              | 600                 | 75,645          |
| 1978          | 17,775                                                               | 3,684                             | 6,038                              | 27,497          | 51,265                                          | 30,980          | 637              | 812                 | 83,694          |
| 1979          | 17,741                                                               | 5,156                             | 6,256                              | 29,153          | 50,816                                          | 30,323          | 528              | 1,259               | 82,926          |
| 1980          | 18,433                                                               | 6,585                             | 5,502                              | 30,520          | 55,008                                          | 31,802          | 410              | 1,752               | 88,972          |
| 1981          | 18,585                                                               | 7,368                             | 4,437                              | 30,390          | 54,538                                          | 30,084          | 609              | 1,694               | 86,925          |
| 1982          | 17,875                                                               | 7,246                             | 2,620                              | 27,741          | 49,232                                          | 28,306          | 739              | 1,960               | 80,237          |
| 1983          | 16,285                                                               | 7,202                             | 2,208                              | 25,695          | 47,322                                          | 25,238          | 534              | 2,496               | 75,590          |
| 1984          | 16,533                                                               | 7,458                             | 1,682                              | 25,673          | 48,616                                          | 25,077          | 564              | 2,111               | 76,368          |
| 1985          | 15,324                                                               | 6,751                             | 1,296                              | 23,371          | 42,620                                          | 23,532          | 471              | 2,907               | 69,530          |
| 1986          | 14,626                                                               | 6,864                             | 986                                | 22,476          | 34,269                                          | 21,357          | 448              | 3,378               | 59,452          |
| 1987          | 14,822                                                               | 6,430                             | 886                                | 22,138          | 33,815                                          | 21,634          | 394              | 4,726               | 60,569          |
| 1988          | 14,760                                                               | 5,832                             | 749                                | 21,341          | 32,386                                          | 21,367          | 409              | 4,121               | 58,283          |

MALAYSIA  
BILANGAN PERKAKAS-PERKAKAS YANG DILESENKAN MENGIKUT NEGERI, 1988  
NUMBER OF LICENSED FISHING GEARS BY STATE, 1988

JADUAL (TABLE) 3.1

| Kumpulan Perkakas<br>Gear Group | Pukat<br>Tunda<br>Trawl<br>Nets | Pukat-Pukat Tarik<br>Seine Nets             |                                                 |                              | Pukat<br>Hanyut<br>Drift/Gill<br>Nets | Pukat<br>Tangguk<br>Lift<br>Nets | Perangkap-Perangkap<br>Traps |                  | Pancing<br>Hooks &<br>Lines | Pukat Bakul/<br>Bag Nets | Pukat<br>Rentang/<br>Barrier<br>Nets | Pukat<br>Surung/<br>Push/Scoop<br>Nets | Memungut<br>Siput/<br>Shellfish<br>Collection | Rampaian<br>Miscellaneous | Jumlah<br>Total |
|---------------------------------|---------------------------------|---------------------------------------------|-------------------------------------------------|------------------------------|---------------------------------------|----------------------------------|------------------------------|------------------|-----------------------------|--------------------------|--------------------------------------|----------------------------------------|-----------------------------------------------|---------------------------|-----------------|
|                                 |                                 | Pukat Jerut<br>Ikan<br>Purse Seine-<br>Fish | Pukat Jerut<br>Bilis<br>Purse Seine-<br>Anchovy | Lain-Lain<br>Other<br>Seines |                                       |                                  | Belat-Belat<br>Stationary    | Bubu<br>Portable |                             |                          |                                      |                                        |                                               |                           |                 |
| Pantai Barat/West Coast:        |                                 |                                             |                                                 |                              |                                       |                                  |                              |                  |                             |                          |                                      |                                        |                                               |                           |                 |
| Perlis                          | 232                             | 112                                         | 0                                               | 5                            | 248                                   | 4                                | 0                            | 0                | 9                           | 0                        | 0                                    | 0                                      | 0                                             | 0                         | 610             |
| Kedah                           | 524                             | 19                                          | 71                                              | 41                           | 949                                   | 35                               | 0                            | 1                | 41                          | 37                       | 20                                   | 0                                      | 0                                             | 8                         | 1,746           |
| Pulau Pinang/Penang             | 117                             | 48                                          | 0                                               | 137                          | 1,521                                 | 0                                | 1                            | 27               | 69                          | 55                       | 0                                    | 0                                      | 0                                             | 19                        | 1,994           |
| Perak                           | 1,604                           | 97                                          | 13                                              | 639                          | 1,540                                 | 0                                | 0                            | 56               | 179                         | 93                       | 0                                    | 0                                      | 142                                           | 88                        | 4,451           |
| Selangor                        | 482                             | 29                                          | 0                                               | 8                            | 1,879                                 | 1                                | 1                            | 0                | 57                          | 178                      | 14                                   | 0                                      | 6                                             | 115                       | 2,770           |
| Negeri Sembilan                 | 0                               | 0                                           | 0                                               | 5                            | 163                                   | 0                                | 0                            | 6                | 9                           | 0                        | 0                                    | 0                                      | 0                                             | 0                         | 183             |
| Melaka/Malacca                  | 0                               | 0                                           | 0                                               | 10                           | 701                                   | 0                                | 2                            | 0                | 66                          | 0                        | 4                                    | 0                                      | 0                                             | 0                         | 783             |
| Johor Barat/West Johore         | 298                             | 0                                           | 0                                               | 17                           | 1,964                                 | 1                                | 34                           | 104              | 70                          | 61                       | 42                                   | 0                                      | 50                                            | 31                        | 2,672           |
| Jumlah Kecil/Sub-Total          | 3,257                           | 305                                         | 84                                              | 862                          | 8,965                                 | 41                               | 38                           | 194              | 500                         | 424                      | 80                                   | 0                                      | 198                                           | 261                       | 15,209          |
| Pantai Timur/East Coast:        |                                 |                                             |                                                 |                              |                                       |                                  |                              |                  |                             |                          |                                      |                                        |                                               |                           |                 |
| Kelantan                        | 86                              | 44                                          | 8                                               | 61                           | 705                                   | 33                               | 0                            | 9                | 246                         | 0                        | 0                                    | 0                                      | 0                                             | 0                         | 1,192           |
| Terengganu                      | 278                             | 181                                         | 57                                              | 9                            | 513                                   | 50                               | 0                            | 141              | 1,055                       | 0                        | 0                                    | 0                                      | 0                                             | 70                        | 2,354           |
| Pahang                          | 277                             | 69                                          | 19                                              | 3                            | 245                                   | 31                               | 0                            | 131              | 224                         | 0                        | 0                                    | 0                                      | 0                                             | 29                        | 1,028           |
| Johor Timur/East Johore         | 302                             | 61                                          | 0                                               | 1                            | 985                                   | 4                                | 12                           | 28               | 133                         | 16                       | 10                                   | 0                                      | 0                                             | 6                         | 1,558           |
| Jumlah Kecil/Sub-Total          | 943                             | 355                                         | 84                                              | 74                           | 2,448                                 | 118                              | 12                           | 309              | 1,658                       | 16                       | 10                                   | 0                                      | 0                                             | 105                       | 6,132           |
| Sarawak                         | 727                             | 23                                          | 0                                               | 11                           | 4,551                                 | 77                               | 138                          | 145              | 266                         | 999                      | 345                                  | 147                                    | 0                                             | 21                        | 7,450           |
| Sabah                           | 852                             | 77                                          | 0                                               | 0                            | 566                                   | 168                              | 118                          | 32               | 344                         | 0                        | 0                                    | 0                                      | 0                                             | 143                       | 2,300           |
| W.P. Labuan                     | 0                               | 0                                           | 0                                               | 0                            | 97                                    | 16                               | 16                           | 10               | 42                          | 0                        | 0                                    | 0                                      | 0                                             | 0                         | 181             |
| Jumlah Kecil/Sub-Total          | 1,579                           | 100                                         | 0                                               | 11                           | 5,214                                 | 261                              | 272                          | 187              | 652                         | 999                      | 345                                  | 147                                    | 0                                             | 164                       | 9,931           |
| Jumlah Besar/Grand Total        | 5,779                           | 760                                         | 168                                             | 947                          | 16,627                                | 420                              | 322                          | 690              | 2,810                       | 1,439                    | 435                                  | 147                                    | 198                                           | 530                       | 31,272          |

SEMANANJUNG MALAYSIA/ PENINSULAR MALAYSIA  
 ANGGARAN PERKAKAS-PERKAKAS MENANGKAP IKAN YANG DIUSAHAKAN MENGIKUT NEGERI, 1988  
 ESTIMATED NUMBER OF FISHING GEARS IN OPERATION BY STATE, 1988

JADUAL (TABLE) 3.2

| Kumpulan Perkakas<br>Gear Group | Pukat<br>Tunda<br>Trawl<br>Nets | Pukat-Pukat Tarik<br>Seine Nets             |                                                 |                              | Pukat<br>Hanyut<br>Drift/Gill<br>Nets | Pukat<br>Tangguk<br>Lift<br>Nets | Perangkap-Perangkap<br>Traps |                  | Pancing<br>Hooks &<br>Lines | Pukat Bakul<br>Bag Nets | Pukat<br>Rentang<br>Barrier<br>Nets | Pukat<br>Surung<br>Push/Scoop<br>Nets | Memungut<br>Siput<br>Shellfish<br>Collection | Rampaian<br>Miscellaneous | Jumlah<br>Total |
|---------------------------------|---------------------------------|---------------------------------------------|-------------------------------------------------|------------------------------|---------------------------------------|----------------------------------|------------------------------|------------------|-----------------------------|-------------------------|-------------------------------------|---------------------------------------|----------------------------------------------|---------------------------|-----------------|
|                                 |                                 | Pukat Jerut<br>Ikan<br>Purse Seine-<br>Fish | Pukat Jerut<br>Bilis<br>Purse Seine-<br>Anchovy | Lain-Lain<br>Other<br>Seines |                                       |                                  | Belat-Belat<br>Stationary    | Bubu<br>Portable |                             |                         |                                     |                                       |                                              |                           |                 |
| Pantai Barat/West Coast:        |                                 |                                             |                                                 |                              |                                       |                                  |                              |                  |                             |                         |                                     |                                       |                                              |                           |                 |
| Perlis                          | 405                             | 116                                         | 0                                               | 9                            | 483                                   | 0                                | 8                            | 0                | 15                          | 0                       | 25                                  | 10                                    | 13                                           | 5                         | 1,089           |
| Kedah                           | 604                             | 13                                          | 78                                              | 46                           | 1,250                                 | 0                                | 0                            | 0                | 39                          | 90                      | 16                                  | 16                                    | 0                                            | 69                        | 2,221           |
| Pulau Pinang/Penang             | 98                              | 39                                          | 0                                               | 118                          | 1,256                                 | 0                                | 0                            | 34               | 78                          | 126                     | 129                                 | 27                                    | 10                                           | 25                        | 1,940           |
| Perak                           | 1,867                           | 118                                         | 13                                              | 478                          | 1,903                                 | 0                                | 0                            | 63               | 244                         | 119                     | 74                                  | 129                                   | 46                                           | 161                       | 5,215           |
| Selangor                        | 1,206                           | 32                                          | 0                                               | 15                           | 1,651                                 | 0                                | 12                           | 12               | 101                         | 177                     | 37                                  | 32                                    | 5                                            | 14                        | 3,294           |
| Negeri Sembilan                 | 0                               | 0                                           | 0                                               | 7                            | 157                                   | 0                                | 0                            | 11               | 11                          | 0                       | 0                                   | 0                                     | 0                                            | 4                         | 190             |
| Melaka/Malacca                  | 0                               | 0                                           | 0                                               | 8                            | 693                                   | 0                                | 2                            | 0                | 103                         | 0                       | 4                                   | 300                                   | 0                                            | 0                         | 1,110           |
| Johor Barat/West Johore         | 367                             | 0                                           | 0                                               | 15                           | 1,267                                 | 0                                | 14                           | 9                | 15                          | 83                      | 3                                   | 145                                   | 0                                            | 0                         | 1,918           |
| Jumlah Kecil/Sub-Total          | 4,547                           | 318                                         | 91                                              | 696                          | 8,660                                 | 0                                | 36                           | 129              | 606                         | 595                     | 288                                 | 659                                   | 74                                           | 278                       | 16,977          |
| Pantai Timur/East Coast:        |                                 |                                             |                                                 |                              |                                       |                                  |                              |                  |                             |                         |                                     |                                       |                                              |                           |                 |
| Kelantan                        | 300                             | 28                                          | 0                                               | 0                            | 301                                   | 21                               | 0                            | 12               | 173                         | 0                       | 0                                   | 0                                     | 0                                            | 0                         | 835             |
| Terengganu                      | 421                             | 154                                         | 80                                              | 0                            | 269                                   | 44                               | 0                            | 187              | 654                         | 12                      | 0                                   | 0                                     | 0                                            | 0                         | 1,821           |
| Pahang                          | 436                             | 78                                          | 30                                              | 0                            | 270                                   | 19                               | 0                            | 140              | 210                         | 0                       | 0                                   | 0                                     | 0                                            | 0                         | 1,183           |
| Johor Timur/East Johore         | 588                             | 52                                          | 0                                               | 0                            | 547                                   | 2                                | 42                           | 17               | 121                         | 158                     | 0                                   | 0                                     | 0                                            | 2                         | 1,529           |
| Jumlah Kecil/Sub-Total          | 1,745                           | 312                                         | 110                                             | 0                            | 1,387                                 | 86                               | 42                           | 356              | 1,158                       | 170                     | 0                                   | 0                                     | 0                                            | 2                         | 5,368           |
| Jumlah Besar/Grand-Total        | 6,292                           | 630                                         | 201                                             | 696                          | 10,047                                | 86                               | 78                           | 485              | 1,764                       | 765                     | 288                                 | 659                                   | 74                                           | 280                       | 22,345          |

MALAYSIA  
PENDARATAN IKAN LAUT MENGIKUT NEGERI DAN KUMPULAN PERKAKAS, 1988  
LANDINGS OF MARINE FISH BY STATE AND GEAR GROUP, 1988  
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

JADUAL (TABLE) 4.1

| Kumpulan Perkakas<br>Gear Group                     | Pukat<br>Tunda<br>Trawl<br>Nets | Pukat-Pukat Tarik<br>Seine Nets             |                                                 |                              | Pukat<br>Hanyut<br>Drift/Gill<br>Nets | Pukat<br>Tangguk<br>Lift<br>Nets | Perangkap-Perangkap<br>Traps |                  | Pancing<br>Hooks &<br>Lines | Pukat Bakul<br>Bag Nets | Pukat<br>Rentang<br>Barrier<br>Nets | Pukat<br>Surung<br>Push/Scoop<br>Nets | Memungut<br>Siput<br>Shellfish<br>Collection | Rampaian<br>Miscellaneous | Jumlah<br>Total |
|-----------------------------------------------------|---------------------------------|---------------------------------------------|-------------------------------------------------|------------------------------|---------------------------------------|----------------------------------|------------------------------|------------------|-----------------------------|-------------------------|-------------------------------------|---------------------------------------|----------------------------------------------|---------------------------|-----------------|
|                                                     |                                 | Pukat Jerut<br>Ikan<br>Purse Seine<br>-Fish | Pukat Jerut<br>Bilis<br>Purse Seine<br>-Anchovy | Lain-Lain<br>Other<br>Seines |                                       |                                  | Belat-Belat<br>Stationary    | Bubu<br>Portable |                             |                         |                                     |                                       |                                              |                           |                 |
| Pantai Barat/West Coast:                            |                                 |                                             |                                                 |                              |                                       |                                  |                              |                  |                             |                         |                                     |                                       |                                              |                           |                 |
| Perlis                                              | 9,504                           | 25,090                                      | 0                                               | 45                           | 5,091                                 | 0                                | 196                          | 0                | 32                          | 0                       | 58                                  | 9                                     | 705                                          | 2                         | 40,732          |
| Kedah                                               | 41,436                          | 3,141                                       | 17,995                                          | 272                          | 9,176                                 | 0                                | 0                            | 0                | 39                          | 615                     | 68                                  | 7                                     | 0                                            | 27                        | 72,775          |
| Pulau Pinang/Penang                                 | 9,132                           | 7,269                                       | 0                                               | 1,607                        | 2,834                                 | 0                                | 1                            | 130              | 77                          | 969                     | 147                                 | 10                                    | 43                                           | 11                        | 22,230          |
| Perak                                               | 131,216                         | 12,248                                      | 6,971                                           | 12,161                       | 10,152                                | 0                                | 26                           | 1,133            | 2,450                       | 1,812                   | 223                                 | 1,299                                 | 146                                          | 147                       | 179,982         |
| Selangor                                            | 63,277                          | 3,928                                       | 0                                               | 76                           | 4,098                                 | 0                                | 227                          | 51               | 981                         | 16,935                  | 562                                 | 120                                   | 634                                          | 4                         | 90,891          |
| Negeri Sembilan                                     | 0                               | 0                                           | 0                                               | 10                           | 226                                   | 0                                | 0                            | 52               | 20                          | 0                       | 0                                   | 0                                     | 0                                            | 2                         | 310             |
| Melaka/Malacca                                      | 0                               | 0                                           | 0                                               | 9                            | 1,459                                 | 0                                | 5                            | 0                | 468                         | 0                       | 3                                   | 538                                   | 0                                            | 0                         | 2,482           |
| Johor Barat/West Johore                             | 12,411                          | 0                                           | 0                                               | 37                           | 3,025                                 | 0                                | 219                          | 66               | 89                          | 4,914                   | 3                                   | 16                                    | 0                                            | 7                         | 20,787          |
| Jumlah/Total:                                       | 266,975                         | 51,675                                      | 24,966                                          | 14,216                       | 36,061                                | 0                                | 674                          | 1,432            | 4,155                       | 25,244                  | 1,064                               | 1,998                                 | 1,527                                        | 200                       | 430,188         |
| Pantai Timur/East Coast:                            |                                 |                                             |                                                 |                              |                                       |                                  |                              |                  |                             |                         |                                     |                                       |                                              |                           | 0               |
| Kelantan                                            | 2,828                           | 5,821                                       | 0                                               | 97                           | 3,501                                 | 1,224                            | 0                            | 146              | 4,331                       | 0                       | 0                                   | 0                                     | 0                                            | 54                        | 18,002          |
| Terengganu                                          | 28,664                          | 36,422                                      | 4,009                                           | 0                            | 1,585                                 | 3,112                            | 0                            | 3,557            | 5,979                       | 119                     | 0                                   | 8                                     | 0                                            | 0                         | 83,456          |
| Pahang                                              | 52,759                          | 28,287                                      | 5,795                                           | 0                            | 650                                   | 858                              | 0                            | 877              | 5,820                       | 0                       | 0                                   | 0                                     | 0                                            | 0                         | 95,047          |
| Johor Timur/East Johore                             | 42,974                          | 7,775                                       | 0                                               | 0                            | 2,100                                 | 32                               | 301                          | 63               | 1,507                       | 12,896                  | 19                                  | 0                                     | 0                                            | 89                        | 67,755          |
| Jumlah/Total:                                       | 127,224                         | 78,305                                      | 9,804                                           | 97                           | 7,837                                 | 5,226                            | 301                          | 4,643            | 17,637                      | 13,016                  | 19                                  | 8                                     | 0                                            | 143                       | 264,261         |
| Malaysia:                                           |                                 |                                             |                                                 |                              |                                       |                                  |                              |                  |                             |                         |                                     |                                       |                                              |                           |                 |
| Semenanjung Malaysia/<br>Peninsular Malaysia        | 394,200                         | 129,980                                     | 34,771                                          | 14,313                       | 43,898                                | 5,226                            | 975                          | 6,075            | 21,792                      | 38,260                  | 1,083                               | 2,006                                 | 1,527                                        | 342                       | 694,449         |
| Sarawak                                             | 36,710                          | 2,796                                       | 0                                               | 0                            | 12,686                                | 0                                | 1,146                        | 103              | 2,158                       | 15,864                  | 2,062                               | 6,098                                 | 13                                           | 5                         | 79,642          |
| Sabah                                               | 11,688                          | 7,435                                       | 0                                               | 0                            | 7,309                                 | 1,355                            | 2,033                        | 241              | 4,189                       | 0                       | 0                                   | 0                                     | 0                                            | 13,750                    | 48,000          |
| W. Persekutuan Labuan/<br>Labuan, Federal Territory | 1,540                           | 347                                         | 0                                               | 0                            | 848                                   | 0                                | 17                           | 6                | 769                         | 0                       | 0                                   | 7                                     | 0                                            | 6                         | 3,540           |
| Jumlah/Total:                                       | 444,138                         | 140,558                                     | 34,771                                          | 14,313                       | 64,741                                | 6,581                            | 4,171                        | 6,425            | 28,908                      | 54,124                  | 3,145                               | 8,112                                 | 1,540                                        | 14,104                    | 825,631         |

MALAYSIA  
PENDARATAN IKAN LAUT MENGIKUT BULAN DAN NEGERI, 1988  
LANDINGS OF MARINE FISH BY MONTH AND STATE, 1988  
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

JADUAL (TABLE) 4.2

| Bulan/Month                                       | Januari | Februari | Mac    | April  | Mei    | Jun    | Julai  | Ogos   | September | Oktober | November | Disember | Jumlah  |
|---------------------------------------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|---------|
| Negeri/State                                      | January | February | March  | April  | May    | June   | July   | August | September | October | November | December | Total   |
| Pantai Barat/West Coast:                          |         |          |        |        |        |        |        |        |           |         |          |          |         |
| Perlis                                            | 3,187   | 3,234    | 3,484  | 3,591  | 3,205  | 3,336  | 3,151  | 3,531  | 3,143     | 3,596   | 3,197    | 4,076    | 40,731  |
| Kedah                                             | 8,266   | 6,293    | 5,390  | 5,535  | 5,347  | 5,055  | 4,599  | 6,730  | 6,450     | 6,019   | 6,833    | 6,258    | 72,775  |
| Pulau Pinang/Penang                               | 1,798   | 1,734    | 1,912  | 2,138  | 1,932  | 1,836  | 1,951  | 2,349  | 2,218     | 1,583   | 1,295    | 1,484    | 22,230  |
| Perak                                             | 15,846  | 9,416    | 14,043 | 15,814 | 18,710 | 16,387 | 15,056 | 15,090 | 14,834    | 14,777  | 14,151   | 15,858   | 179,982 |
| Selangor                                          | 7,794   | 7,329    | 8,420  | 8,650  | 9,065  | 7,768  | 7,867  | 7,835  | 5,329     | 4,783   | 8,785    | 7,266    | 90,891  |
| Negeri Sembilan                                   | 31      | 24       | 24     | 29     | 29     | 27     | 27     | 26     | 23        | 22      | 26       | 22       | 310     |
| Melaka                                            | 157     | 161      | 179    | 204    | 250    | 189    | 148    | 200    | 321       | 238     | 234      | 201      | 2,482   |
| Johor Barat/West Johore                           | 1,267   | 1,737    | 1,119  | 1,362  | 1,836  | 3,729  | 1,623  | 1,404  | 1,840     | 1,544   | 1,805    | 1,521    | 20,787  |
| Jumlah Kecil/Sub Total                            | 38,346  | 29,928   | 34,571 | 37,323 | 40,374 | 38,327 | 34,422 | 37,165 | 34,158    | 32,562  | 36,326   | 36,686   | 430,188 |
| Pantai Timur/East Coast:                          |         |          |        |        |        |        |        |        |           |         |          |          |         |
| Kelantan                                          | 957     | 972      | 1,325  | 1,488  | 1,636  | 2,518  | 2,038  | 1,872  | 2,010     | 1,696   | 1,343    | 147      | 18,002  |
| Trengganu                                         | 6,727   | 10,332   | 8,531  | 7,140  | 4,712  | 5,480  | 7,382  | 7,587  | 10,814    | 7,431   | 3,513    | 3,807    | 83,456  |
| Pahang                                            | 3,388   | 6,340    | 12,258 | 8,247  | 5,516  | 5,355  | 15,537 | 9,577  | 9,771     | 13,508  | 2,980    | 2,570    | 95,047  |
| Johor Timur/East Johore                           | 3,534   | 5,541    | 5,589  | 4,316  | 3,198  | 6,864  | 9,099  | 9,134  | 7,966     | 6,258   | 3,903    | 2,354    | 67,756  |
| Jumlah Kecil/Sub Total                            | 14,606  | 23,185   | 27,703 | 21,191 | 15,062 | 20,217 | 34,056 | 28,170 | 30,561    | 28,893  | 11,739   | 8,878    | 264,261 |
| Malaysia:                                         |         |          |        |        |        |        |        |        |           |         |          |          |         |
| Semenanjung Malaysia/<br>Peninsular Malaysia      | 52,952  | 53,113   | 62,274 | 58,514 | 55,436 | 58,544 | 68,478 | 65,335 | 64,719    | 61,455  | 48,065   | 45,564   | 694,449 |
| Sarawak                                           | 3,296   | 13,007   | 11,558 | 5,153  | 4,760  | 14,667 | 6,591  | 7,711  | 5,129     | 2,307   | 2,705    | 2,758    | 79,642  |
| Sabah                                             | 4,520   | 4,664    | 4,427  | 4,023  | 3,848  | 3,787  | 3,880  | 3,843  | 4,024     | 3,867   | 3,754    | 3,363    | 48,000  |
| W.Persekutuan Labuan/<br>Labuan Federal Territory | 247     | 210      | 371    | 240    | 246    | 385    | 209    | 337    | 227       | 273     | 269      | 526      | 3,540   |
| Jumlah Besar<br>Grand Total                       | 61,015  | 70,994   | 78,630 | 67,930 | 64,290 | 77,383 | 79,158 | 77,226 | 74,099    | 67,902  | 54,793   | 52,211   | 825,631 |

SEMENANJUNG MALAYSIA/PENINSULAR MALAYSIA  
PENDARATAN IKAN LAUT MENGIKUT BULAN DAN KUMPULAN PERKAKAS, 1988  
LANDINGS OF MARINE FISH BY MONTH AND GEAR GROUP, 1988  
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

JADUAL (TABLE) 4.3

| Bulan/Month                            | Januari | Februari | Mac    | April  | Mei    | Jun    | Julai  | Ogos   | September | Oktober | November | Disember | Jumlah  |
|----------------------------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|---------|
| Kumpulan Perkakas<br>Gear Group        | January | February | March  | April  | May    | June   | July   | August | September | October | November | December | Total   |
| Pukat-Pukat Tunda<br>Trawl Nets        | 31,838  | 29,247   | 38,631 | 35,430 | 35,786 | 31,647 | 37,452 | 33,762 | 32,172    | 29,995  | 28,205   | 30,036   | 394,201 |
| P.P. Tarik/Seine Nets:                 |         |          |        |        |        |        |        |        |           |         |          |          |         |
| Pukat Jerut Ikan                       | 9,079   | 10,769   | 12,064 | 11,013 | 8,465  | 8,858  | 13,408 | 12,200 | 15,350    | 16,422  | 6,712    | 5,640    | 129,980 |
| P.Seine-Fish                           |         |          |        |        |        |        |        |        |           |         |          |          |         |
| Pukat Jerut Bilis                      | 3,559   | 2,943    | 1,686  | 1,668  | 1,745  | 2,594  | 2,721  | 3,099  | 5,022     | 4,723   | 3,207    | 1,803    | 34,770  |
| P.Seine-Anchovy                        |         |          |        |        |        |        |        |        |           |         |          |          |         |
| Lain-Lain/Other Seines                 | 1,263   | 1,199    | 1,018  | 1,137  | 1,175  | 1,189  | 1,173  | 1,323  | 1,167     | 1,335   | 1,156    | 1,178    | 14,313  |
| Pukat-Pukat Hanyut<br>Drift/Gill Nets  | 2,894   | 3,397    | 3,775  | 3,900  | 3,572  | 4,394  | 3,915  | 3,805  | 4,235     | 3,959   | 2,989    | 3,063    | 43,898  |
| Pukat-Pukat Tangguk<br>Lift Nets       | 155     | 403      | 600    | 664    | 586    | 567    | 542    | 554    | 583       | 482     | 90       | 0        | 5,226   |
| Perangkap-Perangkap/Traps:             |         |          |        |        |        |        |        |        |           |         |          |          |         |
| Belat-Belat (Stationary)               | 102     | 174      | 131    | 64     | 54     | 47     | 78     | 75     | 60        | 51      | 82       | 57       | 975     |
| Bubu (Portable)                        | 511     | 623      | 452    | 743    | 360    | 536    | 618    | 552    | 486       | 564     | 378      | 252      | 6,075   |
| Pancing/Hooks & Lines                  | 1,000   | 998      | 1,864  | 1,820  | 1,785  | 2,192  | 2,525  | 3,268  | 2,436     | 2,118   | 846      | 940      | 21,792  |
| Pukat-Pukat Bakul<br>Bag Nets          | 2,024   | 3,051    | 1,730  | 1,723  | 1,583  | 6,212  | 5,658  | 6,243  | 2,632     | 1,248   | 3,923    | 2,233    | 38,260  |
| Pukat-Pukat Rentang<br>Barrier Nets    | 155     | 112      | 96     | 89     | 74     | 85     | 57     | 79     | 86        | 71      | 81       | 98       | 1,083   |
| Pukat-Pukat Surung<br>Push/Scoop Nets  | 125     | 95       | 138    | 170    | 169    | 128    | 112    | 128    | 280       | 247     | 247      | 167      | 2,006   |
| Memungut Siput<br>Shellfish Collection | 230     | 84       | 71     | 62     | 49     | 61     | 200    | 201    | 136       | 212     | 144      | 77       | 1,527   |
| Rampaian/Miscellaneous                 | 17      | 18       | 18     | 31     | 33     | 34     | 19     | 46     | 74        | 28      | 5        | 20       | 343     |
| Jumlah<br>Total                        | 52,952  | 53,113   | 62,274 | 58,514 | 55,436 | 58,544 | 68,478 | 65,335 | 64,719    | 61,455  | 48,065   | 45,564   | 694,449 |



MALAYSIA  
PENDARATAN IKAN LAUT MENGIKUT NEGERI DAN SPESIES IKAN, 1988  
LANDINGS OF MARINE FISH BY STATE AND SPECIES, 1988  
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

JADUAL (TABLE) 4.4

| ISSCAAP<br>GROUP<br>NO. | Spesies<br>Species          | Pantai Barat<br>West Coast |       |                     |       |          |                    |                   |                      | Jumlah | Pantai Timur<br>East Coast |            |        |                       | Jumlah | Sarawak | Sabah | W. P.<br>Labuan | Jumlah | Jumlah<br>Besar<br>Grand-<br>Total |
|-------------------------|-----------------------------|----------------------------|-------|---------------------|-------|----------|--------------------|-------------------|----------------------|--------|----------------------------|------------|--------|-----------------------|--------|---------|-------|-----------------|--------|------------------------------------|
|                         | Nama Tempatan<br>Local Name | Perlis                     | Kedah | P. Pinang<br>Penang | Perak | Selangor | Negeri<br>Sembilan | Melaka<br>Malacca | J. Barat<br>W. Johor | Total  | Kelantan                   | Terengganu | Pahang | J. Timur<br>E. Johore | Total  |         |       |                 | Total  |                                    |
| 24                      | Kebasi/Selangat             | 276                        | 840   | 62                  | 768   | 28       | *                  | 32                | 189                  | 2,195  | 0                          | 0          | 0      | 164                   | 164    | 260     | 200   | 0               | 460    | 2,819                              |
|                         | Puput/B. Mata/Tirok         | 0                          | 174   | 30                  | 2,454 | 1,523    | *                  | 14                | 425                  | 4,620  | 0                          | 4          | *      | 45                    | 49     | 901     | 100   | 14              | 1,015  | 5,684                              |
|                         | Terubok                     | 0                          | 0     | 0                   | 0     | 0        | 0                  | 0                 | 0                    | 0      | 0                          | 0          | 0      | 0                     | 0      | 339     | 100   | 0               | 439    | 439                                |
| 25                      | Siakap                      | 0                          | 0     | 3                   | 37    | 6        | 1                  | 3                 | 0                    | 50     | 0                          | 3          | 2      | 3                     | 8      | 813     | 0     | 2               | 815    | 873                                |
| 31                      | Lidah                       | 312                        | 535   | 148                 | 183   | 198      | *                  | 0                 | 53                   | 1,429  | 20                         | 43         | 56     | 61                    | 180    | 64      | 70    | 2               | 136    | 1,745                              |
|                         | Sebelah                     | 0                          | 0     | 4                   | 205   | 59       | 0                  | 0                 | 4                    | 272    | 28                         | 113        | 192    | 266                   | 599    | 11      | 30    | 21              | 62     | 933                                |
| 33                      | Bayan                       | 0                          | 0     | 0                   | 0     | 2        | 0                  | 0                 | 0                    | 2      | 0                          | 18         | 56     | 5                     | 79     | 67      | 250   | 0               | 317    | 398                                |
|                         | Biji Nangka                 | 0                          | 0     | 176                 | 1,088 | 9        | *                  | 0                 | 72                   | 1,345  | 218                        | 1244       | 2234   | 1,398                 | 5,094  | 44      | 650   | 114             | 808    | 7,247                              |
|                         | Daun Baharu                 | 0                          | 0     | *                   | 192   | 68       | 3                  | 4                 | 2                    | 269    | 7                          | 49         | 103    | 124                   | 283    | 88      | 250   | 49              | 387    | 939                                |
|                         | Delah/Pinang-Pinang         | 0                          | 0     | *                   | 30    | 5        | 0                  | 0                 | 0                    | 35     | 0                          | 21         | 56     | 77                    | 154    | 5       | 350   | 71              | 426    | 615                                |
|                         | Duri/Pulutan/Utik           | 23                         | 553   | 135                 | 1,685 | 443      | 6                  | 110               | 371                  | 3,326  | 277                        | 1997       | 6481   | 1,562                 | 10,317 | 2,822   | 2,200 | 27              | 5,049  | 18,692                             |
|                         | Dengkis/Debam               | 0                          | 0     | 2                   | 209   | 1        | 0                  | *                 | 0                    | 212    | 11                         | 172        | 150    | 157                   | 490    | 0       | 500   | 127             | 627    | 1,329                              |
|                         | Gelama/Tengkerong/Selampai  | 370                        | 1,421 | 826                 | 3,475 | 2,374    | 2                  | 21                | 622                  | 9,111  | 544                        | 769        | 473    | 1,045                 | 2,831  | 3,343   | 1,780 | 80              | 5,203  | 17,145                             |
|                         | Gerut-Gerut                 | 13                         | 65    | 13                  | 587   | 104      | *                  | 5                 | 3                    | 790    | 16                         | 58         | 90     | 69                    | 233    | 181     | 150   | 33              | 364    | 1,387                              |
|                         | Jenahak                     | 3                          | 39    | 31                  | 536   | 133      | 45                 | 70                | 57                   | 914    | 0                          | 0          | 2      | 13                    | 15     | 387     | 250   | 1               | 638    | 1,567                              |
|                         | Kaci                        | 0                          | 0     | 3                   | 142   | 7        | 1                  | 1                 | 1                    | 155    | 0                          | 69         | 185    | 203                   | 457    | 12      | 280   | 7               | 299    | 911                                |
|                         | Kerapu                      | 23                         | 228   | 102                 | 2,375 | 59       | 7                  | 8                 | 9                    | 2,811  | 81                         | 370        | 2959   | 267                   | 3,677  | 216     | 320   | 85              | 621    | 7,109                              |
|                         | Kerisi                      | 63                         | 795   | 187                 | 6,537 | 182      | 0                  | 0                 | 1                    | 7,765  | 992                        | 7218       | 8375   | 4,918                 | 21,503 | 301     | 800   | 108             | 1,209  | 30,477                             |
|                         | Kerisi Bali                 | 0                          | 0     | 10                  | 726   | 7        | 0                  | 0                 | 0                    | 743    | 0                          | 204        | 180    | 97                    | 481    | 2       | 0     | 0               | 2      | 1,226                              |
|                         | Kikek                       | 21                         | 0     | 0                   | 543   | 6        | 0                  | 0                 | 0                    | 570    | 237                        | 175        | 153    | 100                   | 665    | 20      | 500   | 39              | 559    | 1,794                              |
|                         | Malong                      | 49                         | 449   | 17                  | 225   | 697      | 0                  | 1                 | 589                  | 2,027  | 0                          | 59         | 148    | 81                    | 288    | 855     | 620   | 0               | 1,475  | 3,790                              |
|                         | Merah                       | 0                          | 0     | 41                  | 1,922 | 104      | 4                  | 7                 | 13                   | 2,091  | 511                        | 1497       | 462    | 524                   | 2,994  | 495     | 650   | 87              | 1,232  | 6,317                              |
|                         | Mengkerong/Conor/Ubi-Ubi    | 0                          | 21    | 81                  | 2,178 | 254      | 0                  | 0                 | 71                   | 2,605  | 0                          | 204        | 222    | 374                   | 800    | 0       | 0     | 0               | 0      | 3,405                              |
|                         | Bemong/Kunyit-Kunyit/Tanda  | 0                          | *     | 0                   | 456   | 38       | 0                  | 0                 | 0                    | 494    | 157                        | 432        | 745    | 601                   | 1,935  | 0       | 500   | 15              | 515    | 2,944                              |
|                         | Semilang                    | 6                          | 164   | 4                   | 361   | 38       | 1                  | 1                 | 7                    | 582    | 0                          | *          | 1      | *                     | 1      | 253     | 150   | 0               | 403    | 986                                |
|                         | Shrumbu/Lemah               | 0                          | 0     | 0                   | *     | 0        | 0                  | 0                 | 0                    | 0      | *                          | 0          | 5      | 0                     | 5      | 241     | 0     | 4               | 245    | 250                                |
|                         | Puntong Damar/Bulus         | 28                         | 26    | *                   | 130   | 30       | 1                  | 0                 | 0                    | 215    | 236                        | 652        | 586    | 338                   | 1,812  | 0       | 0     | 0               | 0      | 2,027                              |
|                         | Pasir-Pasir/Timun-Timun     | 0                          | 0     | 0                   | *     | 24       | 0                  | 0                 | 0                    | 24     | 0                          | 305        | 429    | 222                   | 956    | 0       | 300   | 59              | 359    | 1,339                              |
| 34                      | Alu-Alu/Kacang-Kacang       | 113                        | 499   | 4                   | 657   | 179      | *                  | 11                | 25                   | 1,488  | 65                         | 181        | 353    | 207                   | 806    | 51      | 500   | 47              | 598    | 2,892                              |
|                         | Aruan Tasik                 | 0                          | 10    | *                   | 79    | 12       | *                  | 5                 | 8                    | 114    | 14                         | 162        | 90     | 33                    | 299    | 0       | 500   | 6               | 506    | 919                                |
|                         | Bawal                       | 337                        | 574   | 227                 | 1,274 | 2,172    | 10                 | 11                | 292                  | 4,897  | 144                        | 222        | 81     | 209                   | 656    | 2,901   | 2,000 | 21              | 4,922  | 10,475                             |
|                         | Belanak/Kedera              | 83                         | 84    | 355                 | 1,181 | 79       | 1                  | 29                | 18                   | 1,830  | 0                          | 0          | *      | *                     | *      | 73      | 200   | 4               | 277    | 2,107                              |
|                         | Cermin/Sagai/Cupak          | 0                          | 0     | *                   | 328   | 83       | 1                  | 11                | 44                   | 467    | 81                         | 738        | 1331   | 969                   | 3,119  | 60      | 800   | 223             | 1,083  | 4,669                              |

Samb. (contd.)

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|    |                           |        |        |        |         |        |     |       |        |         |        |       |       |        |         |        |        |        |         |         |
|----|---------------------------|--------|--------|--------|---------|--------|-----|-------|--------|---------|--------|-------|-------|--------|---------|--------|--------|--------|---------|---------|
|    | Cincaru                   | 491    | 235    | 70     | 1,456   | 2,030  | 4   | 55    | 423    | 4,764   | 397    | 1197  | 1065  | 1,409  | 4,068   | 660    | 1,000  | 148    | 1,808   | 10,640  |
|    | Demudok/Rambai            | 0      | 16     | 26     | 1,797   | 587    | 0   | 0     | 0      | 2,426   | 387    | 224   | 201   | 204    | 1,016   | 61     | 200    | 6      | 267     | 3,709   |
|    | Kurau/Senangin/Senohong   | 38     | 116    | 15     | 425     | 187    | 2   | 54    | 29     | 866     | 0      | 1     | *     | 15     | 16      | 955    | 300    | 0      | 1,255   | 2,137   |
|    | Pelata/Selar              | 3,103  | 282    | 474    | 2,433   | 485    | 0   | 2     | 81     | 6,860   | 1,227  | 4358  | 2214  | 1,089  | 8,888   | 237    | 1,000  | 0      | 1,237   | 16,985  |
|    | Selar Kuning/Lolong       | 1,154  | 539    | 5      | 829     | 44     | 0   | 3     | 2      | 2,576   | 1,676  | 3947  | 5487  | 2,810  | 13,920  | 409    | 1,500  | 46     | 1,955   | 18,451  |
|    | Selayang/Curut            | 6,409  | 18     | 2,562  | 1,891   | 2      | 0   | 0     | 0      | 10,882  | 524    | 19879 | 2343  | 2,313  | 25,059  | 47     | 1,500  | 170    | 1,717   | 37,658  |
|    | Pisang-Pisang             | 48     | 0      | 0      | 2       | 6      | 0   | 0     | 0      | 56      | 0      | 113   | 35    | 0      | 148     | 0      | 0      | 0      | 0       | 204     |
|    | Talang                    | 6      | 191    | 0      | 282     | 66     | 2   | 48    | 33     | 628     | 22     | 2     | 11    | 75     | 110     | 694    | 0      | 111    | 805     | 1,543   |
| 35 | Bilis/Bunga Air           | 0      | 17,962 | 0      | 7,249   | 35     | 0   | 0     | 79     | 25,325  | 0      | 2386  | 3351  | 131    | 5,868   | 480    | 250    | 10     | 740     | 31,933  |
|    | Parang-Parang             | 597    | 184    | 10     | 732     | 764    | 55  | 353   | 464    | 3,159   | 393    | 191   | 362   | 331    | 1,277   | 375    | 200    | 21     | 596     | 5,032   |
|    | Tamban                    | 1,602  | 1,267  | 1,481  | 1,101   | 760    | 0   | 15    | 100    | 6,326   | 1,013  | 5839  | 7561  | 1,908  | 16,321  | 689    | 550    | 150    | 1,389   | 24,036  |
|    | Bulan-Bulan               | 0      | 0      | 0      | 3       | 3      | 0   | 0     | 0      | 6       | 0      | 5     | 19    | 0      | 24      | 5      | 0      | 13     | 18      | 48      |
| 36 | Aya/Kayu/Tongkol          | 2,459  | 287    | 251    | 1,891   | 147    | 0   | 0     | 0      | 5,035   | 657    | 3229  | 8603  | 3,206  | 15,695  | 810    | 5,000  | 101    | 5,911   | 26,641  |
|    | Layaran/Mersuji           | 0      | 0      | 0      | 0       | 0      | 0   | 0     | 0      | 0       | 32     | 72    | 43    | 0      | 147     | 0      | 0      | 0      | 0       | 147     |
| 37 | Kembong/Temenong/Pelaling | 9,721  | 14,602 | 3,263  | 8,846   | 3,553  | 0   | 43    | 31     | 40,059  | 720    | 6015  | 5557  | 2,591  | 14,883  | 1,396  | 1,500  | 270    | 3,166   | 58,108  |
|    | Tenggiri                  | 724    | 555    | 44     | 1,318   | 1,438  | 57  | 376   | 421    | 4,933   | 752    | 1996  | 476   | 559    | 3,783   | 1,650  | 1,200  | 310    | 3,160   | 11,876  |
|    | Timah/Layor/Selayor       | 115    | 262    | 145    | 3,755   | 679    | 0   | 0     | 110    | 5,066   | 65     | 224   | 27    | 113    | 429     | 779    | 300    | 2      | 1,081   | 6,576   |
| 38 | Pari                      | 151    | 479    | 63     | 2,301   | 2,425  | 12  | 244   | 451    | 6,126   | 41     | 347   | 805   | 1,110  | 2,303   | 2,456  | 600    | 32     | 3,088   | 11,517  |
|    | Yu                        | 54     | 234    | 20     | 691     | 313    | 0   | 28    | 19     | 1,359   | 0      | 217   | 334   | 560    | 1,111   | 1,785  | 400    | 22     | 2,207   | 4,677   |
| 39 | Ikan Baja                 | 5,163  | 20,557 | 7,944  | 68,748  | 38,343 | 0   | 0     | 4,755  | 145,510 | 88     | 8117  | 23468 | 17,597 | 49,270  | 4,177  | 0      | 3      | 4,180   | 198,960 |
|    | Ikan Campur               | 416    | 695    | 41     | 6,561   | 983    | 53  | 238   | 997    | 9,984   | 4,427  | 2745  | 2511  | 1,392  | 11,075  | 12,977 | 2,400  | 252    | 15,629  | 36,688  |
|    | Jebong                    | 0      | 0      | 13     | 1,453   | 43     | 0   | 0     | 2      | 1,511   | 5      | 335   | 215   | 224    | 779     | 0      | 0      | 19     | 19      | 2,309   |
| 42 | Ketam                     | 281    | 798    | 358    | 775     | 621    | 9   | 0     | 147    | 2,989   | 7      | 181   | 123   | 762    | 1,073   | 353    | 500    | 20     | 873     | 4,935   |
| 45 | Udang Karang/Lobok        | 0      | 0      | 0      | 145     | 32     | 0   | 0     | 0      | 177     | 0      | 109   | 174   | 331    | 614     | 90     | 600    | 13     | 703     | 1,494   |
|    | Udang Putih               | 89     | 553    | 153    | 1,286   | 383    | 21  | 87    | 258    | 2,830   | 192    | 21    | 0     | 319    | 532     | 764    | 2,000  | 0      | 2,764   | 6,126   |
|    | Udang Minyak              | 136    | 0      | 600    | 11,155  | 3,451  | 0   | 0     | 1,660  | 17,002  | 2      | 17    | 19    | 552    | 590     | 33     | 3,000  | 0      | 3,033   | 20,625  |
|    | Udang Merah Ros           | 0      | 0      | 0      | 0       | 356    | 0   | 0     | 0      | 356     | 0      | 5     | 33    | 3      | 41      | 30     | 500    | 0      | 530     | 927     |
|    | Udang Kulit Keras         | 0      | 0      | 138    | 703     | 833    | 0   | 1     | 562    | 2,237   | 216    | 5     | 131   | 78     | 430     | 1,733  | 400    | 116    | 2,249   | 4,916   |
|    | Udang Harimau             | 8      | 219    | 8      | 93      | 2      | 0   | 0     | *      | 330     | 15     | 21    | 132   | 146    | 314     | 303    | 500    | 38     | 841     | 1,485   |
|    | Lain-lain Jenis Udang     | 4,268  | 2,744  | 1,681  | 13,652  | 6,464  | 12  | 83    | 2,388  | 31,292  | 766    | 398   | 150   | 1,498  | 2,812   | 10,161 | 5,000  | 264    | 15,425  | 49,529  |
|    | Udang Baring              | 8      | 7      | 142    | 1,225   | 8,885  | 0   | 508   | 2,234  | 13,009  | 0      | *     | 0     | 8,701  | 8,701   | 268    | 0      | 0      | 268     | 21,978  |
| 56 | Siput/Kepah/Kupang/Tiram  | 704    | 0      | 43     | 146     | 636    | 0   | 0     | 0      | 1,529   | 0      | 0     | *     | 0      | *       | 13     | 1,000  | 0      | 1,013   | 2,542   |
| 57 | Sotong Kereta             | 93     | 116    | *      | 0       | 0      | 0   | 0     | 0      | 209     | *      | 0     | 1     | 0      | 1       | 0      | 0      | 0      | 0       | 210     |
|    | Sotong Katak              | 183    | 311    | 63     | 1,537   | 783    | 0   | 0     | 41     | 2,918   | 63     | 866   | 1282  | 1,346  | 3,557   | 69     | 200    | 72     | 341     | 6,816   |
|    | Sotong Biasa              | 990    | 3,069  | 156    | 4,938   | 1,547  | 0   | 0     | 196    | 10,896  | 676    | 3415  | 2114  | 2,251  | 8,456   | 676    | 800    | 85     | 1,561   | 20,913  |
| 76 | Ubur-Ubur                 | 0      | 0      | 0      | 0       | 5,081  | 0   | 0     | 2,428  | 7,509   | 0      | 0     | 0     | 0      | 0       | 19,686 | 0      | 0      | 19,686  | 27,195  |
|    | Trepang                   | 0      | 0      | 0      | 0       | 0      | 0   | 0     | 0      | 0       | 0      | 0     | 0     | 0      | 0       | 16     | 600    | 0      | 616     | 616     |
|    | Jumlah Tan M/Total Tonnes | 40,731 | 72,775 | 22,230 | 179,982 | 90,891 | 310 | 2,482 | 20,787 | 430,188 | 18,002 | 83456 | 95047 | 67,756 | 264,261 | 79,642 | 48,000 | 13,540 | 131,182 | 825,631 |

\* Pendaratan kurang dari 0.5 tan metrik.  
Landings below 0.5 tonnes.

SEMENANJUNG MALAYSIA/PENINSULAR MALAYSIA  
PENDARATAN IKAN LAUT MENGIKUT BULAN DAN SPESIES IKAN, 1988  
LANDINGS OF MARINE FISH BY MONTH AND SPECIES, 1988  
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

JADUAL (TABLE) 4.5

| ISSCAAP<br>GROUP<br>NO. | Species<br>Species          | Januari | Februari | Mac   | April | Mei   | Jun   | Julai | Ogos   | September | Oktober | November | Disember | Jumlah<br>(Tan)   |
|-------------------------|-----------------------------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|-------------------|
|                         | Nama Tempatan<br>Local Name | January | February | March | April | May   | June  | July  | August | September | October | November | December | Total<br>(Tonnes) |
| 18                      | 24 Kebasi/Selangat          | 159     | 228      | 220   | 195   | 170   | 256   | 176   | 160    | 179       | 228     | 133      | 255      | 2,359             |
|                         | Puput/B. Mata/Tirok         | 374     | 255      | 329   | 327   | 357   | 462   | 361   | 403    | 477       | 408     | 457      | 459      | 4,669             |
|                         | Terubok                     | 0       | 0        | 0     | 0     | 0     | 0     | 0     | 0      | 0         | 0       | 0        | 0        | 0                 |
|                         | 25 Siakap                   | 2       | 5        | 5     | 4     | 3     | 6     | 4     | 6      | 4         | 7       | 3        | 10       | 59                |
|                         | 31 Lidah                    | 106     | 92       | 125   | 155   | 179   | 95    | 151   | 136    | 154       | 146     | 135      | 135      | 1,609             |
|                         | Sebelah                     | 50      | 130      | 66    | 73    | 78    | 68    | 108   | 78     | 61        | 44      | 60       | 57       | 871               |
|                         | 33 Bayan                    | 3       | 6        | 12    | 8     | 1     | 6     | 6     | 8      | 11        | 10      | 7        | 3        | 81                |
|                         | Biji Nangka                 | 650     | 1,701    | 876   | 643   | 284   | 208   | 420   | 588    | 249       | 306     | 222      | 292      | 6,439             |
|                         | Daun Baharu                 | 95      | 55       | 35    | 41    | 44    | 43    | 50    | 53     | 44        | 43      | 30       | 19       | 552               |
|                         | Delah/Pinang-Pinang         | 4       | 6        | 7     | 34    | 16    | 10    | 19    | 12     | 27        | 34      | 16       | 4        | 189               |
|                         | Duri/Pulutan/Utik           | 891     | 1,045    | 1,453 | 811   | 823   | 519   | 631   | 658    | 567       | 5,343   | 475      | 427      | 13,643            |
|                         | Dengkis/Debam               | 43      | 39       | 40    | 67    | 60    | 74    | 77    | 63     | 86        | 45      | 32       | 75       | 702               |
|                         | Gelama/Tengkerong/Selampai  | 1,208   | 821      | 965   | 1,097 | 1,076 | 1,054 | 1,086 | 1,022  | 1,039     | 839     | 937      | 798      | 11,942            |
|                         | Gerut-Gerut                 | 73      | 76       | 79    | 93    | 115   | 97    | 115   | 56     | 81        | 86      | 72       | 81       | 1,023             |
|                         | Jenahak                     | 93      | 75       | 109   | 57    | 112   | 78    | 46    | 62     | 50        | 77      | 110      | 60       | 929               |
|                         | Kaci                        | 29      | 58       | 49    | 53    | 71    | 53    | 61    | 40     | 42        | 75      | 46       | 35       | 612               |
|                         | Kerapu                      | 283     | 507      | 309   | 399   | 352   | 358   | 2,832 | 304    | 282       | 381     | 258      | 223      | 6,488             |
|                         | Kerisi                      | 2,460   | 3,106    | 2,678 | 3,059 | 2,516 | 1,598 | 2,856 | 2,624  | 2,734     | 2,559   | 1,592    | 1,484    | 29,267            |
|                         | Kerisi Bali                 | 38      | 47       | 59    | 192   | 131   | 108   | 213   | 83     | 135       | 85      | 61       | 73       | 1,224             |
|                         | Kikek                       | 65      | 125      | 83    | 95    | 77    | 143   | 168   | 117    | 159       | 60      | 73       | 70       | 1,236             |
|                         | Malong                      | 145     | 216      | 244   | 188   | 185   | 130   | 171   | 196    | 261       | 182     | 213      | 184      | 2,315             |
|                         | Merah                       | 470     | 544      | 382   | 468   | 542   | 586   | 365   | 402    | 367       | 433     | 282      | 244      | 5,085             |
|                         | Mengkerong/Conor/Ubi-Ubi    | 307     | 187      | 319   | 310   | 302   | 343   | 317   | 266    | 363       | 282     | 241      | 168      | 3,405             |
|                         | Remong/Kunyit-Kunyit/Tanda  | 174     | 282      | 120   | 212   | 190   | 147   | 332   | 208    | 271       | 189     | 118      | 186      | 2,429             |
|                         | Semilang                    | 33      | 50       | 49    | 53    | 72    | 20    | 42    | 47     | 42        | 64      | 50       | 61       | 584               |
|                         | Shrumbu/Lemah               | 0       | 0        | 0     | 5     | 0     | 0     | 0     | 0      | 0         | 0       | 0        | 0        | 5                 |
|                         | Puntong Damar/Bulus         | 223     | 504      | 121   | 182   | 251   | 128   | 130   | 138    | 91        | 88      | 87       | 84       | 2,027             |
|                         | Pasir-Pasir/Timun           | 155     | 179      | 132   | 72    | 46    | 74    | 58    | 45     | 98        | 53      | 32       | 36       | 980               |
|                         | 34 Alu-Alu/Kacang-Kacang    | 125     | 164      | 235   | 195   | 132   | 111   | 223   | 196    | 304       | 247     | 164      | 198      | 2,294             |
|                         | Aruan Tasik                 | 22      | 35       | 32    | 36    | 31    | 37    | 47    | 32     | 44        | 48      | 30       | 19       | 413               |
|                         | Bawal                       | 340     | 320      | 486   | 613   | 613   | 305   | 409   | 551    | 577       | 449     | 368      | 522      | 5,553             |

Samb. (contd.)

|                           |                            |        |        |        |        |        |        |        |        |        |        |        |        |         |
|---------------------------|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
|                           | :Belanak/Kedera            | 137    | 146    | 155    | 93     | 124    | 190    | 121    | 151    | 140    | 182    | 191    | 184    | 1,830   |
|                           | :Cernin/Sagai/Cupak        | 148    | 351    | 240    | 236    | 202    | 161    | 1,158  | 169    | 245    | 240    | 123    | 313    | 3,586   |
|                           | :Cincaru                   | 805    | 536    | 755    | 1,185  | 528    | 568    | 1,085  | 949    | 750    | 653    | 348    | 702    | 8,832   |
|                           | :Demudok/Rambai            | 258    | 114    | 255    | 355    | 404    | 353    | 386    | 318    | 293    | 274    | 221    | 211    | 3,442   |
|                           | :Kurau/Senangin/Senohong   | 59     | 59     | 132    | 61     | 89     | 53     | 65     | 49     | 80     | 92     | 64     | 78     | 882     |
|                           | :Pelata/Selar              | 1,635  | 1,711  | 1,625  | 1,297  | 1,158  | 1,081  | 1,828  | 1,091  | 1,354  | 1,177  | 978    | 813    | 15,748  |
|                           | :Selar Kuning/Lolong       | 705    | 1,070  | 1,624  | 1,708  | 1,366  | 1,100  | 1,980  | 1,856  | 2,041  | 1,767  | 814    | 465    | 16,496  |
|                           | :Selayang/Corut            | 2,916  | 3,878  | 2,949  | 2,276  | 1,713  | 1,873  | 3,379  | 4,376  | 4,713  | 3,787  | 1,886  | 2,195  | 35,941  |
|                           | :Pisang-Pisang             | 0      | 21     | 7      | 61     | 10     | 20     | 8      | 8      | 18     | 36     | 12     | 3      | 204     |
|                           | :Talang                    | 43     | 35     | 88     | 110    | 58     | 55     | 39     | 69     | 50     | 70     | 59     | 62     | 738     |
| 35                        | :Bilis/Bunga Air           | 3,586  | 2,991  | 1,737  | 1,754  | 1,537  | 2,245  | 2,395  | 2,739  | 3,629  | 3,564  | 3,209  | 1,808  | 31,193  |
|                           | :Parang-Parang             | 376    | 313    | 364    | 449    | 371    | 365    | 348    | 382    | 506    | 370    | 304    | 288    | 4,436   |
|                           | :Tamban                    | 1,167  | 2,046  | 2,182  | 1,702  | 1,244  | 1,843  | 2,227  | 2,055  | 4,268  | 2,929  | 583    | 401    | 22,647  |
|                           | :Bulan-Bulan               | 0      | 0      | 2      | 4      | 3      | 1      | 1      | 1      | 5      | 5      | 4      | 3      | 29      |
| 36                        | :Aya/Kayu/Tongkol          | 282    | 385    | 1,130  | 2,232  | 1,754  | 2,342  | 3,256  | 2,607  | 3,175  | 2,318  | 951    | 298    | 20,730  |
|                           | :Layaran/Marsuji           | 3      | 13     | 17     | 16     | 17     | 3      | 14     | 24     | 12     | 22     | 3      | 3      | 147     |
| 37                        | :Kembong/Temenong/Pelaling | 3,845  | 4,031  | 6,066  | 4,725  | 4,188  | 4,676  | 5,454  | 5,142  | 5,256  | 4,809  | 3,035  | 3,715  | 54,942  |
|                           | :Tenggiri                  | 772    | 705    | 704    | 643    | 775    | 764    | 687    | 748    | 852    | 672    | 566    | 828    | 8,716   |
|                           | :Timah/Layor/Selayor       | 734    | 366    | 515    | 844    | 572    | 463    | 466    | 326    | 284    | 370    | 297    | 258    | 5,495   |
| 38                        | :Pari                      | 534    | 501    | 539    | 757    | 710    | 1,880  | 469    | 476    | 698    | 474    | 658    | 733    | 8,429   |
|                           | :Yu                        | 145    | 169    | 170    | 208    | 214    | 197    | 188    | 217    | 348    | 242    | 191    | 182    | 2,471   |
| 39                        | :Ikan Baja                 | 15,335 | 12,045 | 21,475 | 17,113 | 18,220 | 16,352 | 16,872 | 18,000 | 15,607 | 14,554 | 14,564 | 14,643 | 194,780 |
|                           | :Ikan Campur               | 1,626  | 1,885  | 1,687  | 1,843  | 1,696  | 2,118  | 1,825  | 2,234  | 2,047  | 1,675  | 1,470  | 953    | 21,059  |
|                           | :Jebong                    | 237    | 198    | 154    | 298    | 550    | 188    | 152    | 157    | 96     | 56     | 87     | 117    | 2,291   |
| 42                        | :Ketam                     | 382    | 320    | 353    | 260    | 287    | 270    | 403    | 474    | 459    | 324    | 289    | 250    | 4,062   |
| 45                        | :Udang Karang/Lobok        | 63     | 102    | 38     | 53     | 166    | 56     | 51     | 48     | 60     | 42     | 50     | 52     | 791     |
|                           | :Udang Putih               | 360    | 280    | 311    | 270    | 229    | 268    | 277    | 266    | 265    | 267    | 237    | 332    | 3,362   |
|                           | :Udang Minyak              | 1,507  | 1,299  | 1,211  | 1,155  | 1,548  | 1,273  | 1,249  | 1,124  | 1,400  | 1,480  | 1,864  | 2,482  | 17,592  |
|                           | :Udang Merah Ros           | 5      | 2      | 0      | 17     | 17     | 1      | 14     | 25     | 79     | 66     | 97     | 74     | 397     |
|                           | :Udang Kulit Keras         | 236    | 289    | 214    | 142    | 214    | 176    | 233    | 236    | 198    | 207    | 163    | 359    | 2,667   |
|                           | :Udang Harimau             | 47     | 31     | 48     | 44     | 29     | 42     | 81     | 59     | 51     | 54     | 84     | 74     | 644     |
|                           | :Lain-Lain Jenis Udang     | 3,651  | 2,593  | 2,651  | 2,872  | 3,255  | 3,076  | 2,152  | 2,300  | 2,353  | 2,477  | 3,587  | 3,135  | 34,102  |
|                           | :Udang Baring              | 1,040  | 1,940  | 638    | 856    | 628    | 4,037  | 2,889  | 2,847  | 1,556  | 861    | 2,852  | 1,566  | 21,710  |
| 56                        | :Siput/Kepah/Kupang/Tiram  | 230    | 84     | 71     | 64     | 49     | 61     | 200    | 201    | 136    | 212    | 145    | 76     | 1,529   |
| 57                        | :Sotong Kereta             | 11     | 8      | 26     | 16     | 19     | 15     | 17     | 23     | 16     | 16     | 21     | 21     | 210     |
|                           | :Sotong Katak              | 466    | 584    | 683    | 623    | 566    | 529    | 604    | 532    | 576    | 551    | 420    | 341    | 6,475   |
|                           | :Sotong Biasa              | 986    | 1,153  | 1,826  | 2,296  | 1,700  | 1,527  | 1,870  | 1,850  | 1,824  | 1,701  | 1,335  | 1,284  | 19,352  |
| 76                        | :Ubur-Ubur                 | 0      | 0      | 13     | 159    | 399    | 1,197  | 2,571  | 2,652  | 470    | 48     | 0      | 0      | 7,509   |
| Jumlah Tan M/Total Tonnes |                            | 52,952 | 53,113 | 62,274 | 58,514 | 55,436 | 58,544 | 68,478 | 65,335 | 64,719 | 61,455 | 48,065 | 45,564 | 694,449 |

\* Pendaratan kurang dari 0.5 tan metrik  
Landings below 0.5 tonnes.

PANTAI BARAT SEMENANJUNG MALAYSIA /WEST COAST PENINSULAR MALAYSIA  
PENDARATAN IKAN LAUT MENGIKUT BULAN DAN SPESIES IKAN, 1988  
LANDINGS OF MARINE FISH BY MONTH AND SPECIES, 1988  
(Kuantiti dalam Tan Metrik/ Quantity in Tonnes)

JADUAL (TABLE) 4.5.1

| ISSCAAP/<br>GROUP<br>NO. | Species<br>Species          | Januari | Februari | Mac   | April | Mei   | Jun  | Julai | Ogos   | September | Oktober | November | Disember | Jumlah<br>(Tan)   |
|--------------------------|-----------------------------|---------|----------|-------|-------|-------|------|-------|--------|-----------|---------|----------|----------|-------------------|
|                          | Nama Tempatan<br>Local Name | January | February | March | April | May   | June | July  | August | September | October | November | December | Total<br>(Tonnes) |
| 24                       | Kebasi/Selangat             | 139     | 204      | 191   | 189   | 155   | 246  | 162   | 146    | 171       | 223     | 130      | 239      | 2,195             |
|                          | Puput/B. Mata/Tirok         | 357     | 249      | 317   | 323   | 353   | 462  | 360   | 403    | 477       | 408     | 456      | 455      | 4,620             |
|                          | Terubok                     | 0       | 0        | 0     | 0     | 0     | 0    | 0     | 0      | 0         | 0       | 0        | 0        | 0                 |
| 25                       | Siakap                      | 2       | 3        | 4     | 3     | 3     | 5    | 3     | 6      | 2         | 7       | 3        | 9        | 50                |
| 31                       | Lidah                       | 84      | 68       | 105   | 142   | 166   | 83   | 131   | 118    | 143       | 138     | 129      | 122      | 1,429             |
|                          | Sebelah                     | 23      | 16       | 22    | 25    | 33    | 22   | 18    | 14     | 22        | 12      | 31       | 34       | 272               |
| 33                       | Bayan                       | 0       | 0        | 0     | 0     | 0     | 0    | 0     | 0      | 0         | 0       | 2        | 0        | 2                 |
|                          | Biji Nangka                 | 55      | 63       | 96    | 147   | 105   | 110  | 55    | 118    | 107       | 138     | 133      | 218      | 1,345             |
|                          | Daun Baharu                 | 71      | 16       | 9     | 15    | 25    | 19   | 16    | 23     | 25        | 23      | 13       | 14       | 269               |
|                          | Delah/Pinang-Pinang         | 3       | 1        | 2     | 3     | 4     | 4    | 6     | 4      | 1         | 3       | 2        | 2        | 35                |
|                          | Duri/Pulutan/Utik           | 391     | 208      | 270   | 290   | 399   | 233  | 196   | 230    | 253       | 292     | 266      | 298      | 3,326             |
|                          | Dengkis/Debam               | 23      | 3        | 1     | 37    | 41    | 55   | 15    | 11     | 1         | 8       | 4        | 13       | 212               |
|                          | Gelama/Tengkerong/Selampai  | 828     | 572      | 676   | 874   | 816   | 837  | 855   | 773    | 799       | 650     | 748      | 683      | 9,111             |
|                          | Gerut-Gerut                 | 53      | 42       | 48    | 65    | 99    | 89   | 60    | 50     | 67        | 79      | 63       | 75       | 790               |
|                          | Jenahak                     | 93      | 75       | 109   | 56    | 111   | 71   | 45    | 62     | 48        | 76      | 109      | 59       | 914               |
|                          | Kaci                        | 9       | 6        | 7     | 13    | 44    | 14   | 9     | 6      | 4         | 8       | 13       | 22       | 155               |
|                          | Kerapu                      | 239     | 412      | 183   | 261   | 298   | 252  | 195   | 229    | 160       | 201     | 201      | 180      | 2,811             |
|                          | Kerisi                      | 1,010   | 135      | 743   | 863   | 1,060 | 674  | 555   | 686    | 473       | 583     | 477      | 506      | 7,765             |
|                          | Kerisi Bali                 | 33      | 23       | 34    | 112   | 95    | 93   | 81    | 40     | 82        | 43      | 49       | 58       | 743               |
|                          | Kikek                       | 30      | 32       | 41    | 62    | 60    | 123  | 55    | 42     | 35        | 1       | 30       | 59       | 570               |
|                          | Malong                      | 132     | 146      | 193   | 132   | 171   | 128  | 139   | 187    | 238       | 181     | 205      | 175      | 2,027             |
|                          | Merah                       | 200     | 104      | 125   | 205   | 352   | 267  | 134   | 159    | 95        | 148     | 151      | 151      | 2,091             |
|                          | Mengkerong/Conor/Ubi-Ubi    | 266     | 111      | 173   | 233   | 245   | 294  | 287   | 196    | 264       | 200     | 184      | 152      | 2,605             |
|                          | Remong/Kunyit-Kunyit/Tanda  | 31      | 12       | 13    | 81    | 46    | 56   | 62    | 44     | 46        | 48      | 12       | 43       | 494               |
|                          | Semilang                    | 33      | 50       | 50    | 53    | 72    | 20   | 42    | 47     | 42        | 64      | 48       | 61       | 582               |
|                          | Shrumbu/Lemah               | 0       | 0        | 0     | 0     | 0     | 0    | 0     | 0      | 0         | 0       | 0        | 0        | 0                 |
|                          | Puntong Damar/Bulus         | 17      | 12       | 8     | 7     | 46    | 7    | 20    | 28     | 17        | 13      | 23       | 17       | 215               |
|                          | Pasir-Pasir/Timun           | 3       | 0        | 0     | 1     | 3     | 2    | 5     | 5      | 0         | 2       | 2        | 1        | 24                |
| 34                       | Alu-Alu/Kacang-Kacang       | 70      | 53       | 150   | 106   | 95    | 77   | 156   | 131    | 225       | 160     | 120      | 145      | 1,488             |
|                          | Aruan Tasik                 | 14      | 6        | 8     | 11    | 9     | 5    | 11    | 11     | 8         | 13      | 11       | 7        | 114               |
|                          | Bawal                       | 262     | 272      | 427   | 531   | 558   | 225  | 358   | 518    | 539       | 407     | 340      | 460      | 4,897             |

Samb. (contd.)

|                           |                            |        |        |        |        |        |        |        |        |        |        |        |        |         |
|---------------------------|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
|                           | :Belanak/Kedera            | 137    | 145    | 155    | 93     | 124    | 198    | 121    | 152    | 148    | 182    | 192    | 184    | 1,829   |
|                           | :Cermin/Sagai/Cupak        | 24     | 15     | 45     | 30     | 15     | 47     | 64     | 17     | 16     | 42     | 36     | 116    | 467     |
|                           | :Cincaru                   | 614    | 350    | 466    | 684    | 343    | 203    | 330    | 272    | 424    | 214    | 223    | 641    | 4,764   |
|                           | :Demudok/Rambai            | 228    | 85     | 141    | 255    | 303    | 244    | 292    | 203    | 153    | 149    | 183    | 190    | 2,426   |
|                           | :Kurau/Senangin/Senohong   | 59     | 55     | 132    | 60     | 85     | 52     | 65     | 47     | 79     | 92     | 63     | 77     | 866     |
|                           | :Pelata/Selar              | 930    | 686    | 478    | 555    | 640    | 537    | 688    | 508    | 675    | 508    | 390    | 265    | 6,860   |
|                           | :Selar Kuning/Lolong       | 188    | 148    | 182    | 197    | 222    | 160    | 192    | 348    | 316    | 207    | 201    | 215    | 2,576   |
|                           | :Selayang/Curut            | 604    | 602    | 678    | 1,055  | 776    | 792    | 959    | 1,248  | 1,112  | 1,262  | 779    | 1,015  | 10,882  |
|                           | :Pisang-Pisang             | 0      | 0      | 0      | 0      | 3      | 8      | 2      | 3      | 10     | 20     | 10     | 1      | 56      |
|                           | :Talang                    | 34     | 31     | 83     | 93     | 50     | 51     | 36     | 47     | 42     | 57     | 46     | 58     | 628     |
| 35                        | :Bilis/Bunga Air           | 3,555  | 2,981  | 1,666  | 1,588  | 1,397  | 1,391  | 1,624  | 1,990  | 2,078  | 2,085  | 3,162  | 1,808  | 25,325  |
|                           | :Parang-Parang             | 305    | 267    | 249    | 274    | 215    | 246    | 215    | 254    | 384    | 238    | 241    | 271    | 3,159   |
|                           | :Tamban                    | 629    | 534    | 880    | 468    | 421    | 424    | 570    | 712    | 418    | 589    | 324    | 357    | 6,326   |
|                           | :Bulan-Bulan               | 0      | 1      | 0      | 0      | 1      | 0      | 0      | 0      | 0      | 0      | 0      | 3      | 6       |
| 36                        | :Aya/Kayu/Tongkol          | 172    | 182    | 636    | 546    | 415    | 617    | 863    | 509    | 362    | 283    | 195    | 255    | 5,035   |
|                           | :Layaran/Marsuji           | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0       |
| 37                        | :Kembong/Temenong/Pelaling | 3,484  | 3,148  | 3,656  | 3,507  | 3,329  | 3,585  | 2,894  | 3,808  | 3,135  | 3,501  | 2,609  | 3,403  | 40,059  |
|                           | :Tenggiri                  | 520    | 400    | 454    | 375    | 344    | 448    | 406    | 407    | 460    | 318    | 292    | 509    | 4,933   |
|                           | :Timah/Layor/Selayor       | 668    | 323    | 467    | 825    | 550    | 435    | 429    | 305    | 231    | 355    | 233    | 245    | 5,066   |
| 38                        | :Pari                      | 385    | 185    | 302    | 492    | 556    | 1,762  | 313    | 307    | 452    | 303    | 534    | 535    | 6,126   |
|                           | :Yu                        | 88     | 59     | 96     | 121    | 137    | 113    | 94     | 95     | 204    | 137    | 129    | 87     | 1,359   |
| 39                        | :Ikan Baja                 | 12,675 | 9,148  | 13,007 | 13,164 | 15,642 | 12,630 | 11,575 | 11,822 | 11,347 | 10,561 | 11,742 | 12,197 | 145,510 |
|                           | :Ikan Campur               | 686    | 682    | 820    | 967    | 1,080  | 860    | 672    | 1,066  | 817    | 782    | 763    | 789    | 9,984   |
|                           | :Jebong                    | 153    | 39     | 100    | 217    | 488    | 144    | 81     | 85     | 20     | 27     | 51     | 106    | 1,511   |
| 42                        | :Ketam                     | 297    | 217    | 284    | 214    | 235    | 184    | 280    | 334    | 321    | 249    | 194    | 180    | 2,989   |
| 45                        | :Udang Karang/Lobok        | 9      | 4      | 2      | 5      | 131    | 3      | 4      | 7      | 4      | 2      | 2      | 4      | 177     |
|                           | :Udang Putih               | 283    | 184    | 274    | 254    | 207    | 248    | 247    | 243    | 238    | 213    | 190    | 249    | 2,830   |
|                           | :Udang Minyak              | 1,424  | 1,217  | 1,023  | 1,131  | 1,544  | 1,271  | 1,241  | 1,115  | 1,385  | 1,439  | 1,810  | 2,402  | 17,002  |
|                           | :Udang Merah Ros           | 3      | 1      | 0      | 17     | 18     | 1      | 14     | 26     | 79     | 66     | 88     | 43     | 356     |
|                           | :Udang Kulit Keras         | 176    | 246    | 140    | 122    | 212    | 155    | 233    | 198    | 174    | 151    | 114    | 316    | 2,237   |
|                           | :Udang Harimau             | 30     | 14     | 28     | 28     | 21     | 23     | 45     | 32     | 26     | 30     | 25     | 28     | 330     |
|                           | :Lain-Lain Jenis Udang     | 3,241  | 2,238  | 2,431  | 2,761  | 3,169  | 2,937  | 1,891  | 2,142  | 2,121  | 2,206  | 3,252  | 2,903  | 31,292  |
|                           | :Udang Baring              | 982    | 1,888  | 543    | 856    | 628    | 1,706  | 203    | 453    | 631    | 702    | 2,852  | 1,565  | 13,009  |
| 56                        | :Siput/Kepah/Kupang/Tiram  | 230    | 84     | 71     | 64     | 49     | 61     | 200    | 201    | 136    | 213    | 144    | 76     | 1,529   |
| 57                        | :Sotong Kereta             | 11     | 8      | 26     | 16     | 19     | 15     | 17     | 23     | 17     | 16     | 21     | 20     | 209     |
|                           | :Sotong Katak              | 242    | 184    | 249    | 253    | 284    | 302    | 230    | 222    | 289    | 246    | 225    | 192    | 2,918   |
|                           | :Sotong Biasa              | 810    | 683    | 794    | 1,040  | 855    | 804    | 730    | 1,022  | 1,039  | 939    | 1,056  | 1,124  | 10,896  |
| 76                        | :Ubur-Ubur                 | 0      | 0      | 13     | 159    | 399    | 1,197  | 2,571  | 2,652  | 470    | 48     | 0      | 0      | 7,509   |
| Jumlah Tan M/Total Tonnes |                            | 38,346 | 29,928 | 34,571 | 37,323 | 40,374 | 38,327 | 34,422 | 37,165 | 34,158 | 32,562 | 36,326 | 36,686 | 430,188 |

\* Pendaratan kurang dari 0.5 tan metrik.  
Landings below 0.5 tonnes.

PANTAI TIMUR SEMENANJUNG MALAYSIA/EAST COAST PENINSULAR MALAYSIA  
PENDARATAN IKAN LAUT MENGIKUT BULAN DAN SPESIES IKAN, 1988  
LANDINGS OF MARINE FISH BY MONTH AND SPECIES, 1988  
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

JADUAL (TABLE) 4.5.2

| ISSCAAP<br>GROUP<br>NO. | Species<br>Species          | Januari | Februari | Mac   | April | Mei   | Jun  | Julai | Ogos   | September | Oktober | November | Disember | Jumlah<br>(Tan)<br>Total<br>(Tonnes) |
|-------------------------|-----------------------------|---------|----------|-------|-------|-------|------|-------|--------|-----------|---------|----------|----------|--------------------------------------|
|                         | Nama Tempatan<br>Local Name | January | February | March | April | May   | June | July  | August | September | October | November | December |                                      |
| 0                       | Kebasi/Selangat             | 19      | 24       | 29    | 6     | 15    | 10   | 14    | 15     | 8         | 5       | 2        | 17       | 164                                  |
|                         | Puput/B. Mata/Tirok         | 17      | 7        | 12    | 4     | 4     | *    | 1     | 0      | *         | 0       | 1        | 3        | 49                                   |
|                         | Terubok                     | 0       | 0        | 0     | 0     | 0     | 0    | 0     | 0      | 0         | 0       | 0        | 0        | 0                                    |
| 0                       | Siakap                      | 0       | 2        | 1     | 1     | 0     | 1    | 1     | *      | 1         | *       | *        | 1        | 8                                    |
| 0                       | Lidah                       | 22      | 24       | 20    | 12    | 13    | 11   | 20    | 18     | 11        | 8       | 7        | 14       | 180                                  |
|                         | Sebelah                     | 27      | 113      | 44    | 49    | 45    | 45   | 89    | 64     | 39        | 33      | 29       | 22       | 599                                  |
| 0                       | Bayan                       | 3       | 6        | 12    | 8     | 1     | 6    | 6     | 8      | 11        | 10      | 5        | 3        | 79                                   |
|                         | Biji Nangka                 | 595     | 1,638    | 780   | 495   | 180   | 98   | 365   | 470    | 142       | 168     | 89       | 74       | 5,094                                |
|                         | Daun Baharu                 | 24      | 38       | 27    | 26    | 19    | 24   | 35    | 30     | 19        | 20      | 16       | 5        | 283                                  |
|                         | Delah/Pinang-Pinang         | 2       | 5        | 5     | 32    | 12    | 6    | 12    | 8      | 26        | 30      | 14       | 2        | 154                                  |
|                         | Duri/Pulutan/Utik           | 500     | 836      | 1,182 | 521   | 424   | 286  | 435   | 428    | 314       | 5,052   | 210      | 129      | 10,317                               |
|                         | Dengkis/Debam               | 20      | 36       | 40    | 30    | 19    | 20   | 62    | 52     | 85        | 36      | 27       | 63       | 490                                  |
|                         | Gelama/Tengkerong/Selampai  | 380     | 249      | 290   | 222   | 261   | 217  | 231   | 250    | 240       | 189     | 187      | 115      | 2,831                                |
|                         | Gerut-Gerut                 | 20      | 34       | 31    | 28    | 15    | 8    | 55    | 6      | 14        | 8       | 8        | 6        | 233                                  |
|                         | Jenahak                     | 0       | 0        | 0     | 1     | 1     | 7    | 1     | *      | 1         | 2       | 2        | *        | 15                                   |
|                         | Kaci                        | 20      | 51       | 42    | 39    | 27    | 40   | 52    | 34     | 38        | 67      | 34       | 13       | 457                                  |
|                         | Kerapu                      | 44      | 94       | 126   | 138   | 54    | 107  | 2,637 | 75     | 122       | 180     | 57       | 43       | 3,677                                |
|                         | Kerisi                      | 1,450   | 2,971    | 1,936 | 2,196 | 1,456 | 924  | 2,301 | 1,938  | 2,261     | 1,977   | 1,115    | 978      | 21,503                               |
|                         | Kerisi Bali                 | 5       | 24       | 25    | 80    | 36    | 16   | 132   | 43     | 52        | 42      | 11       | 15       | 481                                  |
|                         | Kikek                       | 35      | 93       | 42    | 33    | 16    | 21   | 113   | 75     | 125       | 58      | 43       | 11       | 665                                  |
|                         | Malong                      | 14      | 70       | 51    | 55    | 14    | 2    | 31    | 9      | 24        | 1       | 8        | 9        | 288                                  |
|                         | Merah                       | 270     | 440      | 257   | 262   | 191   | 320  | 231   | 242    | 272       | 285     | 131      | 93       | 2,994                                |
|                         | Hengkerong/Conor/Ubi-Ubi    | 42      | 77       | 146   | 77    | 57    | 49   | 30    | 70     | 98        | 81      | 57       | 16       | 800                                  |
|                         | Remong/Kunyit-Kunyit/Tanda  | 143     | 270      | 108   | 130   | 145   | 91   | 270   | 164    | 226       | 140     | 105      | 143      | 1,935                                |
|                         | Semilang                    | 0       | 0        | 0     | *     | *     | *    | *     | *      | 0         | 0       | 1        | 0        | 1                                    |
|                         | Shrumbu/Lemah               | 0       | 0        | 0     | 5     | 0     | 0    | 0     | 0      | 0         | 0       | 0        | 0        | 5                                    |
|                         | Puntong Damar/Bulus         | 206     | 492      | 113   | 175   | 204   | 121  | 109   | 109    | 75        | 75      | 65       | 68       | 1,812                                |
|                         | Pasir-Pasir/Timun           | 152     | 179      | 132   | 71    | 43    | 72   | 54    | 40     | 97        | 50      | 31       | 35       | 956                                  |
| 0                       | Alu-Alu/Kacang-Kacang       | 55      | 111      | 85    | 89    | 37    | 34   | 68    | 65     | 78        | 87      | 44       | 53       | 806                                  |
|                         | Aruan Tasik                 | 8       | 28       | 25    | 26    | 22    | 32   | 36    | 21     | 36        | 34      | 19       | 12       | 299                                  |
|                         | Bawal                       | 78      | 49       | 60    | 82    | 55    | 79   | 51    | 33     | 39        | 41      | 27       | 62       | 656                                  |

Samb. (contd.)

|   |                           |        |        |        |        |        |        |        |        |        |        |        |       |         |
|---|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|---------|
|   | Belanak/Kedera            | 0      | 0      | 0      | *      | 0      | *      | *      | 0      | 0      | 0      | 0      | *     | *       |
|   | Cermin/Sagai/Cupak        | 124    | 336    | 195    | 206    | 187    | 114    | 1,095  | 152    | 229    | 198    | 87     | 196   | 3,119   |
|   | Cincaru                   | 191    | 186    | 289    | 481    | 182    | 364    | 735    | 678    | 336    | 440    | 125    | 61    | 4,068   |
|   | Demudok/Rambai            | 30     | 28     | 114    | 100    | 101    | 110    | 93     | 115    | 141    | 125    | 38     | 21    | 1,016   |
|   | Kurau/Senangin/Senohong   | 0      | 3      | 0      | 2      | 4      | 1      | *      | 1      | 2      | 0      | 1      | 2     | 16      |
|   | Pelata/Selar              | 705    | 1,025  | 1,147  | 742    | 518    | 544    | 1,140  | 584    | 679    | 669    | 588    | 547   | 8,888   |
|   | Selar Kuning/Lolong       | 517    | 923    | 1,442  | 1,511  | 1,144  | 940    | 1,788  | 1,508  | 1,724  | 1,559  | 614    | 250   | 13,920  |
|   | Selayang/Curut            | 2,312  | 3,276  | 2,271  | 1,221  | 937    | 1,081  | 2,420  | 3,128  | 3,601  | 2,526  | 1,107  | 1,179 | 25,059  |
|   | Pisang-Pisang             | 0      | 21     | 7      | 61     | 7      | 11     | 6      | 5      | 8      | 17     | 2      | 3     | 148     |
|   | Talang                    | 9      | 4      | 5      | 18     | 8      | 4      | 2      | 22     | 8      | 13     | 13     | 4     | 110     |
| 0 | Bilis/Bunga Air           | 31     | 10     | 70     | 166    | 139    | 854    | 771    | 750    | 1,551  | 1,479  | 47     | *     | 5,868   |
|   | Parang-Parang             | 71     | 47     | 115    | 175    | 156    | 119    | 133    | 127    | 122    | 132    | 63     | 17    | 1,277   |
|   | Tamban                    | 537    | 1,512  | 1,301  | 1,234  | 823    | 1,420  | 1,657  | 1,343  | 3,850  | 2,340  | 259    | 45    | 16,321  |
|   | Bulan-Bulan               | 0      | 0      | 2      | 4      | 2      | *      | 1      | 1      | 5      | 5      | 4      | 0     | 24      |
| 0 | Aya/Kayu/Tongkol          | 110    | 203    | 493    | 1,687  | 1,339  | 1,725  | 2,393  | 2,097  | 2,813  | 2,036  | 756    | 43    | 15,695  |
|   | Layaran/Marsuji           | 3      | 13     | 17     | 16     | 17     | 3      | 14     | 24     | 12     | 22     | 3      | 3     | 147     |
| 0 | Kembong/Temenong/Pelaling | 361    | 884    | 2,409  | 1,218  | 859    | 1,091  | 2,560  | 1,334  | 2,121  | 1,308  | 426    | 312   | 14,883  |
|   | Tenggiri                  | 252    | 305    | 251    | 268    | 430    | 316    | 281    | 341    | 392    | 353    | 275    | 319   | 3,783   |
|   | Timah/Layor/Selayor       | 66     | 45     | 48     | 19     | 22     | 28     | 36     | 21     | 53     | 15     | 64     | 12    | 429     |
| 0 | Pari                      | 149    | 316    | 237    | 266    | 153    | 118    | 156    | 169    | 246    | 171    | 124    | 198   | 2,303   |
|   | Yu                        | 57     | 110    | 74     | 88     | 76     | 83     | 94     | 122    | 144    | 105    | 63     | 95    | 1,111   |
| 0 | Ikan Baja                 | 2,660  | 2,897  | 8,468  | 3,949  | 2,578  | 3,722  | 5,298  | 6,178  | 4,259  | 3,993  | 2,822  | 2,446 | 49,270  |
|   | Ikan Campur               | 939    | 1,203  | 868    | 877    | 616    | 1,258  | 1,153  | 1,167  | 1,230  | 893    | 707    | 164   | 11,075  |
|   | Jebong                    | 84     | 159    | 55     | 81     | 62     | 44     | 71     | 71     | 76     | 29     | 36     | 11    | 779     |
| 0 | Ketam                     | 85     | 103    | 68     | 46     | 53     | 86     | 124    | 140    | 129    | 75     | 95     | 69    | 1,073   |
| 0 | Udang Karang/Lobok        | 55     | 98     | 36     | 48     | 35     | 53     | 57     | 39     | 56     | 40     | 48     | 49    | 614     |
|   | Udang Putih               | 77     | 96     | 36     | 16     | 22     | 20     | 30     | 23     | 27     | 54     | 47     | 84    | 532     |
|   | Udang Minyak              | 83     | 82     | 188    | 25     | 4      | 2      | 7      | 9      | 15     | 41     | 54     | 80    | 590     |
|   | Udang Merah Ros           | 2      | 1      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 9      | 29    | 41      |
|   | Udang Kulit Keras         | 60     | 43     | 74     | 21     | 2      | 21     | *      | 38     | 24     | 56     | 48     | 43    | 430     |
|   | Udang Harimau             | 17     | 17     | 20     | 15     | 8      | 19     | 37     | 27     | 25     | 24     | 59     | 46    | 314     |
|   | Lain-Lain Jenis Udang     | 410    | 355    | 220    | 111    | 85     | 139    | 263    | 157    | 232    | 271    | 335    | 234   | 2,812   |
|   | Udang Baring              | 58     | 52     | 95     | 0      | 0      | 2,330  | 2,686  | 2,394  | 926    | 159    | 0      | 1     | 8,701   |
| 0 | Siput/Kepah/Kupang/Tiram  | 0      | 0      | *      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | *      | 0     | *       |
| 0 | Sotong Kereta             | 0      | 0      | 1      | 0      | *      | 0      | 0      | 0      | 0      | 0      | *      | *     | *       |
|   | Sotong Katak              | 224    | 401    | 434    | 370    | 282    | 227    | 374    | 310    | 286    | 304    | 195    | 150   | 3,557   |
|   | Sotong Biasa              | 176    | 470    | 1,032  | 1,256  | 845    | 723    | 1,139  | 828    | 785    | 762    | 280    | 160   | 8,456   |
| 0 | Ubur-Ubur                 | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | *      | 0      | 0      | 0     | *       |
|   | Jumlah Tan M/Total Tonnes | 14,606 | 23,185 | 27,703 | 21,191 | 15,062 | 20,217 | 34,056 | 28,170 | 30,561 | 28,893 | 11,739 | 8,878 | 264,261 |

\* Pendaratan kurang dari 0.5 tan metrik  
Landings below 0.5 tonnes.



SARAWAK  
PENDARATAN IKAN DAN UDANG MENGIKUT BULAN DAN SPESIES, 1988  
LANDINGS OF MARINE FISH AND PRAWN BY MONTH AND SPECIES, 1988  
(Kuantiti dalam Tan Metrik/ Quantity in Tonnes)

JADUAL (TABLE) 4.5.3

| Nama Tempatan<br>Local Name of Fish | JANUARI<br>JANUARY | FEBRUARI<br>FEBRUARY | MAR<br>MARCH | APRIL<br>APRIL | MAY<br>MAY | JUN<br>JUNE | JULAI<br>JULY | OGOS<br>AUGUST | SEPTEMBER<br>SEPTEMBER | OKTOBER<br>OCTOBER | NOVEMBER<br>NOVEMBER | DISEMBER<br>DECEMBER | JUMLAH<br>TOTAL |
|-------------------------------------|--------------------|----------------------|--------------|----------------|------------|-------------|---------------|----------------|------------------------|--------------------|----------------------|----------------------|-----------------|
| Kebasi/Selangat                     | 33                 | 35                   | 35           | 22             | 17         | 40          | 20            | 43             | 10                     | 3                  | 1                    | 1                    | 260             |
| Puput                               | 21                 | 27                   | 50           | 63             | 59         | 204         | 74            | 86             | 24                     | 24                 | 13                   | 13                   | 658             |
| Beliak Mata                         | 0                  | 0                    | 0            | 0              | 0          | 62          | 55            | 42             | 35                     | 12                 | 23                   | 14                   | 243             |
| Terubok                             | *                  | 2                    | 4            | 20             | 64         | 85          | 69            | 29             | 42                     | 12                 | 7                    | 5                    | 339             |
| Terubok/T. Macrura                  | 0                  | 0                    | 0            | 0              | 0          | 0           | 0             | *              | 0                      | 0                  | 0                    | 0                    | 0               |
| Siakap                              | 7                  | 8                    | 10           | 1              | 1          | 688         | 8             | 26             | 29                     | 15                 | 19                   | 1                    | 813             |
| Lidah                               | 5                  | 4                    | 4            | 5              | 4          | 2           | 4             | 19             | 5                      | 4                  | 5                    | 3                    | 64              |
| Sebelah                             | *                  | *                    | 1            | *              | 1          | 1           | 3             | 2              | *                      | 1                  | 1                    | 1                    | 11              |
| Bayan                               | 0                  | 0                    | 0            | 0              | 0          | 21          | 0             | 1              | 2                      | 31                 | 7                    | 5                    | 67              |
| Biji Nangka                         | 5                  | 5                    | 3            | 0              | 0          | 3           | 1             | 14             | 4                      | 4                  | 3                    | 2                    | 44              |
| Delah                               | 0                  | 0                    | 0            | 0              | 0          | 0           | 5             | 0              | 0                      | 0                  | 0                    | 0                    | 5               |
| Daun Baharu                         | 13                 | 14                   | 11           | 9              | 8          | 2           | 7             | 10             | 9                      | 1                  | 2                    | 2                    | 88              |
| Duri/Pulutan/Utek                   | 116                | 144                  | 180          | 169            | 281        | 396         | 250           | 342            | 233                    | 118                | 113                  | 115                  | 2,457           |
| Gelama/Tengkerong                   | 173                | 146                  | 237          | 175            | 217        | 749         | 360           | 510            | 290                    | 142                | 183                  | 161                  | 3,343           |
| Gerut-Gerut/Selukut                 | 18                 | 22                   | 23           | 16             | 0          | 28          | 18            | 0              | 7                      | 16                 | 18                   | 15                   | 181             |
| Jahan/Goh                           | 0                  | 0                    | 0            | 0              | 0          | 0           | 0             | 5              | 0                      | 0                  | 0                    | 0                    | 5               |
| Pedukang                            | 6                  | 1                    | 2            | 4              | 4          | 70          | 97            | 77             | 65                     | 7                  | 16                   | 11                   | 360             |
| Jenahak                             | 1                  | 1                    | 1            | 2              | 3          | 306         | 9             | 9              | 12                     | 2                  | 20                   | 21                   | 387             |
| Kaci                                | *                  | 0                    | 0            | 1              | 2          | 1           | 1             | 1              | 1                      | 1                  | 2                    | 2                    | 12              |
| Kerapu                              | 12                 | 10                   | 8            | 7              | 8          | 6           | 37            | 41             | 32                     | 15                 | 21                   | 19                   | 216             |
| Kerisi                              | 0                  | 0                    | 1            | 2              | 2          | 12          | 78            | 68             | 51                     | 24                 | 24                   | 39                   | 301             |
| Kerisi Bali                         | 0                  | 0                    | 0            | 0              | 0          | 0           | 0             | 1              | 1                      | 0                  | 0                    | 0                    | 2               |
| Kikek                               | *                  | 2                    | 3            | 3              | 2          | *           | 0             | 1              | 1                      | 0                  | 5                    | 3                    | 20              |
| Lumi-Lumi                           | 67                 | 125                  | 340          | 304            | 625        | 48          | 65            | 5              | 12                     | 1                  | 4                    | 4                    | 1,600           |
| Malong                              | 70                 | 20                   | 82           | 72             | 114        | 109         | 145           | 75             | 73                     | 20                 | 40                   | 35                   | 855             |
| Merah                               | 5                  | 7                    | 11           | 12             | 24         | 78          | 63            | 75             | 65                     | 55                 | 58                   | 42                   | 495             |
| Pelanduk                            | 0                  | 0                    | 1            | 1              | 11         | 1           | 17            | 12             | 6                      | 1                  | 3                    | 2                    | 55              |
| Semilang                            | 2                  | 3                    | 5            | 4              | 5          | 19          | 15            | 30             | 32                     | 64                 | 45                   | 29                   | 253             |
| Shrumbu/Lemah                       | *                  | 1                    | 5            | 10             | 11         | 16          | 56            | 45             | 48                     | 1                  | 28                   | 20                   | 241             |
| Senolong/Kapas                      | 0                  | 0                    | 0            | 0              | 0          | 5           | 0             | 0              | 5                      | 3                  | 1                    | 1                    | 15              |
| Alu/Kacang                          | 0                  | *                    | 1            | 1              | 1          | 4           | 8             | 13             | 7                      | 4                  | 6                    | 6                    | 51              |
| Bawal Hitam                         | 7                  | 16                   | 25           | 79             | 144        | 235         | 244           | 207            | 170                    | 93                 | 72                   | 81                   | 1,373           |
| Bawal Puteh                         | 8                  | 6                    | 13           | 38             | 58         | 258         | 102           | 155            | 65                     | 4                  | 40                   | 44                   | 791             |
| Bawal/Bujang                        | 6                  | 9                    | 16           | 66             | 42         | 460         | 45            | 36             | 19                     | 9                  | 17                   | 12                   | 737             |
| Belanak/Kedera                      | 2                  | 2                    | 2            | 12             | 1          | 10          | 6             | 12             | 14                     | 5                  | 2                    | 5                    | 73              |
| Cermin/Sagai/Cupak                  | 0                  | 0                    | 0            | 0              | 14         | 21          | 1             | 24             | 0                      | 0                  | 0                    | 0                    | 60              |
| Geronggong                          | 0                  | 0                    | 5            | 0              | 0          | 0           | 0             | 0              | 0                      | 0                  | 0                    | 0                    | 5               |
| Cincar                              | 14                 | 10                   | 11           | 19             | 23         | 193         | 62            | 88             | 69                     | 44                 | 43                   | 79                   | 655             |
| Demudok/Rambai                      | 0                  | 0                    | 1            | 3              | 2          | 17          | 12            | 9              | 8                      | 3                  | 3                    | 3                    | 61              |
| Kurau/Senangin                      | 1                  | 5                    | 1            | 42             | 36         | 105         | 223           | 134            | 102                    | 40                 | 1                    | 26                   | 716             |
| Senangin                            | 42                 | 16                   | 73           | 0              | 0          | 0           | 10            | 2              | 4                      | 17                 | 55                   | 20                   | 239             |
| Selar                               | 1                  | 3                    | 2            | 2              | 1          | 0           | 4             | 24             | 9                      | 2                  | 2                    | 2                    | 52              |
| Pelata                              | 0                  | 0                    | 0            | *              | 0          | 166         | 13            | 4              | *                      | 2                  | 0                    | 0                    | 185             |
| Selar Kuning                        | 1                  | 1                    | 4            | 2              | 5          | 34          | 126           | 72             | 60                     | 25                 | 44                   | 35                   | 409             |
| Selayang/Cerut                      | 0                  | 0                    | 0            | 0              | 0          | *           | 0             | 26             | 20                     | *                  | *                    | 1                    | 47              |
| Talang                              | 8                  | 8                    | 12           | 38             | 40         | 131         | 100           | 99             | 94                     | 67                 | 52                   | 45                   | 694             |
| Tampan                              | 25                 | 20                   | 40           | 21             | 34         | 211         | 62            | 73             | 114                    | 18                 | 39                   | 32                   | 689             |
| Bilis/Bunga Air                     | 4                  | 4                    | 6            | 6              | 18         | 49          | 107           | 243            | 22                     | 12                 | 1                    | 8                    | 480             |

|                       |       |        |        |       |       |        |       |       |       |       |       |       |        |
|-----------------------|-------|--------|--------|-------|-------|--------|-------|-------|-------|-------|-------|-------|--------|
| Parang-Parang         | 2     | 2      | 4      | 10    | 30    | 64     | 66    | 98    | 33    | 26    | 21    | 19    | 375    |
| Bulan-Bulan           | 0     | *      | 0      | *     | *     | 0      | *     | 0     | 0     | 0     | 0     | 5     | 5      |
| Tongkol/K. Affinis    | 45    | 32     | 56     | 24    | 37    | 12     | 133   | 47    | 34    | 47    | 35    | 36    | 538    |
| Tongkol/K. Pelamis    | 0     | 0      | 0      | 0     | 7     | 0      | 0     | 0     | 0     | 10    | 2     | 0     | 19     |
| Tongkol/T. Tonggol    | 7     | 13     | 5      | 19    | 12    | 53     | 7     | 19    | 13    | 16    | 7     | 8     | 179    |
| Tongkol/A. Thazard    | 8     | 3      | 4      | 4     | 5     | 17     | 4     | 9     | 4     | 4     | 5     | 7     | 74     |
| Tenggiri              | 51    | 63     | 104    | 112   | 173   | 457    | 184   | 172   | 105   | 75    | 80    | 74    | 1,650  |
| Kembong               | 36    | 24     | 30     | 33    | 31    | 506    | 168   | 167   | 145   | 47    | 59    | 143   | 1,389  |
| Pelaling/Temenong     | 0     | 0      | 0      | 0     | 0     | 0      | 0     | 7     | 0     | 0     | 0     | 0     | 7      |
| Timah/Layor/Selayor   | 40    | 25     | 39     | 13    | 14    | 276    | 91    | 66    | 59    | 73    | 42    | 41    | 779    |
| Yu                    | 55    | 76     | 135    | 75    | 87    | 195    | 341   | 326   | 205   | 115   | 85    | 90    | 1,785  |
| Pari                  | 92    | 43     | 42     | 209   | 105   | 862    | 240   | 263   | 214   | 108   | 158   | 120   | 2,456  |
| Ikan Baja             | 288   | 250    | 328    | 526   | 548   | 123    | 474   | 533   | 734   | 76    | 133   | 164   | 4,177  |
| Ikan Campur           | 266   | 279    | 340    | 350   | 370   | 2,866  | 804   | 743   | 551   | 252   | 220   | 235   | 7,276  |
| Ketam Laut/Suri       | 5     | 5      | 3      | 7     | 25    | 11     | 14    | 152   | 28    | 13    | 11    | 8     | 282    |
| Ketam Renjong/Bakau   | 0     | 0      | 1      | 0     | 0     | 3      | 2     | 0     | 8     | 0     | 0     | 0     | 14     |
| Ketam Batu            | 11    | 3      | 2      | 0     | 3     | 0      | 11    | 4     | 22    | 0     | 0     | 1     | 57     |
| Udang Karang          | *     | 2      | 1      | 0     | 0     | 0      | 0     | *     | *     | 0     | 1     | *     | 4      |
| Udang Lobok           | 1     | 1      | 6      | 8     | 56    | 2      | 0     | 11    | 0     | 0     | 0     | 1     | 86     |
| Udang Harimau         | 61    | 4      | 3      | 52    | 18    | 6      | 123   | 29    | 3     | 1     | 3     | 0     | 303    |
| Udang Putih Besar     | 65    | 35     | 38     | 10    | 15    | *      | 69    | 26    | 42    | 25    | 11    | 4     | 340    |
| Udang Putih Sedang    | 24    | 32     | 70     | 40    | 43    | 17     | 74    | 36    | 48    | 15    | 14    | 11    | 424    |
| U. Putih Kecil/Kertas | 0     | 0      | 0      | 0     | 0     | 0      | 2     | 0     | 1     | 8     | 4     | 2     | 17     |
| Udang Sua Lor (B)     | 154   | 157    | 205    | 130   | 98    | 604    | 22    | 119   | 41    | 9     | 105   | 104   | 1,748  |
| Udang Sua Lor (S)     | 16    | 8      | 28     | 11    | 16    | 367    | 46    | 103   | 41    | 0     | 1     | 91    | 728    |
| Udang Merah Ros       | 18    | 0      | 3      | 0     | 0     | 0      | 0     | 0     | 2     | 0     | 3     | 4     | 30     |
| Udang Kulit Keras     | 68    | 37     | 92     | 44    | 46    | 1,149  | 114   | 90    | 53    | 16    | 13    | 11    | 1,733  |
| Udang Kuning          | 0     | 0      | 0      | 0     | 0     | 7      | 1     | 56    | 1     | 0     | 0     | 0     | 65     |
| Udang Merah/Payak     | 599   | 724    | 1,378  | 1,350 | 675   | 815    | 377   | 361   | 291   | 78    | 254   | 261   | 7,163  |
| Udang Pasir           | 52    | 1      | 1      | 0     | 0     | *      | 0     | 66    | 2     | 0     | 88    | 78    | 288    |
| Udang Minyak          | 0     | 0      | 0      | 0     | 0     | 3      | 1     | 17    | 4     | 3     | 3     | 2     | 33     |
| Udang Baring          | 52    | 13     | 35     | 16    | 11    | 34     | 23    | 49    | 14    | 19    | 1     | 1     | 268    |
| Udang Galah           | 19    | 2      | 1      | 5     | 6     | 0      | 0     | 119   | 0     | 0     | 0     | 0     | 152    |
| Sotong Biasa/Cumit    | 30    | 31     | 58     | 22    | 16    | 133    | 99    | 93    | 55    | 43    | 51    | 45    | 676    |
| Sotong Katak          | 6     | 2      | 5      | 8     | 5     | 19     | 12    | 1     | 10    | 1     | *     | *     | 69     |
| Sotong Kereta         | 0     | 0      | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0     | 0     | 0     | 0      |
| Siput                 | 7     | 0      | 0      | 0     | 0     | 0      | 0     | 6     | 0     | 0     | 0     | 0     | 13     |
| Trepang               | 0     | 0      | 0      | 0     | 0     | 16     | 0     | 0     | 0     | 0     | 0     | 0     | 16     |
| Ubur-Ubur Putih       | 362   | 10,044 | 7,097  | 633   | 161   | 4      | 48    | 681   | 104   | 122   | 85    | 87    | 19,428 |
| Ubur-Ubur Merah       | 0     | 219    | 0      | 0     | 0     | 0      | 39    | 0     | 0     | 0     | 0     | 0     | 258    |
| Jamah                 | 31    | 15     | 40     | 26    | 27    | 368    | 115   | 130   | 126   | 46    | 60    | 37    | 1,021  |
| Perencong             | 12    | 18     | 12     | 6     | 17    | 34     | 37    | 45    | 88    | 23    | 20    | 16    | 328    |
| Panjang               | 25    | 35     | 46     | 24    | 16    | 127    | 93    | 94    | 30    | 34    | 37    | 33    | 594    |
| Pelayak               | 2     | 44     | 20     | 11    | 31    | 365    | 47    | 37    | 24    | 21    | 22    | 24    | 648    |
| Impirang              | 41    | 31     | 30     | 44    | 53    | 23     | 23    | 13    | 27    | 14    | 7     | 9     | 315    |
| Bulu Ayam             | 17    | 12     | 19     | 19    | 24    | 243    | 9     | 8     | 19    | 5     | 2     | 2     | 379    |
| Kilat                 | 24    | 30     | 30     | 49    | 51    | 24     | 23    | 79    | 41    | 15    | 8     | 5     | 379    |
| Bulu                  | 31    | 13     | 12     | 22    | 20    | 6      | 7     | 28    | 16    | 17    | 12    | 11    | 195    |
| Empirit               | *     | 2      | 6      | 10    | 26    | 10     | 66    | 18    | 20    | 8     | 3     | 3     | 172    |
| Jumlah (Total)        | 3,296 | 13,007 | 11,558 | 5,153 | 4,760 | 14,667 | 6,591 | 7,711 | 5,129 | 2,307 | 2,705 | 2,758 | 79,642 |

\* Pendaratan kurang dari 0.5 tan metrik.  
Landings below 0.5 tonnes.

WILAYAH PERSEKUTUAN LABUAN/LABUAN FEDERAL TERRITORY  
PENDARATAN IKAN DAN UDANG MENGIKUT BULAN DAN SPESIES, 1988  
LANDINGS OF MARINE FISH AND PRAWN BY MONTH AND SPECIES, 1988  
(Kuantiti dalam Tan Metrik/ Quantity in Tonnes)

JADUAL (TABLE) 4.5.4

| Nama Tempatan<br>Local Name of Fish | JANUARI<br>JANUARY | FEBRUARI<br>FEBRUARY | MAR<br>MARCH | APRIL<br>APRIL | MEI<br>MAY | JUN<br>JUNE | JULAI<br>JULY | OGOS<br>AUGUST | SEPTEMBER<br>SEPTEMBER | OKTOBER<br>OCTOBER | NOVEMBER<br>NOVEMBER | DISEMBER<br>DECEMBER | JUMLAH<br>TOTAL |
|-------------------------------------|--------------------|----------------------|--------------|----------------|------------|-------------|---------------|----------------|------------------------|--------------------|----------------------|----------------------|-----------------|
| Kebasi/Selangat                     | 0                  | 0                    | 0            | 0              | 0          | 0           | 0             | 0              | 0                      | 0                  | 0                    | 0                    | 0               |
| Puput/B. Mata/Tirok                 | 0                  | 0                    | 0            | 0              | 0          | 0           | 0             | 1              | 3                      | 0                  | 0                    | 10                   | 14              |
| Siakap                              | 1                  | 1                    | 0            | 0              | 0          | 0           | 0             | 0              | 0                      | 1                  | 0                    | 0                    | 3               |
| Lidah                               | 0                  | 0                    | 0            | 0              | 0          | 0           | 0             | 0              | 1                      | 0                  | 0                    | 1                    | 2               |
| Sebelah                             | 1                  | 2                    | 1            | 1              | 3          | 5           | 1             | 0              | 1                      | 1                  | 3                    | 2                    | 21              |
| Bayan                               | 0                  | 0                    | 0            | 0              | 0          | 0           | 0             | 0              | 0                      | 0                  | 0                    | 0                    | 0               |
| Biji Nangka                         | 0                  | 7                    | 4            | 14             | 0          | 15          | 21            | 19             | 8                      | 6                  | 9                    | 11                   | 114             |
| Daun Baharu                         | 2                  | 3                    | 7            | 3              | 2          | 5           | 6             | 7              | 3                      | 6                  | 1                    | 4                    | 49              |
| Delah/Pinang-Pinang                 | 7                  | 1                    | 1            | 1              | 0          | 1           | 4             | 8              | 34                     | 2                  | 6                    | 5                    | 70              |
| Duri/Pulutan/Utek                   | 0                  | 1                    | 3            | 0              | 1          | 0           | 1             | 6              | 1                      | 2                  | 1                    | 8                    | 24              |
| Dengkis/Debam                       | 2                  | 9                    | 11           | 8              | 14         | 7           | 5             | 17             | 20                     | 12                 | 10                   | 16                   | 131             |
| Gelama/Tengkerong                   | 2                  | 3                    | 16           | 4              | 3          | 9           | 6             | 8              | 8                      | 4                  | 4                    | 13                   | 80              |
| Gerut-Gerut/Selukut                 | 1                  | 3                    | 1            | 1              | 3          | 5           | 1             | 5              | 0                      | 1                  | 1                    | 11                   | 33              |
| Jenahak                             | 1                  | 0                    | 0            | 0              | 0          | 0           | 0             | 0              | 0                      | 0                  | 0                    | 0                    | 1               |
| Kaci                                | 1                  | 0                    | 1            | 0              | 0          | 1           | 1             | 2              | 0                      | 0                  | 1                    | 0                    | 7               |
| Kerapu                              | 4                  | 3                    | 4            | 7              | 8          | 5           | 5             | 7              | 6                      | 2                  | 11                   | 23                   | 85              |
| Kikek                               | 0                  | 1                    | 0            | 3              | 2          | 6           | 4             | 7              | 5                      | 2                  | 1                    | 7                    | 38              |
| Kerisi                              | 8                  | 5                    | 4            | 15             | 9          | 18          | 11            | 10             | 12                     | 3                  | 2                    | 11                   | 108             |
| Kerisi Bali                         | 0                  | 0                    | 0            | 0              | 0          | 0           | 0             | 0              | 0                      | 0                  | 0                    | 0                    | 0               |
| Malong                              | 0                  | 0                    | 0            | 0              | 0          | 0           | 0             | 0              | 0                      | 0                  | 0                    | 0                    | 0               |
| Merah                               | 5                  | 5                    | 9            | 1              | 4          | 9           | 5             | 3              | 7                      | 26                 | 8                    | 5                    | 87              |
| Mengkerong/Conor/Ubi-Ubi            | 0                  | 0                    | 0            | 0              | 0          | 0           | 0             | 0              | 0                      | 0                  | 0                    | 0                    | 0               |
| Remong/Kunyit-Kunyit                | 1                  | 0                    | 2            | 2              | 1          | 0           | 2             | 2              | 2                      | 1                  | 1                    | 1                    | 15              |
| Semilang                            | 0                  | 0                    | 0            | 0              | 0          | 0           | 0             | 0              | 0                      | 0                  | 0                    | 0                    | 0               |
| Shrumbu/Lemah                       | 0                  | 1                    | 0            | 0              | 0          | 0           | 0             | 0              | 0                      | 0                  | 1                    | 2                    | 4               |
| Puntung Damar/Bulus                 | 0                  | 0                    | 4            | 0              | 0          | 0           | 0             | 0              | 0                      | 0                  | 0                    | 0                    | 4               |
| Pasir-Pasir/Timun-Timun             | 4                  | 2                    | 1            | 5              | 4          | 4           | 3             | 4              | 4                      | 1                  | 7                    | 18                   | 57              |
| Alu/Kacang                          | 6                  | 1                    | 0            | 3              | 2          | 3           | 0             | 13             | 3                      | 1                  | 1                    | 12                   | 45              |
| Aruan Tasik                         | 0                  | 0                    | 0            | 1              | 1          | 1           | 0             | 1              | 0                      | 0                  | 1                    | 1                    | 6               |
| Kurau/Senangin                      | 0                  | 0                    | 0            | 0              | 0          | 0           | 0             | 0              | 0                      | 0                  | 0                    | 0                    | 0               |
| Demudok/Rambai                      | 0                  | 0                    | 0            | 0              | 2          | 0           | 1             | 0              | 0                      | 0                  | 1                    | 2                    | 6               |
| Jebong                              | 0                  | 0                    | 6            | 2              | 2          | 4           | 2             | 0              | 2                      | 0                  | 0                    | 1                    | 19              |
| Cermin/Sagai/Cupak                  | 26                 | 7                    | 17           | 21             | 9          | 34          | 13            | 30             | 13                     | 17                 | 6                    | 30                   | 223             |

Samb. (contd.)

|                           |     |     |     |     |     |     |     |     |     |     |     |     |       |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Yu                        | 1   | 2   | 1   | 1   | 2   | 0   | 1   | 4   | 2   | 2   | 2   | 4   | 22    |
| Pari                      | 3   | 1   | 3   | 1   | 1   | 3   | 1   | 4   | 3   | 1   | 4   | 7   | 32    |
| Ikan Campur               | 3   | 9   | 8   | 7   | 20  | 12  | 15  | 33  | 22  | 47  | 30  | 46  | 252   |
| Ikan Baja                 | 0   | 0   | 0   | 0   | 0   | 3   | 0   | 0   | 0   | 0   | 0   | 0   | 3     |
| Terubok                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0     |
| Bawal                     | 10  | 0   | 5   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 6   | 21    |
| Belanak/Kedera            | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 2   | 1   | 0   | 4     |
| Cincaru                   | 3   | 8   | 18  | 22  | 17  | 18  | 10  | 19  | 5   | 20  | 2   | 6   | 148   |
| Pelata/Selar              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0     |
| Selar Kuning/Lolong       | 0   | 0   | 18  | 7   | 4   | 5   | 0   | 7   | 0   | 0   | 5   | 0   | 46    |
| Selayang/Cerut            | 28  | 13  | 35  | 16  | 7   | 23  | 9   | 9   | 0   | 6   | 10  | 14  | 170   |
| Pisang-Pisang             | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0     |
| Talang                    | 6   | 4   | 18  | 3   | 5   | 3   | 2   | 6   | 6   | 4   | 13  | 41  | 111   |
| Bilis/Bunga Air           | 0   | 0   | 0   | 9   | 0   | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 10    |
| Parang-Parang             | 0   | 1   | 1   | 0   | 2   | 4   | 3   | 0   | 1   | 0   | 4   | 5   | 21    |
| Tamban                    | 20  | 10  | 17  | 0   | 0   | 19  | 12  | 8   | 23  | 12  | 23  | 6   | 150   |
| Bulan-Bulan               | 0   | 1   | 2   | 0   | 2   | 3   | 1   | 1   | 0   | 1   | 0   | 2   | 13    |
| Aya/Kayu/Tongkol          | 20  | 3   | 1   | 12  | 3   | 0   | 2   | 4   | 0   | 40  | 16  | 0   | 101   |
| Layaran/Mersuji           | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0     |
| Kembong/Pelaling/Temenong | 15  | 3   | 47  | 9   | 30  | 63  | 12  | 9   | 6   | 24  | 22  | 30  | 270   |
| Tenggiri                  | 27  | 29  | 9   | 11  | 28  | 22  | 13  | 22  | 12  | 16  | 34  | 87  | 310   |
| Timah/Layor/Selayor       | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 2   | 2     |
| Ketam                     | 0   | 1   | 1   | 2   | 4   | 3   | 2   | 4   | 0   | 0   | 1   | 2   | 20    |
| Udang Karang/Lobok        | 1   | 0   | 8   | 3   | 0   | 0   | 0   | 0   | 1   | 0   | 0   | 0   | 13    |
| Udang Putih               | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0     |
| Udang Minyak              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0     |
| Udang Merah Ros           | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0     |
| Udang Kulit Keras         | 3   | 27  | 13  | 10  | 6   | 16  | 9   | 10  | 3   | 2   | 5   | 12  | 116   |
| Udang Harimau             | 3   | 6   | 4   | 5   | 2   | 6   | 2   | 5   | 1   | 1   | 0   | 3   | 38    |
| Lain-Lain Jenis Udang     | 26  | 25  | 44  | 19  | 14  | 33  | 10  | 24  | 0   | 3   | 18  | 48  | 264   |
| Siput/Kepah/Kupang/Tiram  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0     |
| Sotong Kereta             | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0     |
| Sotong Katak              | 6   | 5   | 5   | 5   | 13  | 6   | 9   | 10  | 4   | 2   | 2   | 5   | 72    |
| Sotong Biasa              | 0   | 7   | 21  | 6   | 16  | 10  | 4   | 8   | 4   | 2   | 1   | 6   | 85    |
| Ubur-Ubur                 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0     |
| Trepang                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0     |
| Jumlah (Total)            | 247 | 210 | 371 | 240 | 246 | 385 | 209 | 337 | 227 | 273 | 269 | 526 | 3,540 |

SEMIJAWA MALAYSIA/PENINSULAR MALAYSIA  
PENDARATAN IKAN LAUT MENGIKUT KUMPULAN PERKAKAS DAN SPESIES IKAN, 1988  
LANDINGS OF MARINE FISH BY GEAR GROUP AND SPECIES, 1988  
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

JADUAL (TABLE) 4.6

| ISSCAAP:<br>GROUP<br>NO. | Species<br>Species<br><br>Nama Tempatan<br>Local Name | Pukat<br>Tunda<br><br>Trawl<br>Net | Pukat-Pukat Tarik/Seine Nets         |                                             |                                        | Pukat<br>Hanyut<br><br>Drift/Gill<br>Nets | Pukat<br>Tangguk<br><br>Lift<br>Nets | Perangkap-perangkap<br>Traps      |                      | Pancing<br><br>Hooks<br>and<br>Lines | Pukat<br>Bakul<br><br>Bag<br>Nets | Pukat<br>Rentang<br><br>Barrier<br>Nets | Pukat<br>Surung<br><br>Push/Scoop<br>Nets | Memungut<br>Siput<br><br>Shellfish<br>Collection | Rampaian<br><br>Miscel-<br>laneous | Jumlah<br>(Tan M)<br><br>Total<br>(Tonnes) |
|--------------------------|-------------------------------------------------------|------------------------------------|--------------------------------------|---------------------------------------------|----------------------------------------|-------------------------------------------|--------------------------------------|-----------------------------------|----------------------|--------------------------------------|-----------------------------------|-----------------------------------------|-------------------------------------------|--------------------------------------------------|------------------------------------|--------------------------------------------|
|                          |                                                       |                                    | Pukat<br>Jerut<br>Ikan<br>Seine Fish | Pukat<br>Jerut<br>Bilis<br>Seine<br>Anchovy | Lain Pukat<br>Tarik<br>Other<br>Seines |                                           |                                      | Belat-<br>Belat<br><br>Stationary | Bubu<br><br>Portable |                                      |                                   |                                         |                                           |                                                  |                                    |                                            |
| 24                       | Kebasi/Selangat                                       | 679                                | 332                                  | 0                                           | 0                                      | 1,344                                     | 0                                    | 1                                 | 0                    | 0                                    | 2                                 | 0                                       | 0                                         | 0                                                | 0                                  | 2,359                                      |
|                          | Puput/B. Mata/Tirok                                   | 4,260                              | 88                                   | 0                                           | 0                                      | 316                                       | 0                                    | 0                                 | 0                    | 0                                    | 5                                 | 0                                       | 0                                         | 0                                                | 0                                  | 4,669                                      |
|                          | Terubok                                               | 0                                  | 0                                    | 0                                           | 0                                      | 0                                         | 0                                    | 0                                 | 0                    | 0                                    | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 0                                          |
| 25                       | Siakap                                                | 11                                 | 0                                    | 0                                           | 0                                      | 15                                        | 0                                    | 0                                 | 0                    | 7                                    | 1                                 | 24                                      | 0                                         | 0                                                | 0                                  | 58                                         |
| 31                       | Lidah                                                 | 1,500                              | 0                                    | 0                                           | 1                                      | 103                                       | 0                                    | 0                                 | 1                    | 0                                    | 3                                 | 1                                       | 0                                         | 0                                                | 0                                  | 1,609                                      |
|                          | Sebelah                                               | 840                                | 0                                    | 0                                           | 0                                      | 24                                        | 0                                    | 0                                 | 7                    | 0                                    | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 871                                        |
| 33                       | Bayan                                                 | 36                                 | 0                                    | 0                                           | 0                                      | 0                                         | 0                                    | 0                                 | 40                   | 5                                    | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 81                                         |
|                          | Biji Nangka                                           | 6,272                              | 0                                    | 0                                           | 0                                      | 79                                        | 0                                    | 0                                 | 61                   | 27                                   | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 6,439                                      |
|                          | Daun Baharu                                           | 509                                | 0                                    | 0                                           | 0                                      | 12                                        | 0                                    | 0                                 | 18                   | 1                                    | 0                                 | 0                                       | 0                                         | 0                                                | 12                                 | 552                                        |
|                          | Delah/Pinang-Pinang                                   | 34                                 | 0                                    | 0                                           | 0                                      | 6                                         | 0                                    | 16                                | 59                   | 23                                   | 0                                 | 0                                       | 0                                         | 0                                                | 51                                 | 189                                        |
|                          | Duri/Pulutan/Utik                                     | 6,568                              | 4,914                                | 0                                           | 23                                     | 1,009                                     | 0                                    | 76                                | 37                   | 937                                  | 45                                | 34                                      | 0                                         | 0                                                | 0                                  | 13,643                                     |
|                          | Dengkis/Debam                                         | 482                                | 0                                    | 0                                           | 0                                      | 5                                         | 5                                    | 10                                | 193                  | 7                                    | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 702                                        |
|                          | Gelama/Tengkerong/Selampai                            | 9,394                              | 50                                   | 72                                          | 130                                    | 1,866                                     | 0                                    | 2                                 | 41                   | 194                                  | 57                                | 79                                      | 12                                        | 0                                                | 45                                 | 11,942                                     |
|                          | Gerut-Gerut                                           | 799                                | 0                                    | 0                                           | 2                                      | 12                                        | 0                                    | 0                                 | 34                   | 174                                  | 0                                 | 2                                       | 0                                         | 0                                                | 0                                  | 1,023                                      |
|                          | Jenahak                                               | 393                                | 0                                    | 0                                           | 0                                      | 25                                        | 0                                    | 0                                 | 208                  | 303                                  | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 929                                        |
|                          | Kaci                                                  | 502                                | 0                                    | 0                                           | 0                                      | 1                                         | 0                                    | 0                                 | 72                   | 37                                   | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 612                                        |
|                          | Kerapu                                                | 4,912                              | 0                                    | 0                                           | 1                                      | 26                                        | 0                                    | 0                                 | 655                  | 894                                  | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 6,488                                      |
|                          | Kerisi                                                | 27,073                             | 3                                    | 0                                           | 0                                      | 291                                       | 12                                   | 0                                 | 659                  | 1,228                                | 0                                 | 0                                       | 0                                         | 0                                                | 1                                  | 29,267                                     |
|                          | Kerisi Bali                                           | 607                                | 0                                    | 0                                           | 0                                      | 0                                         | 0                                    | 0                                 | 191                  | 426                                  | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 1,224                                      |
|                          | Kikek                                                 | 1,059                              | 24                                   | 0                                           | 2                                      | 137                                       | 0                                    | 3                                 | 4                    | 7                                    | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 1,236                                      |
|                          | Malong                                                | 1,738                              | 0                                    | 0                                           | 0                                      | 185                                       | 0                                    | 0                                 | 14                   | 378                                  | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 2,315                                      |
|                          | Merah                                                 | 2,462                              | 2                                    | 0                                           | 0                                      | 3                                         | 0                                    | 0                                 | 1,578                | 1,040                                | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 5,085                                      |
|                          | Mengkerong/Conor/Ubi-Ubi                              | 3,397                              | 0                                    | 0                                           | 0                                      | 7                                         | 0                                    | 0                                 | 1                    | 0                                    | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 3,405                                      |
|                          | Remong/Kunyit-Kunyit/Tanda                            | 1,981                              | 1                                    | 0                                           | 0                                      | 89                                        | 0                                    | 1                                 | 233                  | 118                                  | 0                                 | 6                                       | 0                                         | 0                                                | 0                                  | 2,429                                      |
|                          | Semilang                                              | 284                                | 0                                    | 0                                           | 18                                     | 55                                        | 0                                    | 5                                 | 36                   | 6                                    | 0                                 | 179                                     | 0                                         | 0                                                | 0                                  | 583                                        |
|                          | Shrumbu/Lemah                                         | 5                                  | 0                                    | 0                                           | 0                                      | 0                                         | 0                                    | 0                                 | 0                    | 0                                    | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 5                                          |
|                          | Puntong Damar/Bulus                                   | 1,698                              | 0                                    | 0                                           | 0                                      | 307                                       | 0                                    | 0                                 | 0                    | 22                                   | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 2,027                                      |
|                          | Pasir-Pasir/Timun-Timun                               | 823                                | 0                                    | 0                                           | 0                                      | 1                                         | 0                                    | 0                                 | 154                  | 2                                    | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 980                                        |
| 34                       | Alu-Alu/Kacang-Kacang                                 | 1,784                              | 73                                   | 0                                           | 0                                      | 324                                       | 0                                    | 6                                 | 17                   | 90                                   | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 2,294                                      |
|                          | Aruan Tasik                                           | 158                                | 0                                    | 0                                           | 0                                      | 70                                        | 0                                    | 0                                 | 50                   | 135                                  | 0                                 | 0                                       | 0                                         | 0                                                | 0                                  | 413                                        |
|                          | Bawal                                                 | 2,796                              | 1,489                                | 0                                           | 2                                      | 1,177                                     | 33                                   | 16                                | 6                    | 18                                   | 15                                | 1                                       | 0                                         | 0                                                | 0                                  | 5,553                                      |

Samb. (contd.)

|                           |                           |         |         |        |        |        |       |     |       |        |        |       |       |       |     |         |
|---------------------------|---------------------------|---------|---------|--------|--------|--------|-------|-----|-------|--------|--------|-------|-------|-------|-----|---------|
|                           | Belanak/Kedera            | 199     | 512     | 0      | 19     | 1,068  | 0     | 2   | 0     | 0      | 4      | 26    | 0     | 0     | 0   | 1,830   |
|                           | Cermin/Sagai/Cupak        | 3,146   | 66      | 0      | 1      | 116    | 0     | 0   | 100   | 153    | 0      | 0     | 0     | 0     | 4   | 3,586   |
|                           | Cincaru                   | 3,238   | 3,492   | 0      | 0      | 653    | 37    | 1   | 0     | 1,402  | 0      | 0     | 0     | 0     | 9   | 8,832   |
|                           | Demudok/Rambai            | 2,252   | 318     | 0      | 0      | 108    | 8     | 0   | 147   | 596    | 0      | 0     | 0     | 0     | 13  | 3,442   |
|                           | Krau/Senangin/Senohong    | 191     | 69      | 0      | 0      | 587    | 0     | 1   | 0     | 34     | 0      | 0     | 0     | 0     | 0   | 882     |
|                           | Pelata/Selar              | 3,839   | 9,390   | 35     | 6      | 636    | 185   | 11  | 33    | 1,596  | 15     | 0     | 0     | 0     | 2   | 15,748  |
|                           | Selar Kuning/Lolong       | 6,084   | 6,305   | 0      | 0      | 61     | 3,889 | 67  | 23    | 66     | 0      | 0     | 0     | 0     | 0   | 16,496  |
|                           | Selayang/Curut            | 649     | 34,468  | 0      | 0      | 3      | 399   | 0   | 0     | 422    | 0      | 0     | 0     | 0     | 0   | 35,941  |
|                           | Pisang-Pisang             | 12      | 93      | 0      | 0      | 0      | 0     | 0   | 12    | 87     | 0      | 0     | 0     | 0     | 0   | 204     |
|                           | Talang                    | 322     | 17      | 0      | 0      | 281    | 0     | 3   | 0     | 115    | 0      | 0     | 0     | 0     | 0   | 738     |
| 35                        | Bilis/Bunga Air           | 489     | 0       | 30,592 | 0      | 0      | 5     | 107 | 0     | 0      | 0      | 0     | 0     | 0     | 0   | 31,193  |
|                           | Parang-Parang             | 1,816   | 8       | 0      | 3      | 2,529  | 0     | 2   | 1     | 75     | 2      | 0     | 0     | 0     | 0   | 4,436   |
|                           | Tamban                    | 1,438   | 16,113  | 3,829  | 80     | 940    | 125   | 87  | 0     | 22     | 13     | 0     | 0     | 0     | 0   | 22,647  |
|                           | Bulan-Bulan               | 13      | 0       | 0      | 0      | 9      | 0     | 0   | 7     | 0      | 0      | 0     | 0     | 0     | 0   | 29      |
| 36                        | Aya/Kayu/Tongkol          | 23      | 11,721  | 0      | 0      | 2,714  | 11    | 0   | 3     | 6,258  | 0      | 0     | 0     | 0     | 0   | 20,730  |
|                           | Layaran/Mersuji           | 8       | 0       | 0      | 0      | 2      | 0     | 0   | 0     | 137    | 0      | 0     | 0     | 0     | 0   | 147     |
| 37                        | Kembong/Temenong/Pelaling | 13,383  | 31,181  | 0      | 26     | 9,718  | 8     | 57  | 0     | 569    | 0      | 0     | 0     | 0     | 1   | 54,942  |
|                           | Tenggiri                  | 1,389   | 546     | 0      | 0      | 4,479  | 2     | 0   | 4     | 2,296  | 0      | 0     | 0     | 0     | 0   | 8,716   |
|                           | Timah/Layor/Selayor       | 5,164   | 27      | 0      | 0      | 277    | 0     | 0   | 0     | 11     | 16     | 0     | 0     | 0     | 0   | 5,495   |
| 38                        | Pari                      | 7,027   | 0       | 0      | 3      | 345    | 0     | 1   | 71    | 970    | 12     | 0     | 0     | 0     | 0   | 8,429   |
|                           | Yu                        | 1,640   | 4       | 0      | 0      | 601    | 0     | 0   | 9     | 215    | 2      | 0     | 0     | 0     | 0   | 2,471   |
| 39                        | Ikan Baja                 | 176,457 | 4,170   | 94     | 5,380  | 2,075  | 0     | 86  | 1     | 1      | 5,822  | 372   | 322   | 0     | 0   | 194,780 |
|                           | Ikan Campur               | 12,956  | 4,108   | 148    | 28     | 2,792  | 136   | 65  | 417   | 251    | 128    | 23    | 2     | 0     | 5   | 21,059  |
|                           | Jebong                    | 1,875   | 0       | 0      | 1      | 1      | 0     | 0   | 393   | 20     | 0      | 0     | 0     | 0     | 0   | 2,290   |
| 42                        | Ketam                     | 2,602   | 0       | 0      | 15     | 903    | 0     | 27  | 82    | 0      | 11     | 215   | 19    | 0     | 188 | 4,062   |
| 45                        | Udang Karang/Lobok        | 771     | 0       | 0      | 0      | 14     | 0     | 0   | 4     | 0      | 2      | 0     | 0     | 0     | 0   | 791     |
|                           | Udang Putih               | 1,158   | 0       | 0      | 43     | 2,088  | 0     | 1   | 0     | 0      | 64     | 1     | 7     | 0     | 1   | 3,362   |
|                           | Udang Minyak              | 12,772  | 0       | 0      | 4,201  | 125    | 0     | 0   | 0     | 0      | 340    | 20    | 133   | 0     | 0   | 17,592  |
|                           | Udang Merah Ros           | 389     | 0       | 0      | 3      | 2      | 0     | 0   | 0     | 0      | 1      | 2     | 0     | 0     | 0   | 397     |
|                           | Udang Kulit Keras         | 2,242   | 0       | 0      | 248    | 31     | 0     | 4   | 0     | 0      | 103    | 0     | 40    | 0     | 0   | 2,667   |
|                           | Udang Harimau             | 538     | 0       | 0      | 11     | 84     | 0     | 0   | 0     | 0      | 4      | 0     | 7     | 0     | 0   | 644     |
|                           | Lain-Lain Jenis Udang     | 22,811  | 0       | 0      | 4,064  | 3,014  | 0     | 56  | 0     | 0      | 3,307  | 78    | 764   | 0     | 11  | 34,102  |
|                           | Udang Baring              | 6       | 0       | 0      | 0      | 0      | 0     | 224 | 0     | 0      | 20,786 | 0     | 693   | 0     | 0   | 21,709  |
| 56                        | Siput/Kepah/Kupang/Tiran  | 2       | 0       | 0      | 0      | 0      | 0     | 0   | 0     | 0      | 0      | 0     | 0     | 1,527 | 0   | 1,529   |
| 57                        | Sotong Kereta             | 210     | 0       | 0      | 0      | 0      | 0     | 0   | 0     | 0      | 0      | 0     | 0     | 0     | 0   | 210     |
|                           | Sotong Katak              | 6,111   | 0       | 0      | 2      | 3      | 0     | 0   | 323   | 10     | 25     | 1     | 0     | 0     | 0   | 6,475   |
|                           | Sotong Biasa              | 17,924  | 396     | 0      | 0      | 1      | 370   | 36  | 77    | 407    | 115    | 19    | 6     | 0     | 0   | 19,352  |
| 76                        | Ubur-Ubur                 | 0       | 0       | 0      | 0      | 149    | 0     | 0   | 0     | 0      | 7,360  | 0     | 0     | 0     | 0   | 7,509   |
| Jumlah Tan M/Total Tonnes |                           | 394,201 | 129,980 | 34,770 | 14,313 | 43,898 | 5,226 | 975 | 6,075 | 21,792 | 38,260 | 1,083 | 2,006 | 1,527 | 343 | 694,449 |

\* Pendaratan kurang dari 0.5 tan metrik.  
Landings below 0.5 tonnes.

PANTAI BARAT SEMENANJUNG MALAYSIA/WEST COAST PENINSULAR MALAYSIA  
PENDARATAN IKAN LAUT MENGIKUT KUMPULAN PERKAKAS DAN SPESIES IKAN, 1988  
LANDINGS OF MARINE FISH BY GEAR GROUP AND SPECIES, 1988  
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

JADUAL (TABLE) 4.6.1

| ISSCAAP<br>GROUP<br>NO. | Species                     | Pukat<br>Tunda        | Pukat-Pukat Tarik/Seine Nets                  |                                                   |                                        | Pukat<br>Hanyut | Pukat<br>Tangguk | Perangkap-perangkap<br>Traps  |                  | Pancing | Pukat<br>Bakul | Pukat<br>Rentang | Pukat<br>Surung | Memungut<br>Siput | Rampaian | Jumlah<br>(Tan M) |              |                    |              |
|-------------------------|-----------------------------|-----------------------|-----------------------------------------------|---------------------------------------------------|----------------------------------------|-----------------|------------------|-------------------------------|------------------|---------|----------------|------------------|-----------------|-------------------|----------|-------------------|--------------|--------------------|--------------|
|                         | Species                     |                       | Pukat<br>Jerut<br>Ikan<br>Purse<br>Seine Fish | Pukat<br>Jerut<br>Bilis<br>Purse Seine<br>Anchovy | Lain Pukat<br>Tarik<br>Other<br>Seines |                 |                  | Belat-<br>Belat<br>Stationary | Bubu<br>Portable |         |                |                  |                 |                   |          |                   |              |                    |              |
|                         |                             |                       |                                               |                                                   |                                        |                 |                  |                               |                  |         |                |                  |                 |                   |          |                   |              |                    |              |
|                         | Nama Tempatan<br>Local Name |                       |                                               |                                                   |                                        |                 |                  |                               |                  |         |                |                  |                 |                   |          |                   | Trawl<br>Net | Drift/Gill<br>Nets | Lift<br>Nets |
| 24                      | Kebasi/Selangat             | 591                   | 331                                           | 0                                                 | 0                                      | 1,272           | 0                | 1                             | 0                | 0       | 0              | 0                | 0               | 0                 | 0        | 2,195             |              |                    |              |
|                         | Puput/B. Mata/Tirok         | 4,216                 | 88                                            | 0                                                 | 0                                      | 315             | 0                | 0                             | 0                | 0       | 1              | 0                | 0               | 0                 | 0        | 4,620             |              |                    |              |
|                         | Terubok                     | 0                     | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 0                | 0       | 0              | 0                | 0               | 0                 | 0        | 0                 |              |                    |              |
| 25                      | Siakap                      | 9                     | 0                                             | 0                                                 | 0                                      | 11              | 0                | 0                             | 0                | 6       | 0              | 24               | 0               | 0                 | 0        | 50                |              |                    |              |
| 31                      | Lidah                       | 1,331                 | 0                                             | 0                                                 | 1                                      | 94              | 0                | 0                             | 0                | 0       | 1              | 1                | 0               | 0                 | 0        | 1,429             |              |                    |              |
|                         | Sebelah                     | 260                   | 0                                             | 0                                                 | 0                                      | 13              | 0                | 0                             | 0                | 0       | 0              | 0                | 0               | 0                 | 0        | 272               |              |                    |              |
| 33                      | Bayan                       | 2                     | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 0                | 0       | 0              | 0                | 0               | 0                 | 0        | 2                 |              |                    |              |
|                         | Biji Nangka                 | 1,342                 | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 0                | 0       | 0              | 0                | 0               | 0                 | 0        | 1,342             |              |                    |              |
|                         | Daun Baharu                 | 261                   | 0                                             | 0                                                 | 0                                      | 7               | 0                | 0                             | 0                | 1       | 0              | 0                | 0               | 0                 | 0        | 269               |              |                    |              |
|                         | Delah/Pinang-Pinang         | 19                    | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 0                | 15      | 0              | 0                | 0               | 0                 | 0        | 35                |              |                    |              |
|                         | Duri/Pulutan/Utik           | 2,029                 | 0                                             | 0                                                 | 23                                     | 764             | 0                | 75                            | 0                | 358     | 42             | 34               | 0               | 0                 | 0        | 3,326             |              |                    |              |
|                         | Dengkis/Debam               | 167                   | 0                                             | 0                                                 | 0                                      | 2               | 0                | 0                             | 42               | 0       | 0              | 0                | 0               | 0                 | 0        | 212               |              |                    |              |
|                         | Gelama/Tengkerong/Selampai  | 7,260                 | 50                                            | 0                                                 | 128                                    | 1,522           | 0                | 1                             | 2                | 20      | 34             | 79               | 12              | 0                 | 0        | 9,110             |              |                    |              |
|                         | Gerut-Gerut                 | 586                   | 0                                             | 0                                                 | 1                                      | 11              | 0                | 0                             | 20               | 170     | 0              | 2                | 0               | 0                 | 0        | 790               |              |                    |              |
|                         | Jenahak                     | 381                   | 0                                             | 0                                                 | 0                                      | 25              | 0                | 0                             | 205              | 298     | 0              | 0                | 0               | 0                 | 0        | 909               |              |                    |              |
|                         | Kaci                        | 119                   | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 14               | 22      | 0              | 0                | 0               | 0                 | 0        | 155               |              |                    |              |
|                         | Kerapu                      | 1,724                 | 0                                             | 0                                                 | 1                                      | 24              | 0                | 0                             | 395              | 666     | 0              | 0                | 0               | 0                 | 0        | 2,811             |              |                    |              |
|                         | Kerisi                      | 7,681                 | 3                                             | 0                                                 | 0                                      | 77              | 0                | 0                             | 1                | 0       | 0              | 0                | 0               | 0                 | 0        | 7,762             |              |                    |              |
|                         | Kerisi Bali                 | 336                   | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 80               | 327     | 0              | 0                | 0               | 0                 | 0        | 743               |              |                    |              |
|                         | Kikek                       | 549                   | 21                                            | 0                                                 | 0                                      | 0               | 0                | 0                             | 0                | 0       | 0              | 0                | 0               | 0                 | 0        | 570               |              |                    |              |
|                         | Malong                      | 1,463                 | 0                                             | 0                                                 | 0                                      | 0               | 185              | 0                             | 0                | 0       | 378            | 0                | 0               | 0                 | 0        | 2,027             |              |                    |              |
|                         | Merah                       | 1,352                 | 1                                             | 0                                                 | 0                                      | 0               | 1                | 0                             | 0                | 388     | 349            | 0                | 0               | 0                 | 0        | 2,091             |              |                    |              |
|                         | Mengkerong/Conor/Ubi-Ubi    | 2,598                 | 0                                             | 0                                                 | 0                                      | 0               | 7                | 0                             | 0                | 0       | 0              | 0                | 0               | 0                 | 0        | 2,605             |              |                    |              |
|                         | Remong/Kunyit-Kunyit/Tanda  | 425                   | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 0                | 0       | 62             | 0                | 6               | 0                 | 0        | 0                 | 494          |                    |              |
|                         | Semilang                    | 284                   | 0                                             | 0                                                 | 0                                      | 18              | 55               | 0                             | 4                | 35      | 6              | 0                | 178             | 0                 | 0        | 0                 | 582          |                    |              |
|                         | Shrubu/Lemah                | 0                     | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 0                | 0       | 0              | 0                | 0               | 0                 | 0        | 0                 | 0            |                    |              |
|                         | Puntong Damar/Bulus         | 151                   | 0                                             | 0                                                 | 0                                      | 0               | 41               | 0                             | 0                | 0       | 22             | 0                | 0               | 0                 | 0        | 0                 | 215          |                    |              |
|                         | Pasir-Pasir/Timun-Timun     | 23                    | 0                                             | 0                                                 | 0                                      | 0               | 1                | 0                             | 0                | 0       | 0              | 0                | 0               | 0                 | 0        | 0                 | 24           |                    |              |
|                         | 34                          | Alu-Alu/Kacang-Kacang | 1,185                                         | 45                                                | 0                                      | 0               | 220              | 0                             | 1                | 0       | 38             | 0                | 0               | 0                 | 0        | 0                 | 1,488        |                    |              |
|                         |                             | Aruan Tasik           | 74                                            | 0                                                 | 0                                      | 0               | 9                | 0                             | 0                | 2       | 30             | 0                | 0               | 0                 | 0        | 0                 | 114          |                    |              |
|                         |                             | Bawal                 | 2,578                                         | 1,323                                             | 0                                      | 2               | 971              | 0                             | 16               | 0       | 0              | 7                | 1               | 0                 | 0        | 0                 | 4,897        |                    |              |

Samb. (contd.)

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|    |                            |         |        |        |        |        |   |     |       |       |        |       |       |       |     |         |
|----|----------------------------|---------|--------|--------|--------|--------|---|-----|-------|-------|--------|-------|-------|-------|-----|---------|
|    | :Belanak/Kedera            | 201     | 513    | 0      | 19     | 1,068  | 0 | 0   | 0     | 0     | 4      | 26    | 0     | 0     | 0   | 1,830   |
|    | :Cerin/Sagai/Cupak         | 417     | 0      | 0      | 0      | 46     | 0 | 0   | 0     | 4     | 0      | 0     | 0     | 0     | 0   | 467     |
|    | :Cincaru                   | 2,086   | 2,245  | 0      | 0      | 430    | 0 | 1   | 0     | 1     | 0      | 0     | 0     | 0     | 0   | 4,764   |
|    | :Demudok/Rambai            | 2,141   | 133    | 0      | 0      | 34     | 0 | 0   | 11    | 108   | 0      | 0     | 0     | 0     | 0   | 2,426   |
|    | :Kurau/Senangin/Senohong   | 191     | 69     | 0      | 0      | 572    | 0 | 1   | 0     | 35    | 0      | 0     | 0     | 0     | 0   | 867     |
|    | :Pelata/Selar              | 2,532   | 4,147  | 0      | 0      | 145    | 0 | 3   | 0     | 32    | 0      | 0     | 0     | 0     | 0   | 6,860   |
|    | :Selar Kuning/Lolong       | 1,376   | 1,195  | 0      | 0      | 3      | 0 | 1   | 0     | 1     | 0      | 0     | 0     | 0     | 0   | 2,576   |
|    | :Selayang/Curut            | 304     | 10,578 | 0      | 0      | 0      | 0 | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0   | 10,882  |
|    | :Pisang-Pisang             | 8       | 49     | 0      | 0      | 0      | 0 | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0   | 56      |
|    | :Talang                    | 286     | 3      | 0      | 0      | 249    | 0 | 0   | 0     | 90    | 0      | 0     | 0     | 0     | 0   | 628     |
| 35 | :Bilis/Bunga Air           | 431     | 0      | 24,894 | 0      | 0      | 0 | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0   | 25,325  |
|    | :Parang-Parang             | 1,503   | 1      | 0      | 0      | 1,653  | 0 | 2   | 0     | 0     | 0      | 0     | 0     | 0     | 0   | 3,159   |
|    | :Tampan                    | 1,434   | 4,555  | 39     | 0      | 261    | 0 | 37  | 0     | 0     | 0      | 0     | 0     | 0     | 0   | 6,326   |
|    | :Bulan-Bulan               | 3       | 0      | 0      | 0      | 4      | 0 | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0   | 6       |
| 36 | :Aya/Kayu/Tongkol          | 1       | 3,193  | 0      | 0      | 1,841  | 0 | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0   | 5,035   |
|    | :Layaran/Mersuji           | 0       | 0      | 0      | 0      | 0      | 0 | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0   | 0       |
| 37 | :Kempong/Temenong/Pelaling | 11,858  | 18,687 | 0      | 26     | 9,427  | 0 | 57  | 0     | 0     | 0      | 0     | 0     | 0     | 0   | 40,055  |
|    | :Tenggiri                  | 1,074   | 84     | 0      | 0      | 3,762  | 0 | 0   | 0     | 13    | 0      | 0     | 0     | 0     | 0   | 4,933   |
|    | :Timah/Layor/Selayor       | 4,954   | 26     | 0      | 0      | 67     | 0 | 0   | 0     | 6     | 0      | 0     | 0     | 0     | 0   | 5,052   |
| 38 | :Pari                      | 4,881   | 0      | 0      | 3      | 231    | 0 | 0   | 50    | 957   | 3      | 0     | 0     | 0     | 0   | 6,126   |
|    | :Yu                        | 854     | 1      | 0      | 0      | 385    | 0 | 0   | 0     | 118   | 0      | 0     | 0     | 0     | 0   | 1,359   |
| 39 | :Ikan Baja                 | 131,026 | 4,064  | 33     | 5,380  | 2,075  | 0 | 86  | 0     | 1     | 2,185  | 372   | 321   | 0     | 0   | 145,544 |
|    | :Ikan Campur               | 7,367   | 182    | 0      | 25     | 2,264  | 0 | 58  | 4     | 5     | 57     | 23    | 0     | 0     | 0   | 9,984   |
|    | :Jebong                    | 1,369   | 0      | 0      | 1      | 1      | 0 | 0   | 124   | 16    | 0      | 0     | 0     | 0     | 0   | 1,511   |
| 42 | :Ketam                     | 1,667   | 0      | 0      | 15     | 842    | 0 | 27  | 8     | 0     | 9      | 215   | 19    | 0     | 188 | 2,989   |
| 45 | :Udang Karang/Lobok        | 168     | 0      | 0      | 0      | 7      | 0 | 0   | 0     | 0     | 2      | 0     | 0     | 0     | 0   | 177     |
|    | :Udang Putih               | 930     | 0      | 0      | 43     | 1,836  | 0 | 1   | 0     | 0     | 12     | 1     | 7     | 0     | 1   | 2,830   |
|    | :Udang Minyak              | 12,345  | 0      | 0      | 4,201  | 125    | 0 | 0   | 0     | 0     | 177    | 20    | 134   | 0     | 0   | 17,002  |
|    | :Udang Merah Ros           | 348     | 0      | 0      | 3      | 2      | 0 | 0   | 0     | 0     | 1      | 2     | 0     | 0     | 0   | 356     |
|    | :Udang Kulit Keras         | 1,833   | 0      | 0      | 248    | 31     | 0 | 4   | 0     | 0     | 82     | 0     | 40    | 0     | 0   | 2,237   |
|    | :Udang Hari mau            | 257     | 0      | 0      | 11     | 53     | 0 | 0   | 0     | 0     | 2      | 0     | 7     | 0     | 0   | 330     |
|    | :Lain-Lain Jenis Udang     | 20,305  | 0      | 0      | 4,064  | 2,864  | 0 | 56  | 0     | 0     | 3,148  | 78    | 767   | 0     | 11  | 31,291  |
|    | :Udang Baring              | 7       | 0      | 0      | 0      | 4      | 0 | 223 | 0     | 0     | 12,085 | 0     | 690   | 0     | 0   | 13,009  |
| 56 | :Siput/Kepah/Kupang/Tiram  | 2       | 0      | 0      | 0      | 0      | 0 | 0   | 0     | 0     | 0      | 0     | 0     | 1,527 | 0   | 1,529   |
| 57 | :Sotong Kereta             | 209     | 0      | 0      | 0      | 0      | 0 | 0   | 0     | 0     | 0      | 0     | 0     | 0     | 0   | 209     |
|    | :Sotong Katak              | 2,847   | 0      | 0      | 2      | 3      | 0 | 0   | 43    | 0     | 21     | 1     | 0     | 0     | 0   | 2,918   |
|    | :Sotong Biasa              | 10,766  | 91     | 0      | 0      | 1      | 0 | 19  | 5     | 0     | 11     | 0     | 0     | 0     | 0   | 10,893  |
| 76 | :Ubur-Ubur                 | 0       | 0      | 0      | 0      | 149    | 0 | 0   | 0     | 0     | 7,360  | 0     | 0     | 0     | 0   | 7,509   |
|    | Jumlah Tan M/Total Tonnes  | 266,976 | 51,675 | 24,966 | 14,216 | 36,062 | 0 | 674 | 1,432 | 4,155 | 25,244 | 1,064 | 1,998 | 1,527 | 200 | 430,188 |

\* Pendaratan kurang dari 0.5 tan metrik.  
Landings below 0.5 tonnes.



PANTAI TIMUR SEMENANJUNG MALAYSIA/EAST COAST PENINSULAR MALAYSIA  
PENDARATAN IKAN LAUT MENGIKUT KUMPULAN PERKAKAS DAN SPESIES IKAN, 1988  
LANDINGS OF MARINE FISH BY GEAR GROUP AND SPECIES, 1988  
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

JADUAL (TABLE) 4.6.2

| ISSCAAP<br>GROUP<br>NO. | Spesies                     | Pukat<br>Tunda        | Pukat-Pukat Tarik/Seine Nets                  |                                                   |                                        | Pukat<br>Hanyut | Pukat<br>Tangguk | Perangkap-perangkap<br>Traps  |                  | Pancing | Pukat<br>Bakul | Pukat<br>Rentang | Pukat<br>Surung | Memungut<br>Siput | Rampaian | Jumlah<br>(Tan M) |              |
|-------------------------|-----------------------------|-----------------------|-----------------------------------------------|---------------------------------------------------|----------------------------------------|-----------------|------------------|-------------------------------|------------------|---------|----------------|------------------|-----------------|-------------------|----------|-------------------|--------------|
|                         | Species                     |                       | Pukat<br>Jerut<br>Ikan<br>Purse<br>Seine Fish | Pukat<br>Jerut<br>Bilis<br>Purse Seine<br>Anchovy | Lain Pukat<br>Tarik<br>Other<br>Seines |                 |                  | Belat-<br>Belat<br>Stationary | Bubu<br>Portable |         |                |                  |                 |                   |          |                   |              |
|                         | Nama Tempatan<br>Local Name |                       |                                               |                                                   |                                        |                 |                  |                               |                  |         |                |                  |                 |                   |          |                   | Trawl<br>Net |
| 24                      | Kebasi/Selangat             | 87                    | 2                                             | 0                                                 | *                                      | 72              | 0                | 1                             | 0                | 0       | 2              | 0                | 0               | 0                 | 0        | 164               |              |
|                         | Puput/B. Mata/Tirok         | 44                    | 0                                             | 0                                                 | 0                                      | 1               | 0                | 0                             | 0                | 0       | 4              | 0                | 0               | 0                 | 0        | 49                |              |
|                         | Terubok                     | 0                     | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 0                | 0       | 0              | 0                | 0               | 0                 | 0        | 0                 |              |
| 25                      | Siakap                      | 2                     | 0                                             | 0                                                 | 0                                      | 4               | 0                | *                             | 0                | 1       | 1              | 0                | 0               | 0                 | 0        | 8                 |              |
| 31                      | Lidah                       | 168                   | 0                                             | 0                                                 | 0                                      | 9               | 0                | *                             | 1                | 0       | 2              | 0                | 0               | 0                 | 0        | 180               |              |
|                         | Sebelah                     | 580                   | 0                                             | 0                                                 | 0                                      | 12              | 0                | *                             | 7                | 0       | *              | 0                | 0               | 0                 | 0        | 599               |              |
| 33                      | Bayan                       | 34                    | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 40               | 5       | 0              | 0                | 0               | 0                 | 0        | 79                |              |
|                         | Biji Nangka                 | 4,927                 | 0                                             | 0                                                 | 0                                      | 79              | 0                | 0                             | 61               | 27      | 0              | 0                | 0               | 0                 | 0        | 5,094             |              |
|                         | Daun Baharu                 | 248                   | 0                                             | 0                                                 | 0                                      | 5               | 0                | *                             | 18               | 0       | 0              | 0                | 0               | 0                 | 12       | 283               |              |
|                         | Delah/Pinang-Pinang         | 15                    | 0                                             | 0                                                 | 0                                      | 6               | 0                | 16                            | 58               | 8       | 0              | 0                | 0               | 0                 | 51       | 154               |              |
|                         | Duri/Pulutan/Utik           | 4,539                 | 4,914                                         | 0                                                 | 0                                      | 245             | 0                | 1                             | 37               | 579     | 2              | 0                | *               | 0                 | 0        | 10,317            |              |
|                         | Dengkis/Debam               | 314                   | 0                                             | 0                                                 | 0                                      | 2               | 5                | 10                            | 152              | 7       | 0              | 0                | 0               | 0                 | 0        | 490               |              |
|                         | Gelama/Tengkerong/Selampai  | 2,132                 | 0                                             | 72                                                | 2                                      | 344             | 0                | 1                             | 39               | 173     | 23             | 0                | 0               | 0                 | 45       | 2,831             |              |
|                         | Gerut-Gerut                 | 213                   | 0                                             | 0                                                 | *                                      | 1               | 0                | 0                             | 14               | 5       | 0              | 0                | 0               | 0                 | 0        | 233               |              |
|                         | Jenahak                     | 7                     | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 3                | 5       | 0              | *                | 0               | 0                 | 0        | 15                |              |
|                         | Kaci                        | 383                   | 0                                             | 0                                                 | 0                                      | 1               | 1                | *                             | 58               | 14      | 0              | 0                | 0               | 0                 | 0        | 457               |              |
|                         | Kerapu                      | 3,187                 | 0                                             | 0                                                 | *                                      | 2               | 0                | *                             | 260              | 228     | *              | 0                | 0               | 0                 | 0        | 3,677             |              |
|                         | Kerisi                      | 19,390                | 0                                             | 0                                                 | 0                                      | 215             | 12               | 0                             | 657              | 1,228   | 0              | 0                | 0               | 0                 | 1        | 21,503            |              |
|                         | Kerisi Bali                 | 271                   | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 111              | 99      | 0              | 0                | 0               | 0                 | 0        | 481               |              |
|                         | Kikek                       | 509                   | 3                                             | 0                                                 | 2                                      | 137             | 0                | 3                             | 4                | 7       | *              | 0                | 0               | 0                 | 0        | 665               |              |
|                         | Malong                      | 274                   | 0                                             | 0                                                 | 0                                      | 0               | 0                | *                             | 14               | 0       | 0              | *                | 0               | 0                 | 0        | 288               |              |
|                         | Merah                       | 1,109                 | 1                                             | 0                                                 | 0                                      | 0               | 3                | 0                             | *                | 1,190   | 691            | 0                | 0               | 0                 | *        | 2,994             |              |
|                         | Mengkerong/Conor/Ubi-Ubi    | 799                   | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 0                | 1       | 0              | 0                | 0               | 0                 | 0        | 800               |              |
|                         | Remong/Kunyit-Kunyit/Tanda  | 1,555                 | 1                                             | 0                                                 | 0                                      | 0               | 89               | 0                             | 1                | 233     | 56             | 0                | 0               | 0                 | 0        | 1,935             |              |
|                         | Semilang                    | 1                     | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | *                | *       | 0              | 0                | *               | 0                 | 0        | 0                 | 1            |
|                         | Shrumbu/Lemah               | 5                     | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 0                | 0       | 0              | 0                | 0               | 0                 | 0        | 0                 | 5            |
|                         | Puntong Damar/Bulus         | 1,547                 | 0                                             | 0                                                 | 0                                      | *               | 265              | 0                             | 0                | 0       | *              | 0                | *               | 0                 | 0        | 0                 | 1,812        |
|                         | Pasir-Pasir/Timun-Timun     | 801                   | 0                                             | 0                                                 | 0                                      | 0               | 0                | 0                             | 0                | 153     | 2              | 0                | 0               | 0                 | 0        | 0                 | 956          |
|                         | 34                          | Alu-Alu/Kacang-Kacang | 598                                           | 28                                                | 0                                      | 0               | 104              | 0                             | 7                | 17      | 52             | 0                | 0               | 0                 | 0        | 0                 | 806          |
| Aruan Tasik             |                             | 84                    | 0                                             | 0                                                 | 0                                      | 61              | *                | 0                             | 49               | 105     | 0              | 0                | 0               | 0                 | 0        | 299               |              |
| Bawal                   |                             | 217                   | 167                                           | 0                                                 | *                                      | 206             | 34               | 0                             | 6                | 18      | 8              | *                | 0               | 0                 | 0        | 656               |              |

Samb. (contd.)

|                           |                              |         |        |       |    |       |       |     |       |        |        |    |   |   |     |         |
|---------------------------|------------------------------|---------|--------|-------|----|-------|-------|-----|-------|--------|--------|----|---|---|-----|---------|
| 33                        | Belanak/Kedera               | 0       | 0      | 0     | 0  | *     | 0     | 0   | 0     | 0      | *      | 0  | 0 | 0 | 0   | *       |
|                           | Cermin/Sagai/Cupak           | 2,729   | 66     | 0     | 1  | 70    | 0     | *   | 100   | 149    | 0      | 0  | 0 | 0 | 4   | 3,119   |
|                           | Cincaru                      | 1,152   | 1,247  | 0     | 0  | 222   | 37    | 0   | *     | 1,401  | 0      | 0  | 0 | 0 | 9   | 4,068   |
|                           | Demudok/Rambai               | 112     | 185    | 0     | 0  | 73    | 8     | 0   | 136   | 489    | 0      | 0  | 0 | 0 | 13  | 1,016   |
|                           | Kurau/Senangin/Senohong      | 1       | 0      | 0     | 0  | 15    | 0     | 0   | 0     | 0      | 0      | 0  | 0 | 0 | 0   | 16      |
|                           | Pelata/Selar                 | 1,307   | 5,243  | 35    | 6  | 491   | 184   | 8   | 33    | 1,564  | 15     | 0  | 0 | 0 | 2   | 8,888   |
|                           | Selar Kuning/Lolong          | 4,708   | 5,110  | 0     | 0  | 58    | 3,889 | 67  | 23    | 65     | 0      | 0  | 0 | 0 | 0   | 13,920  |
|                           | Selayang/Curut               | 345     | 23,891 | 0     | 0  | 3     | 399   | 0   | 0     | 421    | 0      | 0  | 0 | 0 | 0   | 25,059  |
|                           | Pisang-Pisang                | 5       | 44     | 0     | 0  | 0     | 0     | 0   | 12    | 87     | 0      | 0  | 0 | 0 | 0   | 148     |
|                           | Talang                       | 36      | 14     | 0     | 0  | 32    | 0     | 3   | *     | 25     | *      | 0  | 0 | 0 | *   | 110     |
|                           | 35 Bilis/Bunga Air           | 58      | 0      | 5,698 | 0  | 0     | 5     | 107 | 0     | 0      | 0      | 0  | 0 | 0 | *   | 5,868   |
|                           | Parang-Parang                | 313     | 7      | 0     | 3  | 876   | 0     | *   | 1     | 75     | 2      | *  | 0 | 0 | *   | 1,277   |
|                           | Tamban                       | 3       | 11,558 | 3,790 | 80 | 679   | 125   | 51  | 0     | 22     | 13     | 0  | 0 | 0 | 0   | 16,321  |
|                           | Bulan-Bulan                  | 11      | 0      | 0     | 0  | 6     | 0     | 0   | 7     | 0      | 0      | 0  | 0 | 0 | 0   | 24      |
|                           | 36 Aya/Kayu/Tongkol          | 22      | 8,529  | 0     | 0  | 872   | 11    | 0   | 3     | 6,258  | 0      | 0  | 0 | 0 | 0   | 15,695  |
|                           | Layaran/Mersuji              | 8       | 0      | 0     | 0  | 2     | 0     | 0   | 0     | 137    | 0      | 0  | 0 | 0 | 0   | 147     |
|                           | 37 Kembong/Temenong/Pelaling | 1,525   | 12,494 | 0     | *  | 286   | 8     | 0   | *     | 569    | 0      | 0  | 0 | 0 | 1   | 14,883  |
|                           | Tenggiri                     | 314     | 462    | 0     | 0  | 718   | 2     | 0   | 4     | 2,283  | 0      | 0  | 0 | 0 | 0   | 3,783   |
|                           | Timah/Layor/Selayor          | 210     | 2      | 0     | 0  | 211   | 0     | *   | 0     | 5      | 1      | 0  | 0 | 0 | 0   | 429     |
|                           | 38 Pari                      | 2,146   | 0      | 0     | 0  | 114   | 0     | *   | 21    | 13     | 9      | 0  | 0 | 0 | 0   | 2,303   |
|                           | Yu                           | 786     | 1      | 0     | 0  | 216   | 0     | 0   | 9     | 97     | 2      | 0  | 0 | 0 | 0   | 1,111   |
|                           | 39 Ikan Baja                 | 45,449  | 106    | 61    | 0  | 0     | 0     | 0   | *     | 0      | 3,654  | 0  | * | 0 | 0   | 49,270  |
|                           | Ikan Campur                  | 5,589   | 3,925  | 148   | 3  | 529   | 136   | 7   | 413   | 247    | 72     | 0  | 1 | 0 | 5   | 11,075  |
|                           | Jebong                       | 506     | 0      | 0     | 0  | 0     | 0     | *   | 269   | 4      | 0      | 0  | 0 | 0 | 0   | 779     |
|                           | 42 Ketan                     | 935     | 0      | 0     | 0  | 61    | 0     | 1   | 74    | 0      | 2      | 0  | 0 | 0 | 0   | 1,073   |
|                           | 45 Udang Karang/Lobok        | 603     | 0      | 0     | 0  | 7     | 0     | 0   | 4     | 0      | *      | 0  | 0 | 0 | 0   | 614     |
|                           | Udang Putih                  | 228     | 0      | 0     | 0  | 251   | 0     | 0   | 0     | 0      | 53     | 0  | 0 | 0 | 0   | 532     |
|                           | Udang Minyak                 | 427     | 0      | 0     | 0  | 0     | 0     | 0   | 0     | 0      | 163    | *  | 0 | 0 | 0   | 590     |
|                           | Udang Merah Ros              | 41      | 0      | 0     | 0  | 0     | 0     | 0   | 0     | 0      | 0      | 0  | 0 | 0 | 0   | 41      |
|                           | Udang Kulit Keras            | 409     | 0      | 0     | 0  | 0     | 0     | 0   | 0     | 0      | 21     | 0  | * | 0 | 0   | 430     |
|                           | Udang Harimau                | 281     | 0      | 0     | *  | 31    | 0     | 0   | 0     | 0      | 2      | 0  | 0 | 0 | 0   | 314     |
|                           | Lain-Lain Jenis Udang        | 2,503   | 0      | 0     | 0  | 150   | 0     | 0   | 0     | 0      | 159    | 0  | 0 | 0 | 0   | 2,812   |
|                           | Udang Baring                 | 0       | 0      | 0     | 0  | 0     | 0     | *   | 0     | 0      | 8,698  | 0  | 3 | 0 | 0   | 8,701   |
|                           | 56 Siput/Kepah/Kupang/Tiram  | 0       | 0      | 0     | 0  | 0     | 0     | 0   | 0     | 0      | 0      | 0  | 0 | * | 0   | *       |
|                           | 57 Sotong Kereta             | 1       | 0      | 0     | 0  | 0     | 0     | 0   | 0     | 0      | 0      | 0  | 0 | 0 | 0   | 1       |
|                           | Sotong Katak                 | 3,264   | 0      | 0     | 0  | 0     | 0     | 0   | 279   | 10     | 4      | 0  | 0 | 0 | 0   | 3,557   |
|                           | Sotong Biasa                 | 7,158   | 305    | 0     | 0  | 0     | 370   | 17  | 72    | 407    | 104    | 19 | 4 | 0 | 0   | 8,456   |
|                           | 76 Ubur-Ubur                 | 0       | 0      | 0     | 0  | 0     | 0     | 0   | 0     | 0      | 0      | 0  | 0 | 0 | 0   | 0       |
| Jumlah Tan M/Total Tonnes |                              | 127,225 | 78,305 | 9,804 | 97 | 7,836 | 5,226 | 301 | 4,643 | 17,638 | 13,016 | 19 | 8 | 0 | 143 | 264,261 |

\* Pendaratan kurang dari 0.5 tan metrik.

Landings below 0.5 tonnes.

SARAWAK  
PENDARATAN IKAN DAN UDANG MENGIKUT KUMPULAN PERKAKAS DAN SPESIES, 1988  
LANDINGS OF MARINE FISH AND PRAWN BY GEAR GROUP AND SPECIES, 1988  
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

JADUAL (TABLE) 4.6.3

| SPESIES<br>(SPECIES) | PERKAKAS<br>(GEARS) | PUKAT<br>TUNDA<br>(TRAWL<br>NETS) | PUKAT<br>TARIK<br>(SEINE<br>NETS) | PUKAT<br>HANYUT<br>(DRIFT<br>NETS) | BELAT-<br>BELAT<br>(FISHING<br>STAKES) | KAIL<br>MENGAIL<br>(HOOKS<br>AND LINES) | PERANGKAP<br>(TRAPS) | PUKAT-PUKAT<br>BERPUNDI<br>(BAG NETS) | PUKAT-PUKAT<br>SURUNG<br>(PUSH/Scoop/<br>LIFT NETS) | PUKAT-PUKAT<br>RENTANG<br>(BARRIER<br>NETS) | MEMUNGUT<br>SIPUT<br>(SHELLFISH<br>COLLECTION) | RAMPAIAN<br>(MISCELLANEOUS) | JUMLAH<br>(TOTAL) |
|----------------------|---------------------|-----------------------------------|-----------------------------------|------------------------------------|----------------------------------------|-----------------------------------------|----------------------|---------------------------------------|-----------------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------------------|-------------------|
| Kebasi/Selangat      |                     | 3                                 | 0                                 | 252                                | 3                                      | 0                                       | 0                    | 0                                     | 0                                                   | 2                                           | 0                                              | 0                           | 260               |
| Puput                |                     | 291                               | 7                                 | 340                                | 5                                      | 0                                       | 0                    | 2                                     | 0                                                   | 13                                          | 0                                              | 0                           | 658               |
| Beliak Mata          |                     | 238                               | 0                                 | 5                                  | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 243               |
| Terubok              |                     | 52                                | 19                                | 268                                | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 339               |
| Terubok/T. Macrura   |                     | 0                                 | 0                                 | *                                  | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 0                 |
| Siakap               |                     | 689                               | 6                                 | 44                                 | 2                                      | 69                                      | 0                    | *                                     | 0                                                   | 3                                           | 0                                              | 0                           | 813               |
| Lidah                |                     | 47                                | 0                                 | 10                                 | 7                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 64                |
| Sebelah              |                     | 10                                | *                                 | 1                                  | *                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 11                |
| Bayan                |                     | 21                                | 0                                 | 46                                 | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 67                |
| Biji Nangka          |                     | 34                                | 0                                 | 0                                  | 10                                     | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 44                |
| Delah                |                     | 3                                 | 0                                 | 0                                  | 0                                      | 2                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 5                 |
| Daun Baharu          |                     | 58                                | 0                                 | 29                                 | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 1                                           | 0                                              | 0                           | 88                |
| Duri/Pulutan/Utek    |                     | 1,078                             | 26                                | 1,075                              | 14                                     | 216                                     | 0                    | 39                                    | 0                                                   | 9                                           | 0                                              | 0                           | 2,457             |
| Gelama/Tengkerong    |                     | 2,782                             | 6                                 | 475                                | 36                                     | 0                                       | 0                    | 15                                    | 2                                                   | 27                                          | 0                                              | 0                           | 3,343             |
| Gerut-Gerut/Selukut  |                     | 0                                 | 5                                 | 123                                | 0                                      | 52                                      | 0                    | 0                                     | 0                                                   | 1                                           | 0                                              | 0                           | 181               |
| Jahan/Goh            |                     | *                                 | 0                                 | 5                                  | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 5                 |
| Pedukang             |                     | 0                                 | 0                                 | 214                                | 51                                     | 0                                       | 0                    | 42                                    | 4                                                   | 49                                          | 0                                              | 0                           | 360               |
| Jenahak              |                     | 126                               | 0                                 | 236                                | 0                                      | 25                                      | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 387               |
| Kaci                 |                     | 4                                 | 0                                 | 0                                  | 0                                      | 8                                       | 0                    | 0                                     | 0                                                   | *                                           | 0                                              | 0                           | 12                |
| Kerapu               |                     | 76                                | *                                 | 27                                 | 0                                      | 92                                      | 0                    | 7                                     | 0                                                   | 14                                          | 0                                              | 0                           | 216               |
| Kerisi               |                     | 189                               | 0                                 | 94                                 | 0                                      | 17                                      | 0                    | 0                                     | 0                                                   | 1                                           | 0                                              | 0                           | 301               |
| Kerisi Bali          |                     | 2                                 | 0                                 | 0                                  | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 2                 |
| Kikek                |                     | 2                                 | 0                                 | 16                                 | 0                                      | 0                                       | 0                    | 0                                     | *                                                   | 2                                           | 0                                              | 0                           | 20                |
| Lumi-Lumi            |                     | 531                               | *                                 | 59                                 | 11                                     | 0                                       | 0                    | 7                                     | 4                                                   | 988                                         | 0                                              | 0                           | 1,600             |
| Malong               |                     | 632                               | 17                                | 206                                | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 855               |
| Merah                |                     | 292                               | 0                                 | 91                                 | 0                                      | 104                                     | 0                    | 3                                     | 0                                                   | 5                                           | 0                                              | 0                           | 495               |
| Pelanduk             |                     | 1                                 | 0                                 | 42                                 | 0                                      | 12                                      | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 55                |
| Semilang             |                     | 4                                 | *                                 | 14                                 | 125                                    | 3                                       | 0                    | 28                                    | 2                                                   | 77                                          | 0                                              | 0                           | 253               |
| Shrumbu/Lemah        |                     | 236                               | *                                 | 5                                  | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 241               |
| Senolong/Kapas       |                     | 10                                | 0                                 | 5                                  | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 15                |
| Alu/Kacang           |                     | 25                                | 0                                 | 26                                 | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 51                |
| Bawal Hitam          |                     | 348                               | 591                               | 342                                | *                                      | 0                                       | 0                    | 0                                     | 92                                                  | 0                                           | 0                                              | 0                           | 1,373             |
| Bawal Puteh          |                     | 530                               | 9                                 | 251                                | 1                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 791               |
| Bawal/Bujang         |                     | 597                               | 33                                | 107                                | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 737               |
| Belanak/Kedera       |                     | 14                                | 2                                 | 10                                 | 7                                      | 0                                       | 0                    | 10                                    | 0                                                   | 30                                          | 0                                              | 0                           | 73                |
| Cernin/Sagai/Cupak   |                     | 24                                | 23                                | 12                                 | 0                                      | *                                       | 0                    | 0                                     | 0                                                   | 1                                           | 0                                              | 0                           | 60                |
| Geronggong           |                     | *                                 | 0                                 | 5                                  | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 5                 |
| Cincaru              |                     | 304                               | 7                                 | 340                                | 0                                      | 1                                       | 0                    | 0                                     | 3                                                   | 0                                           | 0                                              | 0                           | 655               |
| Demudok/Rambai       |                     | 21                                | 0                                 | 36                                 | 0                                      | 4                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 61                |
| Kurau/Senangin       |                     | 9                                 | *                                 | 522                                | 3                                      | 169                                     | 0                    | 2                                     | 0                                                   | 10                                          | 0                                              | 0                           | 715               |
| Senangin             |                     | *                                 | 13                                | 187                                | 1                                      | 31                                      | 0                    | 0                                     | 0                                                   | 7                                           | 0                                              | 0                           | 239               |
| Selar                |                     | 12                                | 6                                 | 31                                 | 0                                      | 0                                       | 0                    | 0                                     | 1                                                   | 0                                           | 0                                              | 0                           | 50                |
| Pelata               |                     | 144                               | 21                                | 22                                 | 0                                      | 0                                       | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 187               |
| Selar Kuning         |                     | 26                                | 371                               | 10                                 | 0                                      | 0                                       | 0                    | 0                                     | 2                                                   | 0                                           | 0                                              | 0                           | 409               |
| Selayang/Cerut       |                     | *                                 | 0                                 | 8                                  | 0                                      | 39                                      | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 47                |
| Talang               |                     | 22                                | 13                                | 449                                | 2                                      | 208                                     | 0                    | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 694               |
| Tamban               |                     | 159                               | 463                               | 66                                 | 0                                      | 0                                       | 0                    | 0                                     | 1                                                   | 0                                           | 0                                              | 0                           | 689               |
| Bilis/Bunga Air      |                     | 208                               | *                                 | 31                                 | 215                                    | 0                                       | 0                    | 0                                     | 24                                                  | 2                                           | 0                                              | 0                           | 480               |

Samb. (contd.)

|                       |        |       |        |       |       |     |        |       |       |    |   |        |
|-----------------------|--------|-------|--------|-------|-------|-----|--------|-------|-------|----|---|--------|
| Parang-Parang         | 50     | *     | 323    | 2     | 0     | 0   | 0      | 0     | 0     | 0  | 0 | 375    |
| Bulan-Bulan           | 0      | 0     | 5      | 0     | 0     | 0   | 0      | 0     | *     | 0  | 0 | 5      |
| Tongkol/E. Affinis    | 67     | 13    | 377    | 0     | 81    | 0   | 0      | 0     | 0     | 0  | 0 | 538    |
| Tongkol/K. Pelamis    | *      | 0     | 16     | 0     | 3     | 0   | 0      | 0     | 0     | 0  | 0 | 19     |
| Tongkol/T. Tonggol    | 10     | *     | 139    | 0     | 30    | 0   | 0      | 0     | 0     | 0  | 0 | 179    |
| Tongkol/A. Thazard    | 0      | *     | 60     | 0     | 14    | 0   | 0      | 0     | 0     | 0  | 0 | 74     |
| Tenggiri              | 706    | 28    | 852    | 0     | 64    | 0   | 0      | 0     | 0     | 0  | 0 | 1,650  |
| Kembong               | 513    | 475   | 399    | 0     | 1     | 0   | 0      | 1     | 0     | 0  | 0 | 1,389  |
| Pelaling/Temenong     | 1      | 0     | 5      | 0     | 0     | 0   | 0      | 1     | 0     | 0  | 0 | 7      |
| Timah/Layor/Selayor   | 680    | *     | 94     | 5     | 1     | 0   | 0      | 0     | 0     | 0  | 0 | 780    |
| Yu                    | 555    | 5     | 982    | 15    | 223   | 0   | 0      | 0     | 5     | 0  | 0 | 1,785  |
| Pari                  | 1,737  | 4     | 280    | 36    | 396   | 0   | 2      | 0     | 1     | 0  | 0 | 2,456  |
| Ikan Baja             | 3,715  | 0     | 4      | 67    | 40    | 2   | 349    | 0     | 0     | 0  | 0 | 4,177  |
| Ikan Campur           | 5,870  | 34    | 826    | 247   | 17    | 3   | 224    | 0     | 55    | 0  | 0 | 7,276  |
| Ketam Laut/Suri       | 203    | 1     | 38     | 11    | 0     | 28  | 0      | 0     | 0     | 0  | 1 | 282    |
| Ketam Renjong/Bakau   | 6      | 0     | 8      | 0     | 0     | 0   | 0      | 0     | 0     | 0  | 0 | 14     |
| Ketam Batu            | 19     | 0     | 4      | 5     | 0     | 28  | 1      | 0     | *     | 0  | 0 | 57     |
| Udang Karang          | 3      | 1     | 0      | 0     | 0     | 0   | 0      | 0     | 0     | 0  | 0 | 4      |
| Udang Lobok           | 27     | *     | 51     | 8     | 0     | 0   | 0      | 0     | 0     | 0  | 0 | 86     |
| Udang Harimau         | 176    | 1     | 1      | 2     | 0     | 0   | 122    | 0     | 1     | 0  | 0 | 303    |
| Udang Putih Besar     | 221    | 3     | 84     | 26    | 0     | 0   | 0      | 2     | 4     | 0  | 0 | 340    |
| Udang Putih Sedang    | 408    | 3     | 3      | 9     | 0     | 0   | 0      | 0     | 1     | 0  | 0 | 424    |
| U. Putih Kecil/Kertas | 7      | 0     | 6      | 4     | 0     | 0   | 0      | 0     | 0     | 0  | * | 17     |
| Udang Sua Lor (B)     | 1,324  | 9     | 353    | 27    | 0     | 0   | 12     | 2     | 21    | 0  | 0 | 1,748  |
| Udang Sua Lor (S)     | 521    | 0     | 123    | 31    | 0     | 0   | 20     | 6     | 25    | 0  | 2 | 728    |
| Udang Merah Ros       | 27     | 0     | 0      | 3     | 0     | 0   | 0      | 0     | 0     | 0  | 0 | 30     |
| Udang Kulit Keras     | 1,719  | 1     | 0      | 13    | 0     | 0   | 0      | 0     | 0     | 0  | 0 | 1,733  |
| Udang Kuning          | 65     | 0     | 0      | 0     | 0     | 0   | 0      | 0     | 0     | 0  | 0 | 65     |
| Udang Cendana/Rotan   | 0      | 0     | 0      | 0     | 0     | 0   | 0      | 0     | 0     | 0  | 0 | 0      |
| Udang Merah/Payak     | 4,123  | 53    | 6      | 18    | 0     | 36  | 2,926  | 1     | *     | 0  | 0 | 7,163  |
| Udang Pasir           | 287    | 0     | 0      | 1     | 0     | 0   | 0      | 0     | *     | 0  | 0 | 288    |
| Udang Minyak          | 28     | *     | 0      | 4     | 0     | 0   | 0      | 1     | 0     | 0  | 0 | 33     |
| Udang Baring          | 105    | 0     | 12     | 50    | 0     | 0   | 44     | 57    | 0     | 0  | 0 | 268    |
| Udang Galah           | 131    | 0     | 8      | 0     | 0     | 3   | *      | 0     | 8     | 0  | 2 | 152    |
| Siput                 | 0      | 0     | 0      | 0     | 0     | 0   | 0      | 0     | 0     | 13 | 0 | 13     |
| Sotong Biasa/Cumit    | 671    | *     | 5      | 0     | 0     | 0   | 0      | 0     | 0     | 0  | 0 | 676    |
| Sotong Katak          | 69     | 0     | *      | 0     | 0     | 0   | 0      | 0     | 0     | 0  | 0 | 69     |
| Sotong Kereta         | 0      | 0     | 0      | 0     | 0     | 0   | 0      | 0     | 0     | 0  | 0 | 0      |
| Trepang               | 16     | 0     | 0      | 0     | 0     | 0   | 0      | 0     | 0     | 0  | 0 | 16     |
| Ubur-Ubur Putih       | 1,007  | 0     | 123    | 2     | 3     | 3   | 11,933 | 5,836 | 521   | 0  | 0 | 19,428 |
| Ubur-Ubur Merah       | 219    | 0     | 0      | 0     | 0     | 0   | 39     | 0     | 0     | 0  | 0 | 258    |
| Jamah                 | 373    | 502   | 48     | 0     | 42    | 0   | 0      | 56    | 0     | 0  | 0 | 1,021  |
| Perencong             | 0      | 14    | 221    | 0     | 93    | 0   | 0      | 0     | *     | 0  | 0 | 328    |
| Panjang               | *      | 10    | 461    | 1     | 80    | 0   | 0      | 0     | 42    | 0  | 0 | 594    |
| Pelayak               | 487    | 0     | 130    | 8     | 18    | 0   | 3      | 0     | 2     | 0  | 0 | 648    |
| Impirang              | 65     | 0     | 161    | 20    | 0     | 0   | 16     | 0     | 53    | 0  | 0 | 315    |
| Bulu Ayam             | 244    | 0     | 76     | 16    | 0     | 0   | 9      | 1     | 33    | 0  | 0 | 379    |
| Kilat                 | 297    | 0     | 81     | 1     | 0     | 0   | *      | 0     | *     | 0  | 0 | 379    |
| Bulu                  | 104    | 1     | 20     | 20    | 0     | 0   | 9      | 0     | 41    | 0  | 0 | 195    |
| Empirit               | *      | 0     | 164    | 1     | 0     | 0   | 0      | 0     | 7     | 0  | 0 | 172    |
| Jumlah (Total)        | 36,710 | 2,796 | 12,686 | 1,146 | 2,158 | 103 | 15,864 | 6,099 | 2,062 | 13 | 5 | 79,642 |

\* Pendaratan kurang dari 0.5 tan metrik  
Landings below 0.5 tonnes

WILAYAH PERSEKUTUAN LABUAN/LABUAN FEDERAL TERRITORY  
PENDARATAN IKAN DAN UDANG MENGIKUT KUMPULAN PERKAKAS DAN SPESIES, 1988  
LANDINGS OF MARINE FISH AND PRAWN BY GEAR GROUP AND SPECIES, 1988  
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

JADUAL (TABLE) 4.6.4

| PERKAKAS<br>(GEARS)      | PUKAT<br>TUNDA<br>(TRAWL<br>NETS) | PUKAT<br>JERUT<br>(PURSE<br>SEINE) | PUKAT<br>TARIK<br>(SEINE<br>NETS) | PUKAT<br>HANYUT<br>(DRIFT<br>NETS) | BELAT-<br>BELAT<br>(FISHING<br>STAKES) | PERANGKAP-<br>PERANGKAP<br>(TRAPS) | PANCING<br>(HOOKS &<br>LINES) | PUKAT-PUKAT<br>BERPUNDI<br>(BAG NETS) | PUKAT-PUKAT<br>SURUNG<br>(PUSH/SCOOP/<br>LIFT NETS) | PUKAT-PUKAT<br>RENTANG<br>(BARRIER<br>NETS) | MEMUNGUT<br>SIPUT<br>(SHELLFISH<br>COLLECTION) | RAMPAIAN<br>(MISCELLANEOUS) | JUMLAH<br>(TOTAL) |
|--------------------------|-----------------------------------|------------------------------------|-----------------------------------|------------------------------------|----------------------------------------|------------------------------------|-------------------------------|---------------------------------------|-----------------------------------------------------|---------------------------------------------|------------------------------------------------|-----------------------------|-------------------|
| SPESIES<br>(SPECIES)     |                                   |                                    |                                   |                                    |                                        |                                    |                               |                                       |                                                     |                                             |                                                |                             |                   |
| Kebasi/Selangat          | 0                                 | 0                                  | 0                                 | 0                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 0                 |
| Puput/B. Mata/Tirok      | 3                                 | 10                                 | 0                                 | 1                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 14                |
| Siakap                   | 0                                 | 0                                  | 0                                 | 2                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 2                 |
| Lidah                    | 2                                 | 0                                  | 0                                 | 0                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 2                 |
| Sebelah                  | 16                                | 1                                  | 0                                 | 4                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 21                |
| Bayan                    | 0                                 | 0                                  | 0                                 | 0                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 0                 |
| Biji Nangka              | 103                               | 0                                  | 0                                 | 11                                 | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 114               |
| Daun Baharu              | 45                                | 0                                  | 0                                 | 3                                  | 0                                      | 0                                  | 1                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 49                |
| Delah/Pinang-Pinang      | 0                                 | 0                                  | 0                                 | 42                                 | 0                                      | 1                                  | 28                            | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 71                |
| Duri/Pulutan/Utek        | 11                                | 0                                  | 0                                 | 12                                 | 3                                      | 0                                  | 1                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 27                |
| Dengkis/Debam            | 10                                | 0                                  | 0                                 | 93                                 | 8                                      | 1                                  | 14                            | 0                                     | 0                                                   | 0                                           | 0                                              | 1                           | 127               |
| Gelama/Tengkerong        | 80                                | 0                                  | 0                                 | 0                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 80                |
| Gerut-Gerut/Selukut      | 24                                | 0                                  | 0                                 | 2                                  | 0                                      | 1                                  | 6                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 33                |
| Jenahak                  | 1                                 | 0                                  | 0                                 | 0                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 1                 |
| Kaci                     | 0                                 | 0                                  | 0                                 | 2                                  | 0                                      | 1                                  | 3                             | 0                                     | 0                                                   | 0                                           | 0                                              | 1                           | 7                 |
| Kerapu                   | 13                                | 0                                  | 0                                 | 15                                 | 2                                      | 1                                  | 54                            | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 85                |
| Kikek                    | 34                                | 0                                  | 0                                 | 5                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 39                |
| Kerisi                   | 72                                | 0                                  | 0                                 | 4                                  | 0                                      | 0                                  | 32                            | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 108               |
| Kerisi Bali              | 0                                 | 0                                  | 0                                 | 0                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 0                 |
| Malong                   | 0                                 | 0                                  | 0                                 | 0                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 0                 |
| Merah                    | 22                                | 0                                  | 0                                 | 25                                 | 0                                      | 0                                  | 40                            | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 87                |
| Mengkerong/Conor/Ubi-Ubi | 0                                 | 0                                  | 0                                 | 0                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 0                 |
| Remong/Kunyit-Kunyit     | 0                                 | 0                                  | 0                                 | 9                                  | 1                                      | 0                                  | 5                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 15                |
| Semilang                 | 0                                 | 0                                  | 0                                 | 0                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 0                 |
| Shrumbu/Lemah            | 3                                 | 0                                  | 0                                 | 1                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 4                 |
| Puntung Damar/Bulus      | 0                                 | 0                                  | 0                                 | 0                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 0                 |
| Pasir-Pasir/Timun-Timun  | 4                                 | 0                                  | 0                                 | 18                                 | 0                                      | 0                                  | 37                            | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 59                |
| Alu-Alu/Kacang           | 26                                | 1                                  | 0                                 | 10                                 | 0                                      | 1                                  | 9                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 47                |
| Aruan Tasik              | 4                                 | 0                                  | 0                                 | 1                                  | 0                                      | 0                                  | 1                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 6                 |
| Kurau Senangin           | 0                                 | 0                                  | 0                                 | 0                                  | 0                                      | 0                                  | 0                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 0                 |
| Demudok/Rambai           | 2                                 | 0                                  | 0                                 | 1                                  | 0                                      | 0                                  | 3                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 6                 |
| Jebong                   | 15                                | 0                                  | 0                                 | 0                                  | 0                                      | 0                                  | 4                             | 0                                     | 0                                                   | 0                                           | 0                                              | 0                           | 19                |

Samb. (contd.)

|                          |       |     |   |     |    |   |     |   |   |   |   |   |       |
|--------------------------|-------|-----|---|-----|----|---|-----|---|---|---|---|---|-------|
| Cermin/Sagai/Cupak       | 48    | 0   | 0 | 57  | 0  | 0 | 118 | 0 | 0 | 0 | 0 | 0 | 223   |
| Yu                       | 17    | 0   | 0 | 4   | 0  | 0 | 1   | 0 | 0 | 0 | 0 | 0 | 22    |
| Pari                     | 31    | 0   | 0 | 0   | 1  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 32    |
| Ikan Campur              | 104   | 0   | 0 | 104 | 1  | 0 | 43  | 0 | 0 | 0 | 0 | 0 | 252   |
| Ikan Baja                | 3     | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 3     |
| Terubok                  | 0     | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 0     |
| Bawal                    | 6     | 7   | 0 | 4   | 0  | 0 | 4   | 0 | 0 | 0 | 0 | 0 | 21    |
| Belanak/Kedera           | 0     | 0   | 0 | 4   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 4     |
| Cincaru                  | 57    | 28  | 0 | 43  | 0  | 0 | 20  | 0 | 0 | 0 | 0 | 0 | 148   |
| Pelata/Selar             | 0     | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 0     |
| Selar Kuning/Lolong      | 27    | 13  | 0 | 5   | 0  | 0 | 1   | 0 | 0 | 0 | 0 | 0 | 46    |
| Selayang/Cerut           | 32    | 98  | 0 | 39  | 0  | 0 | 1   | 0 | 0 | 0 | 0 | 0 | 170   |
| Pisang-Pisang            | 0     | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 0     |
| Talang                   | 3     | 0   | 0 | 50  | 0  | 0 | 58  | 0 | 0 | 0 | 0 | 0 | 111   |
| Billis/Bunga Air         | 0     | 0   | 0 | 10  | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 10    |
| Parang-Parang            | 10    | 0   | 0 | 11  | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 21    |
| Tamban                   | 0     | 51  | 0 | 99  | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 150   |
| Bulan-Bulan              | 9     | 0   | 0 | 4   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 13    |
| Aya/Kayu/Tongkol         | 0     | 0   | 0 | 35  | 0  | 0 | 66  | 0 | 0 | 0 | 0 | 0 | 101   |
| Layaran/Mersuji          | 0     | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 0     |
| Kembong/Pelaing/Temenong | 63    | 134 | 0 | 35  | 0  | 0 | 38  | 0 | 0 | 0 | 0 | 0 | 270   |
| Tenggiri                 | 54    | 4   | 0 | 71  | 0  | 0 | 181 | 0 | 0 | 0 | 0 | 0 | 310   |
| Timah/Layor/Selayor      | 0     | 0   | 0 | 2   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 2     |
| Ketam                    | 19    | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 1 | 20    |
| Udang Karang/Lobok       | 10    | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 3 | 13    |
| Udang Putih              | 0     | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 0     |
| Udang Minyak             | 0     | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 0     |
| Udang Merah Ros          | 0     | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 0     |
| Udang Kulit Keras        | 114   | 0   | 0 | 2   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 116   |
| Udang Harimau            | 38    | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 38    |
| Lain-Lain Jenis Udang    | 252   | 0   | 0 | 5   | 0  | 0 | 0   | 0 | 7 | 0 | 0 | 0 | 264   |
| Siput/Kepah/Kupang/Tiram | 0     | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 0     |
| Sotong Kereta            | 0     | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 0     |
| Sotong Katak             | 71    | 0   | 0 | 0   | 1  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 72    |
| Sotong Biasa/Cumit       | 82    | 0   | 0 | 3   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 85    |
| Ubur-Ubur                | 0     | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 0     |
| Trepang                  | 0     | 0   | 0 | 0   | 0  | 0 | 0   | 0 | 0 | 0 | 0 | 0 | 0     |
| Jumlah (Total)           | 1,540 | 347 | 0 | 848 | 17 | 6 | 769 | 0 | 7 | 0 | 0 | 6 | 3,540 |

SEMENANJUNG MALAYSIA/PENINSULAR MALAYSIA  
 USAHA MENANGKAP IKAN DAN PENDARATAN PUKAT TUNDA MENGIKUT KELAS MUATAN DAN SPESIES IKAN, 1988  
 FISHING EFFORTS AND LANDINGS OF TRAWLERS BY TONNAGE CLASS AND SPECIES, 1988  
 (Kuantiti dalam Tan Metrik/Quantity in Tonnes)

| ISSCAAP<br>GROUP | Usaha Menangkap Ikan<br>Fishing Effort | Jumlah<br>Total | Kelas Muatan/Tonnage Class |                |                |                |                                   |
|------------------|----------------------------------------|-----------------|----------------------------|----------------|----------------|----------------|-----------------------------------|
|                  |                                        |                 | 0-9.9<br>GRT               | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 GRT & keatas<br>70 GRT & above |
| NO.              | Cumulative no. of fishing units        | 65,348          | 14,373                     | 34,285         | 8,572          | 7,013          | 1,105                             |
|                  | Cumulative no. of trips                | 1,239,076       | 289,565                    | 703,131        | 148,412        | 93,828         | 4,140                             |
|                  | Cumulative no. of days                 | 1,478,398       | 297,652                    | 777,130        | 205,938        | 157,151        | 40,527                            |
|                  | Cumulative no. of hauls                | 4,096,905       | 818,739                    | 2,220,502      | 557,013        | 436,786        | 63,865                            |
|                  | Cumulative no. of trawling hours       | 11,932,690      | 2,296,011                  | 6,605,491      | 1,477,770      | 1,362,087      | 191,331                           |
| 24               | Species/Species:                       |                 |                            |                |                |                |                                   |
|                  | Kebasi/Selangat                        | 679             | 64                         | 228            | 219            | 161            | 7                                 |
| 25               | Puput/B. Mata/Tirok                    | 4,260           | 56                         | 405            | 1,238          | 2,345          | 216                               |
|                  | Terubok                                | 0               | 0                          | 0              | 0              | 0              | 0                                 |
| 31               | Siakap                                 | 11              | *                          | 8              | 2              | 1              | 0                                 |
| 31               | Lidah                                  | 1,500           | 89                         | 580            | 520            | 247            | 64                                |
|                  | Sebelah                                | 839             | 17                         | 98             | 132            | 436            | 156                               |
| 33               | Bayan                                  | 36              | 7                          | 9              | 8              | 12             | 0                                 |
|                  | Biji Nangka                            | 6,272           | 12                         | 542            | 644            | 3,852          | 1,222                             |
|                  | Daun Baharu                            | 509             | 14                         | 86             | 58             | 224            | 127                               |
|                  | Delah/Pinang-Pinang                    | 34              | 2                          | 9              | 3              | 17             | 3                                 |
|                  | Duri/Pulutan/Utik                      | 6,568           | 83                         | 940            | 1,054          | 2,927          | 1,564                             |
|                  | Dengkis/Debam                          | 482             | 3                          | 34             | 61             | 214            | 170                               |
|                  | Gelama/Tengkerong/Selampai             | 9,394           | 461                        | 2,279          | 2,777          | 3,214          | 663                               |
|                  | Gerut-Gerut                            | 799             | 0                          | 29             | 154            | 376            | 240                               |
|                  | Jenahak                                | 393             | 1                          | 4              | 59             | 275            | 54                                |
|                  | Kaci                                   | 502             | 16                         | 32             | 111            | 224            | 119                               |
|                  | Kerapu                                 | 4,912           | 20                         | 82             | 404            | 3,886          | 520                               |
|                  | Kerisi                                 | 27,073          | 448                        | 2,946          | 4,430          | 13,323         | 5,926                             |
|                  | Kerisi Bali                            | 607             | 23                         | 2              | 68             | 335            | 179                               |
|                  | Kikek                                  | 1,059           | 7                          | 173            | 146            | 536            | 197                               |
|                  | Malong                                 | 1,738           | 126                        | 660            | 318            | 424            | 210                               |
|                  | Merah                                  | 2,462           | 5                          | 51             | 311            | 1,411          | 684                               |
|                  | Mengkerong/Conor/Ubi-Ubi               | 3,397           | 21                         | 305            | 615            | 2,028          | 428                               |
|                  | Remong/Kunyit-Kunyit/Tanda             | 1,981           | 31                         | 128            | 254            | 982            | 586                               |
|                  | Semilang                               | 284             | 23                         | 57             | 67             | 112            | 25                                |
|                  | Shrumbu/Lemah                          | 5               | 0                          | 0              | 0              | 5              | 0                                 |
|                  | Puntong Damar/Bulus                    | 1,698           | 154                        | 539            | 386            | 385            | 234                               |
|                  | Pasir-Pasir/Timun-Timun                | 823             | 26                         | 41             | 131            | 331            | 294                               |
| 34               | Alu-Alu/Kacang-Kacang                  | 1,784           | 11                         | 237            | 492            | 810            | 234                               |
|                  | Aruan Tasik                            | 158             | 5                          | 6              | 34             | 67             | 46                                |
|                  | Bawal                                  | 2,796           | 82                         | 571            | 1,058          | 916            | 169                               |

Samb. (contd.)

|    |                               |         |        |        |        |         |        |
|----|-------------------------------|---------|--------|--------|--------|---------|--------|
|    | Belanak/Kedera                | 199     | 29     | 58     | 78     | 31      | 3      |
|    | Cermin/Sagai/Cupak            | 3,146   | 45     | 250    | 308    | 1,120   | 1,423  |
|    | Cencaru                       | 3,238   | 43     | 259    | 901    | 1,625   | 410    |
|    | Demudok/Rambai                | 2,252   | 3      | 15     | 353    | 1,628   | 253    |
|    | Kurau/Senangin/Senohong       | 191     | 9      | 49     | 66     | 64      | 3      |
|    | Pelata/Selar                  | 3,839   | 124    | 262    | 1,090  | 1,867   | 496    |
|    | Selar Kuning/Lolong           | 6,084   | 353    | 747    | 1,503  | 2,454   | 1,027  |
|    | Selayang/Curut                | 649     | 4      | 10     | 87     | 348     | 200    |
|    | Pisang-Pisang                 | 12      | 0      | 0      | *      | 7       | 5      |
|    | Talang                        | 322     | 2      | 28     | 143    | 146     | 3      |
| 35 | Bilis/Bunga Air               | 489     | 28     | 379    | 55     | 24      | 3      |
|    | Parang-Parang                 | 1,816   | 53     | 218    | 660    | 793     | 92     |
|    | Tamban                        | 1,438   | 21     | 120    | 852    | 445     | 0      |
|    | Bulan-Bulan                   | 13      | 0      | 6      | 2      | 5       | 0      |
| 36 | Aya/Kayu/Tongkol              | 23      | 3      | 0      | 4      | 14      | 2      |
|    | Layaran/Mersuji               | 8       | 0      | 4      | 2      | 2       | 0      |
| 37 | Kembong/Temenong/Pelaling     | 13,383  | 20     | 554    | 7,099  | 5,095   | 615    |
|    | Tenggiri                      | 1,389   | 18     | 59     | 522    | 673     | 117    |
|    | Timah/Layor/Selayor           | 5,164   | 12     | 284    | 1,942  | 2,533   | 393    |
| 38 | Pari                          | 7,027   | 568    | 1,182  | 885    | 3,564   | 828    |
|    | Yu                            | 1,640   | 50     | 223    | 407    | 778     | 182    |
| 39 | Ikan Baja                     | 176,458 | 11,286 | 40,083 | 44,832 | 69,356  | 10,901 |
|    | Ikan Campur                   | 12,956  | 491    | 2,126  | 1,300  | 7,209   | 1,830  |
|    | Jebong                        | 1,875   | 5      | 10     | 232    | 1,265   | 363    |
| 42 | Ketam                         | 2,602   | 372    | 980    | 574    | 535     | 141    |
| 45 | Udang Karang/Lobok            | 771     | 40     | 209    | 115    | 275     | 132    |
|    | Udang Putih/Kaki Merah        | 1,158   | 155    | 818    | 97     | 84      | 4      |
|    | Udang Minyak                  | 12,772  | 2,233  | 10,392 | 126    | 21      | 0      |
|    | Udang Merah Ros               | 389     | 136    | 247    | 4      | 2       | *      |
|    | Udang Kulit Keras             | 2,242   | 719    | 1,507  | 14     | 2       | *      |
|    | Udang Harimau                 | 538     | 95     | 242    | 103    | 94      | 4      |
|    | Lain-Lain Jenis Udang         | 22,817  | 3,772  | 16,996 | 1,585  | 442     | 22     |
|    | Udang Baring                  | 0       | 0      | 0      | 0      | 0       | 0      |
| 56 | Siput/Kepah/Kupang/Tiram      | 2       | 2      | 0      | 0      | 0       | 0      |
| 57 | Sotong Kereta                 | 210     | 15     | 103    | 61     | 31      | 0      |
|    | Sotong Katak                  | 6,111   | 369    | 858    | 1,391  | 2,677   | 816    |
|    | Sotong Biasa                  | 17,923  | 602    | 3,617  | 5,531  | 6,985   | 1,188  |
| 76 | Ubur-Ubur                     | 0       | 0      | 0      | 0      | 0       | 0      |
|    | Jumlah Tan M.<br>Total Tonnes | 394,201 | 23,484 | 93,976 | 88,678 | 152,270 | 35,793 |

\* Pendaratan kurang dari 0.5 tan metrik.  
Landing below 0.5 tonnes.



PANTAI BARAT SEMENANJUNG MALAYSIA/WEST COAST PENINSULAR MALAYSIA  
 USAHA MENANGKAP IKAN DAN PENDARATAN PUKAT TUNDA MENGIKUT KELAS MUATAN DAN SPESIES IKAN, 1988  
 FISHING EFFORTS AND LANDINGS OF TRAWLERS BY TONNAGE CLASS AND SPECIES, 1988  
 (Kuantiti dalam Tan Metrik/Quantity in Tonnes)

| ISSCAAP<br>GROUP | Usaha Menangkap Ikan<br>Fishing Effort | Jumlah<br>Total | Kelas Muatan/Tonnage Class |                |                |                |                                   |
|------------------|----------------------------------------|-----------------|----------------------------|----------------|----------------|----------------|-----------------------------------|
|                  |                                        |                 | 0-9.9<br>GRT               | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 GRT & keatas<br>70 GRT & above |
| NO.              | Cumulative no. of fishing units        | 50,774          | 11,008                     | 27,521         | 6,657          | 4,978          | 610                               |
|                  | Cumulative no. of trips                | 1,032,396       | 226,104                    | 597,756        | 131,742        | 74,421         | 2,373                             |
|                  | Cumulative no. of days                 | 1,202,928       | 234,191                    | 663,509        | 169,947        | 110,887        | 24,393                            |
|                  | Cumulative no. of hauls                | 3,341,292       | 641,683                    | 1,891,001      | 460,557        | 310,485        | 37,566                            |
|                  | Cumulative no. of trawling hours       | 9,820,763       | 1,796,713                  | 5,673,003      | 1,266,532      | 971,818        | 112,698                           |
| 24               | Species/Species:                       |                 |                            |                |                |                |                                   |
|                  | Kebasi/Selangat                        | 591             | 40                         | 200            | 199            | 145            | 7                                 |
|                  | Puput/B. Mata/Tirok                    | 4,216           | 48                         | 385            | 1,226          | 2,341          | 216                               |
| 25               | Terubok                                | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Siakap                                 | 10              | 0                          | 7              | 2              | 1              | 0                                 |
| 31               | Lidah                                  | 1,331           | 75                         | 528            | 500            | 219            | 9                                 |
|                  | Sebelah                                | 260             | 6                          | 10             | 45             | 179            | 20                                |
| 33               | Bayan                                  | 2               | 0                          | 0              | 2              | 0              | 0                                 |
|                  | Biji Nangka                            | 1,345           | 8                          | 70             | 223            | 864            | 180                               |
|                  | Daun Baharu                            | 261             | 2                          | 54             | 19             | 163            | 23                                |
|                  | Delah/Pinang-Pinang                    | 19              | 0                          | 5              | 1              | 10             | 3                                 |
|                  | Duri/Pulutan/Utik                      | 2,029           | 52                         | 255            | 394            | 1,187          | 141                               |
|                  | Dengkis/Debam                          | 167             | 0                          | 0              | 15             | 137            | 15                                |
|                  | Gelama/Tengerong/Selampai              | 7,262           | 317                        | 1,618          | 2,405          | 2,603          | 319                               |
|                  | Gerut-Gerut                            | 586             | *                          | 15             | 135            | 363            | 73                                |
|                  | Jenahak                                | 385             | 0                          | 4              | 59             | 270            | 52                                |
|                  | Kaci                                   | 119             | 0                          | 0              | 14             | 91             | 14                                |
|                  | Kerapu                                 | 1,724           | 6                          | 58             | 223            | 1,253          | 184                               |
|                  | Kerisi                                 | 7,684           | 9                          | 144            | 988            | 5,446          | 1,097                             |
|                  | Kerisi Bali                            | 336             | 0                          | 0              | 26             | 257            | 53                                |
|                  | Kikek                                  | 549             | 6                          | 0              | 90             | 404            | 49                                |
|                  | Malong                                 | 1,463           | 116                        | 655            | 300            | 367            | 25                                |
|                  | Merah                                  | 1,352           | *                          | 6              | 133            | 1,026          | 187                               |
|                  | Mengkerong/Conor/Ubi-Ubi               | 2,598           | 6                          | 91             | 458            | 1,821          | 222                               |
|                  | Remong/Kunyit-Kunyit/Tanda             | 425             | 0                          | 2              | 31             | 345            | 47                                |
|                  | Semilang                               | 284             | 23                         | 57             | 67             | 112            | 25                                |
|                  | Shrumbu/Lemah                          | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Puntong Damar/Bulus                    | 151             | 8                          | 38             | 36             | 66             | 3                                 |
| 34               | Pasir-Pasir/Timun-Timun                | 23              | 0                          | 2              | 12             | 8              | 1                                 |
|                  | Alu-Alu/Kacang-Kacang                  | 1,185           | 4                          | 128            | 407            | 574            | 72                                |
|                  | Aruan Tasik                            | 74              | 0                          | 3              | 18             | 46             | 7                                 |
|                  | Bawal                                  | 2,579           | 66                         | 544            | 1,023          | 866            | 80                                |

Samb. (contd. )

|    |                           |         |        |        |        |         |        |
|----|---------------------------|---------|--------|--------|--------|---------|--------|
|    | Belanak/Kedera            | 198     | 29     | 58     | 77     | 31      | 3      |
|    | Cermin/Sagai/Cupak        | 417     | 26     | 100    | 27     | 189     | 75     |
|    | Cencaru                   | 2,086   | 28     | 210    | 732    | 1,023   | 93     |
|    | Demudok/Rambai            | 2,141   | 0      | 6      | 338    | 1,590   | 207    |
|    | Kurau/Senangin/Senohong   | 191     | 9      | 49     | 66     | 64      | 3      |
|    | Pelata/Selar              | 2,532   | 13     | 127    | 870    | 1,417   | 105    |
|    | Selar Kuning/Lolong       | 1,377   | 6      | 9      | 460    | 839     | 63     |
|    | Selayang/Curut            | 304     | 0      | 0      | 52     | 241     | 11     |
|    | Pisang-Pisang             | 8       | 0      | 0      | 0      | 3       | 5      |
|    | Talang                    | 286     | 2      | 19     | 134    | 128     | 3      |
| 35 | Bilis/Bunga Air           | 431     | 23     | 351    | 50     | 7       | 0      |
|    | Parang-Parang             | 1,503   | 4      | 129    | 585    | 704     | 81     |
|    | Tamban                    | 1,434   | 21     | 118    | 852    | 443     | *      |
|    | Bulan-Bulan               | 3       | 0      | 0      | 1      | 2       | 0      |
| 36 | Aya/Kayu/Tongkol          | 1       | 0      | 0      | 1      | 0       | *      |
|    | Layaran/Mersuji           | 0       | 0      | 0      | 0      | 0       | 0      |
| 37 | Kembong/Temenong/Pelaling | 11,862  | 13     | 529    | 6,303  | 4,680   | 337    |
|    | Tenggiri                  | 1,074   | 2      | 38     | 461    | 521     | 52     |
|    | Timah/Layor/Selayor       | 4,968   | 11     | 200    | 1,913  | 2,469   | 375    |
| 38 | Pari                      | 4,881   | 296    | 820    | 477    | 2,940   | 348    |
|    | Yu                        | 854     | 3      | 110    | 276    | 431     | 34     |
| 39 | Ikan Baja                 | 130,993 | 6,687  | 29,601 | 35,840 | 51,237  | 7,628  |
|    | Ikan Campur               | 7,367   | 365    | 1,158  | 514    | 4,544   | 786    |
|    | Jebong                    | 1,369   | 0      | 2      | 174    | 1,061   | 132    |
| 42 | Ketam                     | 1,667   | 222    | 719    | 409    | 311     | 6      |
| 45 | Udang Karang/Lobok        | 168     | 4      | 129    | 10     | 22      | 3      |
|    | Udang Putih/Kaki Merah    | 930     | 125    | 709    | 58     | 35      | 3      |
|    | Udang Minyak              | 12,345  | 1,954  | 10,276 | 115    | 0       | 0      |
|    | Udang Merah Ros           | 348     | 108    | 234    | 4      | 2       | *      |
|    | Udang Kulit Keras         | 1,833   | 632    | 1,196  | 4      | 1       | *      |
|    | Udang Harimau             | 257     | 17     | 125    | 55     | 58      | 2      |
|    | Lain-Lain Jenis Udang     | 20,311  | 3,388  | 15,553 | 1,289  | 76      | 5      |
|    | Udang Baring              | 0       | 0      | 0      | 0      | 0       | 0      |
| 56 | Siput/Kepah/Kupang/Tiram  | 2       | 2      | 0      | 0      | 0       | 0      |
| 57 | Sotong Kereta             | 209     | 15     | 103    | 60     | 31      | 0      |
|    | Sotong Katak              | 2,848   | 68     | 337    | 822    | 1,442   | 179    |
|    | Sotong Biasa              | 10,768  | 78     | 1,011  | 4,357  | 4,838   | 484    |
| 76 | Ubur-Ubur                 | 0       | 0      | 0      | 0      | 0       | 0      |
|    | Jumlah Tan M.             | 266,976 | 14,943 | 68,905 | 66,437 | 102,544 | 14,147 |
|    | Total Tonnes              |         |        |        |        |         |        |

\* Pendaratan kurang dari 0.5 tan metrik.  
Landing below 0.5 tonnes.

JADUAL (TABLE) 4.7.2

PANTAI TIMUR SEMENANJUNG MALAYSIA/EAST COAST PENINSULAR MALAYSIA  
 USAHA MENANGKAP IKAN DAN PENDARATAN PUKAT TUNDA MENGIKUT KELAS MUATAN DAN SPESIES IKAN, 1988  
 FISHING EFFORTS AND LANDINGS OF TRAWLERS BY TONNAGE CLASS AND SPECIES, 1988  
 (Kuantiti dalam Tan Metrik/Quantity in Tonnes)

| ISSCAAP<br>GROUP | Usaha Menangkap Ikan<br>Fishing Effort | Jumlah<br>Total | Kelas Muatan/Tonnage Class |                |                |                |                                   |
|------------------|----------------------------------------|-----------------|----------------------------|----------------|----------------|----------------|-----------------------------------|
|                  |                                        |                 | 0-9.9<br>GRT               | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 GRT & keatas<br>70 GRT & above |
| NO.              | Cumulative no. of fishing units        | 14,574          | 3,365                      | 6,764          | 1,915          | 2,035          | 495                               |
|                  | Cumulative no. of trips                | 206,680         | 63,461                     | 105,375        | 16,670         | 19,407         | 1,767                             |
|                  | Cumulative no. of days                 | 275,471         | 63,461                     | 113,621        | 35,991         | 46,264         | 16,134                            |
|                  | Cumulative no. of hauls                | 755,612         | 177,056                    | 329,501        | 96,456         | 126,301        | 26,299                            |
|                  | Cumulative no. of trawling hours       | 2,111,926       | 499,298                    | 932,488        | 211,238        | 390,269        | 78,633                            |
| 24               | Spesies/Species:                       |                 |                            |                |                |                |                                   |
|                  | Kebasi/Selangat                        | 88              | 24                         | 28             | 20             | 16             | 0                                 |
|                  | Puput/B. Mata/Tirok                    | 44              | 8                          | 20             | 12             | 4              | 0                                 |
|                  | Terubok                                | 0               | 0                          | 0              | 0              | 0              | 0                                 |
| 25               | Siakap                                 | 1               | *                          | 1              | 0              | 0              | 0                                 |
| 31               | Lidah                                  | 169             | 14                         | 52             | 20             | 28             | 55                                |
|                  | Sebelah                                | 579             | 11                         | 88             | 87             | 257            | 136                               |
| 33               | Bayan                                  | 34              | 7                          | 9              | 6              | 12             | 0                                 |
|                  | Biji Nangka                            | 4,927           | 4                          | 472            | 421            | 2,988          | 1,042                             |
|                  | Daun Baharu                            | 248             | 12                         | 32             | 39             | 61             | 104                               |
|                  | Delah/Pinang-Pinang                    | 15              | 2                          | 4              | 2              | 7              | 0                                 |
|                  | Duri/Pulutan/Utik                      | 4,539           | 31                         | 685            | 660            | 1,740          | 1,423                             |
|                  | Dengkis/Debam                          | 315             | 3                          | 34             | 46             | 77             | 155                               |
|                  | Gelama/Tengkerong/Selampai             | 2,132           | 144                        | 661            | 372            | 611            | 344                               |
|                  | Gerut-Gerut                            | 213             | 0                          | 14             | 19             | 13             | 167                               |
|                  | Jenahak                                | 8               | 1                          | 0              | 0              | 5              | 2                                 |
|                  | Kaci                                   | 383             | 16                         | 32             | 97             | 133            | 105                               |
|                  | Kerapu                                 | 3,188           | 14                         | 24             | 181            | 2,633          | 336                               |
|                  | Kerisi                                 | 19,389          | 439                        | 2,802          | 3,442          | 7,877          | 4,829                             |
|                  | Kerisi Bali                            | 271             | 23                         | 2              | 42             | 78             | 126                               |
|                  | Kikek                                  | 510             | 1                          | 173            | 56             | 132            | 148                               |
|                  | Malong                                 | 275             | 10                         | 5              | 18             | 57             | 185                               |
|                  | Merah                                  | 1,110           | 5                          | 45             | 178            | 385            | 497                               |
|                  | Mengkerong/Conor/Ubi-Ubi               | 799             | 15                         | 214            | 157            | 207            | 206                               |
|                  | Remong/Kunyit-Kunyit/Tanda             | 1,556           | 31                         | 126            | 223            | 637            | 539                               |
|                  | Semilang                               | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Shrumbu/Lemah                          | 5               | 0                          | 0              | 0              | 5              | 0                                 |
|                  | Puntong Damar/Bulus                    | 1,547           | 146                        | 501            | 350            | 319            | 231                               |
|                  | Pasir-Pasir/Timun-Timun                | 800             | 26                         | 39             | 119            | 323            | 293                               |
| 34               | Alu-Alu/Kacang-Kacang                  | 599             | 7                          | 109            | 85             | 236            | 162                               |
|                  | Aruan Tasik                            | 84              | 5                          | 3              | 16             | 21             | 39                                |
|                  | Bawal                                  | 217             | 16                         | 27             | 35             | 50             | 89                                |

Samb. (contd.)

|    |                               |         |       |        |        |        |        |
|----|-------------------------------|---------|-------|--------|--------|--------|--------|
|    | Belanak/Kedera                | 1       | 0     | 0      | 1      | 0      | 0      |
|    | Cermin/Sagai/Cupak            | 2,729   | 19    | 150    | 281    | 931    | 1,348  |
|    | Cencaru                       | 1,152   | 15    | 49     | 169    | 602    | 317    |
|    | Demudok/Rambai                | 111     | 3     | 9      | 15     | 38     | 46     |
|    | Kurau/Senangin/Senohong       | 0       | 0     | 0      | 0      | 0      | 0      |
|    | Pelata/Selar                  | 1,307   | 111   | 135    | 220    | 450    | 391    |
|    | Selar Kuning/Lolong           | 4,707   | 347   | 738    | 1,043  | 1,615  | 964    |
|    | Selayang/Curut                | 345     | 4     | 10     | 35     | 107    | 189    |
|    | Pisang-Pisang                 | 4       | 0     | 0      | *      | 4      | 0      |
|    | Talang                        | 36      | 0     | 9      | 9      | 18     | 0      |
| 35 | Bilis/Bunga Air               | 58      | 5     | 28     | 5      | 17     | 3      |
|    | Parang-Parang                 | 313     | 49    | 89     | 75     | 89     | 11     |
|    | Tamban                        | 4       | 0     | 2      | 0      | 2      | 0      |
|    | Bulan-Bulan                   | 10      | 0     | 6      | 1      | 3      | 0      |
| 36 | Aya/Kayu/Tongkol              | 22      | 3     | 0      | 3      | 14     | 2      |
|    | Layaran/Mersuji               | 8       | 0     | 4      | 2      | 2      | 0      |
| 37 | Kembong/Temenong/Pelaling     | 1,521   | 7     | 25     | 796    | 415    | 278    |
|    | Tenggiri                      | 315     | 16    | 21     | 61     | 152    | 65     |
|    | Timah/Layor/Selayor           | 196     | 1     | 84     | 29     | 64     | 18     |
| 38 | Pari                          | 2,146   | 272   | 362    | 408    | 624    | 480    |
|    | Yu                            | 786     | 47    | 113    | 131    | 347    | 148    |
| 39 | Ikan Baja                     | 45,465  | 4,599 | 10,482 | 8,992  | 18,119 | 3,273  |
|    | Ikan Campur                   | 5,589   | 126   | 968    | 786    | 2,665  | 1,044  |
|    | Jebong                        | 506     | 5     | 8      | 58     | 204    | 231    |
| 42 | Ketam                         | 935     | 150   | 261    | 165    | 224    | 135    |
| 45 | Udang Karang/Lobok            | 603     | 36    | 80     | 105    | 253    | 129    |
|    | Udang Putih/Kaki Merah        | 228     | 30    | 109    | 39     | 49     | 1      |
|    | Udang Minyak                  | 427     | 279   | 116    | 11     | 21     | 0      |
|    | Udang Merah Ros               | 41      | 28    | 13     | 0      | 0      | *      |
|    | Udang Kulit Keras             | 409     | 87    | 311    | 10     | 1      | *      |
|    | Udang Harimau                 | 281     | 78    | 117    | 48     | 36     | 2      |
|    | Lain-Lain Jenis Udang         | 2,506   | 384   | 1,443  | 296    | 366    | 17     |
|    | Udang Baring                  | 0       | 0     | 0      | 0      | 0      | 0      |
| 56 | Siput/Kepah/Kupang/Tiram      | 0       | 0     | 0      | 0      | 0      | 0      |
| 57 | Sotong Kereta                 | 1       | 0     | 0      | 1      | 0      | 0      |
|    | Sotong Katak                  | 3,263   | 301   | 521    | 569    | 1,235  | 637    |
|    | Sotong Biasa                  | 7,155   | 524   | 2,606  | 1,174  | 2,147  | 704    |
| 76 | Ubur-Ubur                     | 0       | 0     | 0      | 0      | 0      | 0      |
|    | Jumlah Tan M.<br>Total Tonnes | 127,225 | 8,541 | 25,071 | 22,241 | 49,726 | 21,646 |

\* Pendaratan kurang dari 0.5 tan metrik.  
Landing below 0.5 tonnes.

SEMANAJUNG MALAYSIA/PENINSULAR MALAYSIA  
 USAHA MENANGKAP IKAN DAN PENDARATAN PUKAT JERUT MENGIKUT KELAS MUATAN DAN SPESIES IKAN, 1988  
 FISHING EFFORTS AND LANDINGS OF FISH PURSE SEINES BY TONNAGE CLASS AND SPECIES, 1988  
 (Kuantiti dalam Tan Metrik/Quantity in Tonnes)

| ISSCAAP<br>GROUP<br>NO. | Usaha Menangkap Ikan<br>Fishing Effort | Jumlah<br>Total | Kelas Muatan/Tonnage Class |                |                |                |                                    |
|-------------------------|----------------------------------------|-----------------|----------------------------|----------------|----------------|----------------|------------------------------------|
|                         |                                        |                 | 0-9.9<br>GRT               | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 GRT. & keatas<br>70 GRT & above |
|                         | Cumulative no. of fishing units        | 5,768           | 88                         | 757            | 1,490          | 2,742          | 691                                |
|                         | Cumulative no. of trips                | 78,227          | 1,848                      | 11,595         | 20,860         | 40,161         | 3,763                              |
|                         | Cumulative no. of days                 | 99,591          | 1,848                      | 12,304         | 27,365         | 44,759         | 13,315                             |
|                         | Cumulative no. of hauls                | 290,153         | 5,544                      | 32,095         | 79,159         | 146,659        | 26,696                             |
|                         | Species/Species:                       |                 |                            |                |                |                |                                    |
| 24                      | Kebasi/Selangat                        | 332             | 89                         | 26             | 187            | 29             | 0                                  |
|                         | Puput/B. Mata/Tirok                    | 88              | 0                          | 0              | 60             | 28             | 0                                  |
|                         | Terubok                                | 0               | 0                          | 0              | 0              | 0              | 0                                  |
| 25                      | Siakap                                 | 0               | 0                          | 0              | 0              | 0              | 0                                  |
| 31                      | Lidah                                  | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Sebelah                                | 0               | 0                          | 0              | 0              | 0              | 0                                  |
| 33                      | Bayan                                  | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Biji Nangka                            | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Daun Baharu                            | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Delah/Pinang-Pinang                    | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Duri/Pulutan/Utik                      | 4,914           | 0                          | 150            | 0              | 4,755          | 9                                  |
|                         | Dengkis/Debam                          | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Gelama/Tengkerong/Selampai             | 50              | 0                          | 0              | 40             | 10             | 0                                  |
|                         | Gerut-Gerut                            | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Jenahak                                | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Kaci                                   | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Kerapu                                 | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Kerisi                                 | 3               | 0                          | 0              | 0              | 3              | 0                                  |
|                         | Kerisi Bali                            | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Kikek                                  | 24              | 0                          | 1              | 13             | 9              | 0                                  |
|                         | Malong                                 | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Merah                                  | 2               | 0                          | 0              | 0              | 1              | 1                                  |
|                         | Mengkerong/Conor/Ubi-Ubi               | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Remong/Kunyit-Kunyit/Tanda             | 1               | 0                          | 0              | 0              | 1              | 0                                  |
|                         | Semilang                               | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Shrumbu/Lemah                          | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Puntong Damar/Bulus                    | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Pasir-Pasir/Timun-Timun                | 0               | 0                          | 0              | 0              | 0              | 0                                  |
| 34                      | Alu-Alu/Kacang-Kacang                  | 73              | 0                          | 11             | 10             | 46             | 5                                  |
|                         | Aruan Tasik                            | 0               | 0                          | 0              | 0              | 0              | 0                                  |
|                         | Bawal                                  | 1,489           | 0                          | 19             | 472            | 833            | 166                                |

Samb. (contd.)

|    |                            |         |       |        |        |        |        |
|----|----------------------------|---------|-------|--------|--------|--------|--------|
|    | :Belanak/Kedera            | 513     | 372   | 80     | 61     | 0      | 0      |
|    | :Cermin/Sagai/Cupak        | 66      | 0     | 23     | 39     | 4      | 0      |
|    | :Cencaru                   | 3,492   | 0     | 368    | 623    | 2,218  | 284    |
|    | :Demudok/Rambai            | 318     | 0     | 36     | 109    | 172    | 0      |
|    | :Kurau/Senangin/Senohong   | 69      | 0     | 0      | 0      | 69     | 0      |
|    | :Pelata/Selar              | 9,390   | 0     | 928    | 1,724  | 5,068  | 1,670  |
|    | :Selar Kuning/Lolong       | 6,304   | 0     | 838    | 1,185  | 3,509  | 773    |
|    | :Selayang/Curut            | 34,468  | 0     | 3,776  | 6,584  | 17,709 | 6,400  |
|    | :Pisang-Pisang             | 93      | 0     | 44     | 4      | 30     | 15     |
|    | :Talang                    | 17      | 0     | 1      | 0      | 15     | 1      |
| 35 | :Bilis/Bunga Air           | 0       | 0     | 0      | 0      | 0      | 0      |
|    | :Parang-Parang             | 8       | 0     | 0      | 1      | 7      | 0      |
|    | :Tampan                    | 16,113  | 0     | 1,739  | 4,095  | 9,461  | 818    |
|    | :Bulan-Bulan               | 0       | 0     | 0      | 0      | 0      | 0      |
| 36 | :Aya/Kayu/Tongkol          | 11,721  | 0     | 133    | 432    | 2,884  | 8,272  |
|    | :Layaran/Mersuji           | 0       | 0     | 0      | 0      | 0      | 0      |
| 37 | :Kembong/Temenong/Pelaling | 31,181  | 112   | 1,872  | 7,882  | 18,832 | 2,482  |
|    | :Tenggiri                  | 546     | 0     | 8      | 28     | 505    | 5      |
|    | :Timah/Layor/Selayor       | 27      | 0     | 1      | 3      | 17     | 5      |
| 38 | :Pari                      | 0       | 0     | 0      | 0      | 0      | 0      |
|    | :Yu                        | 4       | 0     | 0      | 0      | 4      | 0      |
| 39 | :Ikan Baja                 | 4,170   | 539   | 104    | 966    | 1,714  | 847    |
|    | :Ikan Campur               | 4,108   | 0     | 113    | 1,047  | 2,211  | 737    |
|    | :Jebong                    | 0       | 0     | 0      | 0      | 0      | 0      |
| 42 | :Ketam                     | 0       | 0     | 0      | 0      | 0      | 0      |
| 45 | :Udang Karang/Lobok        | 0       | 0     | 0      | 0      | 0      | 0      |
|    | :Udang Putih/Kaki Merah    | 0       | 0     | 0      | 0      | 0      | 0      |
|    | :Udang Minyak              | 0       | 0     | 0      | 0      | 0      | 0      |
|    | :Udang Merah Ros           | 0       | 0     | 0      | 0      | 0      | 0      |
|    | :Udang Kulit Keras         | 0       | 0     | 0      | 0      | 0      | 0      |
|    | :Udang Harimau             | 0       | 0     | 0      | 0      | 0      | 0      |
|    | :Lain-Lain Jenis Udang     | 0       | 0     | 0      | 0      | 0      | 0      |
|    | :Udang Baring              | 0       | 0     | 0      | 0      | 0      | 0      |
| 56 | :Siput/Kepah/Kupang/Tiram  | 0       | 0     | 0      | 0      | 0      | 0      |
| 57 | :Sotong Kereta             | 0       | 0     | 0      | 0      | 0      | 0      |
|    | :Sotong Katak              | 0       | 0     | 0      | 0      | 0      | 0      |
|    | :Sotong Biasa              | 396     | 0     | 82     | 168    | 115    | 30     |
| 76 | :Ubur-Ubur                 | 0       | 0     | 0      | 0      | 0      | 0      |
|    | Jumlah Tan M.              | 129,980 | 1,112 | 10,352 | 25,735 | 70,260 | 22,520 |
|    | Total Tonnes               |         |       |        |        |        |        |

\* Pendaratan kurang dari 0.5 tan metrik.  
Landings below 0.5 tonnes.

PANTAI BARAT SEMENANJUNG MALAYSIA/WEST COAST PENINSULAR MALAYSIA  
 USAHA MENANGKAP IKAN DAN PENDARATAN PUKAT JERUT MENGIKUT KELAS MUATAN DAN SPESIES IKAN, 1988  
 FISHING EFFORTS AND LANDINGS OF FISH PURSE SEINES BY TONNAGE CLASS AND SPECIES, 1988  
 (Kuantiti dalam Tan Metrik/Quantity in Tonnes)

| ISSCAAP<br>GROUP | Usaha Menangkap Ikan<br>Fishing Effort | Jumlah<br>Total | Kelas Muatan/Tonnage Class |                |                |                |                                   |
|------------------|----------------------------------------|-----------------|----------------------------|----------------|----------------|----------------|-----------------------------------|
|                  |                                        |                 | 0-9.9<br>GRT               | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 GRT & keatas<br>70 GRT & above |
| NO.              | Cumulative no. of fishing units        | 3,119           | 88                         | 48             | 852            | 1,773          | 358                               |
|                  | Cumulative no. of trips                | 42,763          | 1,848                      | 960            | 11,928         | 26,595         | 1,432                             |
|                  | Cumulative no. of days                 | 57,539          | 1,848                      | 960            | 17,157         | 29,255         | 8,320                             |
|                  | Cumulative no. of hauls                | 182,470         | 5,544                      | 1,920          | 52,006         | 106,194        | 16,806                            |
| 24               | Species/Species:                       |                 |                            |                |                |                |                                   |
|                  | Kebasi/Selangat                        | 331             | 89                         | 24             | 187            | 29             | 0                                 |
|                  | Puput/B. Mata/Tirok                    | 88              | 0                          | 0              | 60             | 28             | 0                                 |
|                  | Terubok                                | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Siakap                                 | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Lidah                                  | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Sebelah                                | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Bayan                                  | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Biji Nangka                            | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Daun Baharu                            | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Delah/Pinang-Pinang                    | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Duri/Pulutan/Utik                      | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Dengkis/Debam                          | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Gelama/Tengkerong/Selampai             | 50              | 0                          | 0              | 40             | 10             | 0                                 |
|                  | Gerut-Gerut                            | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Jenahak                                | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Kaci                                   | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Kerapu                                 | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Kerisi                                 | 3               | 0                          | 0              | 0              | 3              | 0                                 |
|                  | Kerisi Bali                            | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Kikek                                  | 21              | 0                          | 0              | 12             | 9              | 0                                 |
|                  | Malong                                 | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Merah                                  | 1               | 0                          | 0              | 0              | 1              | 0                                 |
|                  | Mengkerong/Conor/Ubi-Ubi               | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Remong/Kunyit-Kunyit/Tanda             | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Semilang                               | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Shrumbu/Lemah                          | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Puntong Damar/Bulus                    | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Pasir-Pasir/Timun-Timun                | 0               | 0                          | 0              | 0              | 0              | 0                                 |
| 34               | Alu-Alu/Kacang-Kacang                  | 45              | 0                          | 0              | 6              | 34             | 5                                 |
|                  | Aruan Tasik                            | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Bawal                                  | 1,323           | 0                          | 0              | 433            | 753            | 137                               |

Samb. (contd.)

|    |                               |        |       |     |        |        |       |
|----|-------------------------------|--------|-------|-----|--------|--------|-------|
|    | Belanak/Kedera                | 513    | 372   | 80  | 61     | 0      | 0     |
|    | Cermin/Sagai/Cupak            | 0      | 0     | 0   | 0      | 0      | 0     |
|    | Cencaru                       | 2,245  | 0     | 18  | 401    | 1,594  | 233   |
|    | Demudok/Rambai                | 133    | 0     | 0   | 0      | 133    | 0     |
|    | Kurau/Senangin/Senohong       | 69     | 0     | 0   | 0      | 69     | 0     |
|    | Pelata/Selar                  | 4,147  | 0     | 0   | 443    | 2,780  | 924   |
|    | Selar Kuning/Lolong           | 1,195  | 0     | 0   | 58     | 757    | 380   |
|    | Selayang/Curut                | 10,578 | 0     | 0   | 1,443  | 6,380  | 2,755 |
|    | Pisang-Pisang                 | 49     | 0     | 0   | 4      | 30     | 15    |
|    | Talang                        | 3      | 0     | 0   | 0      | 2      | 1     |
| 35 | Bilis/Bunga Air               | 0      | 0     | 0   | 0      | 0      | 0     |
|    | Parang-Parang                 | 1      | 0     | 0   | 1      | 0      | 0     |
|    | Tamban                        | 4,555  | 0     | 27  | 1,412  | 2,748  | 368   |
|    | Bulan-Bulan                   | 0      | 0     | 0   | 0      | 0      | 0     |
| 36 | Aya/Kayu/Tongkol              | 3,193  | 0     | 0   | 366    | 2,324  | 503   |
|    | Layaran/Mersuji               | 0      | 0     | 0   | 0      | 0      | 0     |
| 37 | Kembong/Temenong/Pelaling     | 18,687 | 112   | 277 | 5,405  | 11,204 | 1,689 |
|    | Tenggiri                      | 84     | 0     | 0   | 11     | 68     | 5     |
|    | Timah/Layor/Selayor           | 26     | 0     | 0   | 3      | 17     | 5     |
| 38 | Pari                          | 0      | 0     | 0   | 0      | 0      | 0     |
|    | Yu                            | 1      | 0     | 0   | 0      | 1      | 0     |
| 39 | Ikan Baja                     | 4,064  | 539   | 45  | 966    | 1,708  | 807   |
|    | Ikan Campur                   | 182    | 0     | 0   | 79     | 79     | 24    |
|    | Jebong                        | 0      | 0     | 0   | 0      | 0      | 0     |
| 42 | Ketam                         | 0      | 0     | 0   | 0      | 0      | 0     |
| 45 | Udang Karang/Lobok            | 0      | 0     | 0   | 0      | 0      | 0     |
|    | Udang Putih/Kaki Merah        | 0      | 0     | 0   | 0      | 0      | 0     |
|    | Udang Minyak                  | 0      | 0     | 0   | 0      | 0      | 0     |
|    | Udang Merah Ros               | 0      | 0     | 0   | 0      | 0      | 0     |
|    | Udang Kulit Keras             | 0      | 0     | 0   | 0      | 0      | 0     |
|    | Udang Harimau                 | 0      | 0     | 0   | 0      | 0      | 0     |
|    | Lain-Lain Jenis Udang         | 0      | 0     | 0   | 0      | 0      | 0     |
|    | Udang Baring                  | 0      | 0     | 0   | 0      | 0      | 0     |
| 56 | Siput/Kepah/Kupang/Tiram      | 0      | 0     | 0   | 0      | 0      | 0     |
| 57 | Sotong Kereta                 | 0      | 0     | 0   | 0      | 0      | 0     |
|    | Sotong Katak                  | 0      | 0     | 0   | 0      | 0      | 0     |
|    | Sotong Biasa                  | 91     | 0     | 0   | 10     | 56     | 25    |
| 76 | Ubur-Ubur                     | 0      | 0     | 0   | 0      | 0      | 0     |
|    | Jumlah Tan M.<br>Total Tonnes | 51,675 | 1,112 | 471 | 11,401 | 30,816 | 7,876 |

\* Pendaratan kurang dari 0.5 tan metrik.  
Landings below 0.5 tonnes.



PANTAI TIMUR SEMENANJUNG MALAYSIA/EAST COAST PENINSULAR MALAYSIA  
 USAHA MENANGKAP IKAN DAN PENDARATAN PUKAT JERUT MENGIKUT KELAS MUATAN DAN SPESIES IKAN, 1988  
 FISHING EFFORTS AND LANDINGS OF FISH PURSE SEINES BY TONNAGE CLASS AND SPECIES, 1988  
 (Kuantiti dalam Tan Metrik/Quantity in Tonnes)

JADUAL (TABLE) 4.8.2

| ISSCAAP<br>GROUP | Usaha Menangkap Ikan<br>Fishing Effort | Jumlah<br>Total | Kelas Muatan/Tonnage Class |                |                |                |                                   |
|------------------|----------------------------------------|-----------------|----------------------------|----------------|----------------|----------------|-----------------------------------|
|                  |                                        |                 | 0-9.9<br>GRT               | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 GRT & keatas<br>70 GRT & above |
| NO.              | Cumulative no. of fishing units        | 2,649           | 0                          | 709            | 638            | 969            | 333                               |
|                  | Cumulative no. of trips                | 35,464          | 0                          | 10,635         | 8,932          | 13,566         | 2,331                             |
|                  | Cumulative no. of days                 | 42,051          | 0                          | 11,344         | 10,208         | 15,504         | 4,995                             |
|                  | Cumulative no. of hauls                | 107,684         | 0                          | 30,175         | 27,153         | 40,465         | 9,890                             |
| 24               | Species/Species:                       |                 |                            |                |                |                |                                   |
|                  | Kebasi/Selangat                        | 2               | 0                          | 2              | 0              | 0              | 0                                 |
|                  | Puput/B. Mata/Tirok                    | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Terubok                                | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Siakap                                 | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Lidah                                  | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Sebelah                                | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Bayan                                  | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Biji Nangka                            | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Daun Baharu                            | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Delah/Pinang-Pinang                    | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Duri/Pulutan/Utik                      | 4,914           | 0                          | 150            | 0              | 4,755          | 9                                 |
|                  | Dengkis/Debam                          | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Gelama/Tengkerong/Selampai             | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Gerut-Gerut                            | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Jenahak                                | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Kaci                                   | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Kerapu                                 | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Kerisi                                 | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Kerisi Bali                            | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Kikek                                  | 3               | 0                          | 1              | 1              | 0              | 0                                 |
|                  | Malong                                 | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Merah                                  | 1               | 0                          | 0              | 0              | 0              | 1                                 |
|                  | Mengkerong/Conor/Ubi-Ubi               | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Remong/Kunyit-Kunyit/Tanda             | 1               | 0                          | 0              | 0              | 1              | 0                                 |
|                  | Semilang                               | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Shrumbu/Lemah                          | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Puntong Damar/Bulus                    | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Pasir-Pasir/Timun-Timun                | 0               | 0                          | 0              | 0              | 0              | 0                                 |
| 34               | Alu-Alu/Kacang-Kacang                  | 28              | 0                          | 11             | 4              | 12             | 0                                 |
|                  | Aruan Tasik                            | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Bawal                                  | 167             | 0                          | 19             | 39             | 81             | 28                                |
|                  | Belanak/Kedera                         | 0               | 0                          | 0              | 0              | 0              | 0                                 |
|                  | Cermin/Sagai/Cupak                     | 66              | 0                          | 23             | 39             | 4              | 0                                 |

Samb. (contd.)

|    |                           |        |   |       |        |        |        |
|----|---------------------------|--------|---|-------|--------|--------|--------|
|    | Belanak/Kedera            | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Cermin/Sagai/Cupak        | 66     | 0 | 23    | 39     | 4      | 0      |
|    | Cencaru                   | 1,247  | 0 | 350   | 222    | 624    | 51     |
|    | Demudok/Rambai            | 185    | 0 | 36    | 109    | 40     | 0      |
|    | Kurau/Senangin/Senohong   | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Pelata/Selar              | 5,243  | 0 | 928   | 1,282  | 2,288  | 746    |
|    | Selar Kuning/Lolong       | 5,110  | 0 | 838   | 1,127  | 2,752  | 393    |
|    | Selayang/Curut            | 23,891 | 0 | 3,776 | 5,141  | 11,328 | 3,645  |
|    | Pisang-Pisang             | 44     | 0 | 44    | 0      | 0      | 0      |
|    | Talang                    | 14     | 0 | 1     | 0      | 13     | 0      |
| 35 | Bilis/Bunga Air           | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Parang-Parang             | 7      | 0 | 0     | 0      | 7      | 0      |
|    | Tamban                    | 11,558 | 0 | 1,713 | 2,683  | 6,713  | 450    |
|    | Bulan-Bulan               | 0      | 0 | 0     | 0      | 0      | 0      |
| 36 | Aya/Kayu/Tongkol          | 8,529  | 0 | 133   | 66     | 561    | 7,769  |
|    | Layaran/Mersuji           | 0      | 0 | 0     | 0      | 0      | 0      |
| 37 | Kembong/Temenong/Pelaling | 12,494 | 0 | 1,595 | 2,478  | 7,628  | 793    |
|    | Tenggiri                  | 462    | 0 | 8     | 17     | 437    | 0      |
|    | Timah/Layor/Selayor       | 1      | 0 | 1     | 0      | 0      | 0      |
| 38 | Pari                      | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Yu                        | 3      | 0 | 0     | 0      | 3      | 0      |
| 39 | Ikan Baja                 | 106    | 0 | 60    | 0      | 6      | 40     |
|    | Ikan Campur               | 3,925  | 0 | 113   | 968    | 2,131  | 713    |
|    | Jebong                    | 0      | 0 | 0     | 0      | 0      | 0      |
| 42 | Ketam                     | 0      | 0 | 0     | 0      | 0      | 0      |
| 45 | Udang Karang/Lobok        | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Udang Putih/Kaki Merah    | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Udang Minyak              | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Udang Merah Ros           | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Udang Kulit Keras         | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Udang Harimau             | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Lain-Lain Jenis Udang     | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Udang Baring              | 0      | 0 | 0     | 0      | 0      | 0      |
| 56 | Siput/Kepah/Kupang/Tiram  | 0      | 0 | 0     | 0      | 0      | 0      |
| 57 | Sotong Kereta             | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Sotong Katak              | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Sotong Biasa              | 305    | 0 | 82    | 159    | 59     | 5      |
| 76 | Ubur-Ubur                 | 0      | 0 | 0     | 0      | 0      | 0      |
|    | Jumlah Tan M.             | 78,305 | 0 | 9,882 | 14,334 | 39,445 | 14,644 |
|    | Total Tonnes              |        |   |       |        |        |        |

\* Pendaratan kurang dari 0.5 tan metrik.  
Landings below 0.5 tonnes.

SEMIANJUNG MALAYSIA/PENINSULAR MALAYSIA  
USAHA MENANGKAP IKAN: BILANGAN TRIP MENANGKAP IKAN MENGIKUT JENIS PERKAKAS DAN NEGERI DALAM TAHUN, 1988  
FISHING EFFORT: NUMBER OF TRIPS BY TYPE OF GEAR AND BY STATE IN 1988

JADUAL (TABLE) 5.1

| Jenis<br>Perkakas<br>Type of Gear | Pukat Tunda<br>Trawl Nets |                |                |                |                   | Pukat Tarik (Seine Nets)             |                |                |                |                   |                                          |                |                |                |                   |                                                    |                                           |                                   |                                    |                       | Perangkap-<br>Perangkap<br>Traps |        | Pancing<br>Hooks & Lines | Pukat<br>Bakul<br>Bag Nets | Pukat<br>Rentang<br>Barrier Nets | Pukat<br>Surung/<br>Push/<br>Scoop Nets | Memun-<br>gut<br>Shell-<br>fish Collec-<br>tion | Rampaian<br>Miscella-<br>neous |
|-----------------------------------|---------------------------|----------------|----------------|----------------|-------------------|--------------------------------------|----------------|----------------|----------------|-------------------|------------------------------------------|----------------|----------------|----------------|-------------------|----------------------------------------------------|-------------------------------------------|-----------------------------------|------------------------------------|-----------------------|----------------------------------|--------|--------------------------|----------------------------|----------------------------------|-----------------------------------------|-------------------------------------------------|--------------------------------|
|                                   |                           |                |                |                |                   | Pukat Jerut Ikan<br>Purse Seine-Fish |                |                |                |                   | Pukat Jerut Bilis<br>Purse Seine Anchovy |                |                |                |                   | Lain-<br>Lain<br>Pukat<br>Tarik<br>Other<br>Seines | Pukat<br>Hanyut<br>Drift/<br>Gill<br>Nets | Pukat<br>Tangguk/<br>Lift<br>Nets |                                    |                       |                                  |        |                          |                            |                                  |                                         |                                                 |                                |
|                                   | 0-9.9<br>GRT              | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 & above<br>GRT | 0-9.9<br>GRT                         | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 & above<br>GRT | 0-9.9<br>GRT                             | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 & above<br>GRT | Other<br>Seines                                    | Gill<br>Nets                              | Lift<br>Nets                      | Belat-<br>Belat<br>Station-<br>ary | Bubu<br>Port-<br>able |                                  |        |                          |                            |                                  |                                         |                                                 |                                |
| Negeri/State                      |                           |                |                |                |                   |                                      |                |                |                |                   |                                          |                |                |                |                   |                                                    |                                           |                                   |                                    |                       |                                  |        |                          |                            |                                  |                                         |                                                 |                                |
| Perlis                            | 16,464                    | 31,036         | 7,129          | 0              | 0                 | 0                                    | 0              | 5,127          | 3,802          | 1,432             | 0                                        | 0              | 0              | 0              | 0                 | 1,176                                              | 59,691                                    | 0                                 | 834                                | 0                     | 807                              | 0      | 1,551                    | 1,210                      | 1,184                            | 635                                     |                                                 |                                |
| Kedah                             | 21,742                    | 42,327         | 30,240         | 23,673         | 0                 | 0                                    | 0              | 0              | 3,406          | 0                 | 0                                        | 0              | 0              | 5,362          | 13,828            | 8,892                                              | 241,679                                   | 0                                 | 0                                  | 0                     | 4,283                            | 15,300 | 2,180                    | 464                        | 0                                | 12,627                                  |                                                 |                                |
| P.Pinang/<br>Penang               | 0                         | 0              | 21,080         | 2,159          | 510               | 0                                    | 960            | 3,458          | 1,968          | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 27,651                                             | 261,334                                   | 0                                 | 0                                  | 2,290                 | 10,474                           | 40,275 | 32,014                   | 1,881                      | 2,479                            | 3,892                                   |                                                 |                                |
| Perak                             | 76,626                    | 343,947        | 33,900         | 32,067         | 1,408             | 1,848                                | 0              | 1,519          | 14,569         | 0                 | 0                                        | 0              | 0              | 8,352          | 0                 | 125,585                                            | 372,792                                   | 0                                 | 0                                  | 8,917                 | 47,431                           | 13,804 | 16,132                   | 33,416                     | 4,480                            | 34,134                                  |                                                 |                                |
| Selangor                          | 83,779                    | 119,970        | 38,629         | 14,522         | 455               | 0                                    | 0              | 1,824          | 2,850          | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 2,362                                              | 21,313                                    | 0                                 | 1,428                              | 799                   | 9,227                            | 25,496 | 4,058                    | 2,718                      | 273                              | 836                                     |                                                 |                                |
| N.Sembilan                        | 0                         | 0              | 0              | 0              | 0                 | 0                                    | 0              | 0              | 0              | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 1,022                                              | 27,929                                    | 0                                 | 0                                  | 795                   | 987                              | 0      | 0                        | 0                          | 0                                | 488                                     |                                                 |                                |
| Melaka/<br>Malacca                | 0                         | 0              | 0              | 0              | 0                 | 0                                    | 0              | 0              | 0              | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 1,139                                              | 122,702                                   | 0                                 | 580                                | 0                     | 16,466                           | 0      | 64                       | 31,546                     | 0                                | 0                                       |                                                 |                                |
| Johor Barat/<br>West Johore       | 27,493                    | 60,476         | 701            | 0              | 0                 | 0                                    | 0              | 0              | 0              | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 1,712                                              | 183,815                                   | 0                                 | 4,620                              | 578                   | 1,690                            | 9,031  | 64                       | 25,202                     | 0                                | 0                                       |                                                 |                                |
| Kelantan                          | 0                         | 37,502         | 602            | 0              | 27                | 0                                    | 0              | 553            | 832            | 203               | 0                                        | 0              | 0              | 0              | 0                 | 0                                                  | 45,519                                    | 2,430                             | 2,676                              | 575                   | 25,830                           | 0      | 0                        | 0                          | 0                                | 0                                       |                                                 |                                |
| Terengganu                        | 6,616                     | 41,593         | 2,359          | 299            | 288               | 0                                    | 9,051          | 734            | 5,094          | 762               | 549                                      | 3,859          | 0              | 0              | 0                 | 0                                                  | 18,891                                    | 5,319                             | 0                                  | 15,423                | 83,429                           | 180    | 0                        | 0                          | 0                                | 0                                       |                                                 |                                |
| Pahang                            | 35,176                    | 13,102         | 9,299          | 4,197          | 945               | 0                                    | 0              | 6,967          | 3,851          | 1,168             | 0                                        | 1,170          | 621            | 0              | 0                 | 0                                                  | 35,455                                    | 2,270                             | 0                                  | 7,591                 | 17,752                           | 0      | 0                        | 0                          | 0                                | 0                                       |                                                 |                                |
| Johor Timur/<br>East Johore       | 21,669                    | 13,178         | 4,410          | 14,911         | 507               | 0                                    | 1,584          | 1,678          | 3,789          | 198               | 0                                        | 0              | 0              | 0              | 0                 | 0                                                  | 76,925                                    | 202                               | 5,966                              | 918                   | 21,789                           | 40,065 | 0                        | 0                          | 0                                | 70                                      |                                                 |                                |

\* GRT - Gross Relative Tonnage

SEMNANJUNG MALAYSIA/PENINSULAR MALAYSIA  
 USAHA MENANGKAP IKAN: BILANGAN HARI MENANGKAP IKAN MENGIKUT JENIS PERKAKAS DAN NEGERI DALAM TAHUN, 1988  
 FISHING EFFORT: NUMBER OF FISHING DAYS BY TYPE OF GEAR AND BY STATE IN 1988

| Jenis<br>Perkakas<br>Type of Gear | Pukat Tunda<br>Trawl Nets |                |                |                |                   | Pukat Tarik (Seine Nets)             |                |                |                |                   |                                          |                |                |                |                   |                                                    |                                    | Pukat<br>Hanyut<br>Drift/<br>Gill<br>Nets | Pukat<br>Tangguk/<br>Lift<br>Nets | Perangkap-<br>Perangkap<br>Traps |        | Pancing<br>Hooks & Lines | Pukat<br>Bakul<br>& Bag<br>Nets | Pukat<br>Rentang/<br>Barrier<br>Nets | Pukat<br>Surung/<br>Push/<br>Scoop<br>Nets | Memun-<br>gut<br>Shell-<br>fish<br>Collection | Rampaian<br>Miscella-<br>neous |
|-----------------------------------|---------------------------|----------------|----------------|----------------|-------------------|--------------------------------------|----------------|----------------|----------------|-------------------|------------------------------------------|----------------|----------------|----------------|-------------------|----------------------------------------------------|------------------------------------|-------------------------------------------|-----------------------------------|----------------------------------|--------|--------------------------|---------------------------------|--------------------------------------|--------------------------------------------|-----------------------------------------------|--------------------------------|
|                                   |                           |                |                |                |                   | Pukat Jerut Ikan<br>Purse Seine-Fish |                |                |                |                   | Pukat Jerut Bilis<br>Purse Seine Anchovy |                |                |                |                   | Lain-<br>Lain<br>Pukat<br>Tarik<br>Other<br>Seines | Belat-<br>Belat<br>Station-<br>ary |                                           |                                   | Bubu<br>Port-<br>able            |        |                          |                                 |                                      |                                            |                                               |                                |
|                                   | 0-9.9<br>GRT              | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 GRT<br>& above | 0-9.9<br>GRT                         | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 GRT<br>& above | 0-9.9<br>GRT                             | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 GRT<br>& above | Tarik<br>Nets                                      | Belat<br>Station-<br>ary           |                                           |                                   | Bubu<br>Port-<br>able            |        |                          |                                 |                                      |                                            |                                               |                                |
| Negeri/State                      |                           |                |                |                |                   |                                      |                |                |                |                   |                                          |                |                |                |                   |                                                    |                                    |                                           |                                   |                                  |        |                          |                                 |                                      |                                            |                                               |                                |
| Perlis                            | 24,551                    | 64,526         | 10,486         | 0              | 0                 | 0                                    | 0              | 10,092         | 4,384          | 8,320             | 0                                        | 0              | 0              | 0              | 0                 | 1,176                                              | 112,320                            | 0                                         | 1,029                             | 0                                | 2,538  | 0                        | 1,551                           | 1,210                                | 1,184                                      | 635                                           |                                |
| Kedah                             | 21,742                    | 47,363         | 45,064         | 29,436         | 0                 | 0                                    | 0              | 0              | 3,406          | 0                 | 0                                        | 0              | 0              | 5,632          | 12,828            | 8,892                                              | 241,679                            | 0                                         | 0                                 | 0                                | 4,283  | 15,300                   | 2,180                           | 464                                  | 0                                          | 12,627                                        |                                |
| P. Pinang/<br>Penang              | 0                         | 0              | 21,080         | 2,600          | 5,100             | 0                                    | 960            | 3,458          | 1,968          | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 27,651                                             | 261,334                            | 0                                         | 0                                 | 5,547                            | 10,474 | 13,425                   | 32,014                          | 1,881                                | 2,479                                      | 4,053                                         |                                |
| Perak                             | 76,626                    | 371,174        | 40,300         | 63,086         | 14,080            | 1,848                                | 0              | 1,783          | 15,647         | 0                 | 0                                        | 0              | 0              | 13,506         | 0                 | 125,585                                            | 372,792                            | 0                                         | 0                                 | 14,655                           | 57,092 | 13,804                   | 16,132                          | 33,416                               | 4,480                                      | 34,134                                        |                                |
| Selangor                          | 83,779                    | 119,970        | 52,316         | 15,765         | 5,213             | 0                                    | 0              | 1,824          | 3,850          | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 17,188                                             | 797,509                            | 0                                         | 1,428                             | 799                              | 9,229  | 25,496                   | 4,058                           | 2,718                                | 273                                        | 836                                           |                                |
| N. Sembilan                       | 0                         | 0              | 0              | 0              | 0                 | 0                                    | 0              | 0              | 0              | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 1,054                                              | 27,929                             | 0                                         | 0                                 | 795                              | 987    | 0                        | 0                               | 0                                    | 0                                          | 488                                           |                                |
| Melaka/<br>Malacca                | 0                         | 0              | 0              | 0              | 0                 | 0                                    | 0              | 0              | 0              | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 1,139                                              | 124,049                            | 0                                         | 500                               | 0                                | 16,466 | 0                        | 64                              | 31,546                               | 0                                          | 0                                             |                                |
| Johor Barat/<br>West Johore       | 27,493                    | 60,476         | 701            | 0              | 0                 | 0                                    | 0              | 0              | 0              | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 1,712                                              | 183,815                            | 0                                         | 2,408                             | 1,256                            | 1,690  | 4,254                    | 64                              | 25,202                               | 0                                          | 0                                             |                                |
| Kelantan                          | 0                         | 37,502         | 2,210          | 0              | 243               | 0                                    | 0              | 1,250          | 2,121          | 426               | 0                                        | 0              | 0              | 0              | 0                 | 0                                                  | 45,199                             | 2,430                                     | 0                                 | 2,676                            | 29,428 | 0                        | 0                               | 0                                    | 0                                          | 0                                             |                                |
| Terengganu                        | 6,616                     | 44,313         | 4,530          | 646            | 2,736             | 0                                    | 9,059          | 7,374          | 5,867          | 1,600             | 549                                      | 3,859          | 0              | 0              | 0                 | 0                                                  | 18,569                             | 5,319                                     | 0                                 | 21,516                           | 99,544 | 180                      | 0                               | 0                                    | 0                                          | 0                                             |                                |
| Pahang                            | 35,176                    | 13,102         | 10,739         | 9,332          | 8,592             | 0                                    | 0              | 680            | 3,851          | 2,395             | 0                                        | 1,170          | 621            | 0              | 0                 | 0                                                  | 35,455                             | 2,270                                     | 0                                 | 24,972                           | 32,399 | 0                        | 0                               | 0                                    | 0                                          | 0                                             |                                |
| Johor Timur/<br>East Johore       | 21,669                    | 18,704         | 18,512         | 36,286         | 4,563             | 0                                    | 1,584          | 787            | 3,823          | 574               | 0                                        | 0              | 0              | 0              | 0                 | 0                                                  | 82,072                             | 202                                       | 5,966                             | 2,244                            | 21,789 | 40,065                   | 0                               | 0                                    | 0                                          | 210                                           |                                |

\* GRT - Gross Relative Tonnage

SEMIANJUNG MALAYSIA/PENINSULAR MALAYSIA  
 USAHA MENANGKAP IKAN: BILANGAN KALI MEMUKAT IKAN MENGIKUT JENIS PERKAKAS DAN NEGERI DALAM TAHUN, 1988  
 FISHING EFFORT: NUMBER OF HAULS BY TYPE OF GEAR AND BY STATE IN 1988

| Jenis<br>Perkakas<br>Type of Gear | Pukat Tunda<br>Trawl Nets |                |                |                |                   | Pukat Tarik (Seine Nets)             |                |                |                |                   |                                          |                |                |                |                   |                 | Perangkap-<br>Perangkap<br>Traps |                                   |                                    |                       | Pancing<br>Hooks & Lines | Pukat<br>Bakul<br>Bag Nets | Pukat<br>Rentang<br>Barrier Nets | Pukat<br>Surung<br>Push/<br>Scoop<br>Nets | Memungut<br>Shell-<br>fish Collec-<br>tion | Rampaian<br>Miscella-<br>neous |                 |  |
|-----------------------------------|---------------------------|----------------|----------------|----------------|-------------------|--------------------------------------|----------------|----------------|----------------|-------------------|------------------------------------------|----------------|----------------|----------------|-------------------|-----------------|----------------------------------|-----------------------------------|------------------------------------|-----------------------|--------------------------|----------------------------|----------------------------------|-------------------------------------------|--------------------------------------------|--------------------------------|-----------------|--|
|                                   |                           |                |                |                |                   | Pukat Jerut Ikan<br>Purse Seine-Fish |                |                |                |                   | Pukat Jerut Bilis<br>Purse Seine Anchovy |                |                |                |                   | Lain-<br>Lain   |                                  |                                   |                                    |                       |                          |                            |                                  |                                           |                                            |                                | Pukat<br>Hanyut |  |
|                                   | 0-9.9<br>GRT              | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 GRT<br>& above | 0-9.9<br>GRT                         | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 GRT<br>& above | 0-9.9<br>GRT                             | 10-24.9<br>GRT | 25-39.9<br>GRT | 40-69.9<br>GRT | 70 GRT<br>& above | Other<br>Seines | Pukat<br>Drift/<br>Gill<br>Nets  | Pukat<br>Tangguk/<br>Lift<br>Nets | Belat-<br>Belat<br>Station-<br>ary | Bubu<br>Port-<br>able |                          |                            |                                  |                                           |                                            |                                |                 |  |
| Negeri/State:                     |                           |                |                |                |                   |                                      |                |                |                |                   |                                          |                |                |                |                   |                 |                                  |                                   |                                    |                       |                          |                            |                                  |                                           |                                            |                                |                 |  |
| Perlis                            | 77,752                    | 194,766        | 32,567         | 0              | 0                 | 0                                    | 0              | 30,296         | 15,782         | 16,806            | 0                                        | 0              | 0              | 0              | 0                 | 11,418          | 322,435                          | 0                                 | 2,058                              | 0                     | 0                        | 0                          | 1,551                            | 2,460                                     | 1,674                                      | 885                            |                 |  |
| Kedah                             | 42,486                    | 139,806        | 129,744        | 84,788         | 0                 | 0                                    | 0              | 0              | 12,262         | 0                 | 0                                        | 0              | 0              | 16,077         | 39,300            | 83,670          | 477,144                          | 0                                 | 0                                  | 0                     | 0                        | 31,860                     | 2,572                            | 4,640                                     | 0                                          | 0                              |                 |  |
| P. Pinang/<br>Penang              | 0                         | 0              | 64,260         | 4,044          | 7,726             | 0                                    | 1,920          | 10,374         | 7,085          | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 426,296         | 868,394                          | 0                                 | 0                                  | 5,016                 | 0                        | 38,603                     | 32,014                           | 5,643                                     | 2,479                                      | 3,892                          |                 |  |
| Perak                             | 218,086                   | 1,112,484      | 106,114        | 176,437        | 22,020            | 5,544                                | 0              | 5,634          | 56,787         | 0                 | 0                                        | 0              | 0              | 30,712         | 0                 | 398,718         | 147,964                          | 7,982                             | 0                                  | 19,520                | 0                        | 13,804                     | 28,342                           | 166,480                                   | 0                                          | 34                             |                 |  |
| Selangor                          | 235,935                   | 275,190        | 125,769        | 45,216         | 7,820             | 0                                    | 0              | 5,722          | 14,343         | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 17,188          | 797,509                          | 0                                 | 3,920                              | 799                   | 0                        | 101,976                    | 10,333                           | 54,360                                    | 273                                        | 836                            |                 |  |
| N. Sembilan                       | 0                         | 0              | 0              | 0              | 0                 | 0                                    | 0              | 0              | 0              | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 4,810           | 53,775                           | 0                                 | 0                                  | 4,015                 | 0                        | 0                          | 0                                | 0                                         | 0                                          | 1,428                          |                 |  |
| Melaka/<br>Malacca                | 0                         | 0              | 0              | 0              | 0                 | 0                                    | 0              | 0              | 0              | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 5,781           | 204,470                          | 0                                 | 502                                | 0                     | 0                        | 0                          | 64                               | 53,924                                    | 0                                          | 0                              |                 |  |
| Johor Barat/<br>West Johore       | 67,424                    | 168,755        | 2,103          | 0              | 0                 | 0                                    | 0              | 0              | 0              | 0                 | 0                                        | 0              | 0              | 0              | 0                 | 11,755          | 516,621                          | 0                                 | 4,620                              | 1,156                 | 0                        | 9,031                      | 64                               | 435,636                                   | 0                                          | 0                              |                 |  |
| Kelantan                          | 0                         | 105,006        | 6,366          | 0              | 486               | 0                                    | 0              | 2,808          | 5,188          | 809               | 0                                        | 0              | 0              | 0              | 0                 | 0               | 147,964                          | 7,982                             | 0                                  | 5,750                 | 0                        | 0                          | 0                                | 0                                         | 0                                          | 0                              |                 |  |
| Terengganu                        | 17,842                    | 131,093        | 11,778         | 2,049          | 4,172             | 0                                    | 27,007         | 20,345         | 14,686         | 3,040             | 1,773                                    | 12,097         | 0              | 0              | 0                 | 0               | 62,561                           | 15,252                            | 0                                  | 15,432                | 0                        | 4,050                      | 0                                | 0                                         | 0                                          | 0                              |                 |  |
| Pahang                            | 97,812                    | 39,306         | 27,920         | 27,996         | 12,515            | 0                                    | 0              | 2,030          | 10,288         | 4,951             | 0                                        | 3,510          | 1,863          | 0              | 0                 | 0               | 109,365                          | 6,810                             | 0                                  | 74,916                | 0                        | 0                          | 0                                | 0                                         | 0                                          | 0                              |                 |  |
| Johor Timur/<br>East Johore       | 61,402                    | 54,096         | 50,392         | 96,256         | 9,126             | 0                                    | 3,168          | 1,970          | 10,303         | 1,090             | 0                                        | 0              | 0              | 0              | 0                 | 0               | 239,165                          | 988                               | 23,684                             | 2,754                 | 0                        | 48,297                     | 0                                | 0                                         | 0                                          | 222                            |                 |  |

\* GRT - Gross Relative Tonnage

SEMANJUNG MALAYSIA/PENINSULAR MALAYSIA  
HARGA PURATA IKAN DIPANTAI MENGIKUT BULAN, 1988  
MONTHLY AVERAGE EX-VESSEL PRICES OF FRESH FISH, 1988  
(Harga Dalam \$/Kg/Prices At \$/Kg)

Jadual (Table) 6.1

| Jenis-Jenis Ikan<br>Species | Januari<br>January | Februari<br>February | Mac<br>March | April<br>April | Mei<br>May | Jun<br>June | Julai<br>July | Ogos<br>August | September<br>September | Oktober<br>October | November<br>November | Disember<br>December | Purata 1988<br>Average 1988 |
|-----------------------------|--------------------|----------------------|--------------|----------------|------------|-------------|---------------|----------------|------------------------|--------------------|----------------------|----------------------|-----------------------------|
| Bawal Putih                 | 10.66              | 10.98                | 9.84         | 9.99           | 11.49      | 9.56        | 10.82         | 11.14          | 10.33                  | 9.78               | 10.35                | 11.52                | 10.54                       |
| Bawal Hitam                 | 4.69               | 5.06                 | 5.01         | 5.25           | 5.58       | 4.83        | 4.90          | 4.89           | 4.57                   | 4.76               | 4.88                 | 4.80                 | 4.94                        |
| Kerapu                      | 4.35               | 4.61                 | 4.96         | 4.27           | 4.86       | 4.71        | 4.53          | 4.66           | 4.42                   | 4.77               | 4.68                 | 5.07                 | 4.66                        |
| Tenggiri                    | 4.69               | 4.42                 | 4.59         | 4.08           | 4.79       | 4.35        | 4.34          | 4.56           | 4.71                   | 4.67               | 5.06                 | 4.98                 | 4.60                        |
| Jenahak                     | 4.30               | 4.87                 | 4.81         | 5.42           | 4.81       | 4.74        | 4.26          | 4.88           | 5.01                   | 5.23               | 5.17                 | 5.58                 | 4.92                        |
| Merah                       | 3.49               | 3.59                 | 3.48         | 3.43           | 3.58       | 3.26        | 3.62          | 3.42           | 3.79                   | 3.43               | 3.69                 | 3.88                 | 3.56                        |
| Kaci                        | 2.43               | 3.04                 | 2.43         | 2.07           | 1.92       | 2.07        | 1.78          | 2.25           | 2.11                   | 2.16               | 2.30                 | 2.05                 | 2.22                        |
| Cermin                      | 2.67               | 3.36                 | 2.48         | 2.82           | 2.81       | 2.61        | 2.60          | 2.77           | 2.45                   | 2.65               | 2.60                 | 2.19                 | 2.67                        |
| Gelama                      | 0.71               | 0.76                 | 0.74         | 0.72           | 0.73       | 0.74        | 0.73          | 0.77           | 0.81                   | 0.81               | 0.83                 | 0.81                 | 0.76                        |
| Kembong                     | 1.25               | 1.43                 | 1.50         | 1.33           | 1.33       | 1.48        | 1.64          | 1.48           | 1.43                   | 1.48               | 1.49                 | 1.48                 | 1.44                        |
| Kerisi                      | 1.06               | 1.39                 | 1.11         | 1.30           | 1.41       | 1.67        | 1.54          | 1.58           | 1.60                   | 1.43               | 1.62                 | 1.68                 | 1.45                        |
| Selayang                    | 0.75               | 0.79                 | 0.67         | 0.71           | 0.80       | 0.80        | 0.70          | 0.68           | 0.67                   | 0.70               | 0.73                 | 0.86                 | 0.74                        |
| Tamban                      | 0.33               | 0.02                 | 0.27         | 0.45           | 0.24       | 0.32        | 0.27          | 0.24           | 0.12                   | 0.34               | 0.24                 | 0.24                 | 0.26                        |
| Selar/Pelata                | 0.98               | 1.28                 | 0.90         | 0.85           | 1.02       | 1.13        | 1.11          | 1.23           | 1.20                   | 1.00               | 1.25                 | 1.05                 | 1.08                        |
| Sotong                      | 1.17               | 1.26                 | 1.36         | 1.41           | 1.42       | 1.55        | 1.49          | 1.62           | 1.62                   | 1.53               | 1.60                 | 1.75                 | 1.48                        |
| Aya/Tongkol                 | 0.71               | 0.73                 | 0.63         | 0.83           | 0.79       | 0.81        | 0.70          | 0.73           | 0.54                   | 0.77               | 0.85                 | 0.75                 | 0.74                        |
| Udang Putih                 | 17.00              | 20.45                | 17.85        | 17.18          | 18.85      | 17.58       | 17.97         | 18.03          | 18.28                  | 19.27              | 18.92                | 19.12                | 18.21                       |
| Udang Harimau               | 18.38              | 19.25                | 14.17        | 18.94          | 17.69      | 19.62       | 20.33         | 19.59          | 19.33                  | 18.09              | 17.47                | 17.32                | 18.35                       |
| Lain-Lain Udang             | 2.78               | 2.59                 | 2.62         | 2.64           | 2.63       | 2.74        | 2.20          | 2.52           | 2.47                   | 2.51               | 2.66                 | 2.56                 | 2.58                        |

SEMENANJUNG MALAYSIA/PENINSULAR MALAYSIA  
HARGA BORONG PURATA IKAN BASAH DIPASAR MENGIKUT BULAN, 1988  
MONTHLY AVERAGE WHOLESALE PRICES OF FRESH FISH AT MARKET, 1988  
(Harga Dalam \$/Kg/Prices At \$/Kg)

Jadual (Table) 6.2

| Jenis-Jenis Ikan<br>Species | Januari<br>January | Februari<br>February | Mac<br>March | April<br>April | Mei<br>May | Jun<br>June | Julai<br>July | Ogos<br>August | September<br>September | Oktober<br>October | November<br>November | Disember<br>Disember | Purata 1988<br>Average 1988 |
|-----------------------------|--------------------|----------------------|--------------|----------------|------------|-------------|---------------|----------------|------------------------|--------------------|----------------------|----------------------|-----------------------------|
| Bawal Putih                 | 11.65              | 9.63                 | 9.99         | 9.25           | 10.23      | 9.81        | 10.58         | 10.44          | 10.23                  | 8.97               | 10.52                | 11.67                | 10.25                       |
| Bawal Hitam                 | 5.79               | 5.66                 | 5.48         | 9.34           | 5.44       | 5.38        | 5.18          | 5.38           | 5.61                   | 5.40               | 5.66                 | 5.45                 | 5.81                        |
| Kerapu                      | 5.26               | 5.36                 | 5.60         | 5.69           | 5.62       | 5.55        | 5.26          | 5.27           | 6.31                   | 5.82               | 5.60                 | 6.37                 | 5.64                        |
| Tenggiri                    | 5.90               | 5.09                 | 5.01         | 5.05           | 5.35       | 5.75        | 4.93          | 5.50           | 5.88                   | 5.50               | 5.67                 | 6.85                 | 5.54                        |
| Jenahak                     | 5.35               | 5.38                 | 5.38         | 5.83           | 5.54       | 5.37        | 5.26          | 5.96           | 6.15                   | 6.07               | 5.84                 | 6.82                 | 5.75                        |
| Merah                       | 3.95               | 4.45                 | 4.17         | 3.96           | 4.24       | 3.86        | 3.83          | 3.89           | 4.36                   | 4.11               | 4.28                 | 5.03                 | 4.18                        |
| Kaci                        | 2.94               | 3.26                 | 2.70         | 2.62           | 2.95       | 2.85        | 2.60          | 2.68           | 2.68                   | 2.31               | 2.84                 | 2.80                 | 2.77                        |
| Cermin                      | 2.77               | 3.10                 | 3.03         | 2.67           | 3.68       | 3.13        | 2.99          | 2.89           | 3.32                   | 2.96               | 2.87                 | 2.61                 | 3.00                        |
| Gelama                      | 1.22               | 1.18                 | 1.14         | 1.23           | 1.21       | 1.26        | 1.16          | 1.19           | 1.20                   | 1.12               | 1.34                 | 1.47                 | 1.23                        |
| Kembong                     | 1.74               | 1.78                 | 2.01         | 1.69           | 2.14       | 1.85        | 1.98          | 1.83           | 2.14                   | 1.93               | 2.27                 | 2.04                 | 1.95                        |
| Kerisi                      | 1.47               | 1.61                 | 1.58         | 1.78           | 1.69       | 1.96        | 1.81          | 2.03           | 2.10                   | 1.82               | 2.14                 | 2.26                 | 1.85                        |
| Selayang                    | 1.20               | 1.20                 | 0.93         | 1.03           | 1.09       | 1.04        | 0.87          | 0.99           | 1.27                   | 1.24               | 1.38                 | 1.24                 | 1.12                        |
| Tamban                      | 0.38               | 0.31                 | 0.39         | 0.55           | 0.34       | 0.50        | 0.35          | 0.33           | 0.28                   | 0.45               | 0.40                 | 0.37                 | 0.39                        |
| Selar/Pelata                | 1.52               | 1.60                 | 1.07         | 1.09           | 1.34       | 1.38        | 1.43          | 1.75           | 1.61                   | 1.35               | 1.72                 | 1.65                 | 1.46                        |
| Sotong                      | 1.65               | 1.62                 | 1.73         | 1.70           | 1.81       | 1.85        | 1.74          | 1.99           | 2.12                   | 1.99               | 1.99                 | 2.20                 | 1.87                        |
| Aya/Tongkol                 | 0.92               | 1.09                 | 0.80         | 0.86           | 1.13       | 1.05        | 0.85          | 0.87           | 0.92                   | 0.96               | 1.10                 | 0.97                 | 0.96                        |
| Udang Putih                 | 18.88              | 20.55                | 19.92        | 18.89          | 19.21      | 19.29       | 20.05         | 20.22          | 20.49                  | 19.72              | 19.89                | 18.26                | 19.61                       |
| Udang Harimau               | 19.43              | 18.44                | 15.64        | 19.57          | 21.08      | 20.45       | 22.00         | 21.78          | 20.94                  | 19.43              | 18.85                | 20.34                | 19.83                       |
| Lain-Lain Udang             | 3.03               | 3.06                 | 2.76         | 2.88           | 2.92       | 2.95        | 2.57          | 2.91           | 2.83                   | 2.90               | 2.90                 | 3.25                 | 2.91                        |

SEMENANJUNG MALAYSIA/PENINSULAR MALAYSIA  
HARGA RUNCIT PURATA IKAN BASAH DIPASAR MENGIKUT BULAN, 1988  
MONTHLY AVERAGE RETAIL PRICES OF FRESH FISH AT MARKET, 1988  
(Harga Dalam \$/Kg/Prices At \$/Kg)

Jadual (Table) 6.3

| Jenis-Jenis Ikan<br>Species | Januari<br>January | Februari<br>February | Mac<br>March | April<br>April | Mei<br>May | Jun<br>June | Julai<br>July | Ogos<br>August | September<br>September | Oktober<br>October | November<br>November | Disember<br>Disember | Purata 1988<br>Average 1988 |
|-----------------------------|--------------------|----------------------|--------------|----------------|------------|-------------|---------------|----------------|------------------------|--------------------|----------------------|----------------------|-----------------------------|
| Bawal Putih                 | 13.05              | 11.28                | 11.32        | 11.88          | 12.12      | 11.63       | 10.02         | 11.97          | 11.77                  | 10.24              | 12.57                | 13.67                | 11.79                       |
| Bawal Hitam                 | 7.14               | 6.98                 | 6.23         | 6.19           | 6.22       | 6.58        | 7.09          | 6.89           | 6.72                   | 6.55               | 6.81                 | 6.51                 | 6.66                        |
| Kerapu                      | 6.70               | 6.82                 | 6.89         | 7.12           | 7.20       | 7.04        | 7.39          | 6.80           | 8.40                   | 7.86               | 7.38                 | 7.98                 | 7.30                        |
| Tenggiri                    | 6.69               | 6.70                 | 6.23         | 6.30           | 6.79       | 6.28        | 6.58          | 6.77           | 7.07                   | 7.13               | 7.12                 | 8.06                 | 6.81                        |
| Jenahak                     | 6.44               | 6.69                 | 6.54         | 6.98           | 6.63       | 6.59        | 3.31          | 7.27           | 7.52                   | 7.44               | 7.52                 | 8.14                 | 6.76                        |
| Merah                       | 5.11               | 5.30                 | 5.09         | 5.05           | 5.20       | 4.81        | 4.36          | 4.89           | 5.11                   | 5.06               | 5.45                 | 6.38                 | 5.15                        |
| Kaci                        | 4.01               | 4.27                 | 3.77         | 3.58           | 4.19       | 3.84        | 2.77          | 3.40           | 3.65                   | 3.47               | 3.87                 | 3.78                 | 3.72                        |
| Cermin                      | 3.74               | 3.85                 | 3.90         | 3.86           | 4.68       | 3.86        | 2.61          | 3.61           | 4.27                   | 3.72               | 3.74                 | 2.90                 | 3.73                        |
| Gelama                      | 1.77               | 1.75                 | 1.79         | 1.85           | 1.84       | 1.89        | 1.43          | 1.81           | 1.94                   | 1.73               | 2.16                 | 2.26                 | 1.85                        |
| Kembong                     | 2.25               | 2.28                 | 2.57         | 2.16           | 3.02       | 2.43        | 2.95          | 2.72           | 3.39                   | 2.80               | 2.77                 | 2.68                 | 2.67                        |
| Kerisi                      | 2.35               | 2.31                 | 2.38         | 2.56           | 2.94       | 2.82        | 3.64          | 2.87           | 2.96                   | 2.82               | 4.97                 | 3.08                 | 2.98                        |
| Selayang                    | 1.47               | 1.49                 | 1.19         | 1.31           | 1.49       | 1.42        | 1.21          | 1.48           | 1.45                   | 1.59               | 1.84                 | 1.57                 | 1.46                        |
| Tamban                      | 0.49               | 0.40                 | 0.50         | 0.73           | 0.61       | 0.69        | 0.52          | 0.53           | 0.46                   | 0.71               | 0.67                 | 0.55                 | 0.57                        |
| Selar/Pelata                | 2.04               | 2.04                 | 1.48         | 2.08           | 1.91       | 1.78        | 1.65          | 2.34           | 2.05                   | 1.63               | 2.20                 | 2.05                 | 1.94                        |
| Sotong                      | 2.34               | 2.39                 | 2.48         | 2.18           | 2.41       | 2.51        | 2.39          | 2.66           | 2.80                   | 2.56               | 2.66                 | 2.90                 | 2.52                        |
| Aya/Tongkol                 | 1.22               | 1.37                 | 1.03         | 1.21           | 1.48       | 1.34        | 1.24          | 1.20           | 1.28                   | 1.29               | 1.47                 | 1.35                 | 1.29                        |
| Udang Putih                 | 22.01              | 22.63                | 22.81        | 22.04          | 22.31      | 21.38       | 23.22         | 23.14          | 22.76                  | 23.08              | 23.22                | 20.77                | 22.45                       |
| Udang Harimau               | 23.09              | 20.41                | 18.32        | 22.47          | 24.29      | 24.12       | 24.00         | 24.81          | 23.63                  | 22.74              | 22.40                | 23.39                | 22.81                       |
| Lain-Lain Udang             | 3.84               | 3.62                 | 3.42         | 3.54           | 3.61       | 3.60        | 3.15          | 3.62           | 3.27                   | 3.58               | 3.40                 | 3.60                 | 3.52                        |



JADUAL (TABLE) 6.4

SARAWAK  
HARGA BORONG PURATA IKAN BASAH DI PASAR-PASAR MENGIKUT DAERAH, 1988  
AVERAGE WHOLESALE PRICES OF FRESH FISH AT MARKET BY DISTRICTS, 1988

| JENIS IKAN<br>(SPECIES) | Kuching | Btg Lupar | Sibu  | Mukah | Bintulu | Miri  | Limbang | Lawas | Jumlah<br>(Total) |
|-------------------------|---------|-----------|-------|-------|---------|-------|---------|-------|-------------------|
| Bawal Putih             | 12.09   | 13.86     | 8.47  | 10.58 | 13.60   | 9.92  | 0.00    | 0.00  | 11.42             |
| Bawal Hitam             | 4.73    | 7.11      | 4.83  | 4.86  | 4.50    | 4.29  | 0.00    | 0.00  | 5.05              |
| Kerapu                  | 4.05    | 0.00      | 5.00  | 2.25  | 3.27    | 0.00  | 0.00    | 4.00  | 3.71              |
| Tenggiri                | 3.15    | 5.79      | 2.98  | 3.73  | 3.16    | 4.15  | 0.00    | 0.00  | 3.83              |
| Jenahak                 | 3.22    | 0.00      | 2.60  | 1.95  | 2.19    | 3.86  | 0.00    | 0.00  | 2.76              |
| Merah                   | 3.42    | 0.00      | 2.00  | 2.32  | 2.57    | 3.12  | 0.00    | 0.00  | 2.69              |
| Kaci                    | 0.00    | 0.00      | 2.10  | 1.56  | 0.95    | 3.26  | 0.00    | 0.00  | 1.97              |
| Cermin/Sagai/Cupak      | 2.74    | 0.00      | 0.00  | 0.00  | 0.00    | 1.88  | 0.00    | 0.00  | 2.31              |
| Gelama                  | 0.95    | 1.80      | 0.93  | 1.47  | 1.06    | 3.23  | 2.50    | 2.90  | 1.86              |
| Kembong                 | 2.32    | 2.49      | 1.88  | 2.65  | 2.29    | 3.20  | 4.50    | 3.50  | 2.85              |
| Kerisi                  | 2.26    | 0.00      | 1.20  | 1.93  | 0.00    | 0.00  | 2.00    | 1.33  | 1.74              |
| Selayang                | 0.00    | 0.00      | 0.00  | 0.00  | 2.40    | 0.00  | 0.00    | 0.00  | 2.40              |
| Tamban                  | 0.82    | 0.00      | 0.45  | 0.50  | 0.00    | 3.50  | 0.00    | 1.75  | 1.40              |
| Pelata/Selar            | 0.00    | 0.00      | 1.50  | 2.02  | 2.20    | 2.36  | 0.00    | 0.00  | 2.02              |
| Sotong                  | 2.30    | 0.00      | 1.45  | 2.48  | 2.95    | 2.79  | 0.00    | 0.00  | 2.39              |
| Tongkol/Kayu/Aya        | 2.11    | 0.00      | 1.83  | 1.50  | 2.31    | 2.61  | 0.00    | 4.50  | 2.48              |
| Udang Putih             | 10.39   | 0.00      | 13.41 | 10.50 | 0.00    | 0.00  | 0.00    | 0.00  | 11.43             |
| Udang Harimau Sedang    | 0.00    | 0.00      | 0.00  | 10.00 | 12.20   | 15.50 | 0.00    | 0.00  | 12.57             |
| Udang Cendana/Rotan     | 0.00    | 0.00      | 0.00  | 0.00  | 0.00    | 0.00  | 0.00    | 0.00  | 0.00              |
| Lain-Lain Udang         | 1.94    | 2.30      | 2.28  | 2.05  | 2.06    | 2.38  | 0.00    | 0.00  | 2.17              |

SARAWAK  
HARGA PURATA RUNCIT IKAN BASAH DI PASAR-PASAR MENGIKUT DAERAH, 1988  
AVERAGE RETAIL PRICES OF FRESH FISH AT MARKET BY DISTRICT, 1988

JADUAL (TABLE) 6.5

| JENIS IKAN<br>(SPECIES) | Kuching | Btg Lupar | Sibu  | Mukah | Bintulu | Miri  | Limbang | Lawas | Jumlah<br>(Total) |
|-------------------------|---------|-----------|-------|-------|---------|-------|---------|-------|-------------------|
| Bawal Putih             | 13.81   | 16.00     | 12.20 | 14.08 | 17.03   | 15.88 | 0.00    | 0.00  | 14.83             |
| Bawal Hitam             | 5.71    | 8.21      | 6.50  | 6.70  | 6.65    | 7.55  | 0.00    | 0.00  | 6.89              |
| Kerapu                  | 4.69    | 0.00      | 6.00  | 4.19  | 4.80    | 7.00  | 0.00    | 6.70  | 5.56              |
| Tenggiri                | 3.78    | 6.03      | 5.36  | 5.59  | 4.94    | 7.33  | 0.00    | 7.00  | 5.72              |
| Jenahak                 | 4.04    | 0.00      | 5.33  | 4.11  | 3.04    | 5.76  | 0.00    | 0.00  | 4.46              |
| Merah                   | 4.16    | 0.00      | 2.30  | 3.90  | 3.87    | 5.17  | 0.00    | 0.00  | 3.88              |
| Kaci                    | 2.26    | 0.00      | 2.60  | 2.56  | 1.55    | 0.00  | 0.00    | 0.00  | 2.24              |
| Cermin                  | 3.16    | 0.00      | 0.00  | 0.00  | 0.00    | 3.00  | 0.00    | 0.00  | 3.08              |
| Gelama                  | 1.36    | 2.27      | 2.24  | 2.35  | 1.91    | 2.00  | 3.50    | 4.00  | 2.45              |
| Kembong                 | 2.82    | 3.03      | 3.17  | 3.94  | 3.73    | 5.00  | 5.70    | 5.05  | 4.06              |
| Kerisi                  | 2.90    | 0.00      | 2.00  | 3.83  | 0.00    | 5.89  | 3.00    | 2.71  | 3.39              |
| Selayang                | 0.00    | 0.00      | 0.00  | 0.00  | 4.00    | 0.00  | 0.00    | 0.00  | 4.00              |
| Tampan                  | 1.11    | 0.00      | 3.20  | 1.00  | 0.00    | 5.50  | 0.00    | 3.38  | 2.84              |
| Pelata/Selar            | 0.00    | 0.00      | 2.60  | 3.33  | 3.59    | 4.38  | 0.00    | 0.00  | 3.48              |
| Sotong                  | 2.67    | 0.00      | 2.58  | 4.86  | 4.55    | 4.72  | 0.00    | 0.00  | 3.88              |
| Tongkol/Kayu/Aya        | 2.64    | 0.00      | 2.43  | 3.00  | 3.68    | 4.64  | 0.00    | 6.10  | 3.75              |
| Udang Putih             | 14.32   | 0.00      | 15.77 | 14.13 | 0.00    | 0.00  | 0.00    | 0.00  | 14.74             |
| Udang Harimau Sedang    | 0.00    | 0.00      | 0.00  | 14.00 | 15.00   | 25.00 | 0.00    | 0.00  | 18.00             |
| Udang Cendana/Rotan     | 0.00    | 0.00      | 0.00  | 0.00  | 0.00    | 0.00  | 0.00    | 0.00  | 0.00              |
| Lain-Lain Udang         | 2.35    | 3.32      | 4.13  | 4.03  | 3.51    | 4.06  | 0.00    | 0.00  | 3.57              |

MALAYSIA  
NILAI HARGA BORONG PENDARATAN IKAN LAUT, 1988  
WHOLESALE VALUE OF MARINE FISH LANDINGS, 1988  
(Nilai Dalam Ringgit/Value In Ringgit)

JADUAL (TABLE) 7.1

| Negeri/State                | Gred I (Grade I)   |             | Gred II (Grade II) |             | Gred III (Grade III) |             | Udang (Prawn)      |             | Ikan Baja (Manure Fish) |            | Karang-Karangan (Shellfish) |           | Jumlah/Total       |               |
|-----------------------------|--------------------|-------------|--------------------|-------------|----------------------|-------------|--------------------|-------------|-------------------------|------------|-----------------------------|-----------|--------------------|---------------|
|                             | Tan M.<br>(Tonnes) | \$          | Tan M.<br>(Tonnes) | \$          | Tan M.<br>(Tonnes)   | \$          | Tan M.<br>(Tonnes) | \$          | Tan M.<br>(Tonnes)      | \$         | Tan M.<br>(Tonnes)          | \$        | Tan M.<br>(Tonnes) | \$            |
| Perlis                      | 1,722              | 10,562,870  | 0                  | 0           | 28,633               | 36,341,472  | 4,509              | 11,892,622  | 5,163                   | 1,294,445  | 704                         | 211,200   | 40,731             | 60,302,609    |
| Kedah                       | 1,696              | 10,402,710  | 190                | 548,654     | 46,809               | 57,893,722  | 3,523              | 10,482,709  | 20,557                  | 3,671,818  | 0                           | 0         | 72,775             | 82,999,613    |
| P. Pinang/Penang            | 429                | 2,597,990   | 103                | 296,354     | 10,989               | 15,984,322  | 2,722              | 13,096,461  | 7,944                   | 1,724,109  | 43                          | 12,900    | 22,230             | 33,712,136    |
| Perak                       | 6,661              | 40,980,950  | 6,678              | 19,369,654  | 69,489               | 84,429,322  | 28,259             | 83,621,971  | 68,748                  | 11,118,326 | 146                         | 43,800    | 179,982            | 239,564,023   |
| Selangor                    | 4,754              | 29,233,830  | 2,310              | 6,696,654   | 24,443               | 31,725,502  | 20,406             | 45,457,990  | 38,343                  | 6,420,756  | 636                         | 190,800   | 90,891             | 119,725,532   |
| Negeri Sembilan             | 176                | 1,039,510   | 7                  | 17,954      | 94                   | 3,237,172   | 33                 | 292,974     | 0                       | 0          | 0                           | 0         | 310                | 4,587,610     |
| Melaka/Malacca              | 872                | 5,326,870   | 36                 | 102,054     | 895                  | 4,174,342   | 679                | 1,682,562   | 0                       | 0          | 0                           | 0         | 2,482              | 11,285,828    |
| Johor Barat/<br>West Johore | 1,272              | 7,790,870   | 483                | 1,398,360   | 7,175                | 11,521,942  | 7,102              | 18,482,748  | 4,755                   | 1,231,409  | 0                           | 0         | 20,787             | 40,425,329    |
| Jumlah Kecil                | 17,582             | 107,935,600 | 9,807              | 28,429,684  | 188,527              | 245,307,796 | 67,233             | 185,010,037 | 145,510                 | 25,460,863 | 1,529                       | 458,700   | 430,188            | 592,602,680   |
| Kelantan                    | 1,370              | 8,394,550   | 979                | 2,836,754   | 14,374               | 19,944,772  | 1,191              | 3,320,555   | 88                      | 510,357    | 0                           | 0         | 18,002             | 35,006,988    |
| Terengganu                  | 2,780              | 17,080,150  | 2,535              | 7,349,154   | 69,448               | 84,381,352  | 576                | 3,576,960   | 8,117                   | 1,750,838  | 0                           | 0         | 83,456             | 114,138,454   |
| Pahang                      | 3,880              | 23,856,150  | 2,181              | 6,322,554   | 64,879               | 79,035,618  | 639                | 440,075     | 23,468                  | 4,122,567  | 0                           | 0         | 95,047             | 113,776,964   |
| Johor Timur/<br>East Johore | 1,394              | 8,542,390   | 1,948              | 5,646,854   | 35,189               | 44,298,322  | 11,628             | 61,315,221  | 17,597                  | 3,215,497  | 0                           | 0         | 67,756             | 123,018,284   |
| Jumlah Kecil                | 9,424              | 57,873,240  | 7,643              | 22,155,316  | 183,890              | 227,660,064 | 14,034             | 68,652,811  | 49,270                  | 9,599,259  | 0                           | 0         | 264,261            | 385,940,690   |
| Sarawak                     | 5,483              | 27,796,480  | 3,067              | 7,913,270   | 53,505               | 100,589,630 | 13,381             | 52,301,370  | 4,177                   | 1,420,020  | 29                          | 88,410    | 79,642             | 190,109,180   |
| Sabah                       | 14,720             | 64,469,200  | 1,980              | 40,797,100  | 16,200               | 20,754,700  | 12,000             | 65,669,000  | 1,500                   | 510,000    | 1,600                       | 4,800,000 | 48,000             | 197,000,000   |
| W.P Labuan                  | 449                | 1,543,592   | 334                | 1,426,097   | 2,319                | 4,783,253   | 435                | 2,461,176   | 3                       | 2,208      | 0                           | 0         | 3,540              | 10,216,326    |
| Jumlah Kecil                | 20,652             | 93,809,272  | 5,381              | 50,136,467  | 72,024               | 126,127,583 | 25,816             | 120,431,546 | 5,680                   | 1,932,228  | 1,629                       | 4,888,410 | 131,182            | 397,325,506   |
| JUMLAH/TOTAL                | 47,658             | 259,618,112 | 22,831             | 100,721,467 | 444,441              | 599,095,443 | 107,083            | 374,094,394 | 200,460                 | 36,992,349 | 3,158                       | 5,347,110 | 825,631            | 1,375,868,876 |

NOTA/NOTE:

- (1) Gred I Termasuk Bawal Tambak, Bawal Putih, Bawal Hitam, Senangin/Kurau, Tenggiri, Parang dan Kerapu.  
(Grade I) Includes Chinese Pomfret, Silver Pomfret, Black Pomfret, Threadfin, Spanish Mackerel, Wolf Herring and Grouper.  
Gred II Termasuk Jenahak, Terubok, Puput-Puput, Merah, Kaci, Cermin, Demudok dan Siakap.  
(Grade II) Includes Mangrove Snapper, Longtail Shad, Shads, Red Snapper, Sweetlip, Horse Mackerel and Giant Sea Pearch.  
Gred III Lain-lain ikan termasuk Ikan Bilis, Sotong, Ketam dan Ubor-ubor.  
(Grade III) Other species including Anchovy, Squids, Crabs and Jellyfish.

\* Harga runcit untuk ikan baja tidak ada/(There is no retail price for trash fish)

MALAYSIA  
NILAI HARGA RUNCIT PENDARATAN IKAN LAUT, 1988  
RETAIL VALUE OF MARINE FISH LANDINGS, 1988

JADUAL (TABLE) 7.2

| Negeri/State                | Gred I (Grade I)   |             | Gred II (Grade II) |             | Gred III (Grade III) |               | Udang (Prawn)      |             | Ikan Baja (Manure Fish) |           | Karang-Karangan (Shellfish) |           | Jumlah/Total       |               |
|-----------------------------|--------------------|-------------|--------------------|-------------|----------------------|---------------|--------------------|-------------|-------------------------|-----------|-----------------------------|-----------|--------------------|---------------|
|                             | Tan M.<br>(Tonnes) | \$          | Tan M.<br>(Tonnes) | \$          | Tan M.<br>(Tonnes)   | \$            | Tan M.<br>(Tonnes) | \$          | Tan M.<br>(Tonnes)      | \$        | Tan M.<br>(Tonnes)          | \$        | Tan M.<br>(Tonnes) | \$            |
| Perlis                      | 1,722              | 13,907,923  | 0                  | 0           | 28,633               | 58,615,451    | 4,509              | 13,020,404  | 5,163                   | 0         | 704                         | 467,232   | 40,731             | 86,177,764    |
| Kedah                       | 1,696              | 13,703,043  | 190                | 967,758     | 46,809               | 94,022,299    | 3,523              | 15,398,310  | 20,557                  | 0         | 0                           | 0         | 72,775             | 124,073,118   |
| P. Pinang/Penang            | 429                | 3,719,083   | 103                | 604,098     | 10,989               | 24,244,939    | 2,722              | 19,345,904  | 7,944                   | 0         | 43                          | 17,752    | 22,230             | 47,924,972    |
| Perak                       | 6,661              | 52,819,363  | 6,678              | 28,095,958  | 69,489               | 138,402,939   | 28,259             | 105,235,604 | 68,748                  | 0         | 146                         | 87,792    | 179,982            | 324,634,852   |
| Selangor                    | 4,754              | 37,792,203  | 2,310              | 9,829,358   | 24,443               | 50,453,331    | 20,406             | 60,804,351  | 38,343                  | 0         | 636                         | 420,994   | 90,891             | 159,293,431   |
| Negeri Sembilan             | 176                | 1,725,443   | 7                  | 202,818     | 94                   | 3,021,479     | 33                 | (3,006,486) | 0                       | 0         | 0                           | 0         | 310                | 1,924,962     |
| Melaka/Malacca              | 872                | 7,209,923   | 36                 | 324,038     | 895                  | 4,581,827     | 679                | (1,310,960) | 0                       | 0         | 0                           | 0         | 2,482              | 10,786,537    |
| Johor Barat/<br>West Johore | 1,272              | 10,361,923  | 483                | 2,192,498   | 7,175                | 16,815,267    | 7,102              | 26,143,308  | 4,755                   | 0         | 0                           | 0         | 20,787             | 55,494,704    |
| Jumlah Kecil                | 17,582             | 141,238,907 | 9,807              | 42,216,526  | 188,527              | 390,157,532   | 67,233             | 235,630,435 | 145,510                 | 0         | 1,529                       | 993,770   | 430,188            | 810,310,340   |
| Kelantan                    | 1,370              | 11,134,163  | 979                | 4,265,778   | 14,374               | 30,838,919    | 1,191              | 7,640,487   | 88                      | 0         | 0                           | 0         | 18,002             | 53,861,055    |
| Terengganu                  | 2,780              | 22,244,963  | 2,535              | 10,770,858  | 69,448               | 138,123,071   | 576                | 1,157,609   | 8,117                   | 0         | 0                           | 0         | 83,456             | 172,278,209   |
| Pahang                      | 3,880              | 30,912,963  | 2,181              | 9,290,138   | 64,879               | 129,222,659   | 639                | 2,921,059   | 23,468                  | 0         | 0                           | 0         | 95,047             | 172,328,527   |
| Johor Timur/<br>East Johore | 1,394              | 11,323,283  | 1,948              | 8,316,200   | 35,189               | 71,386,539    | 11,628             | 76,728,221  | 17,597                  | 0         | 0                           | 0         | 67,756             | 167,735,949   |
| Jumlah Kecil                | 9,424              | 75,615,373  | 7,643              | 32,642,974  | 183,890              | 369,571,188   | 14,034             | 88,447,376  | 49,270                  | 0         | 0                           | 0         | 264,261            | 566,203,740   |
| Sarawak                     | 5,483              | 39,638,760  | 3,067              | 13,740,880  | 53,505               | 197,968,940   | 13,381             | 71,012,920  | 4,177                   | 2,672,990 | 29                          | 117,880   | 79,642             | 325,152,370   |
| Sabah                       | 14,720             | 92,190,960  | 1,980              | 70,986,950  | 16,200               | 40,886,760    | 12,000             | 89,309,840  | 1,500                   | 958,800   | 1,600                       | 6,384,000 | 48,000             | 300,717,310   |
| W.P. Labuan                 | 449                | 2,324,232   | 334                | 2,274,599   | 2,319                | 7,724,873     | 435                | 3,251,837   | 3                       | 4,140     | 0                           | 0         | 3,540              | 15,579,681    |
| Jumlah Kecil                | 20,652             | 134,153,952 | 5,381              | 87,002,429  | 72,024               | 246,580,573   | 25,816             | 163,574,597 | 5,680                   | 3,635,930 | 1,629                       | 6,501,880 | 131,182            | 641,449,361   |
| JUMLAH/TOTAL                | 147,658            | 351,008,232 | 22,831             | 161,861,929 | 444,441              | 1,006,309,293 | 107,083            | 487,652,407 | 200,460                 | 3,635,930 | 3,158                       | 7,495,650 | 825,631            | 2,017,963,441 |

NOTA/NOTE:

- (1) Gred I Termasuk Bawal Tambak, Bawal Putih, Bawal Hitam, Senangin/Kurau, Tenggiri, Parang, dan Kerapu.  
 (Grade I) Includes Chinese Pomfret, Silver Pomfret, Black Pomfret, Threadfin, Spanish Mackerel, Wolf Herring and Grouper.  
 Gred II Termasuk Jenahak, Terubok, Puput-Puput, Merah, Kaci, Cermin, Demudok dan , Siakap  
 (Grade II) Includes Mangrove Snapper, Longtail Shad, Shads, Red Snapper, Sweetlip, Horse Mackerel and, Giant Sea Pearch .  
 Gred III Lain-lain ikan termasuk Ikan Bilis, Sotong, Ketam dan Ubor-ubor.  
 (Grade III) Other species including Anchovy, Squids, Crabs and Jellyfish.

\* Harga runcit untuk ikan baja tidak ada/(There is no retail price for trash fish)

SEKUTUPAN MALAYSIA/PENINSULAR MALAYSIA  
NILAI PENDARATAN IKAN LAUT MENGIKUT KUMPULAN PERKAKAS DAN GRED IKAN, 1988  
VALUE OF MARINE FISH LANDINGS BY GEAR GROUP AND GRADE OF FISH, 1988

JADUAL (TABLE) 7.3

| Pendaratan dan Nilai<br>Landings and Values |        | Pukat Tarik/Purse Seine   |                                             |                                                 |                                        |                                       | Perangkap/Traps               |                           |                  | Pancing<br>Hooks<br>and<br>Lines | Pukat Bakul<br>Bag Nets | Pukat<br>Rentang<br>Barrier<br>Nets | Pukat<br>Surung<br>Push/Scoop<br>Nets | Memungut<br>Siput<br>Shellfish<br>Collection | Rampaihan<br>Miscellaneous | Jumlah<br>Total |
|---------------------------------------------|--------|---------------------------|---------------------------------------------|-------------------------------------------------|----------------------------------------|---------------------------------------|-------------------------------|---------------------------|------------------|----------------------------------|-------------------------|-------------------------------------|---------------------------------------|----------------------------------------------|----------------------------|-----------------|
|                                             |        | Pukat Tunda<br>Trawl Nets | Pukat Jerut<br>Ikan<br>Purse Seine-<br>Fish | Pukat Jerut<br>Bilis<br>Purse Seine-<br>Anchovy | Lain Pukat<br>Tarik<br>Other<br>Seines | Pukat<br>Hanyut<br>Drift/Gill<br>Nets | Pukat<br>Tangguk<br>Lift Nets | Belat-Belat<br>Stationary | Bubu<br>Portable |                                  |                         |                                     |                                       |                                              |                            |                 |
| Gred I<br>(Grade I)                         | Tonnes | 11,497                    | 2,112                                       | 0                                               | 6                                      | 8,822                                 | 35                            | 19                        | 874              | 3,622                            | 17                      | 1                                   | 0                                     | 0                                            | 1                          | 27,006          |
|                                             | N.B.\$ | 70,590,580                | 12,960,680                                  | 0                                               | 36,840                                 | 54,167,080                            | 214,900                       | 116,660                   | 5,366,360        | 22,239,080                       | 104,380                 | 6,140                               | 0                                     | 0                                            | 6,140                      | 165,808,840     |
|                                             | N.R.\$ | 92,320,010                | 16,956,360                                  | 0                                               | 48,180                                 | 70,840,660                            | 281,050                       | 152,570                   | 7,018,220        | 29,084,660                       | 136,510                 | 8,030                               | 0                                     | 0                                            | 8,030                      | 216,854,280     |
| Gred II<br>(Grade II)                       | Tonnes | 12,632                    | 473                                         | 0                                               | 1                                      | 559                                   | 8                             | 1                         | 1,897            | 1,832                            | 6                       | 24                                  | 0                                     | 0                                            | 17                         | 17,450          |
|                                             | N.B.\$ | 36,612,800                | 1,371,700                                   | 0                                               | 2,900                                  | 1,621,100                             | 23,200                        | 2,900                     | 5,501,300        | 5,312,800                        | 17,400                  | 69,600                              | 0                                     | 0                                            | 49,300                     | 50,585,000      |
|                                             | N.R.\$ | 54,190,280                | 2,029,170                                   | 0                                               | 4,290                                  | 2,398,110                             | 34,320                        | 4,290                     | 8,138,130        | 7,859,280                        | 25,740                  | 102,960                             | 0                                     | 0                                            | 72,930                     | 74,859,500      |
| Gred III<br>(Grade III)                     | Tonnes | 152,924                   | 123,225                                     | 34,677                                          | 357                                    | 27,084                                | 5,183                         | 584                       | 3,299            | 16,337                           | 7,810                   | 584                                 | 40                                    | 0                                            | 313                        | 372,417         |
|                                             | N.B.\$ | 194,210,480               | 156,495,750                                 | 44,039,790                                      | 453,390                                | 34,396,680                            | 6,582,410                     | 742,950                   | 4,189,730        | 20,749,260                       | 9,917,430               | 741,680                             | 50,800                                | 0                                            | 397,510                    | 472,967,860     |
|                                             | N.R.\$ | 311,960,960               | 251,379,000                                 | 70,741,080                                      | 728,280                                | 55,251,360                            | 10,573,320                    | 1,193,400                 | 6,729,960        | 33,329,520                       | 15,930,360              | 1,191,360                           | 81,600                                | 0                                            | 638,520                    | 759,728,720     |
| Udang<br>(Prawn)                            | Tonnes | 40,687                    | 0                                           | 0                                               | 8,569                                  | 5,358                                 | 0                             | 285                       | 4                | 0                                | 24,605                  | 102                                 | 1,645                                 | 0                                            | 12                         | 81,267          |
|                                             | N.B.\$ | 150,201,343               | 0                                           | 0                                               | 23,761,837                             | 46,308,707                            | 0                             | 208,050                   | 7,160            | 0                                | 27,654,524              | 385,675                             | 5,006,673                             | 0                                            | 128,880                    | 253,662,850     |
|                                             | N.R.\$ | 192,796,443               | 0                                           | 0                                               | 31,516,782                             | 55,021,302                            | 0                             | 301,530                   | 8,420            | 0                                | 37,645,650              | 492,048                             | 6,144,075                             | 0                                            | 151,560                    | 324,077,810     |
| Ikan Baja<br>(Manure Fish)                  | Tonnes | 176,458                   | 4,170                                       | 94                                              | 5,380                                  | 2,075                                 | 0                             | 86                        | 1                | 1                                | 5,822                   | 372                                 | 321                                   | 0                                            | 0                          | 194,780         |
|                                             | N.B.\$ | 31,762,160                | 750,600                                     | 16,920                                          | 968,400                                | 373,500                               | 0                             | 15,480                    | 180              | 180                              | 1,047,960               | 66,960                              | 57,780                                | 0                                            | 0                          | 35,060,120      |
|                                             | N.R.\$ | 0                         | 0                                           | 0                                               | 0                                      | 0                                     | 0                             | 0                         | 0                | 0                                | 0                       | 0                                   | 0                                     | 0                                            | 0                          | 0               |
| Karang-<br>Karangan<br>(Shellfish)          | Tonnes | 2                         | 0                                           | 0                                               | 0                                      | 0                                     | 0                             | 0                         | 0                | 0                                | 0                       | 0                                   | 0                                     | 1,527                                        | 0                          | 1,529           |
|                                             | N.B.\$ | 600                       | 0                                           | 0                                               | 0                                      | 0                                     | 0                             | 0                         | 0                | 0                                | 0                       | 0                                   | 0                                     | 458,100                                      | 0                          | 458,700         |
|                                             | N.R.\$ | 1,220                     | 0                                           | 0                                               | 0                                      | 0                                     | 0                             | 0                         | 0                | 0                                | 0                       | 0                                   | 0                                     | 992,550                                      | 0                          | 993,770         |
| JUMLAH<br>TOTAL                             | Tonnes | 394,200                   | 129,980                                     | 34,771                                          | 14,313                                 | 43,898                                | 5,226                         | 975                       | 6,075            | 21,792                           | 38,260                  | 1,083                               | 2,006                                 | 1,527                                        | 343                        | 694,449         |
|                                             | N.B.\$ | 483,377,963               | 171,578,730                                 | 44,056,710                                      | 25,223,367                             | 136,867,067                           | 6,820,510                     | 1,086,040                 | 15,064,730       | 48,301,320                       | 38,741,694              | 1,270,055                           | 5,115,253                             | 458,100                                      | 581,830                    | 978,543,370     |
| TOTAL                                       | N.R.\$ | 651,268,913               | 270,364,530                                 | 70,741,080                                      | 32,297,532                             | 183,511,432                           | 10,888,690                    | 1,651,790                 | 21,894,730       | 70,273,460                       | 53,738,260              | 1,794,398                           | 6,225,675                             | 992,550                                      | 871,040                    | 1,376,514,080   |

N.B.\$ - Nilai Harga Borong Dalam Ringgit/Wholesale Value In Ringgit

N.R.\$ - Nilai Harga Runcit Dalam Ringgit/Retail Value In Ringgit

\* Harga runcit untuk ikan baja tidak ada/There is no retail price for trash fish

MALAYSIA  
PENDARATAN DAN NILAI IKAN LAUT MENGIKUT NEGERI BAGI TAHUN 1988  
LANDINGS AND VALUES OF MARINE FISH BY STATE FOR THE YEAR 1988

JADUAL (TABLE) 8

| Kuantiti Dan Peratus<br>Quantity And Percentage | Pantai Barat/West Coast |            |                    |             |             |                    |                   |                            | Pantai Timur/East Coast |             |             |                            | Sarawak     | Sabah       | W.P.<br>Labuan | Jumlah<br>Besar<br><br>Grand<br>Total |
|-------------------------------------------------|-------------------------|------------|--------------------|-------------|-------------|--------------------|-------------------|----------------------------|-------------------------|-------------|-------------|----------------------------|-------------|-------------|----------------|---------------------------------------|
|                                                 | Perlis                  | Kedah      | P.Pinang<br>Penang | Perak       | Selangor    | Negeri<br>Sembilan | Melaka<br>Malacca | Johor Barat<br>West Johore | Kelantan                | Terengganu  | Pahang      | Johor Timur<br>East Johore |             |             |                |                                       |
| Pendaratan dalam Tan M.<br>Landing in Tonnes    | 40,731                  | 72,775     | 22,230             | 179,982     | 90,891      | 310                | 2,482             | 20,787                     | 18,002                  | 83,456      | 95,047      | 67,756                     | 79,642      | 48,000      | 3,540          | 825,631                               |
| Peratus<br>Percentage                           | 4.93                    | 8.81       | 2.69               | 21.80       | 11.01       | 0.04               | 0.30              | 2.52                       | 2.18                    | 10.11       | 11.51       | 8.21                       | 9.65        | 5.81        | 0.43           | 100.00                                |
| Nilai dalam Ringgit<br>Value in Ringgit         | 60,302,609              | 82,999,613 | 33,712,136         | 239,564,023 | 119,725,532 | 4,587,610          | 11,285,828        | 40,425,329                 | 35,006,988              | 114,138,454 | 113,776,964 | 123,018,284                | 190,109,180 | 197,000,000 | 10,216,326     | 1,375,868,876                         |
| Peratus<br>Percentage                           | 4.38                    | 6.03       | 2.45               | 17.41       | 8.70        | 0.33               | 0.82              | 2.94                       | 2.55                    | 8.30        | 8.27        | 8.94                       | 13.82       | 14.32       | 0.74           | 100.00                                |

MALAYSIA  
SIRI TAHUNAN PENDARATAN IKAN LAUT DAN NILAI  
ANNUAL SERIES OF MARINE FISH LANDINGS AND VALUES  
(Nilai Dalam Ringgit/Value In Ringgit)

JADUAL (TABLE) 9

| Negeri/State               | 1984                                        |                | 1985                                        |                | 1986                                        |                | 1987                                        |                | 1988                                        |                |
|----------------------------|---------------------------------------------|----------------|---------------------------------------------|----------------|---------------------------------------------|----------------|---------------------------------------------|----------------|---------------------------------------------|----------------|
|                            | Kuantiti<br>(Tan M)<br>Quantity<br>(Tonnes) | Nilai<br>Value | Kuantiti<br>(Tan M)<br>Quantity<br>(Tonnes) | Nilai<br>Value | Kuantiti<br>(Tan M)<br>Quantity<br>(Tonnes) | Nilai<br>Value | Kuantiti<br>(Tan M)<br>Quantity<br>(Tonnes) | Nilai<br>Value | Kuantiti<br>(Tan M)<br>Quantity<br>(Tonnes) | Nilai<br>Value |
| Pantai Barat (West Coast): |                                             |                |                                             |                |                                             |                |                                             |                |                                             |                |
| Perlis                     | 33,540                                      | 70,598,585     | 34,318                                      | 72,624,804     | 29,065                                      | 70,816,510     | 66,856                                      | 69,615,500     | 40,731                                      | 60,302,609     |
| Kedah                      | 93,949                                      | 225,653,347    | 54,859                                      | 135,299,687    | 55,327                                      | 120,454,070    | 94,091                                      | 103,044,610    | 72,775                                      | 82,999,613     |
| Pulau Pinang/Penang        | 19,821                                      | 58,908,743     | 23,832                                      | 65,553,212     | 20,868                                      | 58,380,270     | 29,752                                      | 53,409,330     | 22,230                                      | 33,712,136     |
| Perak                      | 126,354                                     | 281,692,997    | 149,159                                     | 358,075,555    | 135,889                                     | 316,887,440    | 203,774                                     | 251,514,600    | 179,982                                     | 239,564,023    |
| Selangor                   | 52,211                                      | 106,887,445    | 43,983                                      | 100,531,825    | 64,260                                      | 136,156,450    | 87,157                                      | 126,893,470    | 90,891                                      | 119,725,532    |
| Negeri Sembilan            | 476                                         | 2,453,518      | 407                                         | 2,356,191      | 323                                         | 1,998,360      | 352                                         | 1,723,200      | 310                                         | 4,587,610      |
| Melaka/Malacca             | 2,329                                       | 10,816,364     | 2,163                                       | 10,237,060     | 2,201                                       | 10,463,090     | 2,444                                       | 9,429,020      | 2,482                                       | 11,285,828     |
| Johor Barat/West Johore    | 19,065                                      | 48,175,290     | 18,403                                      | 48,400,775     | 16,114                                      | 37,711,920     | 15,439                                      | 28,183,440     | 20,787                                      | 40,425,329     |
| Jumlah Kecil/Sub-Total:    | 347,745                                     | 805,186,289    | 327,124                                     | 793,079,109    | 324,047                                     | 752,868,110    | 499,865                                     | 643,813,170    | 430,188                                     | 592,602,680    |
| Pantai Timur/East Coast:   |                                             |                |                                             |                |                                             |                |                                             |                |                                             |                |
| Kelantan                   | 5,571                                       | 11,240,043     | 9,461                                       | 17,462,532     | 10,223                                      | 21,385,490     | 23,166                                      | 37,313,420     | 18,002                                      | 35,006,988     |
| Terengganu                 | 79,338                                      | 160,201,030    | 80,794                                      | 159,443,662    | 52,228                                      | 132,662,080    | 115,016                                     | 162,157,710    | 83,456                                      | 114,138,454    |
| Pahang                     | 18,969                                      | 31,919,605     | 16,353                                      | 29,649,805     | 30,935                                      | 54,370,850     | 66,519                                      | 84,478,400     | 95,047                                      | 113,776,964    |
| Johor Timur/East Johore    | 30,018                                      | 50,581,990     | 29,129                                      | 51,493,303     | 28,943                                      | 56,485,640     | 36,005                                      | 56,673,140     | 67,756                                      | 123,018,284    |
| Jumlah Kecil/Sub-Total:    | 133,896                                     | 253,942,668    | 135,737                                     | 258,049,302    | 122,329                                     | 264,904,060    | 240,706                                     | 340,622,670    | 264,261                                     | 385,940,690    |
| Sarawak                    | 68,632                                      | 134,000,000    | 62,893                                      | 128,800,000    | 67,971                                      | 155,500,000    | 69,443                                      | 187,900,000    | 79,642                                      | 190,109,180    |
| Sabah                      | 50,200                                      | 166,300,000    | 48,600                                      | 157,750,000    | 46,900                                      | 163,500,000    | 47,640                                      | 165,500,000    | 48,000                                      | 197,000,000    |
| W.P. Labuan                | *                                           | *              | *                                           | *              | 720                                         | 2,500,000      | 1,360                                       | 4,700,000      | 3,540                                       | 10,216,326     |
| Jumlah Kecil/Sub-Total:    | 118,832                                     | 300,300,000    | 111,493                                     | 286,550,000    | 115,591                                     | 321,500,000    | 118,443                                     | 358,100,000    | 131,182                                     | 397,325,506    |
| Jumlah Besar/Grand-Total:  | 600,473                                     | 1,359,428,957  | 574,354                                     | 1,337,678,411  | 561,967                                     | 1,339,272,170  | 859,014                                     | 1,342,535,840  | 825,631                                     | 1,375,868,876  |

\* Tidak diperolehi (Not Available).

SEMIKANTUNG MALAYSIA/PENINSULAR MALAYSIA  
 PENGGUNAAN PENDARATAN IKAN LAUT, 1988  
 DISPOSITION OF MARINE FISH LANDINGS, 1988  
 Timbangan dalam Tan Metrik/Weight in Tonnes

Jadual (Table) 10.1

| Cara Penggunaan<br>Disposition Channel             | Pantai Barat/West Coast |        |                           |         |                            |                    |                   |                            |                           | Pantai Timur/East Coast |            |                           |                            |                           | Jumlah Besar<br>Grand Total |
|----------------------------------------------------|-------------------------|--------|---------------------------|---------|----------------------------|--------------------|-------------------|----------------------------|---------------------------|-------------------------|------------|---------------------------|----------------------------|---------------------------|-----------------------------|
|                                                    | Perlis                  | Kedah  | Pulau<br>Pinang<br>Penang | Perak   | Selangor<br>Darul<br>Khsan | Negeri<br>Sembilan | Melaka<br>Malacca | Johor Barat<br>West Johore | Jumlah Kecil<br>Sub-Total | Kelantan                | Terengganu | Pahang<br>Darul<br>Makmur | Johor Timur<br>East Johore | Jumlah Kecil<br>Sub-Total |                             |
| Diguna secara hidup<br>Disposed alive              | 0                       | 0      | 0                         | 0       | 0                          | 0                  | 0                 | 0                          | 0                         | 0                       | 0          | 0                         | 0                          | 0                         | 0                           |
| Diguna secara basah<br>Disposed fresh              | 40,590                  | 17,923 | 14,545                    | 103,858 | 29,235                     | 310                | 1,463             | 17,634                     | 225,557                   | 17,338                  | 66,203     | 46,726                    | 39,521                     | 169,789                   | 395,346                     |
| Diguna untuk dibeku<br>Disposed for freezing       | 0                       | 0      | 0                         | 11,759  | 21                         | 0                  | 0                 | 0                          | 11,780                    | 0                       | 0          | 0                         | 0                          | 0                         | 11,780                      |
| Diguna untuk mengetin<br>Disposed for canning      | 0                       | 0      | 0                         | 0       | 0                          | 0                  | 0                 | 0                          | 0                         | 0                       | 0          | 0                         | 0                          | 0                         | 0                           |
| Diguna untuk diawetkan<br>Disposed for curing      | 0                       | 0      | 0                         | 0       | 0                          | 0                  | 0                 | 0                          | 0                         | 0                       | 0          | 0                         | 0                          | 0                         | 0                           |
| Kering/Masin/Diasap<br>Dried/Salted/Smoked         | 103                     | 33,809 | 1,189                     | 15,559  | 10,263                     | 0                  | 17                | 54                         | 60,995                    | 265                     | 1,969      | 6,072                     | 89                         | 8,396                     | 69,391                      |
| Rebus<br>Steamed/Boiled                            | 23                      | 0      | 0                         | 919     | 0                          | 0                  | 0                 | 0                          | 942                       | 0                       | 0          | 0                         | 0                          | 0                         | 942                         |
| Diragikan<br>Fermented                             | 11                      | 5      | 3,833                     | 1,249   | 4,287                      | 0                  | 1,001             | 2,013                      | 12,398                    | 264                     | 23         | 0                         | 1,972                      | 2,259                     | 14,657                      |
| Lain-Lain<br>Others                                | 4                       | 3      | 0                         | 489     | 0                          | 0                  | 0                 | 42                         | 539                       | 135                     | 15,260     | 243                       | 155                        | 15,793                    | 16,331                      |
| Diguna untuk mengubahkan<br>Disposed for reduction | 0                       | 21,036 | 1,777                     | 37,404  | 46,752                     | 0                  | 0                 | 1,044                      | 108,013                   | 0                       | 0          | 42,006                    | 26,019                     | 68,025                    | 176,038                     |
| Diguna untuk lain-lain<br>Disposed for others      | 0                       | 0      | 886                       | 8,745   | 333                        | 0                  | 0                 | 0                          | 9,964                     | 0                       | 0          | 0                         | 0                          | 0                         | 9,964                       |
| Jumlah (Tan Metrik)<br>Total (Tonnes)              | 40,732                  | 72,775 | 22,230                    | 179,982 | 90,891                     | 310                | 2,482             | 20,787                     | 430,188                   | 18,002                  | 83,456     | 95,047                    | 67,755                     | 264,261                   | 694,449                     |



SEMENANJUNG MALAYSIA/PENINSULAR MALAYSIA  
HASIL LAUT YANG DIANETKAN, 1988  
PROCESSED MARINE FISH PRODUCTS, 1988  
Timbangan dalam Tan Metrik/Weight in Tonnes

Jadual (Table) 10.2

| Negeri/(State)               | Ikan Masin/<br>(Salted/<br>Dried<br>Fish) | Bilis<br>Kering<br>(Dried<br>Anchovies) | Ikan<br>Rebus<br>(Boiled<br>Fish) | Ikan<br>Baja<br>(Manure<br>Fish) | Tepung<br>Ikan<br>(Fish<br>Meal) | Udang<br>Kering<br>(Dried<br>Prawn) | Otak<br>Udang<br>(Prawn<br>Paste) | Belacan<br>(Shrimp<br>Paste) | Keropok(Crackers) |    | Cincaluk<br>(Pickled<br>Prawn) | Sotong<br>Kering<br>(Dried<br>Cuttel-<br>Fish) | Budu<br>(Fermented<br>Anchovies) | Ubur-<br>Ubur<br>(Dried<br>Jelly<br>Fish) | Lala<br>Kering<br>(Dried<br>Shell-<br>fish) | Bebola<br>Ikan<br>(Fish<br>Ball) | Sotong<br>Beku<br>(Frozen<br>Cuttle-<br>Fish) | Satay<br>Ikan<br>(Satay<br>Fish) | Udang<br>Beku<br>(Frozen<br>Prawn) | Jumlah<br>(Total) |
|------------------------------|-------------------------------------------|-----------------------------------------|-----------------------------------|----------------------------------|----------------------------------|-------------------------------------|-----------------------------------|------------------------------|-------------------|----|--------------------------------|------------------------------------------------|----------------------------------|-------------------------------------------|---------------------------------------------|----------------------------------|-----------------------------------------------|----------------------------------|------------------------------------|-------------------|
| Pantai barat/<br>West Coast: |                                           |                                         |                                   |                                  |                                  |                                     |                                   |                              |                   |    |                                |                                                |                                  |                                           |                                             |                                  |                                               |                                  |                                    |                   |
| Perlis                       | 62                                        | 0                                       | 18                                | 0                                | 0                                | 0                                   | 0                                 | 3                            | 2                 | 1  | 0                              | 0                                              | 0                                | 0                                         | 0                                           | 0                                | 0                                             | 0                                | 0                                  | 87                |
| Kedah                        | 1,446                                     | 6,762                                   | 0                                 | 0                                | 5,259                            | 0                                   | 0                                 | 1                            | 1                 | 1  | 0                              | 0                                              | 0                                | 0                                         | 0                                           | 0                                | 0                                             | 0                                | 0                                  | 13,469            |
| Pulau Pinang                 | 404                                       | 0                                       | 0                                 | 532                              | 444                              | 129                                 | 178                               | 657                          | 0                 | 0  | 0                              | 0                                              | 0                                | 0                                         | 0                                           | 0                                | 0                                             | 0                                | 0                                  | 2,344             |
| Perak                        | 2,985                                     | 2,268                                   | 735                               | 5,247                            | 8,623                            | 317                                 | 0                                 | 400                          | 2                 | 0  | 0                              | 48                                             | 0                                | 5                                         | 0                                           | 1,747                            | 510                                           | 262                              | 6,546                              | 29,695            |
| Selangor                     | 915                                       | 0                                       | 0                                 | 200                              | 11,688                           | 243                                 | 0                                 | 1,372                        | 0                 | 0  | 0                              | 2                                              | 0                                | 776                                       | 13                                          | 0                                | 0                                             | 0                                | 0                                  | 15,208            |
| N.Sembilan                   | 0                                         | 0                                       | 0                                 | 0                                | 0                                | 0                                   | 0                                 | 0                            | 0                 | 0  | 0                              | 0                                              | 0                                | 0                                         | 0                                           | 0                                | 0                                             | 0                                | 0                                  | 0                 |
| Melaka/Malacca               | 10                                        | 0                                       | 0                                 | 0                                | 0                                | 0                                   | 0                                 | 249                          | 0                 | 0  | 67                             | 0                                              | 0                                | 0                                         | 0                                           | 0                                | 0                                             | 0                                | 0                                  | 326               |
| Johor Barat/<br>West Johore  | 31                                        | 1                                       | 0                                 | 0                                | 239                              | 0                                   | 0                                 | 642                          | 10                | 17 | 2                              | 0                                              | 0                                | 0                                         | 0                                           | 52                               | 0                                             | 0                                | 0                                  | 994               |
| Jumlah Kecil/<br>Sub-Total   | 5,853                                     | 9,031                                   | 754                               | 5,979                            | 26,253                           | 688                                 | 178                               | 3,325                        | 15                | 19 | 69                             | 50                                             | 0                                | 781                                       | 13                                          | 1,799                            | 510                                           | 262                              | 6,546                              | 62,124            |
| Pantai Timur/<br>East Coast: |                                           |                                         |                                   |                                  |                                  |                                     |                                   |                              |                   |    |                                |                                                |                                  |                                           |                                             |                                  |                                               |                                  |                                    |                   |
| Kelantan                     | 159                                       | 0                                       | 0                                 | 0                                | 0                                | 0                                   | 0                                 | 0                            | 88                | 0  | 0                              | 0                                              | 79                               | 0                                         | 0                                           | 0                                | 0                                             | 0                                | 0                                  | 326               |
| Terengganu                   | 442                                       | 256                                     | 0                                 | 0                                | 0                                | 0                                   | 0                                 | 0                            | 9,919             | 0  | 0                              | 52                                             | 7                                | 0                                         | 0                                           | 0                                | 0                                             | 0                                | 0                                  | 10,676            |
| Pahang                       | 331                                       | 1,380                                   | 0                                 | 0                                | 10,439                           | 0                                   | 0                                 | 0                            | 158               | 0  | 0                              | 0                                              | 0                                | 0                                         | 0                                           | 150                              | 0                                             | 0                                | 0                                  | 12,458            |
| Johor Timur/<br>East Johore  | 0                                         | 22                                      | 0                                 | 0                                | 6,505                            | 0                                   | 0                                 | 631                          | 100               | 0  | 0                              | 0                                              | 0                                | 0                                         | 0                                           | 0                                | 0                                             | 0                                | 0                                  | 7,258             |
| Jumlah Kecil/<br>Sub-Total   | 932                                       | 1,658                                   | 0                                 | 0                                | 16,944                           | 0                                   | 0                                 | 631                          | 10,265            | 0  | 0                              | 52                                             | 86                               | 0                                         | 0                                           | 150                              | 0                                             | 0                                | 0                                  | 30,719            |
| Jumlah Besar/<br>Grand-Total | 6,785                                     | 10,689                                  | 754                               | 5,979                            | 43,197                           | 688                                 | 178                               | 3,956                        | 10,281            | 19 | 69                             | 102                                            | 86                               | 781                                       | 13                                          | 1,949                            | 510                                           | 262                              | 6,546                              | 92,843            |

SEMENANJUNG MALAYSIA/PENINSULAR MALAYSIA  
KILANG-KILANG AIR BATU DAN KEMUDAHAN-KEMUDAHAN PENYEJOKKAN SEHINGGA 31-12-1988  
ICE FACTORIES AND REFRIGERATION FACILITIES AS AT 31-12-1988  
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

| Negeri/State                | Daya Pengeluaran Harian<br>(Daily Production Capacity) |                        |                                                      |                                      | Kemudahan Menyimpan<br>(Storage Capacity) |                     |             |
|-----------------------------|--------------------------------------------------------|------------------------|------------------------------------------------------|--------------------------------------|-------------------------------------------|---------------------|-------------|
|                             | Bil.<br>(No.)                                          | Kuantiti<br>(Quantity) | Timbangan/Blok<br>Dalam Kg.<br>(Weight/Block In Kg.) | Harga se Blok<br>(Price/Block)<br>\$ | Bil.<br>(No.)                             | Kuantiti (Quantity) |             |
|                             |                                                        |                        |                                                      |                                      |                                           | Ais (Ice)           | Ikan (Fish) |
| Perlis                      | 3                                                      | 119                    | 100 - 145                                            | 4.47                                 | 16                                        | 380                 | 170         |
| Kedah                       | 5                                                      | 168                    | 100                                                  | 5.06                                 | 59                                        | 543                 | 617         |
| P. Pinang/Penang            | 6                                                      | 288                    | 145.45                                               | 6.70                                 | 13                                        | 940                 | 5,121       |
| Perak                       | 16                                                     | 1,036                  | 45 - 145                                             | 5.28                                 | 54                                        | 2,284               | 2,830       |
| Selangor                    | 6                                                      | 304                    | 45.36 - 101.50                                       | 6.00                                 | 28                                        | 300                 | 435         |
| Melaka/Malacca              | 2                                                      | 78                     | 145                                                  | 8.00                                 | 3                                         | 67                  | 0           |
| N. Sembilan                 | 1                                                      | 28                     | 101                                                  | 6.40                                 | 1                                         | 13                  | 0           |
| Johor Barat/<br>West Johore | 4                                                      | 144                    | 28 - 75                                              | 0.00                                 | 8                                         | 137                 | 0           |
| Johor Timur/<br>East Johore | 3                                                      | 220                    | 28 - 30                                              | 0.00                                 | 12                                        | 253                 | 0           |
| Pahang                      | 5                                                      | 190                    | 45 - 224                                             | 5.64                                 | 5                                         | 348                 | 0           |
| Terengganu                  | 13                                                     | 299                    | 100 - 165                                            | 6.44                                 | 13                                        | 712                 | 0           |
| Kelantan                    | 6                                                      | 74                     | 100 - 220                                            | 5.38                                 | 6                                         | 85                  | 15          |
| Jumlah/Total:               | 70                                                     | 2,948                  | -                                                    | -                                    | 218                                       | 6,062               | 9,188       |

Semenanjung Malaysia/Peninsular Malaysia  
HASIL PERIKANAN DALAM RINGGIT, 1988  
(Fisheries Revenue in Ringgit, 1988)

JADUAL (TABLE) 12

| Jenis Hasil<br>(Type of Revenue) | HASIL NEGERI (STATE REVENUE) |                        |                                        |                   | HASIL PERIKANAN (FEDERAL REVENUE) |                                                                     |                                        |                                            |                   | Jumlah<br>Besar<br>(Grand Total) |
|----------------------------------|------------------------------|------------------------|----------------------------------------|-------------------|-----------------------------------|---------------------------------------------------------------------|----------------------------------------|--------------------------------------------|-------------------|----------------------------------|
|                                  | Perahu<br>(Boat)             | Perikanan<br>(Fishing) | Patil<br>Perahu<br>(Boat No.<br>Plate) | Jumlah<br>(Total) | Ikan<br>(Fish)                    | Bayaran Pindah<br>Milik & lain2<br>(Boat transfer<br>fee & Miscel.) | Kompaun/Denda<br>(Compound<br>or Fine) | Jualan<br>Pelbagai<br>(Miscel-<br>laneous) | Jumlah<br>(Total) |                                  |
| Negeri/State                     |                              |                        |                                        |                   |                                   |                                                                     |                                        |                                            |                   |                                  |
| Perlis                           | 16,779.00                    | 120,959.00             | 2,055.00                               | 139,793.00        | 0.00                              | 0.00                                                                | 0.00                                   | 0.00                                       | 0.00              | 139,793.00                       |
| Kedah                            | 37,296.00                    | 304,869.00             | 1,762.00                               | 343,927.00        | 0.00                              | 0.00                                                                | 497,500.00                             | 0.00                                       | 497,500.00        | 841,427.00                       |
| P. Pinang/Penang                 | 21,701.00                    | 55,016.00              | 1,966.00                               | 78,683.00         | 208.00                            | 0.00                                                                | 88,300.00                              | 1,344.31                                   | 89,852.31         | 168,535.31                       |
| Perak                            | 87,979.00                    | 405,274.00             | 4,994.00                               | 498,247.00        | 710.00                            | 0.00                                                                | 262,300.00                             | 0.00                                       | 263,010.00        | 761,257.00                       |
| Selangor                         | 52,217.00                    | 69,653.00              | 2,280.00                               | 124,150.00        | 230.00                            | 570.00                                                              | 81,260.00                              | 1.00                                       | 82,061.00         | 206,211.00                       |
| Negeri Sembilan                  | 1,199.50                     | 670.00                 | 276.00                                 | 2,145.50          | 0.00                              | 0.00                                                                | 0.00                                   | 60.00                                      | 60.00             | 2,205.50                         |
| Melaka/Malacca                   | 2,727.00                     | 1,780.00               | 823.00                                 | 5,330.00          | 0.00                              | 0.00                                                                | 0.00                                   | 0.00                                       | 0.00              | 5,330.00                         |
| Kelantan                         | 10,051.50                    | 30,229.10              | 1,297.00                               | 41,577.60         | 16,563.50                         | 0.00                                                                | 4,000.00                               | 291.00                                     | 20,854.50         | 62,432.10                        |
| Terengganu                       | 28,960.50                    | 113,523.75             | 2,342.00                               | 144,826.25        | 74,189.00                         | 3,240.00                                                            | 58,000.00                              | 10.00                                      | 135,439.00        | 280,265.25                       |
| Pahang                           | 29,575.50                    | 363,757.00             | 1,030.00                               | 394,362.50        | 820.00                            | 0.00                                                                | 85,500.00                              | 7,484.00                                   | 93,804.00         | 488,166.50                       |
| Johor/Johore                     | 59,413.00                    | 272,121.00             | 4,303.00                               | 335,837.00        | 0.00                              | 0.00                                                                | 36,100.00                              | 0.00                                       | 36,100.00         | 371,937.00                       |
| Jumlah Besar<br>(Grand Total)    | 347,899.00                   | 1,737,851.85           | 23,128.00                              | 2,108,878.85      | 92,720.50                         | 3,810.00                                                            | 1,112,960.00                           | 9,190.31                                   | 1,218,680.81      | 3,327,559.66                     |

MALAYSIA  
ANGGARAN BILANGAN DAN LUAS KOLAM, BEKAS LOMBONG DAN SANGKAR YANG DIUSAHAKAN  
SERTA BILANGAN PENTERNAK MENGIKUT SISTEM PENTERNAKAN DAN NEGERI 1988  
ESTIMATED NUMBER AND AREA OF PONDS, DISUSED MINING POOLS AND CAGES  
AND NUMBER OF CULTURISTS BY CULTURE SYSTEM AND STATE, 1988

JADUAL (TABLE) 13.1

| Negeri<br>State                 | Airtawar/Freshwater |           |                                  |                               |           |                                  |               |                         |                                  | Airpayau/Brackishwater |           |                                  |               |                         |                                  | Jumlah/Total                                  |           |                                  |               |                         |                                  |
|---------------------------------|---------------------|-----------|----------------------------------|-------------------------------|-----------|----------------------------------|---------------|-------------------------|----------------------------------|------------------------|-----------|----------------------------------|---------------|-------------------------|----------------------------------|-----------------------------------------------|-----------|----------------------------------|---------------|-------------------------|----------------------------------|
|                                 | Kolam Ponds         |           |                                  | Bekas Lombong Ex-Mining Pools |           |                                  | Sangkar Cages |                         |                                  | Kolam Ponds            |           |                                  | Sangkar Cages |                         |                                  | Kolam & Bekas Lombong Ponds & Ex-Mining Pools |           |                                  | Sangkar Cages |                         |                                  |
|                                 | Bil. No.            | Luas (ha) | Bil. Penternak No. Of Culturists | Bil. No.                      | Luas (ha) | Bil. Penternak No. Of Culturists | Bil. No.      | Luas (m2) Area in Sq.m. | Bil. Penternak No. Of Culturists | Bil. No.               | Luas (ha) | Bil. Penternak No. Of Culturists | Bil. No.      | Luas (m2) Area in Sq.m. | Bil. Penternak No. Of Culturists | Bil. No.                                      | Luas (ha) | Bil. Penternak No. Of Culturists | Bil. No.      | Luas (m2) Area in Sq.m. | Bil. Penternak No. Of Culturists |
| Perlis                          | 131                 | 26.01     | 111                              | 1                             | 1.22      | 1                                | 0             | 0.00                    | 0                                | 0                      | 0.00      | 0                                | 0             | 0.00                    | 0                                | 132                                           | 27.23     | 112                              | 0             | 0.00                    | 0                                |
| Kedah                           | 761                 | 171.86    | 396                              | 4                             | 4.84      | 2                                | 16            | 144.00                  | 2                                | 52                     | 23.47     | 21                               | 910           | 7,822.78                | 44                               | 817                                           | 200.17    | 419                              | 926           | 7,966.78                | 46                               |
| Pulau Pinang/<br>Penang         | 191                 | 25.96     | 128                              | 0                             | 0.00      | 0                                | 0             | 0.00                    | 0                                | 4                      | 1.63      | 4                                | 5,432         | 33,173.36               | 263                              | 195                                           | 27.59     | 132                              | 5,432         | 33,173.36               | 263                              |
| Perak                           | 2,388               | 428.34    | 1,568                            | 134                           | 210.61    | 110                              | 226           | 2,158.18                | 12                               | 95                     | 38.89     | 21                               | 3,511         | 32,647.05               | 104                              | 2,617                                         | 677.84    | 1,699                            | 3,737         | 34,805.23               | 116                              |
| Selangor                        | 1,613               | 302.12    | 1,390                            | 242                           | 234.79    | 218                              | 474           | 7,316.00                | 407                              | 75                     | 16.36     | 29                               | 2,619         | 33,115.43               | 88                               | 1,930                                         | 553.27    | 1,637                            | 3,093         | 40,431.43               | 495                              |
| M. Persekutuan/<br>F. Territory | 0                   | 0.00      | 0                                | 0                             | 0.00      | 0                                | 0             | 0.00                    | 0                                | 0                      | 0.00      | 0                                | 0             | 0.00                    | 0                                | 0                                             | 0.00      | 0                                | 0             | 0.00                    | 0                                |
| N. Sembilan                     | 1,311               | 232.34    | 1,138                            | 40                            | 15.94     | 40                               | 72            | 648.00                  | 1                                | 0                      | 0.00      | 0                                | 0             | 0.00                    | 0                                | 1,351                                         | 248.28    | 1,178                            | 72            | 648.00                  | 1                                |
| Melaka/Malacca                  | 786                 | 172.41    | 619                              | 0                             | 0.00      | 0                                | 64            | 2,090.32                | 45                               | 4                      | 1.54      | 4                                | 0             | 0.00                    | 0                                | 790                                           | 173.95    | 623                              | 64            | 2,090.32                | 45                               |
| Johor/Johore                    | 1,383               | 203.92    | 669                              | 1                             | 0.81      | 1                                | 12            | 103.62                  | 2                                | 423                    | 516.97    | 69                               | 3,590         | 41,707.85               | 136                              | 1,807                                         | 721.70    | 739                              | 3,602         | 41,811.47               | 138                              |
| Pahang                          | 1,498               | 263.14    | 929                              | 2                             | 3.50      | 1                                | 0             | 0.00                    | 0                                | 16                     | 3.84      | 13                               | 0             | 0.00                    | 0                                | 1,516                                         | 270.48    | 943                              | 0             | 0.00                    | 0                                |
| Terengganu                      | 470                 | 56.47     | 391                              | 0                             | 0.00      | 0                                | 0             | 0.00                    | 0                                | 20                     | 5.62      | 15                               | 170           | 1,537.50                | 24                               | 490                                           | 62.09     | 406                              | 170           | 1,537.50                | 24                               |
| Kelantan                        | 1,193               | 150.65    | 881                              | 2                             | 3.50      | 2                                | 52            | 483.60                  | 13                               | 61                     | 8.30      | 44                               | 256           | 2,380.80                | 21                               | 1,256                                         | 162.45    | 927                              | 308           | 2,864.40                | 34                               |
| Sarawak                         | 947                 | 147.14    | 828                              | 0                             | 0.00      | 0                                | 0             | 0.00                    | 0                                | 0                      | 0.00      | 0                                | 0             | 0.00                    | 0                                | 947                                           | 147.14    | 828                              | 0             | 0.00                    | 0                                |
| Sabah                           | 7,445               | 825.37    | 3,450                            | 0                             | 0.00      | 0                                | 0             | 0.00                    | 0                                | 359                    | 300.00    | 62                               | 0             | 0.00                    | 0                                | 7,804                                         | 1,125.37  | 3,512                            | 0             | 0.00                    | 0                                |
| Jumlah/Total:                   | 120,117             | 3,005.73  | 12,498                           | 426                           | 475.21    | 375                              | 916           | 12,943.72               | 482                              | 1,109                  | 916.62    | 282                              | 16,488        | 152,384.77              | 680                              | 121,652                                       | 4,397.56  | 13,155                           | 17,404        | 165,328.49              | 1,162                            |

Nota: Bagi Sarawak ia merujuk kepada kolam-kolam yang telah dibina dalam tahun semasa.  
Note: For Sarawak it refers to ponds constructed in this year.

MALAYSIA  
 ANGGARAN BILANGAN DAN LUAS KOLAM, BEKAS LOMBONG DAN SANGKAR AIR TAWAR YANG DIBUKA  
 DAN TERBIAR SERTA BILANGAN PENTERNAK MENGIKUT NEGERI, 1988  
 ESTIMATED NUMBER AND AREA OF OPENED AND ABANDONED PONDS, DISUSED MINING POOLS  
 AND CAGES AND NUMBER OF CULTURISTS BY STATE, 1988

JADUAL (TABLE) 13.2

| Negeri<br>State                 | Dibuka dan Beroperasi/Opened and Operation |              |                     |                                  |              |                     |                  |                           |                     | Terbiar/Abandoned |              |                     |                                  |              |                     |                  |              |                     |
|---------------------------------|--------------------------------------------|--------------|---------------------|----------------------------------|--------------|---------------------|------------------|---------------------------|---------------------|-------------------|--------------|---------------------|----------------------------------|--------------|---------------------|------------------|--------------|---------------------|
|                                 | Kolam<br>Ponds                             |              |                     | Bekas Lombong<br>Ex-Mining Pools |              |                     | Sangkar<br>Cages |                           |                     | Kolam<br>Ponds    |              |                     | Bekas Lombong<br>Ex-Mining Pools |              |                     | Sangkar<br>Cages |              |                     |
|                                 | Bil.                                       | Luas         | Bil.                | Bil.                             | Luas         | Bil.                | Bil.             | Luas                      | Bil.                | Bil.              | Luas         | Bil.                | Bil.                             | Luas         | Bil.                | Bil.             | Luas         | Bil.                |
|                                 | No.                                        | (ha)<br>Area | No. Of<br>Culturist | No.                              | (ha)<br>Area | No. Of<br>Culturist | No.              | (m2)<br>Area<br>in Sq. m. | No. Of<br>Culturist | No.               | (ha)<br>Area | No. Of<br>Culturist | No.                              | (ha)<br>Area | No. Of<br>Culturist | No.              | (ha)<br>Area | No. Of<br>Culturist |
| Perlis                          | 0                                          | 0.00         | 0                   | 0                                | 0.00         | 0                   | 0                | 0.00                      | 0                   | 23                | 3.56         | 13                  | 0                                | 0.00         | 0                   | 0                | 0.00         | 0                   |
| Kedah                           | 97                                         | 17.91        | 51                  | 2                                | 0.44         | 2                   | 4                | 36.00                     | 1                   | 205               | 65.47        | 84                  | 1                                | 1.85         | 1                   | 0                | 0.00         | 0                   |
| Pulau Pinang/<br>Penang         | 12                                         | 0.23         | 2                   | 0                                | 0.00         | 0                   | 0                | 0.00                      | 0                   | 82                | 13.15        | 59                  | 0                                | 0.00         | 0                   | 0                | 0.00         | 0                   |
| Perak                           | 32                                         | 9.71         | 16                  | 1                                | 2.81         | 2                   | 4                | 37.21                     | 1                   | 625               | 101.64       | 422                 | 0                                | 0.00         | 0                   | 32               | 297.68       | 12                  |
| Selangor                        | 310                                        | 38.19        | 170                 | 3                                | 10.55        | 5                   | 354              | 6,132.00                  | 302                 | 210               | 32.39        | 175                 | 11                               | 62.99        | 6                   | 0                | 0.00         | 0                   |
| W. Persekutuan/<br>F. Territory | 0                                          | 0.00         | 0                   | 0                                | 0.00         | 0                   | 0                | 0.00                      | 0                   | 0                 | 0.00         | 0                   | 0                                | 0.00         | 0                   | 0                | 0.00         | 0                   |
| N. Sembilan                     | 8                                          | 1.19         | 3                   | 0                                | 0.00         | 0                   | 0                | 0.00                      | 0                   | 204               | 35.26        | 189                 | 0                                | 0.00         | 0                   | 0                | 0.00         | 0                   |
| Melaka/Malacca                  | 1                                          | 0.10         | 1                   | 0                                | 0.00         | 0                   | 0                | 0.00                      | 0                   | 302               | 46.94        | 256                 | 3                                | 3.45         | 2                   | 0                | 0.00         | 0                   |
| Johor/Johore                    | 56                                         | 3.19         | 3                   | 0                                | 0.00         | 0                   | 0                | 0.00                      | 0                   | 702               | 76.01        | 330                 | 22                               | 23.07        | 15                  | 0                | 0.00         | 0                   |
| Pahang                          | 29                                         | 6.27         | 17                  | 0                                | 0.00         | 0                   | 0                | 0.00                      | 0                   | 560               | 80.53        | 248                 | 26                               | 0.00         | 8                   | 0                | 0.00         | 0                   |
| Terengganu                      | 89                                         | 7.19         | 66                  | 0                                | 0.00         | 0                   | 0                | 0.00                      | 0                   | 154               | 19.00        | 90                  | 0                                | 0.00         | 0                   | 0                | 0.00         | 0                   |
| Kelantan                        | 371                                        | 49.26        | 247                 | 2                                | 1.68         | 2                   | 0                | 0.00                      | 0                   | 380               | 49.96        | 275                 | 0                                | 0.00         | 0                   | 0                | 0.00         | 0                   |
| Sarawak                         | 947                                        | 147.14       | 828                 | 0                                | 0.00         | 0                   | 0                | 0.00                      | 0                   | 0                 | 0.00         | 0                   | 0                                | 0.00         | 0                   | 0                | 0.00         | 0                   |
| Sabah                           | 0                                          | 0.00         | 0                   | 0                                | 0.00         | 0                   | 0                | 0.00                      | 0                   | 0                 | 0.00         | 0                   | 0                                | 0.00         | 0                   | 0                | 0.00         | 0                   |
| Jumlah/Total:                   | 1,952                                      | 280.38       | 1,404               | 8                                | 15.48        | 11                  | 362              | 6,205.21                  | 304                 | 3,447             | 523.91       | 2,141               | 63                               | 91.36        | 32                  | 32               | 297.68       | 12                  |

\* Kolam, bekas lombong dan sangkar yang dibuka adalah tertakluk kepada yang dibuka dalam tahun semasa.

Newly opened and in operation ponds, ex-mining pools and cages are counted based on current year.

\* Kolam, bekas lombong dan sangkar yang terbiar adalah timbunan dari tahun sebelum dan tahun semasa.

Abandoned ponds, ex-mining pools and cages are accumulative figures.

ANGGARAN BILANGAN DAN LUAS, SERTA BILANGAN PENTERNAK  
KOLAM DAN SANGKAR AIRPAYAU YANG DI BUKA DAN TERBIAR, 1988.  
ESTIMATED NUMBER AND AREA OF OPENED AND  
ABANDONED BRACKISHWATER PONDS AND CAGES, AND NUMBER OF CULTURIST, 1988.

JADUAL (TABLE) 13.3

| Negeri<br><br>State             | Dibuka dan Beroperasi/Opened and Operation |       |                                       |                  |                                        |                          | Terbiar/Abandoned |       |                                       |                  |          |                                       |
|---------------------------------|--------------------------------------------|-------|---------------------------------------|------------------|----------------------------------------|--------------------------|-------------------|-------|---------------------------------------|------------------|----------|---------------------------------------|
|                                 | Kolam<br>Ponds                             |       |                                       | Sangkar<br>Cages |                                        |                          | Kolam<br>Ponds    |       |                                       | Sangkar<br>Cages |          |                                       |
|                                 | Bil.                                       | Luas  | Bil.                                  | Bil.             | Luas                                   | Bil.                     | Bil.              | Luas  | Bil.                                  | Luas             | Bil.     | Bil.                                  |
|                                 | No.                                        | (ha)  | Penternak<br>No. Of<br>(ha) Culturist | No.              | (m <sup>2</sup> )<br>Area<br>in Sq. m. | No. Of<br>(ha) Culturist | No.               | (ha)  | Penternak<br>No. Of<br>(ha) Culturist | No.              | (ha)     | Penternak<br>No. Of<br>(ha) Culturist |
| Perlis                          | 0                                          | 0.00  | 0                                     | 0                | 0.00                                   | 0                        | 0                 | 0.00  | 0                                     | 0                | 0.00     | 0                                     |
| Kedah                           | 14                                         | 7.14  | 4                                     | 233              | 1,886.62                               | 12                       | 31                | 8.82  | 7                                     | 36               | 210.96   | 2                                     |
| Pulau Pinang/Penang             | 3                                          | 0.34  | 3                                     | 539              | 3,677.71                               | 28                       | 0                 | 0.00  | 0                                     | 48               | 351.20   | 4                                     |
| Perak                           | 34                                         | 24.79 | 3                                     | 621              | 5,778.58                               | 6                        | 0                 | 0.00  | 0                                     | 16               | 148.84   | 1                                     |
| Selangor                        | 44                                         | 8.04  | 13                                    | 329              | 12,588.84                              | 21                       | 17                | 9.36  | 1                                     | 0                | 0.00     | 0                                     |
| M. Persekutuan/<br>F. Territory | 0                                          | 0.00  | 0                                     | 0                | 0.00                                   | 0                        | 0                 | 0.00  | 0                                     | 0                | 0.00     | 0                                     |
| N. Sembilan                     | 0                                          | 0.00  | 0                                     | 0                | 0.00                                   | 0                        | 0                 | 0.00  | 0                                     | 0                | 0.00     | 0                                     |
| Melaka/Malacca                  | 0                                          | 0.00  | 0                                     | 0                | 0.00                                   | 0                        | 0                 | 0.00  | 0                                     | 0                | 0.00     | 0                                     |
| Johor/Johore                    | 64                                         | 41.33 | 13                                    | 276              | 4,475.12                               | 7                        | 8                 | 5.30  | 2                                     | 43               | 582.49   | 9                                     |
| Pahang                          | 12                                         | 2.62  | 12                                    | 0                | 0.00                                   | 0                        | 27                | 6.07  | 12                                    | 0                | 0.00     | 0                                     |
| Terengganu                      | 5                                          | 0.85  | 3                                     | 108              | 850.10                                 | 5                        | 20                | 4.88  | 1                                     | 6                | 54.00    | 1                                     |
| Kelantan                        | 19                                         | 4.31  | 11                                    | 0                | 0.00                                   | 0                        | 17                | 1.92  | 14                                    | 0                | 0.00     | 0                                     |
| Sarawak                         | 0                                          | 0.00  | 0                                     | 0                | 0.00                                   | 0                        | 0                 | 0.00  | 0                                     | 0                | 0.00     | 0                                     |
| Sabah                           | 0                                          | 0.00  | 0                                     | 0                | 0.00                                   | 0                        | 0                 | 0.00  | 0                                     | 0                | 0.00     | 0                                     |
| Jumlah/Total:                   | 195                                        | 89.42 | 62                                    | 2,106            | 29,256.97                              | 77                       | 120               | 36.35 | 37                                    | 149              | 1,347.49 | 17                                    |

- \* Kolam Dan Sangkar Yang Dibuka Adalah Tertakluk Kepada Yang Dibuka Dalam Tahun Semasa.  
Newly opened and in operation ponds and cages are counted based on current year.
- \* Kolam dan sangkar yang terbiar adalah timbunan dari tahun sebelum dan tahun semasa.  
Abandoned ponds and cages are accumulative figures.

MALAYSIA  
 ANGGAHAN JUMLAH PENDARATAN IKAN TERNAKAN, KERANG DAN KUPANG MENGIKUT  
 NEGERI DAN SISTEM TERNAKAN 1988  
 ESTIMATED LANDINGS OF FISH, COCKLE AND MUSSELS  
 BY STATE AND CULTURE SYSTEM 1988  
 (TAN METRIK/TONNES)

JADUAL (TABLE) 14.1

| Negeri<br>State               | Airtawar/Freshwater                              |                  | Airpayau/Brackishwater |                  |                  |                   | Jumlah Kecil/Sub-total |                  |                  |                   | Jumlah<br>Besar |
|-------------------------------|--------------------------------------------------|------------------|------------------------|------------------|------------------|-------------------|------------------------|------------------|------------------|-------------------|-----------------|
|                               | Kolam & Bekas Lombong<br>Ponds & Ex-Mining Pools | Sangkar<br>Cages | Kolam<br>Ponds         | Sangkar<br>Cages | Kerang<br>Cockle | Kupang<br>Mussels | Kolam<br>Ponds         | Sangkar<br>Cages | Kerang<br>Cockle | Kupang<br>Mussels | Grand Total     |
| Perlis                        | 19.54                                            | 0.00             | 0.00                   | 0.00             | 71.35            | 0.00              | 19.54                  | 0.00             | 71.35            | 0.00              | 90.89           |
| Kedah                         | 175.16                                           | 0.00             | 3.45                   | 7.28             | 287.78           | 0.00              | 178.61                 | 7.28             | 287.78           | 0.00              | 473.67          |
| P.Pinang/Penang               | 26.01                                            | 0.00             | 0.00                   | 566.41           | 8,096.85         | 1.19              | 26.01                  | 566.41           | 8,096.85         | 1.19              | 8,690.46        |
| Perak                         | 1,022.37                                         | 3.91             | 43.61                  | 51.25            | 20,644.94        | 60.28             | 1,065.98               | 55.16            | 20,644.94        | 60.28             | 21,826.36       |
| Selangor                      | 859.10                                           | 31.60            | 31.98                  | 423.42           | 5,584.75         | 0.64              | 891.08                 | 455.02           | 5,584.75         | 0.64              | 6,931.49        |
| W.Persekutuan/<br>F.Territory | 0.00                                             | 0.00             | 0.00                   | 0.00             | 0.00             | 0.00              | 0.00                   | 0.00             | 0.00             | 0.00              | 0.00            |
| N. Sembilan                   | 397.29                                           | 2.51             | 0.00                   | 0.00             | 0.00             | 2.32              | 397.29                 | 2.51             | 0.00             | 2.32              | 402.12          |
| Melaka/Malacca                | 224.19                                           | 12.65            | 3.80                   | 0.00             | 0.00             | 43.11             | 227.99                 | 12.65            | 0.00             | 43.11             | 283.75          |
| Johor/Johore                  | 280.52                                           | 1.04             | 873.06                 | 510.66           | 181.33           | 1,260.44          | 1,153.58               | 511.70           | 181.33           | 1,260.44          | 3,107.05        |
| Pahang                        | 341.34                                           | 0.00             | 0.00                   | 0.00             | 0.00             | 0.00              | 341.34                 | 0.00             | 0.00             | 0.00              | 341.34          |
| Terengganu                    | 56.46                                            | 0.00             | 5.15                   | 18.04            | 0.00             | 0.00              | 61.61                  | 18.04            | 0.00             | 0.00              | 79.65           |
| Kelantan                      | 164.98                                           | 0.77             | 2.85                   | 2.22             | 0.00             | 0.00              | 167.83                 | 2.99             | 0.00             | 0.00              | 170.82          |
| Sarawak                       | 110.32                                           | 0.00             | 0.00                   | 0.00             | 0.00             | 0.00              | 110.32                 | 0.00             | 0.00             | 0.00              | 110.32          |
| Sabah                         | 4,100.00                                         | 0.00             | 350.00                 | 0.00             | 0.00             | 0.00              | 4,450.00               | 0.00             | 0.00             | 0.00              | 4,450.00        |
| Jumlah/Total:                 | 7,777.28                                         | 52.48            | 1,313.90               | 1,579.28         | 34,867.00        | 1,367.98          | 9,091.18               | 1,631.76         | 34,867.00        | 1,367.98          | 46,957.92       |

MALAYSIA  
 ANGGARAN NILAI BORONG IKAN TERNAKAN, KERANG DAN KUPANG MENGIKUT  
 NEGERI DAN SISTEM TERNAKAN 1988  
 ESTIMATED WHOLESALE VALUE OF FISH, COCKLE AND MUSSEL  
 BY STATE AND CULTURE SYSTEM 1988  
 (NILAI DALAM RM '000/VALUE IN RM '000)

JADUAL (TABLE) 14.2

| Negeri<br>State                 | Airtawar/Freshwater                              |                  | Airpayau/Brackishwater |                  |                  |                   | Jumlah (RM)/Total (RM)                        |                  |                  |                   |
|---------------------------------|--------------------------------------------------|------------------|------------------------|------------------|------------------|-------------------|-----------------------------------------------|------------------|------------------|-------------------|
|                                 | Kolam & Bekas Lombong<br>Ponds & Ex-Mining Pools | Sangkar<br>Cages | Kolam<br>Ponds         | Sangkar<br>Cages | Kerang<br>Cockle | Kupang<br>Mussels | Kolam & Bekas Lombong<br>Ponds & Mining Pools | Sangkar<br>Cages | Kerang<br>Cockle | Kupang<br>Mussels |
| Perlis                          | 110.00                                           | 0.00             | 0.00                   | 0.00             | 17.84            | 0.00              | 110.00                                        | 0.00             | 17.84            | 0.00              |
| Kedah                           | 604.22                                           | 0.00             | 60.51                  | 104.01           | 71.95            | 0.00              | 664.73                                        | 104.01           | 71.95            | 0.00              |
| P. Pinang/Penang                | 81.34                                            | 0.00             | 0.00                   | 6,367.66         | 2,833.90         | 0.48              | 81.34                                         | 6,367.66         | 2,833.90         | 0.48              |
| Perak                           | 2,690.58                                         | 13.14            | 846.91                 | 623.27           | 7,225.73         | 33.15             | 3,537.49                                      | 636.41           | 7,225.73         | 33.15             |
| Selangor                        | 3,299.84                                         | 103.62           | 640.25                 | 3,515.79         | 1,340.34         | 0.45              | 3,940.09                                      | 3,619.41         | 1,340.34         | 0.45              |
| W. Persekutuan/<br>F. Territory | 0.00                                             | 0.00             | 0.00                   | 0.00             | 0.00             | 0.00              | 0.00                                          | 0.00             | 0.00             | 0.00              |
| N. Sembilan                     | 1,321.69                                         | 7.40             | 0.00                   | 0.00             | 0.00             | 1.86              | 1,321.69                                      | 7.40             | 0.00             | 1.86              |
| Melaka/Malacca                  | 746.65                                           | 37.70            | 28.50                  | 0.00             | 0.00             | 19.40             | 775.15                                        | 37.70            | 0.00             | 19.40             |
| Johor/Johore                    | 1,392.96                                         | 6.48             | 15,939.95              | 5,104.63         | 45.33            | 415.95            | 17,332.91                                     | 5,111.11         | 45.33            | 415.95            |
| Pahang                          | 1,236.97                                         | 0.00             | 0.00                   | 0.00             | 0.00             | 0.00              | 1,236.97                                      | 0.00             | 0.00             | 0.00              |
| Terengganu                      | 184.24                                           | 0.00             | 59.38                  | 144.08           | 0.00             | 0.00              | 243.62                                        | 144.08           | 0.00             | 0.00              |
| Kelantan                        | 731.57                                           | 3.10             | 48.61                  | 17.49            | 0.00             | 0.00              | 780.18                                        | 20.59            | 0.00             | 0.00              |
| Sarawak                         | 547.99                                           | 0.00             | 0.00                   | 0.00             | 0.00             | 0.00              | 547.99                                        | 0.00             | 0.00             | 0.00              |
| Sabah                           | 25,000.00                                        | 0.00             | 6,000.00               | 0.00             | 0.00             | 0.00              | 31,000.00                                     | 0.00             | 0.00             | 0.00              |
| Jumlah/Total:                   | 37,948.05                                        | 171.44           | 23,624.11              | 15,876.93        | 11,535.09        | 471.29            | 61,572.16                                     | 16,048.37        | 11,535.09        | 471.29            |



MALAYSIA  
 ANGGARAN NILAI RUNCIT IKAN TERNAKAN, KERANG DAN KUPANG MENGIKUT NEGERI DAN  
 SISTEM TERNAKAN 1988  
 ESTIMATED RETAIL VALUE OF FISH, COCKLE AND MUSSEL  
 BY STATE AND CULTURE SYSTEM 1988  
 (NILAI DALAM M\$ '000/VALUE IN M\$ '000)

JADUAL (TABLE) 14.3

| Negeri<br>State                 | Airtawar/Freshwater                              |                  | Airpayau/Brackishwater |                  |                  |                   | Jumlah (M\$)/Total (M\$)                         |                  |                  |                   |
|---------------------------------|--------------------------------------------------|------------------|------------------------|------------------|------------------|-------------------|--------------------------------------------------|------------------|------------------|-------------------|
|                                 | Kolam & Bekas Lombong<br>Ponds & Ex-Mining Pools | Sangkar<br>Cages | Kolam<br>Ponds         | Sangkar<br>Cages | Kerang<br>Cockle | Kupang<br>Mussels | Kolam & Bekas Lombong<br>Ponds & Ex-mining Pools | Sangkar<br>Cages | Kerang<br>Cockle | Kupang<br>Mussels |
| Perlis                          | 128.50                                           | 0.00             | 0.00                   | 0.00             | 35.68            | 0.00              | 128.50                                           | 0.00             | 35.68            | 0.00              |
| Kedah                           | 767.38                                           | 0.00             | 65.10                  | 110.18           | 143.89           | 0.00              | 832.48                                           | 110.18           | 143.89           | 0.00              |
| P. Pinang/Penang                | 101.77                                           | 0.00             | 0.00                   | 6,292.93         | 5,262.95         | 0.71              | 101.77                                           | 6,292.93         | 5,262.95         | 0.71              |
| Perak                           | 4,010.95                                         | 18.63            | 1,090.25               | 695.83           | 12,386.96        | 60.28             | 5,101.20                                         | 714.46           | 12,386.96        | 60.28             |
| Selangor                        | 4,605.55                                         | 144.88           | 854.62                 | 4,084.19         | 2,513.14         | 0.74              | 5,460.17                                         | 4,229.07         | 2,513.14         | 0.74              |
| W. Persekutuan/<br>F. Territory | 0.00                                             | 0.00             | 0.00                   | 0.00             | 0.00             | 0.00              | 0.00                                             | 0.00             | 0.00             | 0.00              |
| N. Sembilan                     | 2,006.02                                         | 12.17            | 0.00                   | 0.00             | 0.00             | 2.32              | 2,006.02                                         | 12.17            | 0.00             | 2.32              |
| Melaka/Malacca                  | 934.03                                           | 53.65            | 36.10                  | 0.00             | 0.00             | 25.87             | 970.13                                           | 53.65            | 0.00             | 25.87             |
| Johor/Johore                    | 1,834.62                                         | 8.27             | 19,807.19              | 6,430.92         | 117.86           | 819.29            | 21,641.81                                        | 6,439.19         | 117.86           | 819.29            |
| Pahang                          | 1,711.11                                         | 0.00             | 0.00                   | 0.00             | 0.00             | 0.00              | 1,711.11                                         | 0.00             | 0.00             | 0.00              |
| Terengganu                      | 296.17                                           | 0.00             | 41.72                  | 168.12           | 0.00             | 0.00              | 337.89                                           | 168.12           | 0.00             | 0.00              |
| Kelantan                        | 847.24                                           | 3.59             | 52.72                  | 20.53            | 0.00             | 0.00              | 899.96                                           | 24.12            | 0.00             | 0.00              |
| Sarawak                         | 639.17                                           | 0.00             | 0.00                   | 0.00             | 0.00             | 0.00              | 639.17                                           | 0.00             | 0.00             | 0.00              |
| Sabah                           | 27,192.81                                        | 0.00             | 7,203.00               | 0.00             | 0.00             | 0.00              | 34,395.81                                        | 0.00             | 0.00             | 0.00              |
| Jumlah/Total:                   | 45,075.32                                        | 241.19           | 29,150.70              | 17,802.70        | 20,460.48        | 909.21            | 74,226.02                                        | 18,043.89        | 20,460.48        | 909.21            |

JADUAL (TABLE) 15.1

MALAYSIA  
 BILANGAN DAN LUAS KOLAM BINAAN AIRTAWAR YANG DIUSAHAKAN  
 SERTA BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1988  
 NUMBER AND AREA OF FRESHWATER PONDS AND  
 NUMBER OF CULTURISTS BY RACE AND STATE, 1988

| Negeri<br>State                 | Kolam Airtawar<br>Freshwater Ponds |              | Bilangan Penternak Ikan<br>Number Of Culturists |         |        |           |        |
|---------------------------------|------------------------------------|--------------|-------------------------------------------------|---------|--------|-----------|--------|
|                                 | Bilangan                           | Luas (ha)    | Melayu                                          | Cina    | India  | Lain-Lain | Jumlah |
|                                 | Number                             | Area<br>(ha) | Malay                                           | Chinese | Indian | Others    | Total  |
| Perlis                          | 131                                | 26.01        | 101                                             | 4       | 0      | 6         | 111    |
| Kedah                           | 761                                | 171.86       | 375                                             | 7       | 0      | 14        | 396    |
| P. Pinang/Penang                | 191                                | 25.96        | 87                                              | 21      | 6      | 14        | 128    |
| Perak                           | 2,388                              | 428.34       | 1,296                                           | 189     | 19     | 64        | 1,568  |
| Selangor                        | 1,613                              | 302.12       | 862                                             | 322     | 53     | 153       | 1,390  |
| W. Persekutuan/<br>F. Territory | 0                                  | 0.00         | 0                                               | 0       | 0      | 0         | 0      |
| N. Sembilan                     | 1,311                              | 232.34       | 1,034                                           | 49      | 3      | 52        | 1,138  |
| Melaka/Malacca                  | 786                                | 172.41       | 471                                             | 134     | 9      | 5         | 619    |
| Johor/Johore                    | 1,383                              | 203.92       | 443                                             | 200     | 3      | 23        | 669    |
| Pahang                          | 1,498                              | 263.14       | 784                                             | 136     | 6      | 3         | 929    |
| Terengganu                      | 470                                | 56.47        | 390                                             | 1       | 0      | 0         | 391    |
| Kelantan                        | 1,193                              | 150.65       | 857                                             | 24      | 0      | 0         | 881    |
| Sarawak                         | 947                                | 147.14       | 23                                              | 98      | 0      | 707       | 828    |
| Sabah                           | 7,445                              | 825.37       | 0                                               | 0       | 0      | 3,450     | 3,450  |
| Jumlah/Total:                   | 20,117                             | 3,005.73     | 6,723                                           | 1,185   | 99     | 4,491     | 12,498 |

MALAYSIA  
BILANGAN DAN LUAS BEKAS LOMBONG YANG DIUSAHAKAN  
SERTA BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1988  
NUMBER AND AREA OF EX-MINING POOLS AND  
NUMBER OF CULTURISTS BY RACE AND STATE, 1988

JADUAL (TABLE) 1

| Negeri<br>State                 | Kolam Airtawar<br>Freshwater Ponds |                           | Bilangan Penternak Ikan<br>Number Of Culturists |                 |                 |                     |                 |
|---------------------------------|------------------------------------|---------------------------|-------------------------------------------------|-----------------|-----------------|---------------------|-----------------|
|                                 | Bilangan<br>Number                 | Luas (ha)<br>Area<br>(ha) | Melayu<br>Malay                                 | Cina<br>Chinese | India<br>Indian | Lain-Lain<br>Others | Jumlah<br>Total |
| Perlis                          | 1                                  | 1.22                      | 0                                               | 1               | 0               | 0                   | 1               |
| Kedah                           | 4                                  | 4.84                      | 1                                               | 1               | 0               | 0                   | 2               |
| P. Pinang/Penang                | 0                                  | 0.00                      | 0                                               | 0               | 0               | 0                   | 0               |
| Perak                           | 134                                | 210.61                    | 51                                              | 55              | 0               | 4                   | 110             |
| Selangor                        | 242                                | 234.79                    | 99                                              | 97              | 1               | 21                  | 218             |
| W. Persekutuan/<br>F. Territory | 0                                  | 0.00                      | 0                                               | 0               | 0               | 0                   | 0               |
| N. Sembilan                     | 40                                 | 15.94                     | 0                                               | 40              | 0               | 0                   | 40              |
| Melaka/Malacca                  | 0                                  | 0.00                      | 0                                               | 0               | 0               | 0                   | 0               |
| Johor/Johore                    | 1                                  | 0.81                      | 1                                               | 0               | 0               | 0                   | 1               |
| Pahang                          | 2                                  | 3.50                      | 0                                               | 1               | 0               | 0                   | 1               |
| Terengganu                      | 0                                  | 0.00                      | 0                                               | 0               | 0               | 0                   | 0               |
| Kelantan                        | 2                                  | 3.50                      | 2                                               | 0               | 0               | 0                   | 2               |
| Sarawak                         | 0                                  | 0.00                      | 0                                               | 0               | 0               | 0                   | 0               |
| Sabah                           | 0                                  | 0.00                      | 0                                               | 0               | 0               | 0                   | 0               |
| Jumlah/Total:                   | 426                                | 475.21                    | 154                                             | 195             | 1               | 25                  | 375             |

MALAYSIA  
 ANGARAN PENGELUARAN HASIL IKAN DARI KOLAM DAN BEKAS LOMBONG AIRTAWAR  
 MENGIKUT NEGERI DAN SPESIES IKAN, 1988  
 ESTIMATED FISH PRODUCTION FROM FRESHWATER PONDS AND EX-MINING POOLS  
 BY STATE AND SPECIES, 1988  
 (Timbangan dalam Tan Metrik/Weight in Tonnes)

JADUAL (TABLE) 15.3

| Negeri<br>State                 | Lampam<br>Java<br>Javanese<br>Carp | Lee Koh<br>Common<br>Carp | Kap<br>Rumput<br>Grass<br>Carp | Kap Kepala<br>Besar<br>Big Head<br>Carp | Udang Galah<br>Giant Fresh-<br>water Prawn | Tilapia<br>Nilotika<br>Tilapia<br>Nilotica | Tilapia<br>Merah<br>Red<br>Tilapia | Jelawat<br>River<br>Carp | Keli<br>Freshwater<br>Catfish | Patin<br>River<br>Catfish | Pelbagai<br>Miscellaneous | Jumlah<br>Total |
|---------------------------------|------------------------------------|---------------------------|--------------------------------|-----------------------------------------|--------------------------------------------|--------------------------------------------|------------------------------------|--------------------------|-------------------------------|---------------------------|---------------------------|-----------------|
| Perlis                          | 0.52                               | 0.61                      | 0.52                           | 1.29                                    | 5.15                                       | 7.06                                       | 0.00                               | 0.00                     | 1.91                          | 0.00                      | 2.48                      | 19.54           |
| Kedah                           | 51.25                              | 20.39                     | 13.17                          | 14.28                                   | 3.37                                       | 33.61                                      | 0.00                               | 9.80                     | 20.54                         | 0.69                      | 8.06                      | 175.16          |
| P. Pinang/ Penang               | 7.97                               | 1.36                      | 2.46                           | 1.15                                    | 0.13                                       | 4.96                                       | 1.83                               | 0.00                     | 1.95                          | 0.00                      | 4.20                      | 26.01           |
| Perak                           | 118.32                             | 1.46                      | 417.99                         | 175.32                                  | 11.55                                      | 147.84                                     | 115.12                             | 7.24                     | 25.79                         | 0.17                      | 1.57                      | 1,022.37        |
| Selangor                        | 83.63                              | 7.89                      | 138.75                         | 12.55                                   | 20.06                                      | 316.64                                     | 0.00                               | 133.61                   | 52.27                         | 13.78                     | 79.92                     | 859.10          |
| W. Persekutuan/<br>F. Territory | 0.00                               | 0.00                      | 0.00                           | 0.00                                    | 0.00                                       | 0.00                                       | 0.00                               | 0.00                     | 0.00                          | 0.00                      | 0.00                      | 0.00            |
| N. Sembilan                     | 131.65                             | 11.82                     | 125.64                         | 37.92                                   | 14.67                                      | 41.54                                      | 11.63                              | 14.86                    | 5.17                          | 0.13                      | 2.26                      | 397.29          |
| Melaka/Malacca                  | 84.54                              | 5.72                      | 23.89                          | 13.01                                   | 2.27                                       | 29.83                                      | 22.17                              | 5.13                     | 23.53                         | 7.21                      | 6.89                      | 224.19          |
| Johor/Johore                    | 38.39                              | 15.97                     | 24.60                          | 16.06                                   | 4.64                                       | 9.73                                       | 87.92                              | 11.67                    | 7.93                          | 9.51                      | 54.10                     | 280.52          |
| Pahang                          | 108.40                             | 39.63                     | 55.64                          | 19.08                                   | 3.25                                       | 81.40                                      | 1.95                               | 7.94                     | 2.14                          | 9.28                      | 12.63                     | 341.34          |
| Terengganu                      | 11.22                              | 3.98                      | 4.28                           | 3.22                                    | 0.26                                       | 14.84                                      | 0.00                               | 3.62                     | 7.09                          | 1.91                      | 6.04                      | 56.46           |
| Kelantan                        | 31.60                              | 17.64                     | 25.58                          | 13.67                                   | 2.79                                       | 21.61                                      | 0.00                               | 15.08                    | 34.51                         | 1.73                      | 0.77                      | 164.98          |
| Sarawak                         | 31.97                              | 20.74                     | 14.07                          | 2.76                                    | 0.08                                       | 0.56                                       | 0.00                               | 3.96                     | 0.00                          | 12.83                     | 23.35                     | 110.32          |
| Sabah                           | 1,230.00                           | 820.00                    | 120.00                         | 84.00                                   | 0.00                                       | 1,640.00                                   | 0.00                               | 0.00                     | 0.00                          | 0.00                      | 206.00                    | 4,100.00        |
| Jumlah/Total:                   | 1,929.46                           | 967.21                    | 966.59                         | 394.31                                  | 68.22                                      | 2,349.62                                   | 240.62                             | 212.91                   | 182.83                        | 57.24                     | 408.27                    | 7,777.28        |

Nota : Pelbagai - Termasuk Ikan-ikan Ketutu, Haruan, Baung dan Sepat Siam.

Note : Miscellaneous - Includes Goby, Snake Head, River Catfish and Snakeskin Gouramy.

## MALAYSIA

JADUAL (TABLE) 15.4

ANGGARAN NILAI BORONG HASIL DARI KOLAM DAN BEKAS LOMBONG AIRTAWAR MENGIKUT NEGERI DAN SPESIES, 1988

ESTIMATED WHOLESALE VALUE OF PRODUCTIONS FROM FRESHWATER PONDS AND EX-MINING POOLS

BY STATE AND SPECIES, 1988

(Nilai dalam M\$ '000/Value in M\$ '000)

| Negeri/State                    | Lampam Jawa<br>Javanese<br>Carp | Lee Koh<br>Common<br>Carp | Kap<br>Rumput<br>Grass Carp | Kap Kepala<br>Besar<br>Big Head<br>Carp | Udang Galah<br>Giant Fresh-<br>water Prawn | Tilapia<br>Nilotika<br>Tilapia<br>Nilotika | Tilapia<br>Merah<br>Red<br>Tilapia | Keli<br>Freshwater<br>Catfish | Patin<br>River<br>Catfish | Jelawat<br>River<br>Carp | Pelbagai<br>Miscellaneous | Jumlah<br>Total |
|---------------------------------|---------------------------------|---------------------------|-----------------------------|-----------------------------------------|--------------------------------------------|--------------------------------------------|------------------------------------|-------------------------------|---------------------------|--------------------------|---------------------------|-----------------|
| Perlis                          | 1.04                            | 1.22                      | 2.34                        | 3.62                                    | 77.25                                      | 14.12                                      | 0.00                               | 6.69                          | 0.00                      | 0.00                     | 3.72                      | 110.00          |
| Kedah                           | 119.42                          | 52.00                     | 52.68                       | 31.42                                   | 42.97                                      | 100.83                                     | 0.00                               | 63.68                         | 6.90                      | 121.82                   | 12.50                     | 604.22          |
| P. Pinang/Penang                | 24.71                           | 3.57                      | 7.38                        | 2.30                                    | 1.67                                       | 15.13                                      | 8.24                               | 5.74                          | 0.00                      | 0.00                     | 12.60                     | 81.34           |
| Perak                           | 298.17                          | 3.87                      | 1,124.40                    | 215.65                                  | 128.90                                     | 356.30                                     | 391.41                             | 103.06                        | 0.56                      | 64.80                    | 3.46                      | 2,690.58        |
| Selangor                        | 310.27                          | 31.56                     | 312.19                      | 16.32                                   | 235.71                                     | 956.26                                     | 0.00                               | 189.22                        | 37.90                     | 964.67                   | 245.74                    | 3,299.84        |
| W. Persekutuan/<br>F. Territory | 0.00                            | 0.00                      | 0.00                        | 0.00                                    | 0.00                                       | 0.00                                       | 0.00                               | 0.00                          | 0.00                      | 0.00                     | 0.00                      | 0.00            |
| N. Sembilan                     | 398.90                          | 35.94                     | 378.18                      | 81.91                                   | 168.71                                     | 122.55                                     | 34.89                              | 20.68                         | 0.38                      | 71.93                    | 7.62                      | 1,321.69        |
| Melaka/Malacca                  | 245.17                          | 15.33                     | 75.26                       | 28.11                                   | 33.01                                      | 93.37                                      | 71.17                              | 106.83                        | 20.26                     | 30.78                    | 27.36                     | 746.65          |
| Johor/Johore                    | 122.08                          | 51.11                     | 90.04                       | 52.20                                   | 75.40                                      | 29.68                                      | 575.88                             | 27.12                         | 33.57                     | 78.66                    | 257.22                    | 1,392.96        |
| Pahang                          | 346.88                          | 118.89                    | 250.38                      | 47.70                                   | 38.35                                      | 284.90                                     | 10.34                              | 10.70                         | 41.76                     | 39.70                    | 47.37                     | 1,236.97        |
| Terengganu                      | 33.66                           | 11.94                     | 13.91                       | 10.15                                   | 2.08                                       | 42.45                                      | 0.00                               | 24.82                         | 4.78                      | 21.72                    | 18.73                     | 184.24          |
| Kelantan                        | 126.40                          | 79.38                     | 115.11                      | 47.85                                   | 27.90                                      | 86.44                                      | 0.00                               | 134.59                        | 6.41                      | 105.56                   | 1.93                      | 731.57          |
| Sarawak                         | 150.25                          | 93.33                     | 70.35                       | 13.80                                   | 0.76                                       | 1.68                                       | 0.00                               | 0.00                          | 75.69                     | 27.72                    | 114.41                    | 547.99          |
| Sabah                           | 6,500.00                        | 6,600.00                  | 840.00                      | 670.00                                  | 0.00                                       | 9,000.00                                   | 0.00                               | 0.00                          | 0.00                      | 0.00                     | 1,390.00                  | 25,000.00       |
| Jumlah/Total:                   | 8,676.95                        | 17,098.14                 | 3,332.22                    | 1,221.03                                | 832.71                                     | 11,103.71                                  | 1,091.93                           | 693.13                        | 228.21                    | 1,527.36                 | 2,142.66                  | 37,948.05       |

Nota : Pelbagai - termasuk ikan-ikan Ketutu, Haruan, Baung dan Sepat Siam.

Note : Miscellaneous - Includes Goby, Snake Head, River Catfish and Snakeskin Gouramy.

MALAYSIA  
 ANGARAN NILAI RUNCIT HASIL DARI KOLAM DAN BEKAS LOMBONG AIRTAWAR MENGIKUT NEGERI DAN SPESIES, 1988  
 ESTIMATED RETAIL VALUE OF PRODUCTIONS FROM FRESHWATER PONDS AND EX-MINING POOLS  
 BY STATE AND SPECIES, 1988  
 (Nilai dalam M\$ '000/Value in M\$ '000)

JADUAL (TABLE) 15.5

| Negeri<br>State                 | Lampam Jawa<br>Javanese<br>Carp | Lee Koh<br>Common<br>Carp | Kap<br>Rumput<br>Grass Carp | Kap Kepala<br>Besar<br>Big Head<br>Carp | Udang Galah<br>Giant Fresh-<br>water Prawn | Tilapia<br>Nilotika<br>Tilapia<br>Nilotika | Tilapia<br>Merah<br>Red<br>Tilapia | Keli<br>Freshwater<br>Catfish | Patin<br>River<br>Catfish | Jelawat<br>River<br>Carp | Pelbagai<br>Miscellaneous | Jumlah<br>Total |
|---------------------------------|---------------------------------|---------------------------|-----------------------------|-----------------------------------------|--------------------------------------------|--------------------------------------------|------------------------------------|-------------------------------|---------------------------|--------------------------|---------------------------|-----------------|
| Perlis                          | 1.22                            | 1.74                      | 2.60                        | 4.52                                    | 87.55                                      | 19.07                                      | 0.00                               | 7.26                          | 0.00                      | 0.00                     | 4.54                      | 128.50          |
| Kedah                           | 146.07                          | 69.13                     | 65.59                       | 42.13                                   | 46.34                                      | 108.23                                     | 0.00                               | 75.59                         | 8.28                      | 188.36                   | 17.66                     | 767.38          |
| P. Pinang/Penang                | 30.37                           | 5.66                      | 9.48                        | 2.59                                    | 1.87                                       | 19.89                                      | 9.67                               | 9.01                          | 0.00                      | 0.00                     | 13.23                     | 101.77          |
| Perak                           | 450.80                          | 6.08                      | 1,605.09                    | 394.47                                  | 165.86                                     | 573.62                                     | 606.69                             | 119.41                        | 0.79                      | 83.19                    | 4.95                      | 4,010.95        |
| Selangor                        | 357.10                          | 46.00                     | 492.57                      | 34.64                                   | 320.96                                     | 1,333.06                                   | 0.00                               | 233.13                        | 57.33                     | 1,373.51                 | 357.25                    | 4,605.55        |
| W. Persekutuan/<br>F. Territory | 0.00                            | 0.00                      | 0.00                        | 0.00                                    | 0.00                                       | 0.00                                       | 0.00                               | 0.00                          | 0.00                      | 0.00                     | 0.00                      | 0.00            |
| N. Sembilan                     | 625.34                          | 50.24                     | 552.82                      | 153.58                                  | 220.05                                     | 201.47                                     | 58.15                              | 28.44                         | 0.65                      | 104.02                   | 11.26                     | 2,006.02        |
| Melaka/Malacca                  | 317.03                          | 19.17                     | 113.72                      | 55.04                                   | 39.55                                      | 121.12                                     | 31.26                              | 137.42                        | 32.45                     | 39.71                    | 27.56                     | 934.03          |
| Johor/Johore                    | 170.84                          | 71.87                     | 122.51                      | 72.27                                   | 88.81                                      | 40.29                                      | 735.02                             | 39.10                         | 45.46                     | 87.06                    | 361.39                    | 1,834.62        |
| Pahang                          | 482.38                          | 161.30                    | 303.24                      | 83.00                                   | 41.77                                      | 443.63                                     | 12.29                              | 11.77                         | 76.10                     | 44.47                    | 51.16                     | 1,711.11        |
| Terengganu                      | 49.82                           | 17.83                     | 22.47                       | 13.59                                   | 2.55                                       | 62.78                                      | 0.00                               | 36.02                         | 10.13                     | 55.61                    | 25.37                     | 296.17          |
| Kelantan                        | 150.74                          | 84.15                     | 125.35                      | 59.06                                   | 32.79                                      | 96.17                                      | 0.00                               | 168.41                        | 8.10                      | 119.89                   | 2.58                      | 847.24          |
| Sarawak                         | 180.95                          | 107.02                    | 84.42                       | 16.56                                   | 0.83                                       | 2.05                                       | 0.00                               | 0.00                          | 85.48                     | 29.70                    | 132.16                    | 639.17          |
| Sabah                           | 7,146.31                        | 7,265.20                  | 624.00                      | 737.52                                  | 0.00                                       | 9,889.20                                   | 0.00                               | 0.00                          | 0.00                      | 0.00                     | 1,530.58                  | 27,192.81       |
| Jumlah/Total:                   | 10,108.97                       | 7,905.39                  | 4,123.86                    | 1,668.97                                | 1,048.93                                   | 12,910.58                                  | 1,453.08                           | 865.56                        | 324.77                    | 2,125.52                 | 2,539.69                  | 45,075.32       |

Nota : Pelbagai - termasuk ikan-ikan Ketutu, Haruan, Baung dan Sepat Siam.

Note : Miscellaneous - Includes Goby, Snake Head, River Catfish and Snakeskin Gouramy.

## MALAYSIA

JADUAL (TABLE) 16.1

BILANGAN DAN LUAS SANGKAR AIRTAWAR YANG DIUSAHAKAN SERTA  
 BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1988  
 NUMBER AND AREA OF FRESHWATER CAGES AND NUMBER OF CULTURISTS  
 AND STATE, 1988

| Negeri<br>State                 | Sangkar Airtawar<br>Freshwater Cages |                                    | Bilangan Penternak Ikan<br>No. Of Culturists |                 |                 |                     |                 |
|---------------------------------|--------------------------------------|------------------------------------|----------------------------------------------|-----------------|-----------------|---------------------|-----------------|
|                                 | Bilangan<br>Number                   | Luas (m2)<br>Area In<br>Sq. Metres | Melayu<br>Malay                              | Cina<br>Chinese | India<br>Indian | Lain-lain<br>Others | Jumlah<br>Total |
| Perlis                          | 0                                    | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| Kedah                           | 16                                   | 144.00                             | 1                                            | 0               | 0               | 1                   | 2               |
| P. Pinang/Penang                | 0                                    | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| Perak                           | 226                                  | 2,158.18                           | 12                                           | 0               | 0               | 0                   | 12              |
| Selangor                        | 474                                  | 7,316.00                           | 2                                            | 405             | 0               | 0                   | 407             |
| W. Persekutuan/<br>F. Territory | 0                                    | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| N. Sembilan                     | 72                                   | 648.00                             | 1                                            | 0               | 0               | 0                   | 1               |
| Melaka/Malacca                  | 64                                   | 2,090.32                           | 22                                           | 23              | 0               | 0                   | 45              |
| Johor/Johore                    | 12                                   | 103.62                             | 1                                            | 1               | 0               | 0                   | 2               |
| Pahang                          | 0                                    | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| Terengganu                      | 0                                    | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| Kelantan                        | 52                                   | 483.60                             | 11                                           | 2               | 0               | 0                   | 13              |
| Sarawak                         | 0                                    | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| Sabah                           | 0                                    | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| Jumlah/Total:                   | 916                                  | 12,943.72                          | 50                                           | 431             | 0               | 1                   | 482             |

MALAYSIA  
 ANGGARAN PENGELUARAN HASIL IKAN DARI SANGKAR AIRTAWAR MENGIKUT NEGERI DAN SPESIES IKAN, 1988  
 ESTIMATED FISH PRODUCTION FROM FRESHWATER CAGES BY STATE AND SPECIES, 1988  
 (Timbangan dalam Tan Metrik/Weight in Tonnes)

JADUAL (TABLE) 16.2

| Negeri                          | Lampam Jawa   | Lee Koh     | Kap Rumput | Kap Kepala Besar | Keli               | Tilapia Nilotika | Tilapia Merah | Jelawat    | Patin         | Pelbagai      | Jumlah |
|---------------------------------|---------------|-------------|------------|------------------|--------------------|------------------|---------------|------------|---------------|---------------|--------|
| State                           | Javanese Carp | Common Carp | Grass Carp | Big Head Carp    | Freshwater Catfish | Tilapia Nilotika | Red Tilapia   | River Carp | River Catfish | Miscellaneous | Total  |
| Perlis                          | 0.00          | 0.00        | 0.00       | 0.00             | 0.00               | 0.00             | 0.00          | 0.00       | 0.00          | 0.00          | 0.00   |
| Kedah                           | 0.00          | 0.00        | 0.00       | 0.00             | 0.00               | 0.00             | 0.00          | 0.00       | 0.00          | 0.00          | 0.00   |
| P. Pinang/Penang                | 0.00          | 0.00        | 0.00       | 0.00             | 0.00               | 0.00             | 0.00          | 0.00       | 0.00          | 0.00          | 0.00   |
| Perak                           | 0.58          | 0.00        | 1.06       | 0.03             | 0.00               | 0.50             | 0.11          | 0.40       | 0.88          | 0.35          | 3.91   |
| Selangor                        | 0.00          | 0.00        | 0.00       | 0.00             | 0.00               | 29.65            | 0.00          | 1.95       | 0.00          | 0.00          | 31.60  |
| W. Persekutuan/<br>F. Territory | 0.00          | 0.00        | 0.00       | 0.00             | 0.00               | 0.00             | 0.00          | 0.00       | 0.00          | 0.00          | 0.00   |
| N. Sembilan                     | 0.00          | 0.00        | 0.00       | 0.00             | 0.00               | 2.51             | 0.00          | 0.00       | 0.00          | 0.00          | 2.51   |
| Melaka/Malacca                  | 0.02          | 0.00        | 0.00       | 1.57             | 0.00               | 5.80             | 3.29          | 0.00       | 1.97          | 0.00          | 12.65  |
| Johor/Johore                    | 0.00          | 0.00        | 0.04       | 0.00             | 0.00               | 0.01             | 0.86          | 0.04       | 0.03          | 0.06          | 1.04   |
| Pahang                          | 0.00          | 0.00        | 0.00       | 0.00             | 0.00               | 0.00             | 0.00          | 0.00       | 0.00          | 0.00          | 0.00   |
| Terengganu                      | 0.00          | 0.00        | 0.00       | 0.00             | 0.00               | 0.00             | 0.00          | 0.00       | 0.00          | 0.00          | 0.00   |
| Kelantan                        | 0.40          | 0.06        | 0.08       | 0.05             | 0.00               | 0.13             | 0.02          | 0.00       | 0.00          | 0.03          | 0.77   |
| Sarawak                         | 0.00          | 0.00        | 0.00       | 0.00             | 0.00               | 0.00             | 0.00          | 0.00       | 0.00          | 0.00          | 0.00   |
| Sabah                           | 0.00          | 0.00        | 0.00       | 0.00             | 0.00               | 0.00             | 0.00          | 0.00       | 0.00          | 0.00          | 0.00   |
| Jumlah/Total:                   | 1.00          | 0.06        | 1.18       | 1.65             | 0.00               | 38.60            | 4.28          | 2.39       | 2.88          | 0.44          | 52.48  |

\* Pelbagai - Termasuk ikan-ikan Ketutu, Haruan, Baung dan Sepat Siam.  
 Miscellaneous - Includes Gobi, Snake Head, River Catfish and Snakeskin Gouramy.



MALAYSIA  
 ANGGARAN NILAI BORONG HASIL IKAN DARI SANGKAR AIRTAWAR  
 MENGIKUT NEGERI DAN SPESIES IKAN 1988  
 ESTIMATED WHOLESALE VALUE OF FISH PRODUCTION FROM FRESHWATER CAGES  
 BY STATE AND SPECIES, 1988  
 (Nilai dalam M\$ '000/Value in M\$ '000)

JADUAL (TABLE) 16.3

| Negeri<br>State                 | Lampam<br>Jawa<br>Javanese<br>Carp | Lee Koh<br>Common<br>Carp | Kap Rumpit<br>Grass Carp | Kap Kepala<br>Besar<br>Big Head<br>Carp | Keli<br>Freshwater<br>Catfish | Tilapia<br>Nilotika<br>Tilapia<br>Nilotika | Tilapia<br>Merah<br>Red<br>Tilapia | Jelawat<br>River<br>Carp | Patin<br>River<br>Catfish | Pelbagai<br>Miscellaneous<br>* | Jumlah<br>Total |
|---------------------------------|------------------------------------|---------------------------|--------------------------|-----------------------------------------|-------------------------------|--------------------------------------------|------------------------------------|--------------------------|---------------------------|--------------------------------|-----------------|
| Perlis                          | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.06                      | 0.00                           | 0.00            |
| Kedah                           | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| P. Pinang/Penang                | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| Perak                           | 1.46                               | 0.00                      | 2.85                     | 0.04                                    | 0.00                          | 1.21                                       | 0.37                               | 3.58                     | 2.86                      | 0.77                           | 13.14           |
| Selangor                        | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 89.54                                      | 0.00                               | 14.08                    | 0.00                      | 0.00                           | 103.62          |
| W. Persekutuan/<br>F. Territory | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| N. Sembilan                     | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 7.40                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 7.40            |
| Melaka/Malacca                  | 0.06                               | 0.00                      | 0.00                     | 3.39                                    | 0.00                          | 18.15                                      | 10.56                              | 0.00                     | 5.54                      | 0.00                           | 37.70           |
| Johor/Johore                    | 0.00                               | 0.00                      | 0.15                     | 0.00                                    | 0.00                          | 0.03                                       | 5.63                               | 0.27                     | 0.11                      | 0.29                           | 6.48            |
| Pahang                          | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| Terengganu                      | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| Kelantan                        | 1.60                               | 0.27                      | 0.36                     | 0.18                                    | 0.00                          | 0.52                                       | 0.09                               | 0.00                     | 0.00                      | 0.08                           | 3.10            |
| Sarawak                         | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| Sabah                           | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| Jumlah/Total:                   | 3.12                               | 0.27                      | 3.36                     | 3.61                                    | 0.00                          | 116.85                                     | 16.65                              | 17.93                    | 8.51                      | 1.14                           | 171.44          |

\* Pelbagai - Termasuk ikan-ikan Ketutu, Haruan, Baung dan Sepat Siam.  
 Miscellaneous - Includes Goby, Snake Head and River Catfish and Snakeskin Gouramy.

MALAYSIA  
 ANGGARAN NILAI RUNCIT HASIL IKAN DARI SANGKAR AIRTAWAR MENGIKUT NEGERI DAN SPESIES IKAN, 1988  
 ESTIMATED RETAIL VALUE OF FISH PRODUCTION FROM FRESHWATER CAGES BY STATE AND SPECIES, 1988  
 (Nilai dalam M\$ '000/Value in M\$ '000)

JADUAL (TABLE) 16.4

| Negeri<br>State                 | Lampam<br>Jawa<br>Javanese<br>Carp | Lee Koh<br>Common<br>Carp | Kap Rumput<br>Grass Carp | Kap Kepala<br>Besar<br>Big Head<br>Carp | Keli<br>Freshwater<br>Catfish | Tilapia<br>Nilotika<br>Tilapia<br>Nilotika | Tilapia<br>Merah<br>Red<br>Tilapia | Jelawat<br>River<br>Carp | Patin<br>River<br>Catfish | Pelbagai<br>Miscellaneous<br>* | Jumlah<br>Total |
|---------------------------------|------------------------------------|---------------------------|--------------------------|-----------------------------------------|-------------------------------|--------------------------------------------|------------------------------------|--------------------------|---------------------------|--------------------------------|-----------------|
| Perlis                          | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| Kedah                           | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| P. Pinang/Penang                | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| Perak                           | 2.21                               | 0.00                      | 4.07                     | 0.07                                    | 0.00                          | 1.94                                       | 0.58                               | 4.60                     | 4.06                      | 1.10                           | 18.63           |
| Selangor                        | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 124.83                                     | 0.00                               | 20.05                    | 0.00                      | 0.00                           | 144.88          |
| W. Persekutuan/<br>F. Territory | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| N. Sembilan                     | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 12.17                                      | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 12.17           |
| Melaka/Malacca                  | 0.08                               | 0.00                      | 0.00                     | 6.64                                    | 0.00                          | 23.55                                      | 14.51                              | 0.00                     | 8.87                      | 0.00                           | 53.65           |
| Johor/Johore                    | 0.00                               | 0.00                      | 0.20                     | 0.00                                    | 0.00                          | 0.04                                       | 7.19                               | 0.30                     | 0.14                      | 0.40                           | 8.27            |
| Pahang                          | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| N. Sembilan                     | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| Kelantan                        | 1.91                               | 0.29                      | 0.39                     | 0.22                                    | 0.00                          | 0.58                                       | 0.10                               | 0.00                     | 0.00                      | 0.10                           | 3.59            |
| Sarawak                         | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| Sabah                           | 0.00                               | 0.00                      | 0.00                     | 0.00                                    | 0.00                          | 0.00                                       | 0.00                               | 0.00                     | 0.00                      | 0.00                           | 0.00            |
| Jumlah/Total:                   | 4.20                               | 0.29                      | 4.66                     | 6.93                                    | 0.00                          | 163.11                                     | 22.38                              | 24.95                    | 13.07                     | 1.60                           | 241.19          |

\* Pelbagai - Termasuk ikan-ikan Ketutu, Haruan, Baung dan Sepat Siam.  
 Miscellaneous - Includes Goby, Snake Head, River Catfish and Snakeskin Gouramy.

MALAYSIA  
 BILANGAN DAN LUAS KOLAM BINAAN AIRPAYAU YANG DIUSAHAKAN SERTA  
 BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1988  
 NUMBER AND ACREAGE OF BRACKISHWATER PONDS AND NUMBER OF  
 CULTURISTS BY RACE AND STATE, 1988

| Negeri<br>State                 | Kolam Airpayau<br>Brackishwater Ponds |                              | Bilangan Penternak Ikan<br>Number Of Culturists |         |        |           |        |
|---------------------------------|---------------------------------------|------------------------------|-------------------------------------------------|---------|--------|-----------|--------|
|                                 | Bilangan<br>Number                    | Luas (ha)<br>Acreage<br>(ha) | Melayu                                          | Cina    | India  | Lain-Lain | Jumlah |
|                                 |                                       |                              | Malay                                           | Chinese | Indian | Others    | Total  |
| Perlis                          | 0                                     | 0.00                         | 0                                               | 0       | 0      | 0         | 0      |
| Kedah                           | 52                                    | 23.47                        | 13                                              | 3       | 1      | 4         | 21     |
| P. Pinang/Penang                | 4                                     | 1.63                         | 3                                               | 1       | 0      | 0         | 4      |
| Perak                           | 95                                    | 38.89                        | 5                                               | 10      | 0      | 6         | 21     |
| Selangor                        | 75                                    | 16.36                        | 19                                              | 9       | 0      | 1         | 29     |
| W. Persekutuan/<br>F. Territory | 0                                     | 0.00                         | 0                                               | 0       | 0      | 0         | 0      |
| N. Sembilan                     | 0                                     | 0.00                         | 0                                               | 0       | 0      | 0         | 0      |
| Melaka/Malacca                  | 4                                     | 1.54                         | 1                                               | 3       | 0      | 0         | 4      |
| Johor/Johore                    | 423                                   | 516.97                       | 17                                              | 37      | 0      | 15        | 69     |
| Pahang                          | 16                                    | 3.84                         | 13                                              | 0       | 0      | 0         | 13     |
| Terengganu                      | 20                                    | 5.62                         | 15                                              | 0       | 0      | 0         | 15     |
| Kelantan                        | 61                                    | 8.30                         | 41                                              | 3       | 0      | 0         | 44     |
| Sarawak                         | 0                                     | 0.00                         | 0                                               | 0       | 0      | 0         | 0      |
| Sabah                           | 359                                   | 300.00                       | 0                                               | 0       | 0      | 62        | 62     |
| Jumlah/Total:                   | 1109                                  | 916.62                       | 127                                             | 66      | 1      | 88        | 282    |

MALAYSIA  
 ANGGAHAN PENGELUARAN HASIL IKAN DARI KOLAM AIRPAYAU/MASIN  
 MENGIKUT NEGERI DAN SPESIES IKAN, 1988  
 ESTIMATED FISH PRODUCTION FROM BRACKISHWATER/MARINE PONDS BY STATE AND SPECIES, 1988  
 (Timbangan dalam Tan Metrik/Weight in Tonnes)

JADUAL (TABLE) 17.2

| Negeri<br>State                 | Siakap<br>Barramundi | Kerapu<br>Grouper | Jenahak<br>Mangrove<br>Snapper | Udang Putih<br>Banana Prawn | Udang Harimau<br>Tiger Prawn | Ketam<br>Mud Crab | Pelbagai<br>Miscellaneous<br>** | Jumlah<br>Total |
|---------------------------------|----------------------|-------------------|--------------------------------|-----------------------------|------------------------------|-------------------|---------------------------------|-----------------|
| Perlis                          | 0.00                 | 0.00              | 0.00                           | 0.00                        | 0.00                         | 0.00              | 0.00                            | 0.00            |
| Kedah                           | 0.00                 | 0.26              | 0.00                           | 0.00                        | 3.19                         | 0.00              | 0.00                            | 3.45            |
| P. Pinang/Penang                | 0.00                 | 0.00              | 0.00                           | 0.00                        | 0.00                         | 0.00              | 0.00                            | 0.00            |
| Perak                           | 0.00                 | 0.00              | 0.00                           | 0.00                        | 43.61                        | 0.00              | 0.00                            | 43.61           |
| Selangor                        | 1.50                 | 0.00              | 0.00                           | 1.93                        | 28.28                        | 0.27              | 0.00                            | 31.98           |
| W. Persekutuan/<br>F. Territory | 0.00                 | 0.00              | 0.00                           | 0.00                        | 0.00                         | 0.00              | 0.00                            | 0.00            |
| N. Sembilan                     | 0.00                 | 0.00              | 0.00                           | 0.00                        | 0.00                         | 0.00              | 0.00                            | 0.00            |
| Melaka/Malacca                  | 3.80                 | 0.00              | 0.00                           | 0.00                        | 0.00                         | 0.00              | 0.00                            | 3.80            |
| Johor/Johore                    | 2.34                 | 0.00              | 0.00                           | 150.31                      | 673.50                       | 46.73             | 0.18                            | 873.06          |
| Pahang                          | 0.00                 | 0.00              | 0.00                           | 0.00                        | 0.00                         | 0.00              | 0.00                            | 0.00            |
| Terengganu                      | 1.93                 | 0.00              | 0.00                           | 0.00                        | 1.61                         | 1.60              | 0.01                            | 5.15            |
| Kelantan                        | 1.17                 | 0.00              | 0.00                           | 0.00                        | 1.68                         | 0.00              | 0.00                            | 2.85            |
| Sarawak                         | 0.00                 | 0.00              | 0.00                           | 0.00                        | 0.00                         | 0.00              | 0.00                            | 0.00            |
| Sabah                           | 0.00                 | 0.00              | 0.00                           | 0.00                        | 350.00                       | 0.00              | 0.00                            | 350.00          |
| Jumlah/Total:                   | 10.74                | 0.26              | 0.00                           | 152.24                      | 1,101.87                     | 48.60             | 0.19                            | 1,313.90        |

\*\* Pelbagai - Termasuk ikan-ikan seperti Tanda, Dengkis, Cermin dan Talang.

\*\* Miscellaneous - Includes Snapper, Rabbitfish and Horse Mackerel and Queenfish.

MALAYSIA  
 ANGGARAN NILAI BORONG HASIL IKAN DARI KOLAM AIRPAYAU/MASIN  
 MENGIKUT NEGERI DAN SPESIES IKAN, 1988  
 ESTIMATED WHOLESALE VALUE OF FISH PRODUCTION FROM BRACKISHWATER/MARINE PONDS  
 BY STATE AND SPECIES, 1988  
 (Nilai dalam M\$ '000/Value in M\$ '000)

JADUAL (TABLE) 17.3

| Negeri<br>State                 | Siakap<br>Barramundi | Kerapu<br>Grouper | Jenahak<br>Mangrove<br>Snapper | Udang<br>Harimau<br>Tiger Prawn | Udang<br>Putih<br>Banana<br>Prawn | Ketam<br>Mud Crab | Pelbagai<br>Miscellaneous<br>** | Jumlah<br>Total |
|---------------------------------|----------------------|-------------------|--------------------------------|---------------------------------|-----------------------------------|-------------------|---------------------------------|-----------------|
| Perlis                          | 0.00                 | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 0.00            |
| Kedah                           | 0.00                 | 4.37              | 0.00                           | 56.14                           | 0.00                              | 0.00              | 0.00                            | 60.51           |
| P. Pinang/Penang                | 0.00                 | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 0.00            |
| Perak                           | 0.00                 | 0.00              | 0.00                           | 846.91                          | 0.00                              | 0.00              | 0.00                            | 846.91          |
| Selangor                        | 12.33                | 0.00              | 0.00                           | 577.76                          | 48.25                             | 1.91              | 0.00                            | 640.25          |
| W. Persekutuan/<br>F. Territory | 0.00                 | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 0.00            |
| N. Sembilan                     | 0.00                 | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 0.00            |
| Melaka/Malacca                  | 28.50                | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 28.50           |
| Johor/Johore                    | 23.47                | 0.00              | 0.00                           | 12,459.75                       | 3,194.09                          | 261.22            | 1.42                            | 15,939.95       |
| Pahang                          | 0.00                 | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 0.00            |
| Terengganu                      | 13.51                | 0.00              | 0.00                           | 34.62                           | 0.00                              | 11.20             | 0.05                            | 59.38           |
| Kelantan                        | 9.13                 | 0.00              | 0.00                           | 39.48                           | 0.00                              | 0.00              | 0.00                            | 48.61           |
| Sarawak                         | 0.00                 | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 0.00            |
| Sabah                           | 0.00                 | 0.00              | 0.00                           | 6,000.00                        | 0.00                              | 0.00              | 0.00                            | 6,000.00        |
| Jumlah/Total:                   | 86.94                | 4.37              | 0.00                           | 20,014.66                       | 3,242.34                          | 274.33            | 1.47                            | 23,624.11       |

Nota \*\* Pelbagai - Termasuk ikan-ikan Tanda, Dengkis, Cermin dan Talang  
 Note \*\* Miscellaneous - Includes Snapper, Rabbit fish, Horse Mackerel and Queenfish.

MALAYSIA  
 ANGGARAN NILAI RUNCIT HASIL IKAN DARI KOLAM AIRPAYAU/MASIN  
 MENGIKUT NEGERI DAN SPESIES IKAN, 1988  
 ESTIMATED RETAIL VALUE OF FISH PRODUCTION FROM BRACKISHWATER/MARINE PONDS  
 BY STATE AND SPECIES, 1988  
 (Nilai dalam M\$ '000/Value in M\$ '000)

JADUAL (TABLE) 17.4

| Negeri<br>State                 | Siakap<br>Barramundi | Kerapu<br>Grouper | Jenahak<br>Mangrove<br>Snapper | Udang<br>Harimau<br>Tiger Prawn | Udang<br>Putih<br>Banana<br>Prawn | Ketam<br>Mud Crab | Pelbagai<br>Miscellaneous<br>** | Jumlah<br>Total |
|---------------------------------|----------------------|-------------------|--------------------------------|---------------------------------|-----------------------------------|-------------------|---------------------------------|-----------------|
| Perlis                          | 0.00                 | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 0.00            |
| Kedah                           | 0.00                 | 4.49              | 0.00                           | 60.61                           | 0.00                              | 0.00              | 0.00                            | 65.10           |
| P. Pinang/Penang                | 0.00                 | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 0.00            |
| Perak                           | 0.00                 | 0.00              | 0.00                           | 1,090.25                        | 0.00                              | 0.00              | 0.00                            | 1,090.25        |
| Selangor                        | 14.34                | 0.00              | 0.00                           | 775.44                          | 62.57                             | 2.27              | 0.00                            | 854.62          |
| W. Persekutuan/<br>F. Territory | 0.00                 | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 0.00            |
| N. Sembilan                     | 0.00                 | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 0.00            |
| Melaka/Malacca                  | 36.10                | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 36.10           |
| Johor/Johore                    | 29.55                | 0.00              | 0.00                           | 15,564.59                       | 3,856.95                          | 354.21            | 1.89                            | 19,807.19       |
| Pahang                          | 0.00                 | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 0.00            |
| Terengganu                      | 15.02                | 0.00              | 0.00                           | 14.64                           | 0.00                              | 12.00             | 0.06                            | 41.72           |
| Kelantan                        | 10.72                | 0.00              | 0.00                           | 42.00                           | 0.00                              | 0.00              | 0.00                            | 52.72           |
| Sarawak                         | 0.00                 | 0.00              | 0.00                           | 0.00                            | 0.00                              | 0.00              | 0.00                            | 0.00            |
| Sabah                           | 0.00                 | 0.00              | 0.00                           | 7,203.00                        | 0.00                              | 0.00              | 0.00                            | 7,203.00        |
| Jumlah/Total:                   | 105.73               | 4.49              | 0.00                           | 24,750.53                       | 3,919.52                          | 368.48            | 1.95                            | 29,150.70       |

Nota \*\* Pelbagai - Termasuk ikan-ikan Tanda, Dengkis, Cermin dan Talang  
 Note \*\* Miscellaneous - Includes Snapper, Rabbit fish, Horse Mackerel and Queenfish.

MALAYSIA  
BILANGAN DAN LUAS SANGKAR AIRPAYAU YANG DIUSAHAKAN SERTA  
BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1988  
NUMBER AND AREA OF BRACKISHWATER CAGES AND NUMBER OF CULTURISTS  
BY RACE AND STATE, 1988

JADUAL (TABLE) 18.1

| Negeri<br>State                 | Sangkar Airpayau<br>Brackishwater Cages |                                    | Bilangan Penternak Ikan<br>No. Of Culturists |                 |                 |                     |                 |
|---------------------------------|-----------------------------------------|------------------------------------|----------------------------------------------|-----------------|-----------------|---------------------|-----------------|
|                                 | Bilangan<br>Number                      | Luas (m2)<br>Area In<br>Sq. Metres | Melayu<br>Malay                              | Cina<br>Chinese | India<br>Indian | Lain-lain<br>Others | Jumlah<br>Total |
| Perlis                          | 0                                       | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| Kedah                           | 910                                     | 7,822.78                           | 34                                           | 5               | 0               | 5                   | 44              |
| P. Pinang/ Penang               | 5,432                                   | 33,173.36                          | 6                                            | 48              | 0               | 209                 | 263             |
| Perak                           | 3,511                                   | 32,647.05                          | 23                                           | 79              | 0               | 2                   | 104             |
| Selangor                        | 2,619                                   | 33,115.43                          | 0                                            | 88              | 0               | 0                   | 88              |
| W. Persekutuan/<br>F. Territory | 0                                       | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| N. Sembilan                     | 0                                       | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| Melaka/Malacca                  | 0                                       | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| Johor/Johore                    | 3590                                    | 41,707.85                          | 48                                           | 87              | 0               | 1                   | 136             |
| Pahang                          | 0                                       | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| Terengganu                      | 170                                     | 1,537.50                           | 23                                           | 1               | 0               | 0                   | 24              |
| Kelantan                        | 256                                     | 2,380.80                           | 21                                           | 0               | 0               | 0                   | 21              |
| Sarawak                         | 0                                       | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| Sabah                           | 0                                       | 0.00                               | 0                                            | 0               | 0               | 0                   | 0               |
| Jumlah/Total:                   | 16,488                                  | 152,384.77                         | 155                                          | 308             | 0               | 217                 | 680             |

MALAYSIA  
 ANGGARAN PENGELUARAN HASIL IKAN DARI SANGKAR AIRPAYAU/MASIN  
 MENGIKUT NEGERI DAN SPESIES IKAN, 1988  
 ESTIMATED FISH PRODUCTION FROM BRACKISHWATER/MARINE CAGES  
 BY STATE AND SPECIES, 1988  
 (Timbangan dalam Tan Metrik/Weight in Tonnes)

JADUAL (TABLE) 18.2

| Negeri<br>State                 | Siakap<br>Barramundi | Kerapu<br>Grouper | Jenahak<br>Mangrove<br>Snapper | Merah<br>Red Snapper | Udang<br>Harimau<br>Tiger Prawn | Ketam<br>Mud Crab | Pelbagai<br>Miscellaneous<br>** | Jumlah<br>Total |
|---------------------------------|----------------------|-------------------|--------------------------------|----------------------|---------------------------------|-------------------|---------------------------------|-----------------|
| Perlis                          | 0.00                 | 0.00              | 0.00                           | 0.00                 | 0.00                            | 0.00              | 0.00                            | 0.00            |
| Kedah                           | 0.76                 | 5.41              | 1.11                           | 0.00                 | 0.00                            | 0.00              | 0.00                            | 7.28            |
| P. Pinang/Penang                | 355.94               | 88.60             | 106.17                         | 0.00                 | 0.06                            | 15.64             | 0.00                            | 566.41          |
| Perak                           | 27.69                | 19.85             | 2.69                           | 0.00                 | 0.98                            | 0.04              | 0.00                            | 51.25           |
| Selangor                        | 388.76               | 7.46              | 6.32                           | 0.00                 | 1.85                            | 19.03             | 0.00                            | 423.42          |
| W. Persekutuan/<br>F. Territory | 0.00                 | 0.00              | 0.00                           | 0.00                 | 0.00                            | 0.00              | 0.00                            | 0.00            |
| N. Sembilan                     | 0.00                 | 0.00              | 0.00                           | 0.00                 | 0.00                            | 0.00              | 0.00                            | 0.00            |
| Melaka/Malacca                  | 0.00                 | 0.00              | 0.00                           | 0.00                 | 0.00                            | 0.00              | 0.00                            | 0.00            |
| Johor/Johore                    | 481.07               | 6.34              | 6.87                           | 0.00                 | 0.00                            | 15.00             | 1.38                            | 510.66          |
| Pahang                          | 0.00                 | 0.00              | 0.00                           | 0.00                 | 0.00                            | 0.00              | 0.00                            | 0.00            |
| Terengganu                      | 0.24                 | 17.80             | 0.00                           | 0.00                 | 0.00                            | 0.00              | 0.00                            | 18.04           |
| Kelantan                        | 1.94                 | 0.27              | 0.01                           | 0.00                 | 0.00                            | 0.00              | 0.00                            | 2.22            |
| Sarawak                         | 0.00                 | 0.00              | 0.00                           | 0.00                 | 0.00                            | 0.00              | 0.00                            | 0.00            |
| Sabah                           | 0.00                 | 0.00              | 0.00                           | 0.00                 | 0.00                            | 0.00              | 0.00                            | 0.00            |
| Jumlah/Total:                   | 1,256.40             | 145.73            | 123.17                         | 0.00                 | 2.89                            | 49.71             | 1.38                            | 1,579.28        |

Nota \*\* : Termasuk ikan-ikan seperti Tanda, Dengkis, Cupak/Cermin dan Talang.

Note : Includes Snapper, Rabbit fish, Horse Mackerel and Queenfish.



MALAYSIA  
 ANGGARAN NILAI BORONG HASIL IKAN DARI SANGKAR AIRPAYAU/MASIN  
 MENGIKUT NEGERI DAN SPESIES IKAN, 1988  
 ESTIMATED WHOLESALE VALUE OF FISH PRODUCTION FROM BRACKISHWATER/MARINE CAGES  
 BY STATE AND SPECIES, 1988  
 ( Nilai dalam M\$ '000 / Value in M\$ '000 )

JADUAL (TABLE) 18.3

| Negeri                          | Siakap     | Kerapu   | Jenahak          | Udang Harimau | Ketam    | Pelbagai      | Merah       | Jumlah    |
|---------------------------------|------------|----------|------------------|---------------|----------|---------------|-------------|-----------|
| State                           | Barramundi | Grouper  | Mangrove Snapper | Tiger Prawn   | Mud Crab | Miscellaneous | Red Snapper | Total     |
| Perlis                          | 0.00       | 0.00     | 0.00             | 0.00          | 0.00     | 0.00          | 0.00        | 0.00      |
| Kedah                           | 6.46       | 90.89    | 6.66             | 0.00          | 0.00     | 0.00          | 0.00        | 104.01    |
| P. Pinang/Penang                | 3,381.43   | 1,838.45 | 1,038.34         | 1.05          | 108.39   | 0.00          | 0.00        | 6,367.66  |
| Perak                           | 231.77     | 350.75   | 21.44            | 19.03         | 0.28     | 0.00          | 0.00        | 623.27    |
| Selangor                        | 3,195.61   | 96.08    | 51.57            | 37.80         | 134.73   | 0.00          | 0.00        | 3,515.79  |
| W. Persekutuan/<br>F. Territory | 0.00       | 0.00     | 0.00             | 0.00          | 0.00     | 0.00          | 0.00        | 0.00      |
| N. Sembilan                     | 0.00       | 0.00     | 0.00             | 0.00          | 0.00     | 0.00          | 0.00        | 0.00      |
| Melaka/Malacca                  | 0.00       | 0.00     | 0.00             | 0.00          | 0.00     | 0.00          | 0.00        | 0.00      |
| Johor/Johore                    | 4825.13    | 117.29   | 67.46            | 0.00          | 83.85    | 10.90         | 0.00        | 5,104.63  |
| Pahang                          | 0.00       | 0.00     | 0.00             | 0.00          | 0.00     | 0.00          | 0.00        | 0.00      |
| Terengganu                      | 1.68       | 142.40   | 0.00             | 0.00          | 0.00     | 0.00          | 0.00        | 144.08    |
| Kelantan                        | 15.13      | 2.30     | 0.06             | 0.00          | 0.00     | 0.00          | 0.00        | 17.49     |
| Sarawak                         | 0.00       | 0.00     | 0.00             | 0.00          | 0.00     | 0.00          | 0.00        | 0.00      |
| Sabah                           | 0.00       | 0.00     | 0.00             | 0.00          | 0.00     | 0.00          | 0.00        | 0.00      |
| Jumlah/Total:                   | 11,657.21  | 2,638.16 | 1,185.53         | 57.88         | 327.25   | 10.90         | 0.00        | 15,876.93 |

Nota: Pelbagai - Termasuk Ikan-Ikan Tanda, Dengkis, Cermin dan Talang

Note: Miscellaneous - Includes Snapper, Rabbit Fish, Horse Mackerel and Queenfish

MALAYSIA  
 ANGGAHAN NILAI RUNCIT HASIL IKAN DARI SANGKAR AIRPAYAU/MASIN  
 MENGIKUT NEGERI DAN SPESIES IKAN, 1988  
 ESTIMATED RETAIL VALUE OF FISH PRODUCTION FROM BRACKISHWATER/MARINE CAGES  
 BY STATE AND SPECIES, 1988  
 (Nilai dalam M\$ '000 / Value in M\$ '000 )

JADUAL (TABLE) 18.4

| Negeri                          | Siakap     | Kerapu  | Jenahak          | Udang Harimau | Ketam    | Merah       | Pelbagai      | Jumlah   |
|---------------------------------|------------|---------|------------------|---------------|----------|-------------|---------------|----------|
| State                           | Barramundi | Grouper | Mangrove Snapper | Tiger Prawn   | Mud Crab | Red Snapper | Miscellaneous | Total    |
| Perlis                          | 0.00       | 0.00    | 0.00             | 0.00          | 0.00     | 0.00        | 0.00          | 0.00     |
| Kedah                           | 7.98       | 93.32   | 8.88             | 0.00          | 0.00     | 0.00        | 0.00          | 110.18   |
| P. Pinang/Penang                | 3666.18    | 1385.70 | 1126.46          | 1.20          | 113.39   | 0.00        | 0.00          | 6,292.93 |
| Perak                           | 276.90     | 367.23  | 26.90            | 24.50         | 0.30     | 0.00        | 0.00          | 695.83   |
| Selangor                        | 3716.55    | 98.85   | 58.02            | 50.73         | 160.04   | 0.00        | 0.00          | 4,084.19 |
| W. Persekutuan/<br>F. Territory | 0.00       | 0.00    | 0.00             | 0.00          | 0.00     | 0.00        | 0.00          | 0.00     |
| N. Sembilan                     | 0.00       | 0.00    | 0.00             | 0.00          | 0.00     | 0.00        | 0.00          | 0.00     |
| Melaka/Malacca                  | 0.00       | 0.00    | 0.00             | 0.00          | 0.00     | 0.00        | 0.00          | 0.00     |
| Johor/Johore                    | 6075.91    | 144.24  | 82.58            | 0.00          | 113.70   | 0.00        | 14.49         | 6,430.92 |
| Pahang                          | 0.00       | 0.00    | 0.00             | 0.00          | 0.00     | 0.00        | 0.00          | 0.00     |
| Terengganu                      | 1.87       | 166.25  | 0.00             | 0.00          | 0.00     | 0.00        | 0.00          | 168.12   |
| Kelantan                        | 17.77      | 2.70    | 0.06             | 0.00          | 0.00     | 0.00        | 0.00          | 20.53    |
| Sarawak                         | 0.00       | 0.00    | 0.00             | 0.00          | 0.00     | 0.00        | 0.00          | 0.00     |
| Sabah                           | 0.00       | 0.00    | 0.00             | 0.00          | 0.00     | 0.00        | 0.00          | 0.00     |
| Jumlah/Total:                   | 13763.16   | 2258.29 | 1302.90          | 76.43         | 387.43   | 0.00        | 14.49         | 17802.70 |

Nota: Pelbagai - Termasuk Ikan-Ikan Tanda, Dengkis, Cermin dan Talang

Note: Miscellaneous - Includes Snapper, Rabbit Fish, Horse Mackerel and Queenfish

MALAYSIA  
 BILANGAN PENTERNAK , KAWASAN DAN LUAS KAWASAN  
 TERNAKAN KERANG MENGIKUT NEGERI 1988  
 NUMBER OF CULTURISTS , AREA AND SIZE  
 OF COCKLE CULTURE BY STATE 1988

JADUAL (TABLE) 19.1

| Negeri<br>State              | Bilangan<br>Penternak<br>(No. of Culturist) | Bilangan<br>Kawasan<br>(No. of Area) | Luas Kawasan Tol<br>(ha)<br>Area<br>(ha) |
|------------------------------|---------------------------------------------|--------------------------------------|------------------------------------------|
| Perlis                       | 4                                           | 1                                    | 16.20                                    |
| Kedah                        | 2                                           | 2                                    | 52.43                                    |
| P. Pinang / Penang           | 1259                                        | 68                                   | 155.34                                   |
| Perak                        | 132                                         | 132                                  | 3044.53                                  |
| Selangor                     | 9                                           | 10                                   | 851.57                                   |
| W. Persekutuan/ F. Territory | 0                                           | 0                                    | 0.00                                     |
| N. Sembilan                  | 0                                           | 0                                    | 0.00                                     |
| Melaka/ Malacca              | 0                                           | 0                                    | 0.00                                     |
| Johor/Johore                 | 3                                           | 3                                    | 57.65                                    |
| Pahang                       | 0                                           | 0                                    | 0.00                                     |
| Terengganu                   | 0                                           | 0                                    | 0.00                                     |
| Kelantan                     | 0                                           | 0                                    | 0.00                                     |
| Sarawak                      | 0                                           | 0                                    | 0.00                                     |
| Sabah                        | 0                                           | 0                                    | 0.00                                     |
| Jumlah/Total                 | 1409                                        | 216                                  | 4177.72                                  |

MALAYSIA  
PENDARATAN KERANG DEWASA MENGIKUT BULAN DAN NEGERI 1988  
PRODUCTION OF COCKLES BY MONTH AND STATE 1988  
(TAN METRIK/TONNES)

JADUAL (TABLE) 19.2

| Negeri                          | Januari  | Februari | Mac      | April    | Mei      | Jun      | Julai    | Ogos     | September | Oktober  | November | Disember | Jumlah    |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|-----------|
| State                           | January  | February | March    | April    | May      | June     | July     | August   | September | October  | November | December | Total     |
| Perlis                          | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00      | 0.00     | 38.85    | 32.50    | 71.35     |
| Kedah                           | 24.08    | 0.00     | 0.00     | 67.68    | 0.00     | 64.56    | 0.00     | 0.00     | 34.86     | 52.08    | 35.00    | 9.52     | 287.78    |
| P. Pinang/Penang                | 1,106.84 | 581.75   | 581.75   | 681.75   | 483.53   | 928.52   | 520.18   | 510.54   | 530.49    | 0.00     | 1,651.00 | 520.50   | 8,096.85  |
| Perak                           | 1,452.45 | 2,301.50 | 1,228.95 | 1,633.50 | 1,671.90 | 2,178.54 | 1,668.00 | 1,828.38 | 2,010.95  | 1,796.56 | 1,431.89 | 1,442.32 | 20,644.94 |
| Selangor                        | 232.72   | 197.51   | 295.24   | 455.22   | 505.24   | 525.38   | 553.50   | 546.52   | 486.22    | 532.94   | 595.39   | 658.87   | 5,584.75  |
| W. Persekutuan/<br>F. Territory | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00      | 0.00     | 0.00     | 0.00     | 0.00      |
| N. Sembilan                     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00      | 0.00     | 0.00     | 0.00     | 0.00      |
| Melaka/Malacca                  | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00      | 0.00     | 0.00     | 0.00     | 0.00      |
| Johor/Johore                    | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 26.76    | 51.87    | 33.15     | 35.10    | 24.70    | 9.75     | 181.33    |
| Pahang                          | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00      | 0.00     | 0.00     | 0.00     | 0.00      |
| Terengganu                      | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00      | 0.00     | 0.00     | 0.00     | 0.00      |
| Kelantan                        | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00      | 0.00     | 0.00     | 0.00     | 0.00      |
| Sarawak                         | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00      | 0.00     | 0.00     | 0.00     | 0.00      |
| Sabah                           | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00      | 0.00     | 0.00     | 0.00     | 0.00      |
| Jumlah/Total:                   | 2,816.09 | 3,080.76 | 2,105.94 | 2,838.15 | 2,660.67 | 3,697.00 | 2,768.44 | 2,937.31 | 3,095.67  | 2,416.68 | 3,776.83 | 2,673.46 | 34,867.00 |

MALAYSIA  
PENDARATAN BENIH KERANG MENGIKUT BULAN DAN NEGERI 1988  
LANDINGS OF COCKLE SEEDS BY MONTH AND STATE 1988  
(TAN METRIK/TONNES)

JADUAL (TABLE) 19.3

| Negeri<br>State                 | Januari<br>January | Februari<br>February | Mac<br>March | April<br>April | Mei<br>May | Jun<br>June | Julai<br>July | Ogos<br>August | September<br>September | Oktober<br>October | November<br>November | Disember<br>December | Jumlah<br>Total |
|---------------------------------|--------------------|----------------------|--------------|----------------|------------|-------------|---------------|----------------|------------------------|--------------------|----------------------|----------------------|-----------------|
| Perlis                          | 0.00               | 0.00                 | 0.00         | 0.00           | 0.00       | 0.00        | 0.00          | 0.00           | 0.00                   | 0.00               | 0.00                 | 0.00                 | 0.00            |
| Kedah                           | 0.00               | 0.00                 | 0.00         | 0.00           | 0.00       | 0.00        | 0.00          | 0.00           | 0.00                   | 0.00               | 0.00                 | 0.00                 | 0.00            |
| P. Pinang/ Penang               | 54.00              | 0.00                 | 272.00       | 0.00           | 0.00       | 0.00        | 0.00          | 0.00           | 0.00                   | 0.00               | 0.00                 | 0.00                 | 326.00          |
| Perak                           | 0.00               | 0.00                 | 75.00        | 50.00          | 250.00     | 338.00      | 60.00         | 0.00           | 0.00                   | 0.00               | 0.00                 | 0.00                 | 773.00          |
| Selangor                        | 0.00               | 1,140.00             | 540.00       | 1,536.00       | 0.00       | 0.00        | 0.00          | 0.00           | 1,867.20               | 29.80              | 2,006.00             | 0.00                 | 7,119.00        |
| W. Persekutuan/<br>F. Territory | 0.00               | 0.00                 | 0.00         | 0.00           | 0.00       | 0.00        | 0.00          | 0.00           | 0.00                   | 0.00               | 0.00                 | 0.00                 | 0.00            |
| N. Sembilan                     | 0.00               | 0.00                 | 0.00         | 0.00           | 0.00       | 0.00        | 0.00          | 0.00           | 0.00                   | 0.00               | 0.00                 | 0.00                 | 0.00            |
| Melaka/Malacca                  | 0.00               | 0.00                 | 0.00         | 0.00           | 0.00       | 0.00        | 0.00          | 0.00           | 0.00                   | 0.00               | 0.00                 | 0.00                 | 0.00            |
| Johor/Johore                    | 0.00               | 0.00                 | 0.00         | 0.00           | 0.00       | 0.00        | 0.00          | 0.00           | 0.00                   | 0.00               | 0.00                 | 0.00                 | 0.00            |
| Pahang                          | 0.00               | 0.00                 | 0.00         | 0.00           | 0.00       | 0.00        | 0.00          | 0.00           | 0.00                   | 0.00               | 0.00                 | 0.00                 | 0.00            |
| Terengganu                      | 0.00               | 0.00                 | 0.00         | 0.00           | 0.00       | 0.00        | 0.00          | 0.00           | 0.00                   | 0.00               | 0.00                 | 0.00                 | 0.00            |
| Kelantan                        | 0.00               | 0.00                 | 0.00         | 0.00           | 0.00       | 0.00        | 0.00          | 0.00           | 0.00                   | 0.00               | 0.00                 | 0.00                 | 0.00            |
| Sarawak                         | 0.00               | 0.00                 | 0.00         | 0.00           | 0.00       | 0.00        | 0.00          | 0.00           | 0.00                   | 0.00               | 0.00                 | 0.00                 | 0.00            |
| Sabah                           | 0.00               | 0.00                 | 0.00         | 0.00           | 0.00       | 0.00        | 0.00          | 0.00           | 0.00                   | 0.00               | 0.00                 | 0.00                 | 0.00            |
| Jumlah/Total:                   | 54.00              | 1,140.00             | 887.00       | 1,586.00       | 250.00     | 338.00      | 60.00         | 0.00           | 1,867.20               | 29.80              | 2,006.00             | 0.00                 | 8,218.00        |

MALAYSIA  
BILANGAN PENTERNAK , KAWASAN DAN LUAS KAWASAN  
TERNAKAN SIPUT SUDU MENGIKUT NEGERI 1988  
NUMBER OF CULTURISTS , AREA AND SIZE  
OF MUSSELS CULTURE BY STATE 1988

JADUAL (TABLE) 20.1

| Negeri<br>State              | Bilangan<br>Penternak<br>(No. of Culturist) | Bilangan<br>Kawasan<br>(No. of Area) | Luas Kawasan Tol<br>( Meter persegi)<br>Area<br>( Sq.Metre ) |
|------------------------------|---------------------------------------------|--------------------------------------|--------------------------------------------------------------|
| Perlis                       | 0                                           | 0                                    | 0.00                                                         |
| Kedah                        | 0                                           | 0                                    | 0.00                                                         |
| P. Pinang / Penang           | 6                                           | 2                                    | 37.16                                                        |
| Perak                        | 11                                          | 4                                    | 803.26                                                       |
| Selangor                     | 22                                          | 22                                   | 1,078.00                                                     |
| W. Persekutuan/ F. Territory | 0                                           | 0                                    | 0.00                                                         |
| N. Sembilan                  | 3                                           | 3                                    | 469.45                                                       |
| Melaka/ Malacca              | 45                                          | 5                                    | 1,605.55                                                     |
| Johor/Johore                 | 47                                          | 6                                    | 21,527.78                                                    |
| Pahang                       | 0                                           | 0                                    | 0.00                                                         |
| Terengganu                   | 0                                           | 0                                    | 0.00                                                         |
| Kelantan                     | 0                                           | 0                                    | 0.00                                                         |
| Sarawak                      | 0                                           | 0                                    | 0.00                                                         |
| Sabah                        | 0                                           | 0                                    | 0.00                                                         |
| Jumlah/Total                 | 134                                         | 42                                   | 25,521.20                                                    |

MALAYSIA  
PENDARATAN SIPUT SUDU MENGIKUT BULAN DAN NEGERI 1988  
PRODUCTION OF MUSSELS BY MONTH AND STATE 1988  
(TAN METRIK/TONNES)

JADUAL (TABLE) 20.2

| Negeri                          | Januari | Februari | Mac    | April  | Mei    | Jun    | Julai  | Ogos   | September | Oktober | November | Disember | Jumlah   |
|---------------------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|----------|
| State                           | January | February | March  | April  | May    | June   | July   | August | September | October | November | December | Total    |
| Perlis                          | 0.00    | 0.00     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | 0.00    | 0.00     | 0.00     | 0.00     |
| Kedah                           | 0.00    | 0.00     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | 0.00    | 0.00     | 0.00     | 0.00     |
| P. Pinang/ Penang               | 0.00    | 0.00     | 0.00   | 0.00   | 0.00   | 0.00   | 0.70   | 0.49   | 0.00      | 0.00    | 0.00     | 0.00     | 1.19     |
| Perak                           | 0.55    | 1.04     | 5.27   | 5.98   | 5.32   | 6.46   | 5.00   | 5.00   | 7.71      | 6.13    | 6.15     | 5.67     | 60.28    |
| Selangor                        | 0.00    | 0.00     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.44      | 0.00    | 0.20     | 0.00     | 0.64     |
| W. Persekutuan/<br>F. Territory | 0.00    | 0.00     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | 0.00    | 0.00     | 0.00     | 0.00     |
| N. Sembilan                     | 0.00    | 0.00     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | 0.00    | 1.27     | 1.05     | 2.32     |
| Melaka/Malacca                  | 0.10    | 1.50     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.30   | 0.12      | 18.59   | 9.00     | 13.50    | 43.11    |
| Johor/Johore                    | 69.20   | 141.81   | 160.12 | 115.00 | 102.20 | 183.15 | 116.65 | 81.65  | 91.44     | 46.95   | 44.96    | 107.31   | 1,260.44 |
| Pahang                          | 0.00    | 0.00     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | 0.00    | 0.00     | 0.00     | 0.00     |
| Terengganu                      | 0.00    | 0.00     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | 0.00    | 0.00     | 0.00     | 0.00     |
| Kelantan                        | 0.00    | 0.00     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | 0.00    | 0.00     | 0.00     | 0.00     |
| Sarawak                         | 0.00    | 0.00     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | 0.00    | 0.00     | 0.00     | 0.00     |
| Sabah                           | 0.00    | 0.00     | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00      | 0.00    | 0.00     | 0.00     | 0.00     |
| Jumlah/Total:                   | 69.85   | 144.35   | 165.39 | 120.98 | 107.52 | 189.61 | 122.35 | 87.44  | 99.71     | 71.67   | 61.58    | 127.53   | 1,367.98 |

MALAYSIA  
PENDARATAN IKAN DARAT DARI PERAIRAN UMUM MENGIKUT BULAN DAN NEGERI 1988  
LANDINGS OF FRESHWATER FISH FROM PUBLIC WATERBODIES BY MONTH AND STATE 1988  
(TAN METRIK/TONNES)

JADUAL (TABLE) 20.3

| Negeri                          | Januari | Februari | Mac   | April | Mei   | Jun   | Julai | Ogos   | September | Oktober | November | Disember | Jumlah |
|---------------------------------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|--------|
| State                           | January | February | March | April | May   | June  | July  | August | September | October | November | December | Total  |
| Perlis                          | 0.00    | 0.00     | 0.00  | 0.17  | 0.00  | 0.00  | 0.00  | 0.00   | 0.12      | 0.00    | 0.00     | 0.28     | 0.57   |
| Kedah                           | 0.06    | 0.00     | 0.00  | 7.15  | 4.30  | 11.45 | 3.32  | 1.09   | 7.06      | 0.79    | 0.90     | 1.36     | 37.48  |
| P. Pinang/Penang                | 1.19    | 2.35     | 1.55  | 1.62  | 2.08  | 1.44  | 2.31  | 1.70   | 2.48      | 1.89    | 2.12     | 2.01     | 22.74  |
| Perak                           | 34.79   | 28.57    | 41.90 | 36.71 | 29.31 | 33.84 | 29.43 | 50.89  | 43.99     | 43.99   | 30.76    | 34.92    | 439.10 |
| Selangor                        | 0.00    | 0.00     | 0.00  | 0.00  | 0.00  | 10.40 | 2.43  | 4.18   | 19.52     | 12.41   | 12.57    | 10.64    | 72.15  |
| W. Persekutuan/<br>F. Territory | 0.00    | 0.00     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00      | 0.00    | 0.00     | 0.00     | 0.00   |
| N. Sembilan                     | 0.62    | 0.88     | 0.76  | 0.34  | 0.37  | 2.18  | 3.20  | 4.69   | 3.04      | 9.09    | 8.21     | 9.00     | 42.38  |
| Melaka/Malacca                  | 1.71    | 1.48     | 1.62  | 1.83  | 1.76  | 1.93  | 0.88  | 0.67   | 0.69      | 0.76    | 0.60     | 0.61     | 14.54  |
| Johor/Johore                    | 14.37   | 12.12    | 13.75 | 14.12 | 9.67  | 7.78  | 7.34  | 6.26   | 7.83      | 7.19    | 9.80     | 10.64    | 120.87 |
| Pahang                          | 35.10   | 5.36     | 25.67 | 7.46  | 7.48  | 19.53 | 6.95  | 7.57   | 4.34      | 6.74    | 5.27     | 5.24     | 136.71 |
| Terengganu                      | 5.28    | 2.97     | 3.18  | 8.71  | 0.44  | 3.84  | 2.06  | 1.54   | 0.58      | 3.61    | 3.16     | 4.03     | 39.40  |
| Kelantan                        | 2.34    | 2.33     | 2.78  | 2.98  | 2.21  | 0.00  | 0.00  | 2.18   | 1.95      | 2.19    | 3.07     | 2.55     | 24.58  |
| Sarawak                         | 3.00    | 4.50     | 2.00  | 5.25  | 3.75  | 3.00  | 4.01  | 2.16   | 7.89      | 1.02    | 5.12     | 3.45     | 45.15  |
| Sabah                           | 0.00    | 0.00     | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00   | 0.00      | 0.00    | 0.00     | 0.00     | 0.00   |
| Jumlah/Total:                   | 98.46   | 60.56    | 93.21 | 86.34 | 61.37 | 95.39 | 61.93 | 82.93  | 99.49     | 89.68   | 81.58    | 84.73    | 995.67 |



MALAYSIA  
HARGA BORONG IKAN AIRTAWAR DI PASAR-PASAR UTAMA MENGIKUT  
NEGERI DAN SPESIES IKAN, 1988  
WHOLESALE PRICES OF FRESHWATER FISH AT MAJOR MARKETS  
BY STATE AND SPECIES, 1988  
(\$/Kg)

JADUAL (TABLE) 21.1

| Negeri<br>State                 | Lampam Jawa<br>Javanese Carp | Lee Koh<br>Common Carp | Kap Rumput<br>Grass Carp | Kap Kepala Besar<br>Big Head Carp | Tilapia Nilotika<br>Tilapia Nilotika | Tilapia Merah<br>Red Tilapia | Udang Galah<br>Giant Freshwater Prawn | Keli<br>Freshwater Catfish | Patin<br>River Catfish | Jelawat<br>River Carp | Pelbagai<br>Miscellaneous |
|---------------------------------|------------------------------|------------------------|--------------------------|-----------------------------------|--------------------------------------|------------------------------|---------------------------------------|----------------------------|------------------------|-----------------------|---------------------------|
| Perlis                          | 2.00                         | 2.00                   | 4.50                     | 2.80                              | 2.00                                 | 0.00                         | 15.00                                 | 3.50                       | 0.00                   | 0.00                  | 1.50                      |
| Kedah                           | 2.33                         | 2.55                   | 4.00                     | 2.20                              | 3.00                                 | 0.00                         | 12.75                                 | 3.10                       | 10.00                  | 12.43                 | 1.55                      |
| P. Pinang/Penang                | 3.10                         | 2.62                   | 3.00                     | 2.00                              | 3.05                                 | 4.50                         | 12.80                                 | 2.94                       | 4.00                   | 10.00                 | 3.00                      |
| Perak                           | 2.52                         | 2.65                   | 2.69                     | 1.23                              | 2.41                                 | 3.40                         | 11.16                                 | 4.00                       | 3.25                   | 8.95                  | 2.20                      |
| Selangor                        | 3.71                         | 4.00                   | 2.25                     | 1.30                              | 3.02                                 | 4.50                         | 11.75                                 | 3.62                       | 2.75                   | 7.22                  | 3.37                      |
| M. Persekutuan/<br>F. Territory | 0.00                         | 0.00                   | 0.00                     | 0.00                              | 0.00                                 | 0.00                         | 0.00                                  | 0.00                       | 0.00                   | 0.00                  | 0.00                      |
| N. Sembilan                     | 3.03                         | 3.04                   | 3.01                     | 2.16                              | 2.95                                 | 3.00                         | 11.50                                 | 4.00                       | 2.87                   | 4.84                  | 3.37                      |
| Melaka/Malacca                  | 2.90                         | 2.68                   | 3.15                     | 2.16                              | 3.13                                 | 3.21                         | 14.54                                 | 4.54                       | 2.81                   | 6.00                  | 3.97                      |
| Johor/Johore                    | 3.18                         | 3.20                   | 3.66                     | 3.25                              | 3.05                                 | 6.55                         | 16.25                                 | 3.42                       | 3.53                   | 6.74                  | 4.76                      |
| Pahang                          | 3.20                         | 3.00                   | 4.50                     | 2.50                              | 3.50                                 | 5.30                         | 11.80                                 | 5.00                       | 4.50                   | 5.00                  | 3.75                      |
| Terengganu                      | 3.00                         | 3.00                   | 3.25                     | 3.15                              | 2.86                                 | 0.00                         | 8.00                                  | 3.50                       | 2.50                   | 6.00                  | 3.10                      |
| Kelantan                        | 4.00                         | 4.50                   | 4.50                     | 3.50                              | 4.00                                 | 4.50                         | 10.00                                 | 3.90                       | 3.70                   | 7.00                  | 2.50                      |
| Sarawak                         | 4.70                         | 4.50                   | 5.00                     | 5.00                              | 3.00                                 | 0.00                         | 9.50                                  | 0.00                       | 5.90                   | 7.00                  | 4.90                      |
| Sabah                           | 5.29                         | 8.05                   | 7.00                     | 7.98                              | 5.48                                 | 0.00                         | 0.00                                  | 0.00                       | 0.00                   | 0.00                  | 6.75                      |
| Harga Bertimbang                | 3.17                         | 3.59                   | 2.98                     | 1.77                              | 2.92                                 | 4.90                         | 12.44                                 | 3.82                       | 4.71                   | 7.16                  | 4.38                      |

Nota: Pelbagai - Termasuk Ikan-Ikan Ketutu, Haruan, Baung dan Sepat Siam  
Note: Miscellaneous - Includes Goby, Snake Head, River Catfish and Snakeskin Gouramy

MALAYSIA  
HARGA RUNCIT IKAN AIRTAWAR DI PASAR-PASAR UTAMA MENGIKUT  
NEGERI DAN SPESIES IKAN, 1988  
RETAIL PRICES OF FRESHWATER FISH AT MAJOR MARKETS  
BY STATE AND SPECIES, 1988  
(\$/Kg)

JADUAL (TABLE) 21.2

| Negeri<br>State                 | Lampam Jawa<br>Javanese Carp | Lee Koh<br>Common Carp | Kap Rumput<br>Grass Carp | Kap Kepala<br>Besar<br>Big Head<br>Carp | Tilapia<br>Nilotika<br>Tilapia<br>Nilotika | Tilapia<br>Merah<br>Red Tilapia | Udang Galah<br>Giant Fresh-<br>water Prawn | Keli<br>Freshwater<br>Catfish | Patin<br>River<br>Catfish | Jelawat<br>River Carp | Pelbagai<br>Miscellaneous |
|---------------------------------|------------------------------|------------------------|--------------------------|-----------------------------------------|--------------------------------------------|---------------------------------|--------------------------------------------|-------------------------------|---------------------------|-----------------------|---------------------------|
| Perlis                          | 2.33                         | 2.85                   | 5.00                     | 3.50                                    | 2.70                                       | 0.00                            | 17.00                                      | 3.80                          | 0.00                      | 0.00                  | 1.83                      |
| Kedah                           | 2.85                         | 3.39                   | 4.98                     | 2.95                                    | 3.22                                       | 0.00                            | 13.75                                      | 3.68                          | 12.00                     | 19.22                 | 2.19                      |
| P. Pinang/Penang                | 3.81                         | 4.16                   | 3.85                     | 2.25                                    | 4.01                                       | 5.28                            | 14.35                                      | 4.62                          | 4.61                      | 11.44                 | 3.15                      |
| Perak                           | 3.81                         | 4.16                   | 3.84                     | 2.25                                    | 3.88                                       | 5.27                            | 14.36                                      | 4.63                          | 4.61                      | 11.49                 | 3.15                      |
| Selangor                        | 4.27                         | 5.83                   | 3.55                     | 2.76                                    | 4.21                                       | 4.50                            | 16.00                                      | 4.86                          | 4.16                      | 10.28                 | 4.47                      |
| W. Persekutuan/<br>F. Territory | 0.00                         | 0.00                   | 0.00                     | 0.00                                    | 0.00                                       | 0.00                            | 0.00                                       | 0.00                          | 0.00                      | 0.00                  | 0.00                      |
| N. Sembilan                     | 4.75                         | 4.25                   | 4.40                     | 4.05                                    | 4.85                                       | 5.00                            | 15.00                                      | 5.50                          | 5.00                      | 7.00                  | 4.98                      |
| Melaka/Malacca                  | 3.75                         | 3.35                   | 4.76                     | 4.23                                    | 4.06                                       | 4.41                            | 17.42                                      | 5.84                          | 4.50                      | 7.74                  | 4.00                      |
| Johor/Johore                    | 4.45                         | 4.50                   | 4.98                     | 4.50                                    | 4.14                                       | 8.36                            | 19.14                                      | 4.93                          | 4.78                      | 7.46                  | 6.68                      |
| Pahang                          | 4.45                         | 4.07                   | 5.45                     | 4.35                                    | 5.45                                       | 6.30                            | 12.85                                      | 5.50                          | 8.20                      | 5.60                  | 4.05                      |
| Terengganu                      | 4.44                         | 4.48                   | 5.25                     | 4.22                                    | 4.23                                       | 0.00                            | 9.80                                       | 5.08                          | 5.30                      | 15.36                 | 4.20                      |
| Kelantan                        | 4.77                         | 4.77                   | 4.90                     | 4.32                                    | 4.45                                       | 5.00                            | 11.75                                      | 4.88                          | 4.68                      | 7.95                  | 3.34                      |
| Sarawak                         | 5.66                         | 5.16                   | 6.00                     | 6.00                                    | 3.66                                       | 0.00                            | 10.33                                      | 0.00                          | 6.66                      | 7.50                  | 5.66                      |
| Sabah                           | 5.81                         | 8.86                   | 7.70                     | 8.78                                    | 6.03                                       | 0.00                            | 0.00                                       | 0.00                          | 0.00                      | 0.00                  | 7.43                      |
| Harga Bertimbang                | 4.28                         | 4.48                   | 4.11                     | 2.93                                    | 4.23                                       | 6.68                            | 15.38                                      | 4.86                          | 5.94                      | 9.56                  | 5.56                      |

Nota: Pelbagai - Termasuk Ikan-Ikan Ketutu, Haruan, Baung dan Sepat Siam  
Note: Miscellaneous - Includes Goby, Snake Head, River Catfish and Snakeskin Gouramy

MALAYSIA  
HARGA BORONG IKAN AIRPAYAU/MASIN DI PASAR-PASAR UTAMA MENGIKUT NEGERI DAN SPESIES IKAN, 1988  
WHOLESALE PRICES OF BRACKISHWATER/MARINE FISH AT MAJOR MARKETS BY STATE AND SPECIES, 1988.  
(\$/Kg)

JADUAL (TABLE) 21.3

| Negeri/State                    | Siakap<br>Barramundi | Kerapu<br>Grouper | Jenahak<br>Mangrove Snapper | Merah<br>Red Snapper | Udang Putih<br>Banana Prawn | Ketam<br>Mud Crab | Udang Harimau<br>Tiger Prawn | Kerang<br>Cockles | Kupang<br>Mussels | Pelbagai<br>Miscellaneous |
|---------------------------------|----------------------|-------------------|-----------------------------|----------------------|-----------------------------|-------------------|------------------------------|-------------------|-------------------|---------------------------|
| Perlis                          | 0.00                 | 0.00              | 0.00                        | 0.00                 | 0.00                        | 0.00              | 0.00                         | 0.25              | 0.00              | 0.00                      |
| Kedah                           | 8.50                 | 16.80             | 6.00                        | 0.00                 | 0.00                        | 0.00              | 17.60                        | 0.25              | 0.00              | 5.00                      |
| P. Pinang/Penang                | 9.50                 | 15.64             | 9.78                        | 0.00                 | 0.00                        | 6.93              | 17.60                        | 0.35              | 0.40              | 11.00                     |
| Perak                           | 8.37                 | 17.67             | 7.97                        | 0.00                 | 0.00                        | 7.00              | 19.42                        | 0.35              | 0.55              | 0.00                      |
| Selangor                        | 8.22                 | 12.88             | 8.16                        | 0.00                 | 25.00                       | 7.08              | 20.43                        | 0.24              | 0.70              | 0.00                      |
| W. Persekutuan/<br>F. Territory | 0.00                 | 0.00              | 0.00                        | 0.00                 | 0.00                        | 0.00              | 0.00                         | 0.00              | 0.00              | 0.00                      |
| N. Sembilan                     | 0.00                 | 0.00              | 0.00                        | 0.00                 | 0.00                        | 0.00              | 0.00                         | 0.00              | 0.80              | 0.00                      |
| Melaka/Malacca                  | 7.50                 | 0.00              | 0.00                        | 0.00                 | 0.00                        | 6.40              | 0.00                         | 0.00              | 0.50              | 0.00                      |
| Johor/Johore                    | 10.03                | 18.50             | 9.82                        | 0.00                 | 21.25                       | 5.59              | 18.50                        | 0.25              | 0.33              | 7.90                      |
| Pahang                          | 0.00                 | 0.00              | 0.00                        | 0.00                 | 0.00                        | 0.00              | 0.00                         | 0.00              | 0.00              | 0.00                      |
| Terengganu                      | 7.00                 | 8.00              | 0.00                        | 0.00                 | 0.00                        | 7.00              | 21.50                        | 0.00              | 0.00              | 5.00                      |
| Kelantan                        | 7.80                 | 8.50              | 5.50                        | 0.00                 | 0.00                        | 0.00              | 23.50                        | 0.00              | 0.00              | 0.00                      |
| Sarawak                         | 0.00                 | 0.00              | 0.00                        | 0.00                 | 0.00                        | 0.00              | 0.00                         | 0.00              | 0.00              | 0.00                      |
| Sabah                           | 0.00                 | 0.00              | 0.00                        | 0.00                 | 0.00                        | 0.00              | 17.15                        | 0.00              | 0.00              | 0.00                      |
| Harga Bertimbang                | 9.27                 | 15.00             | 9.63                        | 0.00                 | 21.30                       | 6.12              | 18.65                        | 0.33              | 0.35              | 7.88                      |

\* Pelbagai - termasuk ikan-ikan Tanda, Dengkis, Cupak/Cermin dan Talang.  
Miscellaneous - includes Snapper, Rabbit fish, Horse Mackerel and Queenfish.

MALAYSIA  
HARGA RUNCIT IKAN AIRPAYAU/MASIN DI PASAR-PASAR UTAMA MENGIKUT NEGERI DAN SPESIES IKAN, 1988.  
RETAIL PRICES OF BRACKISHWATER/MARINE FISH AT MAJOR MARKETS BY STATE AND SPECIES, 1988  
(\$/Kg)

JADUAL (TABLE) 21.4

| Negeri/State                        | Jenis Ikan/Species   |                   |                             |                      |                             |                   |                              |                   |                   |                           |
|-------------------------------------|----------------------|-------------------|-----------------------------|----------------------|-----------------------------|-------------------|------------------------------|-------------------|-------------------|---------------------------|
|                                     | Siakap<br>Barramundi | Kerapu<br>Grouper | Jenahak<br>Mangrove Snapper | Merah<br>Red Snapper | Udang Putih<br>Banana Prawn | Ketam<br>Mud Crab | Udang Harimau<br>Tiger Prawn | Kerang<br>Cockles | Kupang<br>Mussels | Pelbagai<br>Miscellaneous |
| Perlis                              | 0.00                 | 0.00              | 0.00                        | 0.00                 | 0.00                        | 0.00              | 0.00                         | 0.50              | 0.00              | 0.00                      |
| Kedah                               | 10.50                | 17.25             | 8.00                        | 0.00                 | 0.00                        | 0.00              | 19.00                        | 0.50              | 0.00              | 5.50                      |
| P. Pinang/Penang                    | 10.30                | 20.75             | 10.61                       | 0.00                 | 0.00                        | 7.25              | 20.00                        | 0.65              | 0.60              | 10.00                     |
| Perak                               | 10.00                | 18.50             | 10.00                       | 0.00                 | 0.00                        | 7.50              | 25.00                        | 0.60              | 1.00              | 0.00                      |
| Selangor                            | 9.56                 | 13.25             | 9.18                        | 0.00                 | 32.42                       | 8.41              | 27.42                        | 0.45              | 1.15              | 0.00                      |
| W. Persekutuan/<br>F. Territory     | 0.00                 | 0.00              | 0.00                        | 0.00                 | 0.00                        | 0.00              | 0.00                         | 0.00              | 0.00              | 0.00                      |
| N. Sembilan                         | 0.00                 | 0.00              | 0.00                        | 0.00                 | 0.00                        | 0.00              | 0.00                         | 0.00              | 1.00              | 0.00                      |
| Melaka/Malacca                      | 9.50                 | 0.00              | 0.00                        | 0.00                 | 0.00                        | 7.00              | 0.00                         | 0.00              | 0.60              | 0.00                      |
| Johor/Johore                        | 12.63                | 22.75             | 12.02                       | 0.00                 | 25.66                       | 7.58              | 23.11                        | 0.65              | 0.65              | 10.50                     |
| Pahang                              | 0.00                 | 0                 | 0.00                        | 0.00                 | 0.00                        | 0.00              | 0.00                         | 0.00              | 0.00              | 0.00                      |
| Terengganu                          | 7.78                 | 9.50              | 0.00                        | 0.00                 | 0.00                        | 7.50              | 24.00                        | 0.00              | 0.00              | 6.00                      |
| Kelantan                            | 9.16                 | 10.00             | 6.00                        | 0.00                 | 0.00                        | 0.00              | 25.00                        | 0.00              | 0.00              | 0.00                      |
| Sarawak                             | 0.00                 | 0.00              | 0.00                        | 0.00                 | 0.00                        | 0.00              | 0.00                         | 0.00              | 0.00              | 0.00                      |
| Sabah                               | 0.00                 | 0.00              | 0.00                        | 0.00                 | 0.00                        | 0.00              | 20.58                        | 0.00              | 0.00              | 0.00                      |
| Harga Bertimbang/<br>Weighted Price | 10.95                | 15.52             | 10.58                       | 0.00                 | 25.75                       | 7.69              | 23.39                        | 0.62              | 0.66              | 10.47                     |

\* Pelbagai - Termasuk ikan-ikan Tanda, Dengkis, Cupak/Cermin dan Talang.  
Miscellaneous - Includes Snapper, Rabbit fish, Horse Mackerel and Queenfish.

MALAYSIA  
PENGELUARAN BENIH IKAN AIRTAWAR DARI PUSAT-PUSAT PEMBAIKBIK IKAN  
KERAJAAN MENGIKUT PUSAT DAN SPESIES, 1988  
FRESHWATER FINGERLINGS PRODUCTION OF GOVERNMENT HATCHERIES  
BY HATCHERY AND SPECIES, 1988

JADUAL (TABLE) 22.1

| Spesies<br>(Species)<br><br>Pusat Pembaikbiak<br>(Hatchery) | Lampam<br>Jawa<br>Javanese<br>Carp | Lee Koh<br>Common<br>Carp | Sepat<br>Siam<br>Snakeskin<br>Gouramy | Tilapia<br>Nilotika<br>Tilapia<br>Nilotica | Tilapia<br>Merah<br>Red<br>Tilapia | Kap Kepala<br>Besar<br>Big Head<br>Carp | Keli<br>Freshwater<br>Catfish | Jumlah<br>(Total) |
|-------------------------------------------------------------|------------------------------------|---------------------------|---------------------------------------|--------------------------------------------|------------------------------------|-----------------------------------------|-------------------------------|-------------------|
| Bukit Tinggi,                                               | 3,081,736                          | 146,026                   | 15,910                                | 920                                        | 559,603                            | 1,472,342                               | 1,300                         | 5,277,837         |
| Jitra, Kedah                                                | 1,467,654                          | 945,556                   | 43,997                                | 359,459                                    | 171,642                            | 696,247                                 | 0                             | 3,684,555         |
| Enggor, Perak                                               | 51,000                             | 0                         | 148,595                               | 0                                          | 0                                  | 0                                       | 306,606                       | 506,201           |
| Kong Kong, Johor                                            | 200,670                            | 31,770                    | 0                                     | 17,750                                     | 33,625                             | 0                                       | 0                             | 283,815           |
| Jumlah/Total:                                               | 4,801,060                          | 1,123,352                 | 208,502                               | 378,129                                    | 764,870                            | 2,168,589                               | 307,906                       | 9,752,408         |

MALAYSIA  
 PENGELUARAN BENIH-BENIH IKAN/UDANG DARI PUSAT-PUSAT KERAJAAN  
 MENGIKUT PUSAT DAN SPESIES, 1988  
 PRODUCTION OF FINGERLINGS FROM GOVERNMENT HATCHERIES  
 BY HATCHERY AND SPECIES, 1988

JADUAL (TABLE) 22.2

| Species<br>(Species)<br><br>Pusat Penetasan<br>(Hatchery) | Udang<br>Galah<br>Giant Fresh-<br>water prawn | Udang<br>Harimau<br>Tiger<br>prawn | Siakap<br><br>Barramundi | Jumlah<br><br>Total |
|-----------------------------------------------------------|-----------------------------------------------|------------------------------------|--------------------------|---------------------|
| PPUG Kg. Aceh                                             | 1,526,039                                     | 959,000                            | 0                        | 2,485,039           |
| PPPBUK Pulau Sayak                                        | 5,729,938                                     | 34,955,496                         | 0                        | 40,685,434          |
| PPUG Sabak                                                | 596,928                                       | 0                                  | 0                        | 596,928             |
| PPUG Tg. Demong                                           | 0                                             | 0                                  | 36,718,928               | 36,718,928          |
| Jumlah/Total:                                             | 7,852,905                                     | 35,914,496                         | 36,718,928               | 80,486,329          |

\* PPUG - Pusat Penetasan Udang Galah  
 ( Giant Freshwater Prawn Hatchery Center )  
 PPPBUK - Pusat Pengeluaran dan Penyelidikan  
 Benih Udang Kebangsaan  
 ( National Prawn Fry Production And Research Center )

PEMBAHAGIAN BENIH-BENIH IKAN UNTUK KEGUNAAN PELBAGAI DAN PELEPASAN  
KE PERAIRAN UMUM MENGIKUT NEGERI DAN SPESIES IKAN, 1988.  
DISTRIBUTION OF FRESHWATER FRY FOR MISCELLANEOUS PURPOSES AND RELEASED  
INTO PUBLIC WATERBODIES BY STATE AND SPECIES, 1988.

| Negeri<br>State                 | Kegunaan Pelbagai/Miscellaneous Purposes |                           |                                       |                                         |                                            |                                    |                          |                                 | Pelepasan Ke Perairan Umum/Released Into Public Waterbodies |                           |                                       |                                         |                                            |                                    |                 | Jumlah<br>Besar |
|---------------------------------|------------------------------------------|---------------------------|---------------------------------------|-----------------------------------------|--------------------------------------------|------------------------------------|--------------------------|---------------------------------|-------------------------------------------------------------|---------------------------|---------------------------------------|-----------------------------------------|--------------------------------------------|------------------------------------|-----------------|-----------------|
|                                 | Lampam<br>Jawa<br>Javanese<br>Carp       | Lee Koh<br>Common<br>Carp | Sepat<br>Siam<br>Snakeskin<br>Gouramy | Kap Kepala<br>Besar<br>Big Head<br>Carp | Tilapia<br>Nilotika<br>Tilapia<br>Nilotika | Tilapia<br>Merah<br>Red<br>Tilapia | Keli<br>River<br>Catfish | Jumlah<br>Kecil<br>Sub<br>Total | Lampam<br>Jawa<br>Javanese<br>Carp                          | Lee Koh<br>Common<br>Carp | Sepat<br>Siam<br>Snakeskin<br>Gouramy | Kap Kepala<br>Besar<br>Big Head<br>Carp | Tilapia<br>Nilotika<br>Tilapia<br>Nilotika | Tilapia<br>Merah<br>Red<br>Tilapia | Jumlah<br>Total | Grand<br>Total  |
| Perlis                          | 0                                        | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 0                        | 0                               | 153,725                                                     | 120,450                   | 0                                     | 77,000                                  | 7,700                                      | 1,100                              | 359,975         | 359,975         |
| Kedah                           | 1,205,059                                | 13,042                    | 4,055                                 | 53,603                                  | 73,267                                     | 25,958                             | 0                        | 1,374,984                       | 416,246                                                     | 173,255                   | 20,955                                | 73,205                                  | 80,405                                     | 55                                 | 764,121         | 2,139,105       |
| P. Pinang/ Penang               | 176                                      | 22                        | 11                                    | 39                                      | 11                                         | 110                                | 0                        | 369                             | 0                                                           | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 0               | 369             |
| Perak                           | 11,880                                   | 33,770                    | 0                                     | 55                                      | 0                                          | 0                                  | 0                        | 45,705                          | 173,665                                                     | 266,717                   | 9,900                                 | 421,300                                 | 0                                          | 800                                | 698,717         | 744,422         |
| Selangor                        | 19,537                                   | 0                         | 0                                     | 144,000                                 | 0                                          | 11,650                             | 0                        | 175,187                         | 95,000                                                      | 3,000                     | 0                                     | 0                                       | 0                                          | 20,000                             | 118,000         | 293,187         |
| W. Persekutuan/<br>F. Territory | 2,050                                    | 0                         | 0                                     | 0                                       | 0                                          | 850                                | 0                        | 2,900                           | 212,650                                                     | 0                         | 0                                     | 484,800                                 | 0                                          | 0                                  | 697,450         | 700,350         |
| N. Sembilan                     | 0                                        | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 0                        | 0                               | 900                                                         | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 900             | 900             |
| Melaka/Malacca                  | 0                                        | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 0                        | 0                               | 0                                                           | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 0               | 0               |
| Johor/Johore                    | 18,096                                   | 1,810                     | 0                                     | 0                                       | 9,750                                      | 2,215                              | 0                        | 31,871                          | 85,000                                                      | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 85,000          | 116,871         |
| Pahang                          | 46,150                                   | 43,000                    | 22,400                                | 3,100                                   | 0                                          | 18,450                             | 0                        | 133,100                         | 402,800                                                     | 5,100                     | 0                                     | 360,300                                 | 0                                          | 76,250                             | 844,450         | 977,550         |
| Terengganu                      | 223,500                                  | 0                         | 0                                     | 0                                       | 0                                          | 15,000                             | 0                        | 238,500                         | 68,000                                                      | 0                         | 0                                     | 144,000                                 | 0                                          | 0                                  | 212,000         | 450,500         |
| Kelantan                        | 150                                      | 200                       | 0                                     | 0                                       | 0                                          | 1,150                              | 0                        | 1,500                           | 359,082                                                     | 8,228                     | 9,750                                 | 301,600                                 | 15,400                                     | 10,000                             | 704,060         | 705,560         |
| Sarawak                         | 0                                        | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 0                        | 0                               | 0                                                           | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 0               | 0               |
| Sabah                           | 0                                        | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 0                        | 0                               | 0                                                           | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 0               | 0               |
| Jumlah/Total:                   | 1,526,598                                | 91,844                    | 26,466                                | 200,797                                 | 83,028                                     | 75,383                             | 0                        | 2,004,116                       | 1,793,403                                                   | 576,750                   | 40,605                                | 1,862,205                               | 103,505                                    | 108,205                            | 4,484,673       | 6,488,789       |

MALAYSIA  
PEMBAHAGIAN BENIH-BENIH IKAN AIRTAWAR KEPADA PENTERNAK  
MENGIKUT NEGERI DAN SPESIES IKAN BAGI TAHUN 1988.  
DISTRIBUTION OF FRESHWATER FISH FRY TO CULTURISTS  
BY STATE AND SPECIES, 1988.

JADUAL (TABLE) 22.4

| Negeri<br>State                 | Lampam<br>Jawa<br>Javanese<br>Carp | Lee Koh<br>Common<br>Carp | Sepat<br>Siam<br>Snakeskin<br>Gouramy | Kap Kepala<br>Besar<br>Big Head<br>Carp | Tilapia<br>Nilotika<br>Tilapia<br>Nilotika | Tilapia<br>Merah<br>Red<br>Tilapia | Keli<br>River<br>Catfish | Jumlah<br>Total |
|---------------------------------|------------------------------------|---------------------------|---------------------------------------|-----------------------------------------|--------------------------------------------|------------------------------------|--------------------------|-----------------|
| Perlis                          | 14,146                             | 19,107                    | 165                                   | 13,723                                  | 3,619                                      | 20,174                             | 0                        | 70,934          |
| Kedah                           | 195,348                            | 94,692                    | 6,400                                 | 25,332                                  | 18,613                                     | 69,508                             | 27,000                   | 436,893         |
| P. Pinang/ Penang               | 37,950                             | 6,215                     | 20,400                                | 3,575                                   | 27,500                                     | 27,973                             | 15,000                   | 138,613         |
| Perak                           | 64,870                             | 5,950                     | 37,685                                | 6,885                                   | 28,750                                     | 85,983                             | 179,606                  | 409,729         |
| Selangor                        | 543,816                            | 100                       | 11,000                                | 0                                       | 0                                          | 66,945                             | 45,000                   | 666,861         |
| W. Persekutuan/<br>F. Territory | 2,500                              | 0                         | 0                                     | 0                                       | 0                                          | 5,975                              | 0                        | 8,475           |
| N. Sembilan                     | 76,850                             | 5,500                     | 200                                   | 0                                       | 0                                          | 2,000                              | 0                        | 84,550          |
| Melaka/Malacca                  | 0                                  | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 0                        | 0               |
| Johor/Johore                    | 139,400                            | 29,910                    | 0                                     | 0                                       | 8,100                                      | 32,320                             | 0                        | 209,730         |
| Pahang                          | 1,051,181                          | 146,236                   | 74,370                                | 47,757                                  | 0                                          | 248,396                            | 0                        | 1,567,940       |
| Terengganu                      | 134,420                            | 80,300                    | 0                                     | 11,385                                  | 57,805                                     | 15,400                             | 0                        | 299,310         |
| Kelantan                        | 182,502                            | 87,878                    | 3,200                                 | 2,469                                   | 45,914                                     | 39,221                             | 40,000                   | 401,184         |
| Sarawak                         | 0                                  | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 0                        | 0               |
| Sabah                           | 0                                  | 0                         | 0                                     | 0                                       | 0                                          | 0                                  | 0                        | 0               |
| Jumlah/Total:                   | 2,442,983                          | 475,888                   | 153,420                               | 111,126                                 | 190,301                                    | 613,895                            | 306,606                  | 4,294,219       |



MALAYSIA  
BILANGAN PUSAT PENETASAN SWASTA DAN PENGELUARANNYA  
MENGIKUT SPESIES DAN NEGERI, 1988.  
NUMBER OF PRIVATE HATCHERIES AND PRODUCTION BY SPECIES AND STATE, 1988

JADUAL (TABLE) 22.5

| Negeri<br>State                 | Bil. Pusat<br>Penetasan<br>No. of Hatchery | Udang<br>Harimau<br>Tiger<br>Prawn | Udang<br>Putih<br>Banana<br>Prawn | Tilapia<br>Nilotika<br>Tilapia<br>Nilotica | Tilapia<br>Merah<br>Red<br>Tilapia | Kap<br>Jepun<br>Japanese<br>Carp | Lee Koh<br>Common<br>Carp | Udang<br>Galah<br>Giant<br>Freshwater<br>Prawn | Pelbagai<br>Miscellaneous | Jumlah<br>Total |
|---------------------------------|--------------------------------------------|------------------------------------|-----------------------------------|--------------------------------------------|------------------------------------|----------------------------------|---------------------------|------------------------------------------------|---------------------------|-----------------|
| Perlis                          | 0                                          | 0                                  | 0                                 | 0                                          | 0                                  | 0                                | 0                         | 0                                              | 0                         | 0               |
| Kedah                           | 2                                          | 15,500,000                         | 0                                 | 0                                          | 0                                  | 0                                | 0                         | 0                                              | 829,000                   | 16,329,000      |
| P. Pinang/Penang                | 1                                          | 7,527,801                          | 0                                 | 0                                          | 0                                  | 0                                | 0                         | 0                                              | 0                         | 7,527,801       |
| Perak                           | 5                                          | 8,000,000                          | 0                                 | 30,000                                     | 40,000                             | 0                                | 0                         | 0                                              | 440,000                   | 8,510,000       |
| Selangor                        | 3                                          | 12,000,000                         | 0                                 | 0                                          | 400,000                            | 360,000                          | 360,000                   | 0                                              | 98,300                    | 13,218,300      |
| W. Persekutuan/<br>F. Territory | 0                                          | 0                                  | 0                                 | 0                                          | 0                                  | 0                                | 0                         | 0                                              | 0                         | 0               |
| N. Sembilan                     | 1                                          | 0                                  | 0                                 | 0                                          | 0                                  | 0                                | 0                         | 0                                              | 0                         | 0               |
| Melaka                          | 3                                          | 7,500,000                          | 0                                 | 0                                          | 0                                  | 0                                | 20,000                    | 0                                              | 855,000                   | 8,375,000       |
| Johor                           | 11                                         | 131,000,000                        | 69,550,000                        | 0                                          | 0                                  | 0                                | 0                         | 0                                              | 0                         | 200,550,000     |
| Pahang                          | 0                                          | 0                                  | 0                                 | 0                                          | 0                                  | 0                                | 0                         | 0                                              | 0                         | 0               |
| Terengganu                      | 0                                          | 0                                  | 0                                 | 0                                          | 0                                  | 0                                | 0                         | 0                                              | 0                         | 0               |
| Kelantan                        | 0                                          | 0                                  | 0                                 | 0                                          | 0                                  | 0                                | 0                         | 0                                              | 0                         | 0               |
| Sarawak                         | 0                                          | 0                                  | 0                                 | 0                                          | 0                                  | 0                                | 0                         | 0                                              | 0                         | 0               |
| Sabah                           | 0                                          | 0                                  | 0                                 | 0                                          | 0                                  | 0                                | 0                         | 0                                              | 0                         | 0               |
| Jumlah/Total                    | 26                                         | 181,527,801                        | 69,550,000                        | 30,000                                     | 440,000                            | 360,000                          | 380,000                   | 0                                              | 2,222,300                 | 254,510,101     |

**KLASIFIKASI PERANGKAAAN PIWAIAAN IKAN-IKAN LAUT MALAYSIA**  
**STANDARD STATISTICAL CLASSIFICATION OF MALAYSIAN MARINE FISHES**

| Division        | ISSCAAP Group                       | Local Name                                                                                                                                                                                                                      | English Name                                                                                                                                                                                                                                                   | Scientific Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2 Diadromous    | 24 Shads, Milkfishes, etc.          | Kebasi/Selangat                                                                                                                                                                                                                 | + Chacunda shad<br>(Gizzard shad)                                                                                                                                                                                                                              | Anodontosoma chacunda                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                 |                                     | Puput<br>Beliak mata<br>Terubok                                                                                                                                                                                                 | + Shad<br>+ Slender shad<br>0 Longtail shad                                                                                                                                                                                                                    | Pellona spp<br>Ilisha elongata<br>Hilsa macrura                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                 | 25 Miscellaneous diadromous fishes  | Siakap                                                                                                                                                                                                                          | + Giant sea perch<br>(Barramundi)                                                                                                                                                                                                                              | Lates calcarifer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 3 Marine fishes | 31 Flounders, Halibuts, Soles, etc. | Lidah<br>Sebelah                                                                                                                                                                                                                | + Tonguefish (Tongue sole)<br>+ Flatfish                                                                                                                                                                                                                       | Cynoglossus spp<br>Pseudorhombus spp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                 |                                     | 33 Redfishes, Basses, Congers, etc.                                                                                                                                                                                             | + Parrotfish<br>+ Goatfish<br>+ Spotted sicklefish<br>+ Fusilier<br>+ Spinefeet (Rabbit fish)<br>+ Marine catfish                                                                                                                                              | Callyodon spp./Thalassoma spp.<br>Upeneus spp.<br>Drepane punctata<br>Caesio erythrogaster/C. chrysona<br>Siganus spp.<br>Tachysurus spp./Arius spp/<br>Osteogobius spp.<br>Sciaenidae spp/Johnius spp/<br>Otolithus spp/Otolithoides spp.<br>Promadasys spp.<br>Abalistes stellaris<br>Lutianus johni<br>Spilotichthys pictus<br>Gerres filamentosus/G. abbreviatus<br>Epinephelus spp/Plectropomus spp.<br>Nemipterus spp<br>Pristipomoides typus<br>Leiognathus spp/Gazax spp/<br>Secutor spp.<br>Harpodon nehereus<br>Muraenesox sp.<br>Lutianus argentimaculatus/<br>L. malabaricus<br>Sauride spp.<br>Sillago sihama/S. maculata<br>Scolopsis spp. |
|                 |                                     | Gelama/Tongkerong                                                                                                                                                                                                               | + Jewfish                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                 |                                     | Gerut-gerut<br>Jebong<br>Jenahak<br>Kaci<br>Kapas laut<br>Kerapu<br>Kerisi<br>Kerisi bali<br>Kikek                                                                                                                              | + Grunter<br>+ Triggerfish<br>+ Mangrove snapper<br>+ Sweetlip<br>+ Majorras (Silver biddies)<br>+ Grouper<br>+ Threadfin bream<br>+ Sharptoothed bass<br>+ Ponyfish (Silpmouth)                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                 |                                     | Lumi-lumi<br>Malong<br>Merah                                                                                                                                                                                                    | + Bombay-duck<br>+ Conger eel<br>+ Red snapper                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                 |                                     | Mengkerong/Ubi/Conor<br>Puntung Damar/Bulus-bulus<br>Pasir-pasir/Timun-timun/<br>Puyu Laut<br>Pelandok<br>Pluru<br>Remong/Kunyit-kunyit<br>Semilang<br>Shrumbu/Lemah<br>Tanda                                                   | + Lizard fish<br>+ Sillago-whittings<br>+ Monocle bream<br><br>+ Emperors (Scavengers)<br>+ Spadefish<br>+ Snapper<br>+ Catfish eel<br>+ False trevally<br>+ Snapper                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 34 Jacks,       | 34 Jacks, Mulllets, Sauries, etc.   | Aji-aji<br>Alu-alu/Kacang-kacang<br>Aruan Tasek<br>Bawal hitam<br>Bawal putih<br>Bawal tambak<br>Bawal selatan<br>Belanak/Kedera<br>Cermin/Sagai/Cupak<br>Cincaru<br>Demudok/Rambai<br>Gerong-gerong<br>Kurau/Senangin/Senohong | + Amberjack<br>+ Barracuda<br>+ Black kingfish<br>0 Black pomfret<br>0 Silver pomfret<br>0 Chinese pomfret<br>0 Small pomfret<br>0 Mullet<br>+ Horse mackerel (Trevally)<br>0 Hardtail scad<br>+ Horse mackerel (Trevally)<br>+ Golden trevally<br>0 Threadfin | Seriola nigrafasciata<br>Sphyræna jello/S. optusa<br>Rachycentron canadus<br>Formio niger<br>Pampus argenteus<br>Pampus chinensis<br>Pampus spp.<br>Liza spp/valamugil spp.<br>Alectis indica/Caranx spp.<br>Megalaspis Cordyla<br>Carangoides spp.<br>Caranx speciosus<br>Polynemus spp/Eleutheronema<br>tetradactylum<br>Caranx sexfasciatus<br>Salar boops<br>Salar crymenophthalmus<br>Elagatis bipinnulatus<br>Salar spp.<br>Salaroides leptolepis<br>Decapierus maruadis/D. macrosoma<br>Scomberoides commersonianus                                                                                                                               |
|                 |                                     | Kerepoh<br>Lolong<br>Mata Besar/Selar<br>Pisang-pisang<br>Selar/Pelata<br>Selar Kuning<br>Selayang/Curut<br>Talang                                                                                                              | 0 Horse mackerel (Trevally)<br>0 Ox-eye scad<br>0 Big-eye scad<br>0 Rainbow runner<br>0 Selar scad<br>0 Yellow striped trevally<br>0 Round scad<br>0 Queenfish (Leatherskin)                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| ISSCAAP                         |                                                     |                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Division                        | Group                                               | Local Name                                                                                                                                                                                                                                                  | English Name                                                                                                                                                                                                                | Scientific Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                 | 35 Herrings, Sardines, Anchovies, etc.              | Tamban sisek<br>Tamban buluh/T. Bulat<br>Bilis<br>Parang-parang<br>Bulan-bulan                                                                                                                                                                              | 0 Fringescale sardinella<br>0 Rainbow sardine<br>0 Anchovy<br>0 Dorab wolf-herring<br>+ Indo-Pacific tarpon                                                                                                                 | <i>Sardinella fimbriata</i><br><i>Dussumieria acuta</i><br><i>Stolephorus</i> spp.<br><i>Chirocentrus dorab</i><br><i>Megalops cyprinoides</i>                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                 | 36 Tunas, Bonitos, Billfishes, etc.                 | Aya/Kayu/Tongkol hitam<br>Aya/Kayu/Tongkol kurik<br>Aya/Kayu/Tongkol/Selasih<br>Layaran/Mersuji<br>Tenggiri                                                                                                                                                 | 0 Longtail tuna<br>0 Kawakawa (eastern little tuna)<br>0 Frigate tuna<br>0 Sailfish/Black and Blue marlin<br>0 Spanish mackerel                                                                                             | <i>Thunnus tonggol</i><br><i>Euthynnus affinis</i><br><i>Auxis thazard</i><br><i>Istiophorus</i> spp./ <i>Makaira</i> spp.<br><i>Scomberomorus</i> spp.                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                 | 37 Mackerels, Snoeks, Cutlass, fishes, etc.         | Kembong/Temenong<br>Timah/Layor/Selayor                                                                                                                                                                                                                     | 0 Indian mackerel<br>+ Large-head hairtail (Ribbon fish)                                                                                                                                                                    | <i>Rastrelliger kanagurta</i> /<br><i>R. brachysoma</i> / <i>R. faughni</i><br><i>Trichiurus lepturus</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                 | 38 Sharks, Rays, Chimaeras, etc.                    | Yu<br>Pari                                                                                                                                                                                                                                                  | + Shark<br>+ Ray                                                                                                                                                                                                            | <i>Galeorhinidae</i><br><i>Gymnura</i> spp/ <i>Dasyatis</i> spp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                 | 49 Miscellaneous marine fishes                      | Ikan Baja<br>Ikan Campur                                                                                                                                                                                                                                    | +/0 Trash fish<br>+/0 Mixed fishes                                                                                                                                                                                          | Mixed spp.<br>Mixed spp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 4 Crustaceans                   | 42 Sea spiders, Crabs, etc.                         | Ketam laut/<br>Ketam Renjong<br>Ketam batu                                                                                                                                                                                                                  |                                                                                                                                                                                                                             | <i>Portunus pelagicus</i><br><i>Scylla serrata</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                 | 43 Lobsters, Spiny rock lobsters, etc.              | Udang karang<br>Udang lobak                                                                                                                                                                                                                                 | Spiny lobster<br>Slipper lobster                                                                                                                                                                                            | <i>Panulirus polyhagus</i><br><i>Thenus orientalis</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                 | 45 Shrimps, Prawns, etc.                            | Udang putih/Udang kaki merah/Udang susu<br>Udang harimau<br><br>Udang pasir/Udang pasir Kepala besar<br>Udang putih kecil<br>Udang kuning<br>Udang merah ros/<br>Udang ekor biru<br>Udang kulit keras<br>Udang minyak/Udang minyak jalur<br><br>Udang merah | Banana prawn/Western king prawn<br>Giant tiger prawn/<br>Green tiger prawn<br>Sand prawn<br><br>Small white prawn<br>Yellow prawn<br>Pink prawns/Greasyback prawns<br>Rainbow prawn<br>Sharp-rostrum prawn<br><br>Red prawn | <i>Penaeus merguensis</i> / <i>P. indicus</i> /<br><i>P. latissulcatus</i><br><i>Penaeus monodon</i> /<br><i>P. semisulcatus</i><br><i>Metapeneopsis stridulans</i> &<br><i>M. barbeensis</i> / <i>Trachypenaeus fulvus</i><br><i>Metapenaeus lysianassa</i><br><i>Metapenaeus brevicornis</i><br><i>Metapenaeus affinis</i> / <i>M. ensis</i> /<br><i>M. intermedius</i><br><i>Parapenaeopsis sculptilis</i><br><i>Parapenaeopsis hardwickii</i> /<br><i>P. coromandelica</i> / <i>P. hungerfordi</i> / <i>P. gracillima</i><br><i>Solenocera subnuda</i> |
| 5 Molluscs                      | 53 Oysters                                          | Tiram                                                                                                                                                                                                                                                       | Rock oysters/Flat oysters                                                                                                                                                                                                   | <i>Ostrea folium</i> / <i>Crassostrea</i> spp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                 | 54 Mussels                                          | Kupang/Siput sudu<br>Siput cangkul                                                                                                                                                                                                                          | Green mussel<br>Sea-Green mussel                                                                                                                                                                                            | <i>Perna viridis</i><br><i>Glaucanome</i> spp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                 | 56 Clams, Cockles, Arkshells, etc.                  | Kerang<br>Retak seribu<br>Lain-lain siput                                                                                                                                                                                                                   | Blood cockle<br>Carpenter clam<br>Other clams/Snails                                                                                                                                                                        | <i>Anadara granosa</i><br><i>Paphia undulata</i><br><i>Bivalves/Gastropods</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                 | 57 Squids, Cuttlefishes, Octopuses, etc.            | Sotong biasa/cumit-cumit<br>Sotong katak<br>Sotong kereta                                                                                                                                                                                                   | Common squid<br>Cuttlefish<br>Octopus                                                                                                                                                                                       | <i>Loligo</i> spp.<br><i>Sepia</i> spp.<br><i>Octopodidae</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 7 Miscellaneous Aquatic animals | 75 Sea-urchins, Sea-cucumbers and other echinoderms | Trepang                                                                                                                                                                                                                                                     | Sea cucumbers (Bache-de-mer)                                                                                                                                                                                                | <i>Holothuriodea</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                 | 76 Miscellaneous Aquatic invertebrates              | Ubur-ubur                                                                                                                                                                                                                                                   | Jellyfish                                                                                                                                                                                                                   | <i>Rhopilema</i> spp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

NOTES:

+ = Demersal finfishes

0 = Pelagic finfishes

+/0 = Trash fish/Mixed fishes of trawl, portable traps, barrier, push/scoop, stationary traps, handlines and other seines are considered demersal.

+/0 = Trash/fish/Mixed fishes of purse seines (fish and anchovy) drift/gill nets and lift nets are considered pelagic.

**KLASIFIKASI PERANGKAAAN PIAWAIAN IKAN-IKAN  
AIRTAWAR MALAYSIA  
STANDARD STATISTICAL CLASSIFICATION  
OF COMMON MALAYSIAN FRESHWATER FISHES**

| ISSCAAP              |                                    | Local Name         | English Name           | Scientific Name                           |
|----------------------|------------------------------------|--------------------|------------------------|-------------------------------------------|
| DIVISION             | GROUP                              |                    |                        |                                           |
| 1. Freshwater Fishes | 11 Carps, Barbs                    | Tengas             | Carp                   | <i>Acrossocheilus hexagonolepis</i>       |
|                      |                                    | Kap Kepala Besar   | Big Head Carp          | <i>Aristichthys nobilis</i>               |
|                      |                                    | Ikan Mas           | Edible Gold Fish       | <i>Carassius auratus</i>                  |
|                      |                                    | Kap Lumpur         | Mud Carp               | <i>Cirrhine molitorella</i>               |
|                      |                                    | Kap Rumpot         | Grass Carp             | <i>Ctenopharyngodon idella</i>            |
|                      |                                    | Temperas           | Carp                   | <i>Cydocheilichthys apogon</i>            |
|                      |                                    | Lee Koh            | Common Carp            | <i>Cyprinus Carpio</i>                    |
|                      |                                    | Selimang Batu      | Carp                   | <i>Epiplatys orthochinchus kalopteris</i> |
|                      |                                    | Sebarau            | Carp                   | <i>Hampala macrolepidota</i>              |
|                      |                                    | Kap Perak          | Silver Carp            | <i>Hypophthalmichthys molitrix</i>        |
|                      |                                    | Pucuk Pisang       | Carp/Barb              | <i>Labiobarbus fasciatus</i>              |
|                      |                                    | Lomah              | Carp/Barb              | <i>Labiobarbus ocellatus</i>              |
|                      |                                    | Jelawat            | River Carp             | <i>Leptobarbus hoevenii</i>               |
|                      |                                    | Jenkua             | Carp                   | <i>Morulus chrysophekadion</i>            |
|                      |                                    | Kap Hitam          | Black Carp             | <i>Mylopharyngodon piceus</i>             |
|                      |                                    | Sia                | Carp                   | <i>Mystacoleucus marginatus</i>           |
|                      |                                    | Terbol             | Carp                   | <i>Osteochilus hasseltii</i>              |
|                      |                                    | Lallang            | Carp                   | <i>Oxygaster anomalura</i>                |
|                      |                                    | Bulu Ayam          | Carp                   | <i>Oxygaster spp.</i>                     |
|                      |                                    | Temolah, Temelian  | Giant River Carp       | <i>Probarbus jullieni</i>                 |
|                      |                                    | Putih, Tebal Sisek | Common Barb            | <i>Puntius binotatus</i>                  |
|                      |                                    | Tengalan           | Carp/Barb              | <i>Puntius buli</i>                       |
|                      |                                    | Kerai Kunyit       | Carp/Barb              | <i>Puntius daruphani</i>                  |
|                      |                                    | Lampam Jawa        | Javanese Carp          | <i>Puntius gonionotus</i>                 |
|                      |                                    | Bagoh              | Spanner Barb           | <i>Puntius lateristriga</i>               |
|                      |                                    | Lampam Sungai      | River Carp             | <i>Puntius schwaefeldii</i>               |
|                      |                                    | Susur Batang       | Rasbora                | <i>Rasbora einthovenii</i>                |
|                      |                                    | Seluang            | Two-spot Rasbora       | <i>Rasbora elegans</i>                    |
|                      |                                    | Kalah              | River Carp             | <i>Tor tambroides</i>                     |
|                      | 12 Cichlids                        | Tilapia            | Tilapia                | <i>Tilapia mossambica</i>                 |
|                      | 13 Miscellaneous freshwater fishes | Puyu               | Climbing Perch         | <i>Anabas tertudineus</i>                 |
|                      |                                    | Tuna               | River Eel              | <i>Anquilla bicolor/A. nebulosa</i>       |
|                      |                                    | Kepala Timah       | White Spot             | <i>Aplocheilichthys panchax</i>           |
|                      |                                    | Lali-lali          | Loach                  | <i>Botia spp.</i>                         |
|                      |                                    | Keli               | Freshwater Catfish     | <i>Clarias batrachus/C. macrocephalus</i> |
|                      |                                    | Lambat             | Freshwater Catfish     | <i>Clarias nieuhofii</i>                  |
|                      |                                    | Belut              | Swamp Eel              | <i>Fluta alba</i>                         |
|                      |                                    | Temakang           | Kissing Gourami        | <i>Helostoma temminckii</i>               |
|                      |                                    | Susoh Batu         | Loach                  | <i>Homaloptera spp.</i>                   |
|                      |                                    | Baug               | River Catfish          | <i>Mystus namurus</i>                     |
|                      |                                    | Tengku Lolah       | River Catfish          | <i>Mystus wyckii</i>                      |
|                      |                                    | Belida             | Feather back           | <i>Notopterus notopterus</i>              |
|                      |                                    | Kalui              | Giant Gourami          | <i>Osphronemus goramy</i>                 |
|                      |                                    | Bujuk              | Snake Head             | <i>Ophicephalus lucius</i>                |
|                      |                                    | Toman              | Snake Head             | <i>Ophicephalus micropeltes</i>           |
|                      |                                    | Haruan             | Snake Head             | <i>Ophicephalus striatus</i>              |
|                      |                                    | Ketutu             | Goby                   | <i>Oxyeleotris marmoratus</i>             |
|                      |                                    | Lawang             | River Catfish          | <i>Pangassius micronemus</i>              |
|                      |                                    | Patin              | River Catfish          | <i>Pangassius pangassius</i>              |
|                      |                                    | Kepar, Patong      | Perch                  | <i>Pristigaster fasciatus</i>             |
|                      |                                    | Kelesa             | Scleropages            | <i>Scleropages formosus</i>               |
|                      |                                    | Sepat Siam         | Snakeskin Gouramy      | <i>Trichogaster pectoralis</i>            |
|                      |                                    | Sepat Padi         | Two-spot Gouramy       | <i>Trichogaster trichopterus</i>          |
|                      |                                    | Tapah              | Giant River Catfish    | <i>Wallago spp.</i>                       |
| 4 Crustaceans        | 41 Freshwater Crustaceans          | Udang Galah        | Giant Freshwater Prawn | <i>Macrobrachium rosenbergii</i>          |