



PERANGKAAN TAHUNAN PERIKANAN

ANNUAL FISHERIES STATISTICS

**1999
(Volume 1)**



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JABATAN PERIKANAN MALAYSIA

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PENDAHULUAN

Perangkaan Tahunan Perikanan adalah pengeluaran Jabatan Perikanan sebagai satu sumber bahan rujukan utama mengenai data dan maklumat-maklumat penting terhadap industri perikanan Malaysia. Maklumat-maklumat ini termasuk data eksport/import komoditi perikanan.

Data mengenai pengeluaran, nelayan, vessel, perkakas dan usaha menangkap ikan dimasukkan dalam jilid ini (Jilid I) manakala data eksport/import dalam Jilid II.

Kami berharap penerbitan ini akan memberi faedah kepada semua terutamanya mereka yang memerlukan statistik perikanan yang terkini.

Terima kasih.

**Ketua Pengarah Perikanan
Jabatan Perikanan Malaysia
KUALA LUMPUR.**

FOREWORD

The Annual Fisheries Statistics is a bulletin produced annually by the Department of Fisheries as the main source of reference for vital data and information on the Malaysian Fisheries Sector. It also includes the export/import data of fisheries commodities.

The data on production, vessels, gears and fishing efforts are in this volume (Volume I) whereas the export/import data are in Volume II.

We hope that this bulletin would be beneficial to all especially to those who require the latest fisheries statistics.

Thank you.

**Director-General of Fisheries
Department of Fisheries Malaysia
KUALA LUMPUR.**

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**KEDUDUKAN SEKTOR PERIKANAN
DI MALAYSIA**

***STATUS OF THE FISHERIES SECTOR
IN MALAYSIA***

KEDUDUKAN SEKTOR PERIKANAN DI MALAYSIA

1. PENDAHULUAN

Sektor perikanan di Malaysia terus memainkan peranan yang penting sebagai penyumbang utama ikan sebagai sumber makanan dan protein yang penting kepada negara. Sektor ini juga menyumbang 1.66% kepada KDNK* serta memberi peluang pekerjaan kepada 83,952 orang nelayan dan 21,104 orang penternak ikan. Sektor perikanan laut pantai menghasilkan pengeluaran sekitar 1.1 juta tan metrik setahun. Pencapaian ini adalah hasil dari usaha berterusan pengurusan sumber perikanan yang dilakukan oleh Jabatan.

Jabatan juga sedang mengambil beberapa tindakan untuk meningkatkan pengeluaran ikan negara. Antara usaha-usaha yang sedang diambil untuk menambahkan pengeluaran ikan negara adalah melalui tangkapan perikanan laut dalam dan membangunkan sektor akuakultur. Penambahan vesel-vesel laut dalam serta pengawalseliaan yang lebih ketat terhadap vesel-vesel yang sedia ada akan memberi sumbangan yang positif kepada sektor perikanan di masa akan datang. Namun begitu potensi sebenar dalam meningkatkan pengeluaran ikan masih bergantung kepada sektor akuakultur yang mempunyai kawasan berpotensi yang luas. Dijangkakan bahawa pengeluaran daripada sektor ini akan dapat ditingkatkan empat kali ganda menjelang tahun 2010. Perancangan dan langkah bersepadu sedang diambil dengan penyertaan pihak swasta dan adalah diharapkan bahawa industri akuakultur akan menjadi pemangkin kepada peningkatan pengeluaran ikan negara dimasa akan datang.

* Keluaran Dalam Negara Kasar adalah RM 300.349 bilion (Buku Maklumat Perangkaan, Jabatan Perangkaan Malaysia 2001)

2. PROFIL PERIKANAN

Pada tahun 1999 pengeluaran daripada sektor perikanan telah mencapai 1,418,829 tan metrik bernilai RM 5 bilion. Sektor ini mencatatkan pertumbuhan sebanyak 4.85% dari segi pengeluaran dan 10.38% dari segi nilai. Sumbangan sektor perikanan kepada KDNK adalah 1.66% untuk tahun 1999 berbanding dengan 1.62% dalam tahun 1998. Di samping itu sumbangan kepada sektor pertanian juga menggalakan di mana ia telah meningkat daripada 13.22% pada tahun 1998 kepada 14.56% pada tahun 1999.

Mengikut sektor, pengeluaran perikanan marin menyumbang 1,248,402 tan metrik atau 88% daripada pengeluaran ikan negara yang bernilai RM 4.14 bilion. Perikanan pantai masih kekal sebagai penyumbang utama dengan pengeluaran sebanyak 1,109,733 tan metrik bernilai RM3.74 bilion. Sektor perikanan laut dalam pula telah menyumbang 138,669 tan metrik bernilai RM 405.5 juta atau 9.8% dari keseluruhan pengeluaran ikan.

Sektor akuakultur pula telah mencatatkan pengeluaran sebanyak 166,974 tan metrik iaitu kira-kira 11.8% daripada jumlah pengeluaran ikan negara. Peningkatan sebanyak 24.94% jika dibandingkan dengan pengeluaran pada tahun 1998. Pengeluaran dari sektor ini juga menunjukkan pertumbuhan yang sangat menggalakkan dimana nilai pengeluaran turut meningkat sebanyak 18.46% daripada RM654.24 juta pada tahun 1998 kepada RM775.08 juta pada tahun 1999.

Disamping itu sektor perikanan darat hanya mencatatkan pengeluaran sebanyak 3,453 tan metrik atau 0.24% daripada jumlah pengeluaran ikan negara. Industri ikan hiasan pula pada tahun 1999 telah mencatat pengeluaran sebanyak 340.4 juta ekor ikan bernilai RM80.23 juta iaitu peningkatan sebanyak 1.6% daripada jumlah nilai pengeluaran sektor perikanan.

Dari segi tenaga kerja sektor perikanan mempunyai seramai 83,952 orang nelayan yang bekerja di atas vesel-vesel menangkap ikan yang berlesen dan 21,104 orang penternak ikan yang terlibat di dalam berbagai sistem akuakultur. Angka ini tidak termasuk ramai lagi para pengusaha yang terlibat secara langsung atau tidak langsung dalam aktiviti-aktiviti hiliran dan industri-industri yang berkaitan dengan industri perikanan. Pada tahun 1999, jumlah vesel menangkap ikan yang dilesenkan ialah 32,846 buah di mana kebanyakannya mengusahakan peralatan tradisional (79.3%).

3. PERIKANAN MARIN

3.1 Nelayan

Sejumlah 83,952 orang nelayan telah direkodkan pada tahun 1999 bekerja di atas vesel-vesel menangkap ikan berlesen peningkatan sebanyak 2.95% jika dibandingkan dengan tahun 1998. Nisbah nelayan bekerja di atas vesel menangkap ikan komersial (42.1%) berbanding dengan bilangan nelayan bekerja di vesel menangkap ikan tradisional (57.9%) tidak banyak berubah dalam tempoh tersebut.

Negeri Sarawak mencatatkan penambahan nelayan sebanyak 14.6% ekoran dari berbagai usaha yang diambil untuk membangunkan perikanan laut dalam di Sarawak. Sementara negeri-negeri Perlis, Kedah, Pahang, Selangor dan Pulau Pinang, Johor Barat, masing-masing juga mencatatkan peningkatan bilangan nelayan sebanyak 8.84%, 8.32%, 4.45%, 3.26%, 2.26% dan 1.93%. Sementara itu negeri-negeri Melaka, Negeri Sembilan, Johor Timur, Kelantan dan Perak masing-masing mencatatkan penurunan bilangan nelayan sebanyak 6.5%, 6.23%, 1.53%, 0.88% dan 0.35%.

Pada dekad yang lepas, industri perikanan laut dalam seringkali menghadapi masalah kekurangan vesel yang besar dan kekurangan pekerja mahir. Berbagai langkah telah diambil untuk memastikan bahawa pembangunan industri perikanan laut dalam akan membawa keuntungan maksima kepada negara. Langkah-langkah tersebut termasuklah pengeluaran permit laut dalam dan latihan kepada nelayan. Namun begitu industri penangkapan ikan laut dalam masih lagi bergantung kepada penggunaan tenaga kerja asing. Dengan penglibatan vesel-vesel carter dalam industri laut dalam, bilangan nelayan asing telah bertambah daripada 13,093 orang pada tahun 1998 kepada 15,339 orang pada tahun 1999, pertambahan sebanyak 17.15%. Seramai 9,033 orang nelayan asing telah diluluskan untuk berkerja di Semenanjung Malaysia, 5,767 orang di Negeri Sabah dan 87 orang di Labuan. Peratus nelayan asing yang telah diluluskan untuk berkerja di Negeri Sabah ialah 37.6%, Perlis 21.43%, Kelantan 10.96%, Terengganu 13.62%, Kedah 6.22%, Johor Timur 4.2%, Sarawak 2.95%, Pahang 1.34%, Perak 1.11% dan Labuan 0.57%.

3.2 Vesel-vesel Menangkap Ikan

Bilangan vesel-vesel menangkap ikan yang berdaftar di Malaysia adalah sebanyak 34,051 buah pada tahun 1999 jika dibandingkan dengan tahun 1998 sebanyak 32,846 buah, pertambahan 3.67%. Kebanyakan vesel-vesel ini beroperasi di laut pantai yang telah dieksploitasikan ke tahap maksima. Dasar Jabatan sekarang ini, memberi keutamaan kepada vesel-vesel menangkap ikan laut dalam yang berpotensi di Malaysia Timur. Bilangan vesel-vesel di Semenanjung Malaysia mencatatkan penurunan sebanyak 3.14% (daripada 19,971 buah kepada 19,343 buah). Pantai Timur menunjukkan penurunan sebanyak 0.73% dan Pantai Barat juga mencatatkan penurunan sebanyak 4.12%. Bilangan vesel-vesel menangkap ikan yang dilesenkan di Sabah dan Sarawak menunjukkan sedikit pertambahan.

Pembangunan sektor perikanan laut dalam mengambil kira status sumber perikanan berdasarkan maklumat yang diperolehi dari sumber perikanan. Bilangan vesel menangkap ikan yang dibenarkan untuk sektor perikanan laut dalam agak kecil jika dibandingkan dengan vesel perikanan laut pantai. Pada tahun 1999 terdapat lebih dari 30,000 buah vesel yang dilesenkan untuk menerokai perairan laut pantai. Pada tahun 1999 bilangan vesel laut dalam yang dilesenkan ialah 481 unit. Adalah dijangkakan bahawa pengeluaran dari sektor ini akan berkembang dan akan menyumbang kepada peningkatan dalam pengeluaran ikan negara.

3.3 Perkakas Menangkap Ikan

Sesebuah vesel menangkap ikan yang dilesenkan pada kebiasaannya mengusahakan sejenis perkakas sahaja. Walau bagaimanapun terdapat vesel yang beroperasi lebih daripada sejenis alat menangkap ikan samada pada masa yang sama atau pun di musim yang berlainan. Oleh sebab itu bilangan lesen yang dikeluarkan untuk perkakas menangkap ikan dengan bilangan lesen yang dikeluarkan untuk vesel menangkap ikan biasanya tidak sama. Terdapat peningkatan dalam bilangan vesel menangkap ikan yang dilesenkan pada tahun 1999. Bilangan perkakas menangkap ikan yang dilesenkan juga meningkat sebanyak 9.4% berbanding pada 1998 (daripada 25,451 unit pada tahun 1998 kepada 27,840 unit pada tahun 1999). Terdapat peningkatan terhadap vesel-vesel menangkap ikan tradisi yang beroperasi menggunakan lebih daripada sejenis perkakas.

3.4 Pendaratan Ikan Marin

Pendaratan ikan marin bertambah sebanyak 2.73% daripada 1,215,206 tan metrik pada tahun 1998 kepada 1,248,402 tan metrik pada tahun 1999. Dari segi nilai pendaratan, terdapat penambahan sebanyak 8.66% daripada RM3.81 bilion pada tahun 1998 kepada RM4.14 bilion pada tahun 1999. Vesel-vesel menangkap ikan komersial yang mengusahakan pukut tunda dan pukut jerut ikan

menghasilkan 77% daripada pengeluaran ikan marin. Pada keseluruhannya pendaratan oleh vesel-vesel menangkap ikan pukat tunda menurun 1.16% daripada 681,223 tan metrik pada tahun 1998 kepada 673,305 tan metrik pada tahun 1999. Pendaratan oleh vesel-vesel pukat jerut ikan meningkat sebanyak 20.98% daripada 217,944 tan metrik pada tahun 1998 kepada 263,660 tan metrik pada tahun 1999.

Jadual I

Pendaratan dan Nilai Perikanan Laut Pantai, 1999

	Pendaratan (Tan Metrik)	Nilai (RM)
Pantai Barat Semenanjung Malaysia	462,171	1,605,512,300
Pantai Timur Semenanjung Malaysia	333,532	1,009,370,824
Semenanjung Malaysia	795,703	2,614,883,124
Sabah	200,933	676,858,489
Sarawak	101,130	398,273,946
Wilayah Persekutuan Labuan	11,967	47,720,675
Jumlah	1,109,733	3,737,736,234

Sebahagian besar daripada pengeluaran ikan marin masih disumbangkan oleh sektor perikanan laut pantai (Jadual 1) yang mana pada tahun 1999 telah meningkat sebanyak 2.76% daripada 1,079,953 tan metrik kepada 1,109,733 tan metrik, sumbangan sebanyak 88.9% kepada jumlah pengeluaran ikan marin. Semenjak dua dekad yang lalu sektor perikanan pantai merupakan penyumbang utama kepada pendaratan ikan marin yang kekal pada tahap lebih kurang 80% setiap tahun. Vesel-vesel menangkap ikan komersial (pukat tunda dan pukat jerut) yang hanya merupakan 21% daripada jumlah bilangan vesel menangkap ikan sektor perikanan laut pantai telah menyumbangkan sebanyak 70% kepada jumlah pengeluaran sektor ini. Peralatan tradisional yang digunakan di atas 26,972 unit vesel hanya menyumbang sebanyak 311,005 tan metrik pada 1999. Bagi sektor perikanan laut pantai, pendaratan dari vesel pukat tunda tidak banyak berubah di mana

sebanyak 597,464 tan metrik telah didaratkan (pertambahan hanya sebanyak 0.35% dari pendaratan 1998). Tetapi pukat jerut telah menampakan peningkatan 19.13%. Walau pun bilangan vesel tradisional yang dilesenkan pada tahun 1999 menunjukkan tambahan tetapi pengeluaran dari vesel ini menurun 1.27% daripada 315,005 tan metrik pada 1998 kepada 311,005 tan metrik pada 1999. Pengeluaran ini berpunca dari kurangnya pengeluaran kerang-kerangan, pukat surung (82.56%) pukat tangguk (48.8%), ikan bilis (19.05%), pukat jerut (7.36%) dan pancing (0.09%). Namun begitu pengeluaran dari dari perkakas berikut menunjukkan satu peningkatan, pukat tarik (13.27%), pukat hanyut (5.47%), belat (11.97%), bubu (3.6%), pukat rentang (3.52%) dan pukat bakul 0.24%.

Industri perikanan laut dalam (Jadual II dan III) merangkumi vesel-vesel menangkap ikan yang bermuatan 70 GRT ke atas yang mengusahakan pukat tunda, pukat jerut (kecuali pukat jerut bilis) pancing, pukat hanyut yang beroperasi di kawasan perairan melebihi 30 batu notika. Pada tahun 1999 industri ini menyumbang sebanyak 138,669 tan metrik ikan atau merupakan 11.1% daripada jumlah pendaratan ikan marin di Malaysia. Pendaratan ini telah meningkat sebanyak 2.5% jika dibandingkan dengan tahun sebelumnya. Dari segi pendaratan, Pantai Barat Semenanjung Malaysia menyumbangkan 27.34% (37,910 tan metrik), Pantai Timur 50.24% (69,669 tan metrik), Sabah 4.53% (6,280 tan metrik), Labuan 2.9% (4,026 tan metrik) dan Sarawak 14.99% (20,784 tan metrik) daripada jumlah pendaratan perikanan laut dalam. Dari segi nilai pula pengeluaran dari sektor ini telah meningkat sebanyak 10.8% daripada RM366.02 juta pada tahun 1998 kepada RM405.54 juta pada tahun 1999. Nilai ini juga adalah 9.79% dari jumlah nilai pendaratan ikan marin di Malaysia.

Pendaratan oleh vesel-vesel pukat tunda dalam sektor perikanan laut dalam menunjukkan penurunan sebanyak 13.2% daripada 85,831 tan metrik pada tahun 1998 kepada 75,841 tan metrik pada tahun 1999. Walau bagaimanapun pendaratan oleh vesel-vesel pukat jerut telah meningkat sebanyak 27.4% dari 48,996 tan metrik pada tahun 1998 kepada 62,396 tan metrik pada tahun 1999.

Jadual II

**Pendaratan Perikanan Laut Dalam Mengikut Kumpulan Perkakas, 1999
(Kuantiti Dalam Tan Metrik)**

	Pukat Tunda 70 GRT & Ke Atas	Pukat Jerut Ikan 70 GRT & Ke Atas	Rawai/ Pancing 70 GRT & Ke Atas	Jumlah
Pantai Barat Sem. Malaysia	24,131	13,779	0	37,910
Pantai Timur Sem. Malaysia	30,365	39,304	0	69,669
Semenanjung Malaysia	54,496	53,083	0	107,579
Sabah	0	6,055	225	6,280
Sarawak	19,929	661	194	20,784
Wilayah Persekutuan Labuan	1,416	2,597	13	4,026
Jumlah	75,841	62,396	432	138,669

Jadual III

**Nilai Perikanan Laut Dalam Mengikut Kumpulan Perkakas,
1999, (Nilai Dalam RM)**

	Pukat Tunda 70 GRT & Ke Atas	Pukat Jerut Ikan 70 GRT & Ke Atas	Rawai/ Pancing 70 GRT & Ke Atas	Jumlah
Pantai Barat Sem. Malaysia	61,600,169	46,338,363	0	107,938,532
Pantai Timur Sem. Malaysia	77,513,949	132,178,172	0	209,692,121
Semenanjung Malaysia	139,114,118	178,516,535	0	317,630,653
Sabah	0	20,363,783	1,093,678	21,456,461
Sarawak	50,873,555	2,222,923	942,993	54,039,471
Wilayah Persekutuan Labuan	3,614,680	8,733,633	63,190	12,411,503
Jumlah	193,602,353	209,835,874	2,099,861	405,538,088

4. AKUAKULTUR

Sektor akuakultur mempunyai potensi yang besar dalam menyumbang kepada pengeluaran ikan negara untuk masa hadapan. Perancangan yang teliti dan rapi serta usaha yang serius telah diberikan untuk memajukan sektor ini, terutama sekali dalam bidang akuakultur berskala besar melalui penglibatan pihak swasta. Namun begitu usaha yang sama juga akan diberi untuk meningkatkan pengeluaran akuakultur dari ladang yang kecil dan sederhana melalui penggunaan teknologi moden dan amalan pengurusan yang mampan.

4.1 Pengeluaran Akuakultur

Pengeluaran dari sektor akuakultur untuk tahun 1999 terus dipengaruhi oleh pengeluaran kerang dan dari kolam air tawar. Jumlah pengeluaran adalah sebanyak 166,974 tan metrik, peningkatan 24.9% dari pengeluaran tahun 1998 sebanyak 133,647 tan metrik. Pengeluaran ini adalah 11.8% pengeluaran ikan negara. Dari segi nilai pula ia telah menyumbang sebanyak RM 775.08 juta atau 15.5% dari keseluruhan nilai pengeluaran ikan negara.

Selain pengeluaran ikan untuk makanan, industri akuakultur juga mengeluarkan ikan hiasan. Pengeluaran dari sektor ini meningkat sebanyak 5% daripada 324,542,970 ekor dalam tahun 1998 kepada 340,439,721 ekor pada tahun 1999 manakala dari segi nilai, peningkatan adalah sebanyak 14% daripada RM 70.4 juta kepada RM 80.23 juta dalam tahun 1999.

Sejumlah 21,104 penternak terlibat dalam industri akuakultur dalam tahun 1999, penurunan sebanyak 2.4%. Sejumlah besar tenaga kerja iaitu 82.1% tertumpu kepada ternakan air tawar. Pecahan tenaga kerja mengikut sistem ternakan adalah kolam air tawar (66.1%), sangkar air tawar (7.2%), kandang (5.3%), bekas lombong (2.2%) dan tangki simen (1.3%). Peratus dalam ternakan air payau adalah 17.9% dengan pecahan sangkar (6.9%), kolam (5.2%), rumpai laut (2.4%), kerang (1.3%), siput sudu (1.3%) dan tiram (0.8%).

Pengeluaran dari semua sistem menunjukkan peningkatan kecuali pengeluaran ternakan kerang. Punca utama bagi peningkatan ini adalah disebabkan oleh peningkatan produktiviti dan pendekatan pengurusan yang lebih sistematik.

4.2 Ternakan Air Tawar

Ternakan air tawar menghasilkan sebanyak 26.7% dari jumlah pengeluaran akuakultur. Dalam tahun 1999 jumlah pengeluaran ternakan air tawar telah meningkat sebanyak 34.3%, daripada 33,183 tan metrik kepada 44,576 tan metrik. Dari segi nilai ia merekodkan RM 257.49 juta iaitu peningkatan 31.9% berbanding tahun sebelumnya dan dengan itu menyumbang hampir 33.2% dari jumlah nilai pengeluaran akuakultur keseluruhan.

Sektor Ternakan Kolam Air Tawar merupakan penggerak utama dalam sistem ternakan ini, menyumbang sebanyak 77.1% (34,349 tan metrik) daripada jumlah pengeluaran air tawar iaitu meningkat 29.8% berbanding dengan pengeluaran tahun 1998. Dari segi nilai ia mencatatkan peningkatan sebanyak 28.7% daripada RM 167.18 juta kepada RM 215.15 juta. Kebanyakan negeri menunjukkan peningkatan dalam pengeluaran, kecuali negeri Sarawak dan Sabah. Negeri Terengganu mendahului senarai peningkatan pengeluaran iaitu melebihi satu setengah kali ganda dengan pengeluaran sebanyak 458 tan metrik atau 155.6%. Pengeluaran dari negeri Johor juga meningkat melebihi satu setengah kali ganda dengan penghasilan sebanyak 4,715 tan metrik atau 151.0% diikuti oleh negeri Perak yang menghasilkan sebanyak 4,608 tan metrik iaitu peningkatan sebanyak 113.4%. Lain-lain negeri juga menunjukan peningkatan pengeluaran kecuali negeri Sarawak dan Sabah yang menunjukkan sedikit penurunan masing-masing sebanyak 6.4% dan 26.7%. Spesis utama yang ditenak adalah keli (8,932 tan metrik), tilapia merah (7,943 tan metrik), tilapia hitam (1,717 tan metrik) dan belut (1,500 tan metrik). Kadar pengeluaran dari ternakan kolam air tawar ialah 6.7 mt/ha.

Pengeluaran dari bekas lombong juga meningkat sebanyak 62.5% daripada 3,618 tan metrik dalam tahun 1998 kepada 5,881 tan metrik dalam tahun 1999). Nilai pengeluaran meningkat sebanyak 66.0% daripada RM 12.35 juta dalam tahun 1998 kepada RM 20.50 juta dalam tahun 1999. Keseluruhan luas kawasan ternakan telah meningkat daripada 1,479 hektar pada tahun 1998 kepada 1,602 hektar dalam tahun 1999. Peningkatan pengeluaran adalah disebabkan oleh kadar pengeluaran yang meningkat daripada 3.11 tan/ha dalam tahun 1998 kepada 3.67 tan/ha dalam tahun 1999. Negeri Perak dan Selangor merupakan pengeluar utama dalam ternakan bekas lombong dengan masing-masing mengeluarkan 5,343 tan metrik dan 414 tan metrik. Spesis utama yang dihasilkan ialah Tilapia Merah (37.9%) diikuti oleh Kap Kepala Besar (16.6%) dan Kap Rumput (10.4%).

Ternakan Sangkar Air Tawar menyumbang 6.8% dari keseluruhan pengeluaran ternakan air tawar iaitu menunjukkan pertambahan sebanyak 48.6%, peningkatan daripada 2,040 tan metrik kepada 3,032 tan metrik dalam tahun 1999. Peningkatan ini disebabkan oleh kadar purata pengeluaran telah meningkat daripada 15.73 kg/m² kepada 21.38 kg/m². Ikan Tilapia Merah merupakan spesis utama dternak (64.5%) diikuti Patin (20.5%) dan Baung (9.2%). Pengeluar utama adalah negeri Terengganu yang mengeluarkan 1,246 tan metrik dalam tahun 1999, Pahang (847 tan metrik) dan Negeri Sembilan (489 tan metrik). Pengeluaran dari negeri-negeri lain menunjukkan pengeluaran sederhana sepanjang tahun 1999.

Ternakan Tangki Simen Dan Kandang menyumbang sebanyak 1,313 tan metrik. Ternakan utama dari sistem ini ialah ternakan ikan Tilapia Merah, Patin, Lampam Jawa dan Ikan Keli. Ternakan tangki simen sangat digemari di Selangor, Perak dan Negeri Sembilan dan sedang berkembang di negeri-negeri lain. Ternakan kandang pula hanya dijalankan di Kelantan dan Perak.

4.3 Sistem Air Payau

Dalam tahun 1999, sektor air payau menyumbang 122,398 tan metrik atau 73.3% daripada jumlah pengeluaran akuakultur. Sumbangan ini merosot sedikit dari 75.0% dalam tahun 1998. Ini disebabkan oleh penurunan penghasilan kerang. Lain-lain sistem ternakan air payau menunjukkan peningkatan termasuklah pengeluaran rumpai laut khasnya dari negeri Sabah sebanyak 11,847 tan metrik.

Penghasilan **kerang** merosot sedikit sebanyak 2.2% dari 81,717 tan metrik dalam tahun 1998 kepada 79,912 tan metrik dalam tahun 1999. Negeri Perak menghasilkan 70.1% pengeluaran kerang negara pada tahun 1999 iaitu sebanyak 56,032 tan metrik diikuti oleh Pulau Pinang menyumbang sebanyak 13,985 tan metrik, dan negeri Selangor sebanyak 9,622 tan metrik. Kadar pengeluaran kerang ialah 15.4 mt/ha.

Pengeluaran dari kolam-kolam air payau meningkat sebanyak 17.6% daripada 11,600 tan metrik dalam tahun 1998 kepada 13,643 tan metrik dalam tahun 1999. Dari segi nilai pula ia telah meningkat sebanyak 17.4% daripada RM 308.48 juta kepada RM 362.2 juta. Pengeluaran dari negeri Johor dan Pahang telah menunjukkan peningkatan yang ketara iaitu masing-masing sebanyak 135.1% dan 144.7%. Ternakan utama yang dikeluarkan adalah udang harimau. Negeri Johor mengeluarkan ikan Siakap, Udang Putih dan Siakap Merah dalam kuantiti yang agak tinggi. Negeri Sarawak pula telah menunjukkan peningkatan yang menggalakkan daripada 675.1 tan metrik pada tahun 1998 kepada 1,676.9 tan metrik dalam tahun 1999. Peningkatan sebanyak 158% ini adalah kebanyakannya dari pengeluaran udang harimau. Bagi negeri Sabah, ia mengalami penurunan dalam pengeluaran udang harimau sebanyak 32.2% daripada 2,717 tan metrik pada tahun 1998 kepada 1,843 tan metrik dalam tahun 1999.

Pengeluaran dari Sangkar Air Payau begitu menggalakkan iaitu meningkat sebanyak 16.8% (7,034 tan metrik). Sementara nilai pengeluaran menurun sebanyak 3.1% daripada RM 83.58 juta kepada RM 81.01 juta dalam tahun 1999. Selangor menunjukkan peningkatan sebanyak 84.0% kepada 2,063 tan metrik manakala negeri Perak merekodkan penurunan sebanyak 49.6%

kepada 699 tan metrik. Pengeluaran dari negeri Johor meningkat sebanyak 61.3% daripada 1,189 tan metrik pada tahun 1998 kepada 1,918 tan metrik pada tahun 1999. Kadar pengeluaran utama dari sangkar air payau adalah ditahap 9 kg/m² pada tahun 1999.

Pengeluaran utama dari sangkar air payau terdiri daripada Ikan Siakap dan Ikan Jenahak yang menyumbang sebanyak 75.5% pengeluaran daripada sistem ternakan ini. Lain-lain spesis yang ditenak termasuk Ikan Kerapu, Ikan Merah, Ikan Tilapia Merah dan Ketam.

Pengeluaran Siput Sudu telah meningkat dengan ketara sebanyak sepuluh kali ganda daripada 986 tan metrik dalam tahun 1998 kepada 9,764 tan metrik dalam tahun 1999. Negeri Johor yang merupakan pengeluar utama dengan pengeluaran sebanyak 9,367 tan metrik dengan menyumbangkan 96.0% pengeluaran siput sudu negara. Kadar pengeluaran siput sudu adalah ditahap 126 kg/m² pada tahun 1999. Nilai pengeluaran siput sudu meningkat daripada RM 0.59 juta dalam tahun 1998 kepada RM 4.57 juta pada tahun 1999 iaitu peningkatan sebanyak 674.5%.

Pengeluaran Tiram pada tahun 1999 adalah sebanyak 198 tan metrik dengan nilai RM 1.4 juta. Pengeluaran tertumpu di negeri-negeri Terengganu, Sabah Kedah, dan Pulau Pinang. Kadar pengeluaran tiram adalah rendah iaitu 2.2 kg/m².

Pengeluaran Rumpai Laut merupakan satu komoditi yang berpotensi untuk dimajukan dengan pengeluaran sebanyak 11,847 tan metrik mempunyai keluasan sejumlah 280 hektar. Negeri Sabah merupakan pengeluaran utama rumpai laut negara dengan bilangan penternak seramai 511 orang. Kadar pengeluaran rumpai laut ialah 42.3 mt/ha.

4.4 Ikan Hiasan

Jumlah pengeluaran ikan hiasan telah menunjukkan peningkatan sebanyak 5.9% daripada 324,542,970 ekor dalam tahun 1998 kepada 340,439,721 ekor dalam tahun 1999. Dari segi nilai terdapat peningkatan sebanyak 14.0% daripada RM 70.40 juta dalam tahun 1998 kepada RM 80.23 juta dalam tahun

1999. Negeri Johor masih kekal sebagai pengeluar utama ikan hiasan yang menyumbang sebanyak 251,571,264 ekor iaitu 75.7% dari jumlah keseluruhan pengeluaran ikan hiasan dalam tahun 1999. Ini diikuti oleh negeri Perak yang menyumbang sebanyak 71,200,485 ekor (20.9%), negeri Selangor menyumbangkan sebanyak 7,572,800 ekor (2.2%) dan negeri Pulau Pinang menyumbangkan sebanyak 3,855,936 ekor (1.1%) dari jumlah pengeluaran ikan hiasan dalam tahun 1999. Dua kumpulan utama ikan hiasan yang dikeluarkan adalah '*Cyprinid*' (Ikan Emas, Koi, Barb, Danio) yang menyumbangkan sebanyak 28.7% dan '*poeciliid*' (Guppy dan Molly) yang menyumbangkan sebanyak 30.3% dari jumlah pengeluaran ikan hiasan negara.

5. PENGELUARAN BENIH

Pengeluaran benih ikan air tawar dari pusat pembaikbiak ikan kerajaan pada tahun 1999 adalah sebanyak 34.83 juta ekor. Spesis utama yang dibiak ialah Lampam Jawa (8.51 juta ekor), Keli (8.10 juta ekor), Tilapia Merah (7.95 juta ekor), Jelawat (2.88 juta ekor) dan Lee Koh (1.75 juta ekor). Semua spesis ini menyumbang sebanyak 83.8% daripada pengeluaran keseluruhan benih-benih ikan daripada pusat-pusat kerajaan. Sejumlah 25.28 juta ekor benih telah diagihkan kepada penternak dan 2.7 juta pula dilepaskan ke perairan umum.

Pengeluaran benih ikan/udang air payau dari pusat-pusat pembaikbiak kerajaan dalam tahun 1999 adalah sebanyak 299.64 juta ekor. Spesis utama yang dikeluarkan adalah Siakap (129.48 juta ekor), Udang Harimau (8.28 juta ekor) dan Udang Galah (6.04 juta ekor). Sejumlah besar benih Kerapu (155 juta ekor) yang dihasilkan telah diagihkan kepada pusat penetasan swasta untuk percubaan asuhan dan ada juga yang dilepaskan ke habitat semulajadi di bawah program penambahan stok.

Terdapat 189 pusat penetasan swasta yang mengeluarkan benih ikan dan udang (air tawar dan air payau) bagi menampong industri akuakultur. Sebanyak 2.22 bilion benih udang dan 264.6 juta ekor benih ikan telah dihasilkan pada tahun 1999.

6. PERAIRAN UMUM/PERIKANAN DARAT

Perairan umum (sungai, tasik, bekas lombong dan empangan) telah mencatatkan penurunan pengeluaran daripada 4,344 tan metrik pada tahun 1998 kepada 3,353 tan metrik dalam tahun 1999, penurunan 20.5%. Negeri-negeri penyumbang adalah Perak, Selangor, Pahang, Johor dan Kedah.

7. PENGELUARAN 'FEEDMILL'

Terdapat 32 buah kilang 'feedmill' dengan pengeluaran sebanyak 67,410 tan metrik makanan ikan pada tahun 1999. Namun begitu pengeluaran masih tidak dapat menampung permintaan dari industri akuakultur yang sedang berkembang. Oleh itu sebahagian besar 'feedmill' yang digunakan adalah diimport.

STATUS OF THE FISHERIES SECTOR IN MALAYSIA

1. INTRODUCTION

The fisheries sector in Malaysia plays an important role in providing fish as a source of food and protein. In 1999, it contributed about 1.66% to the national Gross Domestic Product (GDP)* and provided direct employment to 83,952 fishermen and 21,104 fish culturists. Over the years, the industry has succeeded in achieving a steady production from its marine inshore fisheries amounting to an average of 1.1 million tonnes annually. The Department of Fisheries Malaysia has successfully sustained this production level through continuous efforts in the management of the resources.

The Department of Fisheries is taking several measures to increase fish production in the country. Amongst these measures are to increase fish production from deep-sea fishing and the development of the aquaculture sector. An increase in the number of deep-sea fishing vessels together with tighter monitoring, control and surveillance of these vessels will give a positive contribution to the fisheries sector in the future. However, the real potential to increase fish production still remains within the aquaculture industry. With a vast potential of inland areas and coastal areas, it is estimated that the production from the aquaculture industry can be increased by as much as four times its present level by the year 2010. Proper planning and concerted efforts have been made and especially with the participation of the corporate sector, it is envisaged that the aquaculture industry will spearhead the quest to increase fish production in the future.

* National GDP of RM 300.349 billion (Statistics Handbook, Statistics Department Malaysia, 2001)

2. FISHERIES PROFILE

In 1999, the total production from the fisheries sector amounted to 1,418,829 tonnes valued at RM 5 billion. Statistically, the fisheries sector again recorded an overall increase in both production (4.85%) and value (10.38%). The indication that the fisheries industry is poised to remain an important industry can be reflected by its greater contribution to the GDP, which was 1.66% in 1999 as compared to 1.62% in 1998. Its contribution to the agricultural sector GDP was also encouraging, increasing from 13.22% to 14.56%. Given the proper priority, the fisheries sector can become an even more important contributor to the nation's food production.

By sector, production from marine capture fisheries contributed 1,248,402 tonnes or 88.0% of the nation's fish production with a value of RM 4.14 billion. Within this sector, the coastal fisheries remained the major contributor with a production of 1,109,733 tonnes valued at RM 3.74 billion. Still to be developed to its full potential, the deep-sea fisheries sector managed 138,669 tonnes with a value of RM 405.5 million and contributed 9.8% to the total fish production.

The aquaculture sector recorded a production of 166,974 tonnes, which constituted about 11.8% of the total fish production and increasing by 24.94% from the production of 1998. With strong growth in culture systems, which generate higher value produce, the value from the aquaculture sector rose by 18.46% from RM 654.24 million in 1998 to RM 775.08 million in 1999.

The inland fisheries sector continued to be insignificant producing only 3,453 tonnes or 0.24% of the total fish production. The contribution from the ornamental fish (aquarium) industry recorded 340.4 million pieces valued at RM 80.23 million in 1999, representing 1.60% of the total value produced by the fisheries sector.

The work force of the fisheries sector consisted of 83,952 fishermen working on licensed fishing vessels and 21,104 fish culturists involved in the various aquaculture systems. These figures do not include thousands more involved directly or indirectly in downstream activities and related industries. A total of 32,846 fishing vessels were licensed in 1999 with the majority operating traditional gears (79.3%).

3. MARINE FISHERIES

3.1 Fishermen

With 83,952 fishermen working on licensed fishing vessels, the population of the marine fisheries work force increased by 2.95%. However there was no significant change in the ratio of fishermen working on licensed commercial fishing vessels (42.1%) as against the number of fishermen working on traditional fishing vessels (57.9%).

The number of fishermen in Sarawak increased significantly by 14.60% since considerable efforts had been put to develop the deep-sea fishing operation off Sarawak waters. Perlis, Penang, Kedah, Pahang, Selangor and West Johore showed an increase in the number of fishermen by 8.84%, 8.32%, 4.45%, 3.26%, 2.26% and 1.93% respectively. Malacca, Negeri Sembilan, East Johore, Kelantan and Perak registered a drop in the fishermen population by 6.50%, 6.23%, 1.53%, 0.88% and 0.35% respectively.

For the last decade, the deep-sea fishing industry has been affected by a lack of large fishing vessels and skilled manpower. Various measures have been taken to ensure the expansion and development of the deep-sea fishing industry would bring maximum benefits to the country. Amongst these are the issuance of new permits and new licences for deep-sea fishing as well as the training of fishermen. However, the operations of deep-sea fishing vessels, to a certain extent, will still have to rely on foreign work force. The involvement of foreign workers in this sector of the fishing industry is considered necessary to accelerate the development of the industry itself. With the expansion of the

deep-sea fishing as well as the training of fishermen. However, the operations of deep-sea fishing vessels, to a certain extent, will still have to rely on foreign work force. The involvement of foreign workers in this sector of the fishing industry is considered necessary to accelerate the development of the industry itself. With the expansion of the deep-sea fishing fleet and especially with the involvement of chartered vessels, the number of foreign fishermen had increased from 13,093 in 1998 to 15,339 in 1999 i.e. by nearly 17.15%. Of these, 9,033 foreign crew had been approved to work in Peninsular Malaysia, 5,767 in Sabah, 452 in Sarawak and 87 in Labuan. The percentage of the total foreign crew who had been approved to work on fishing vessels in Sabah were 37.60%, Perlis 21.43%, Kelantan 10.96%, Terengganu 13.62%, Kedah 6.22%, East Johore 4.20%, Sarawak 2.95%, Pahang 1.34%, Perak 1.11% and Labuan 0.57%.

3.2 Fishing Vessels

The number of licensed fishing vessels in Malaysia stood at 34,051 units in 1999 as compared to 32,846 units in 1998, increasing by only 3.67%. The majority of the fishing vessels operate in the coastal areas, which have been exploited at an optimum level. In line with the management policy, new licences for fishing vessels are only issued for the deep-sea fishing sector, where the potential is more focused in East Malaysia. The fishing fleet in Peninsular Malaysia actually recorded a reduction of 3.14% (from 19,971 to 19,343) with the East Coast dipping by 0.73% and the West Coast by 4.12%. The slight increase in the number of licensed fishing vessels are mainly for Sabah and Sarawak.

Development of the deep-sea fishing fleet takes into serious consideration the status of the fisheries resources. Taking a precautionary approach, the deep-sea fishing fleet will remain comparatively small compared with the over 30,000 units licensed to operate in the inshore waters. In 1999, the total number of licensed deep-sea fishing vessels was only 481 units. It is expected that the production from this sector will grow and contribute more to the nation's fish production.

3.3 Fishing Gears

Normally each fishing vessel is licensed to operate one fishing gear. However, there are fishing operations where more than one licensed fishing gear are being used. At the same time, there are also licensed fishing vessels being issued more than one fishing gear licence but at different seasons. The number of fishing licences issued for fishing gears will normally exceed the number of fishing vessels licensed. There was an increase in the total number of fishing gear licences issued in 1999 by 9.4% as compared to 1998 (25,451 units in 1998 to 27,840 in 1999). The increase was mainly amongst traditional fishing vessels, which operate additional gears.

3.4 Marine Fish Landings

The total marine landings increased by 2.73% from 1,215,206 tonnes in 1998 to 1,248,402 tonnes in 1999. In terms of value, there was an improvement of 8.66% from RM 3.81 billion in 1998 to RM 4.14 billion in 1999. Commercial fishing vessels operating trawls and fish purse seiners produced 77% of the total marine fish landings. There was a slight decrease in the landings of trawlers by 1.16% from 681,223 tonnes in 1998 to 673,305 tonnes in 1999. Landings from the purse seiners increased significantly by 20.98% from 217,944 tonnes in 1998 to 263,660 tonnes in 1999.

Table 1

Landings and Values of Marine Inshore Fisheries, 1999

	Landings (Tonnes)	Value (RM)
West Coast of Peninsular Malaysia	462,171	1,605,512,300
East Coast of Peninsular Malaysia	333,532	1,009,370,824
Peninsular Malaysia	795,703	2,614,883,124
Sabah	200,933	676,858,489
Sarawak	101,130	398,273,946
Federal Territory of Labuan	11,967	47,720,675
Total	1,109,733	3,737,736,234

The bulk of the marine production is accounted for by the inshore fisheries (table 1), which, in 1999, recorded an increase of 2.76% from 1,079,953 tonnes in 1998 to 1,109,733 tonnes contributing 88.9% of the total marine production. Over the last two decades, this sector of the marine fisheries remained the major source of fish landings accounting for over 80% annually. It is pertinent to note that within the inshore sector, the commercial fishing vessels (trawlers and fish purse seiner), though constituting only about 21% of the total inshore fleet in number of operating units, produced 70% of the total inshore production. The traditional gears involving 26,972 units of fishing vessels produced only 311,005 tonnes in 1999.

Within the commercial sector of the inshore fisheries, landings from trawlers remained relatively unchanged at 597,464 tonnes (increased by only 0.35% of 1998 landings) whereas there was a significant increase in the landings of purse seiners by 19.13%. Although the number of traditional fishing vessels licensed in 1999 showed an increase, production from the traditional fishing vessels decreased by 1.27% from 315,005 tonnes in 1998 to 311,005 tonnes in 1999. The decrease in landings of the traditional fishing sector was due to the drop in production from shellfish-collection, push/scoop nets, lift nets, anchovy, purse seine landings and hook and line by 82.56%, 48.8%, 19.05%, 7.36% and 0.09% respectively. Although the overall landings from traditional gears showed a decrease, landings from the following gears showed an increase. The landings of other seine nets, drift/grill nets, stationary traps, portable traps, barrier nets and bag nets increased by 13.27%, 5.47%, 11.97%, 3.60%, 3.52% and 0.24% respectively.

The deep sea fisheries (Table II and III) covers fishing by vessels of 70 GRT and above operating trawl nets, purse seines (except anchovy purse seine) hooks and lines and drift/gill nets at a distance of beyond 30 nautical miles from the coast. It contributed a total of 138,669 tonnes of fish in 1999, which was 11.1% of the total marine fish landing of Malaysia, and showed an increase of 2.5% compared to the preceeding year. In terms of proportions of total landings, the West Coast of Peninsular Malaysia contributed 27.34% (37,910 tonnes), East Coast 50.24% (69,669 tonnes), Sabah 4.53% (6,280

tonnes), Labuan 2.90% (4,026 tonnes) and Sarawak 14.99% (20,784 tonnes). The value of deep-sea fisheries increased by 10.80% from RM 366.02 million in 1998 to RM 405.54 million in 1999. This contributed to 9.79% of the total value of marine fish landed in Malaysia in 1999.

Within the deep-sea fishing sector, landings from vessels operating trawlers reported a drop of 13.2% from 85,831 tonnes in 1998 to 75,841 tonnes in 1999. However, landing from purse seiners had increased significantly by 27.4% from 48,996 tonnes in 1998 to 62,396 tonnes in 1999.

Table II

**Landings of Deep-Sea Fisheries by Gear Group, 1999
(Quantity in Tonnes)**

	Trawl nets 70 GRT & above	Fish Purse Seine nets 70 GRT & above	Hooks and Lines 70 GRT & above	Total
West Coast of Peninsular Malaysia	24,131	13,779	0	37,910
East Coast of Peninsular Malaysia	30,365	39,304	0	69,669
Peninsular Malaysia	54,496	53,083	0	107,579
Sabah	0	6,055	225	6,280
Sarawak	19,929	661	194	20,784
Federal Territory of Labuan	1,416	2,597	13	4,026
Total	75,841	62,396	432	138,669

Table III

**Value of Deep Sea Fisheries by Gears Group 1999
(Value in RM)**

	Trawl nets 70 GRT & above	Fish Purse Seine Nets 70 GRT & above	Hooks and Lines 70 GRT & above	Total
West Coast of Peninsular Malaysia	61,600,169	46,338,363	0	107,938,532
East Coast of Peninsular Malaysia	77,513,949	132,178,172	0	209,692,121
Peninsular Malaysia	139,114,118	178,516,535	0	317,630,653
Sabah	0	20,362,783	1,093,678	21,456,461
Sarawak	50,873,555	2,222,923	942,993	54,039,471
Federal Territory of Labuan	3,614,680	8,733,633	63,190	12,411,503
Total	193,602,353	209,835,874	2,099,861	405,538,088

4. AQUACULTURE

The aquaculture sector has a large potential and can contribute significantly to the country's total fish requirement in future. Careful planning and serious efforts have been made to develop this sector, especially in the area of industrial scale aquaculture, through the participation of the private sector. However, equal emphasis will also be given to improving the aquaculture output from small and medium scale farms through intensification of production using modern technologies and sustainable management practices.

4.1 Aquaculture Production

Aquaculture production for the year 1999 continued to be influenced by the production of cockles and fish from freshwater pond culture. The total production was 166,974 tonnes, which was an increase of 24.9% over the 1998 output of 133,647 tonnes. This contributed 11.8% to the overall fish production in the country. However, the value of aquaculture production was RM 775.08 million or 15.5% of the total value of fish produced.

Besides producing fish for food, the aquaculture industry also produces ornamental fish (aquarium fish). Always on an increasing trend, production from this sector improved by 5.0% from 324,542,970 pieces in 1998 to 340,439,721 pieces in 1999. The value was RM80.23 million, an increase of 14.0% over the 1998 value of RM 70.40 million.

A total of 21,104 fish farmers/culturists were involved in the aquaculture industry in 1999, decreasing by 2.4 %. The bulk of the culturists were involved in the freshwater sector accounting for 82.1% i.e. pond culture (66.1%), freshwater cage culture (7.2%), freshwater pen culture (5.3%), culture in examining pools (2.2%) and freshwater cement tank culture (1.3%). 17.9 % of the culturists were involved in brackishwater and marine aquaculture i.e. brackishwater/marine cage culture (6.9%), pond culture (5.2%), seaweed culture (2.4%), cockle culture (1.3%), mussel culture (1.3%) and oyster culture (0.8%).

Production from all culture systems showed improvements in output except for cockle culture. The main reasons for this increase in production was improvement in productivity from many of the culture systems due to better technology and a more systemic management approach.

4.2 Freshwater culture

Freshwater aquaculture contributed 26.7% of the total aquaculture production in 1999. It increased 34.3% from 33,183 tonnes in 1998 to 44,576 tonnes in 1999. In terms of value, it recorded RM 257.49 million, which was 31.9% higher compared to the previous year, and contributed 33.2% to the total value of aquaculture production.

Freshwater pond culture spearheaded production from freshwater systems with 77.1% (34,349 tonnes) of the total freshwater production, improving by 29.8% when compared to the production recorded in 1998. In terms of value, it recorded an increase of 28.7% from RM167.18 million to RM215.15 million. Most states showed an increase in production, except Sarawak and Sabah.

Terengganu showed the highest percentage increase by 155.6% to record 458 tonnes. Production from Johor increased 151% to 4,715 tonnes followed by Perak, which produced 4,608 tonnes, increasing by 113.4%. Other states also recorded higher production but contributions from Sarawak and Sabah dipped 6.4% and 26.7% respectively. The major freshwater species cultured were catfish (8,932 tonnes), red tilapia (7,943 tonnes), black tilapia (1,717 tonnes) and eels (1500 tonnes). The average production from freshwater ponds was 6.7 tonnes / ha.

Production from **ex-mining pools** went up by 62.5% (from 3,618 tonnes in 1998 to 5,881 tonnes in 1999) posting a value of RM20.50 million and improving by 66.0% from RM12.35 million in 1998. There was an increase in culture area from 1,479 hectares in 1998 to 1,602 hectares in 1999. Increase in production was mainly due to better average production, which improved from 3.11 tonnes/ha in 1998 to 3.67 tonnes/ha in 1998. Both Perak and Selangor were the main producers contributing 5,343 and 414 tonnes respectively. Major species produced remained the same with Red Tilapia (37.9%) followed by Big Head Carp (16.6%) and Grass Carp (10.4%).

Freshwater cage culture, which contributed 6.8% to the overall freshwater production, also registered a growth of 48.6%, increasing from 2,040 tonnes in 1998 to 3,032 tonnes in 1999. This increase was due to the improvement in the average production from 15.73 kg/m² to 21.38 kg/m². Red tilapia remained the most popular cultured species (64.5%) with river catfish (*Pangasius* spp) (20.5%) and river catfish (*Mystus* spp.) (9.2%) also commonly cultured. Terengganu (1246 tonnes), Pahang (847 tonnes) and Negeri Sembilan (489 tonnes) were the main contributors. Production from the other states was marginal.

Freshwater tank and pen culture systems together provided 1,313 tonnes of mainly Red Tilapia, river catfish, Javanese carp and walking catfish. Freshwater tank culture is most popular in Selangor, Perak and Negeri Sembilan although it is gaining popularity in the other states too. Freshwater pen culture is mostly practiced in Kelantan and Perak.

4.3 Brackishwater / Marine Culture

In 1999, the brackishwater and marine sectors contributed 122,398 tonnes or 73.3% of the total aquaculture production. This was a slight decrease from 75% in 1998. This decrease was due to the slightly lower production of cockles. Other brackishwater/marine culture systems showed improvements in production especially seaweed production from Sabah which reached 11,847 tonnes.

Cockle harvest decreased marginally by 2.2% from 81,717 tonnes in 1998 to 79,912 tonnes in 1999. Perak contributed 70.1% or 56,032 tonnes of the total cockle harvest while Penang contributed 13,985 tonnes and Selangor 9,622 tonnes. The average harvest was 15.4 tonnes/ha.

Production from **brackishwater pond** culture moved up by 17.6% from 11,600 tonnes in 1998 to 13,643 tonnes in 1999. The value also increased by 17.4%, from RM308.48 million to RM362.20 million. Production from Johor and Pahang increased significantly by 135.1% and 144.7% respectively. The main species produced was tiger prawn (*Penaeus monodon*) with Johor also producing substantial amounts of barramundi, banana prawns and snappers. Sarawak too showed an encouraging increase in production from 675.1 tonnes in 1998 to 1,676.9 tonnes in 1999 (158%), with the increase being largely from tiger prawns. Sabah however experienced a drop in tiger prawn production from 2,717 tonnes in 1998 to 1,843 tonnes in 1999 (32.2%).

Production from **brackishwater cage** culture was encouraging with an increase of 16.8% to 7,034 tonnes. However, the value decreased slightly by 3.1% from RM83.58 million to RM81.01 million in 1999. Selangor registered an increment of 84.0% to record 2,063 tonnes while Perak recorded a decline by 49.6% to 699 tonnes. Production from Johore increased by 61.3% from 1,189 tonnes in 1998 to 1,918 tonnes in 1999. The average productivity from brackishwater cage culture was 9kg/m². The main species cultured were barramundi and mangrove snappers making up 75.5% of the production. Other species included groupers, red snapper, red tilapia and crabs.

Mussels production increased almost ten-fold from 986 tonnes in 1998 to 9764 tonnes in 1999. Johore was the main producer with production of 9,367 tonnes, contributing 96.0% of the total mussels harvest. The average productivity was 126 kg/m². The value of mussels produced rose from RM0.59 million in 1998 to RM4.57 million in 1999 i.e. a jump of 674.5%.

Total **oyster** production in 1999 was 198 tonnes with a value of RM1.4 million. Production was concentrated in the states of Terengganu, Sabah, Kedah and Penang. Productivity of oyster was low at 2.2 kg/m².

Seaweed is a commodity with a great potential for development with production at 11,847 tonnes for the year 1999 from an area of 280 ha. Sabah was the only state producing seaweed with 511 culturists. The average productivity was 42.3 tonnes /ha.

4.4 Ornamental Fish

The total production of ornamental fish increased by 5.9% from 324,542,970 pieces in 1998 to 340,439,721 pieces in 1999. In terms of value, the increase was 14.0% from RM70.40 million in 1998 to RM80.23 million in 1999. Johor remained as the main producer of ornamental fish contributing 251,571,264 pieces, which was 75.7% of the total production of ornamental fish in 1999. This was followed by Perak, which contributed 71,200,485 pieces or 20.9%, Selangor 7,572,800 pieces (2.2%) and Penang 3,855,936 pieces (1.1%). The two main groups of ornamental fish produced were Cyprinids (Goldfish, Koi, Barb, Danio) contributing 28.7% and Poecilids (Guppies and Mollies) contributing 30.3% of the total ornamental fish production.

5. FISH SEED PRODUCTION

Production of freshwater fingerlings from government hatcheries in 1999 amounted to 34.83 million pieces. The main species bred were Javanese carp (8.51 million pieces), walking catfish (8.10 million pieces), red tilapia (7.95 million pieces), river carp (2.88 million pieces) and common carp (1.75

million pieces). The above species constituted 83.8% of the total production of freshwater fingerlings from government hatcheries. A total of 25.28 million fish seed were distributed to culturists while 2.70 million were released into public waterbodies.

Production of brackishwater fish/prawn fry and fingerlings from government hatcheries in 1999 was 299.64 million pieces. The main species produced were barramundi (129.48 million pieces), tiger prawn (8.28 million pieces) and giant freshwater prawn (6.04 million pieces). A large amount of grouper fry (155 million) that were produced was distributed to private hatcheries for larval rearing trials and some were released into their natural habitats under the stock enhancement programme.

There were 189 private hatcheries producing fish and prawn fry (both freshwater and brackishwater species) to support the aquaculture industry. 2.22 billion prawn fry and 264.6 million fish fry were produced in 1999.

6. PUBLIC WATERBODIES/INLAND FISHERIES

Public waterbodies/inland fisheries refers to the landing of fish from public waterbodies i.e. rivers, lakes, ex-mining pools and dams. The landings from public waterbodies/inland fisheries decreased from 4,344 tonnes in 1998 to 3,353 tonnes in 1999 i.e. a drop of 20.5%. Perak, Selangor, Pahang, Johor and Kedah were the main producers.

7. FEEDMILL PRODUCTION

In 1999, there were 32 feedmills in the country that produced a total production of 67,410 tonnes of fishfeed. However, the fishfeed produced was insufficient for the growing aquaculture industry and much of it had to be imported.

PETA, CARTA DAN GRAF
MAPS, CHARTS AND GRAPHS

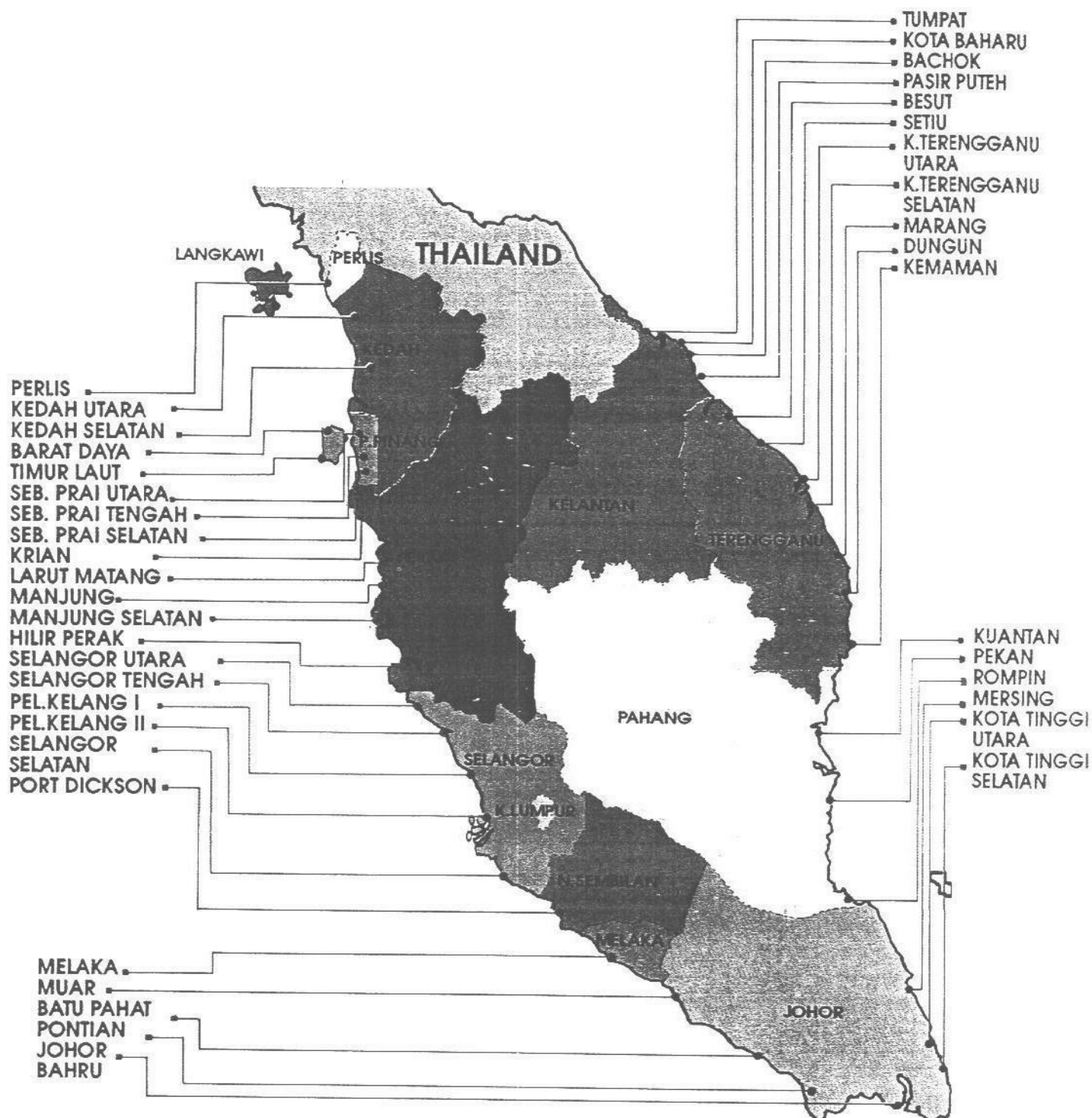
DAERAH-DAERAH PERIKANAN

FISHERIES DISTRICTS

MALAYSIA

MALAYSIA - DAERAH - DAERAH PERIKANAN

Malaysia - Fisheries Districts



Sempadan Negeri ————— State Boundary

Sempadan Daerah Perikanan ————— Fisheries Administrative Districts

SARAWAK

1. SEMANTAN
2. SANTUBONG
3. KUCHING
4. KUALA SADONG
5. BATANG LUPAR
6. SARIBAS/KALAKA
7. SARIKEI/BINTAGOR
8. BELAWAI
9. MATU DARO
10. SIBU/IGAN
11. MUKAH/OYA
12. BINTULU
13. MIRI
14. LIMBANG
15. LAWAS

SABAH

SANDAKAN
BELURAN
PITAS

KOTA MERUDU
KUDAT
KOTA BELUD
TUARAN
KOTA KINABALU
PAPAR
BEAUFORT
KUALA PENYU
SIPITANG

W.P. LABUAN
F.T. LABUAN

LAUT CHINA SELATAN
(SOUTH CHINA SEA)

BRUNEI

SARAWAK

KALIMANTAN

TAWAU

KUNAK

SEMPORNA

LAHAD DATU

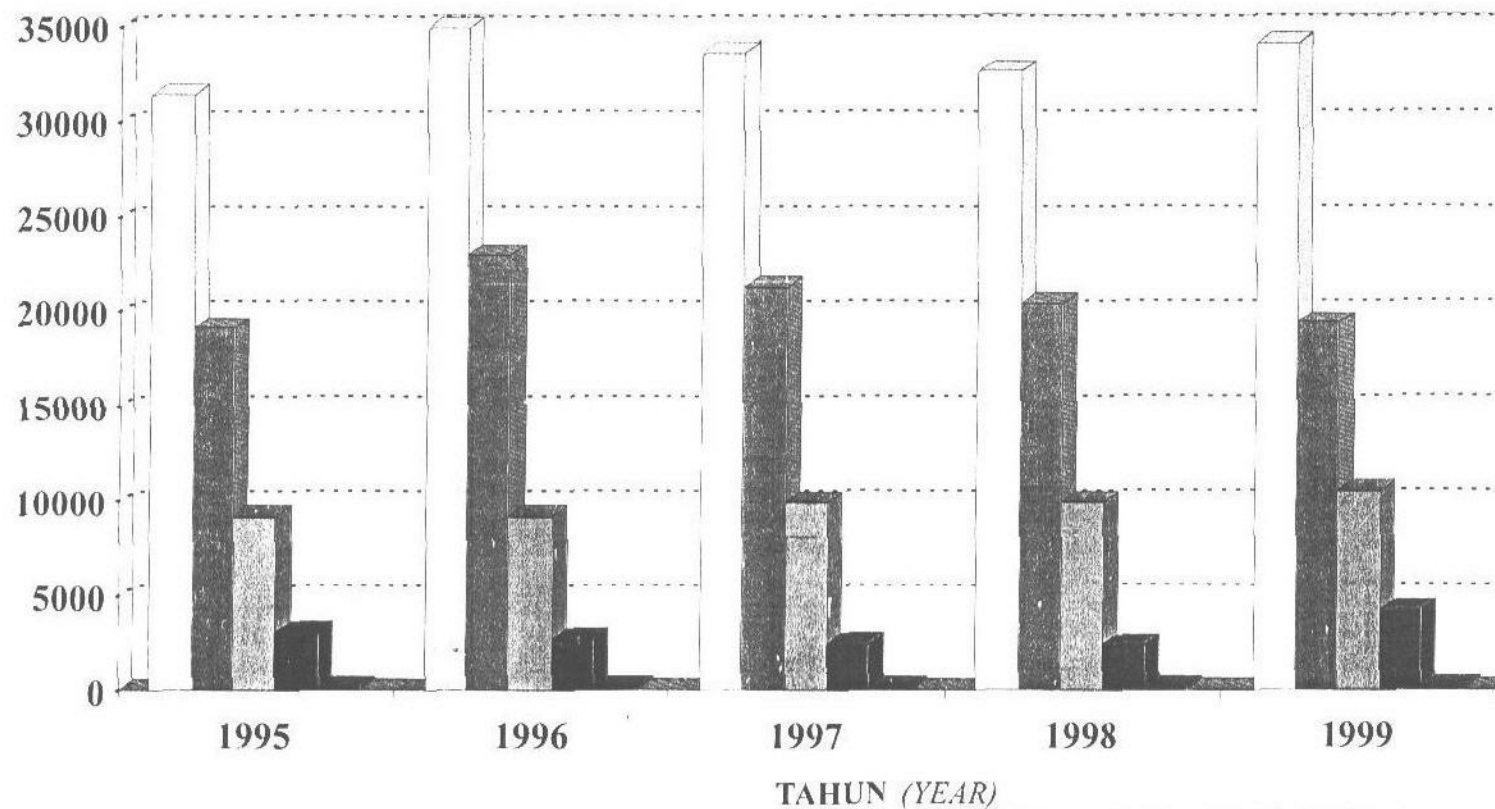
BILANGAN VESEL MENANGKAP IKAN YANG DILESENKAN, 1995-1999

(Number Of Fishing Vessels Licensed, 1995-1999)

MALAYSIA

BILANGAN VESEL

(Number Of Vessels)



MALAYSIA SEM.MALAYSIA SABAH SARAWAK LABUAN
 (Peninsular Malaysia)

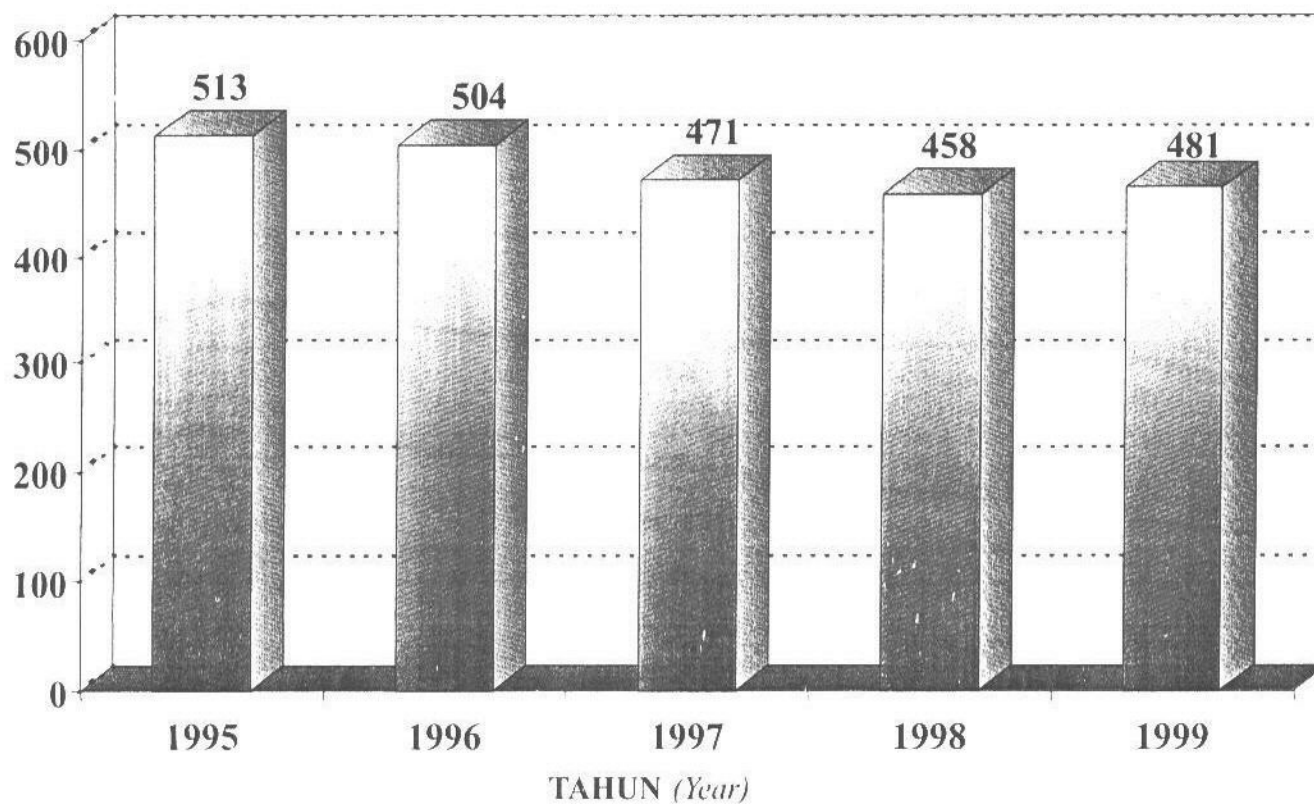
BILANGAN VESEL-VESEL LAUT DALAM YANG DILESENKAN, 1995-1999

(Number Of Deep-Sea Vessels Licensed, 1995 - 1999)

BILANGAN VESEL

(Number Of Vessels)

MALAYSIA



□ **BILANGAN VESEL DILESENKAN**
(Number Of Vessels Licensed)

ARAH ALIRAN PENDARATAN IKAN LAUT, 1990-1999

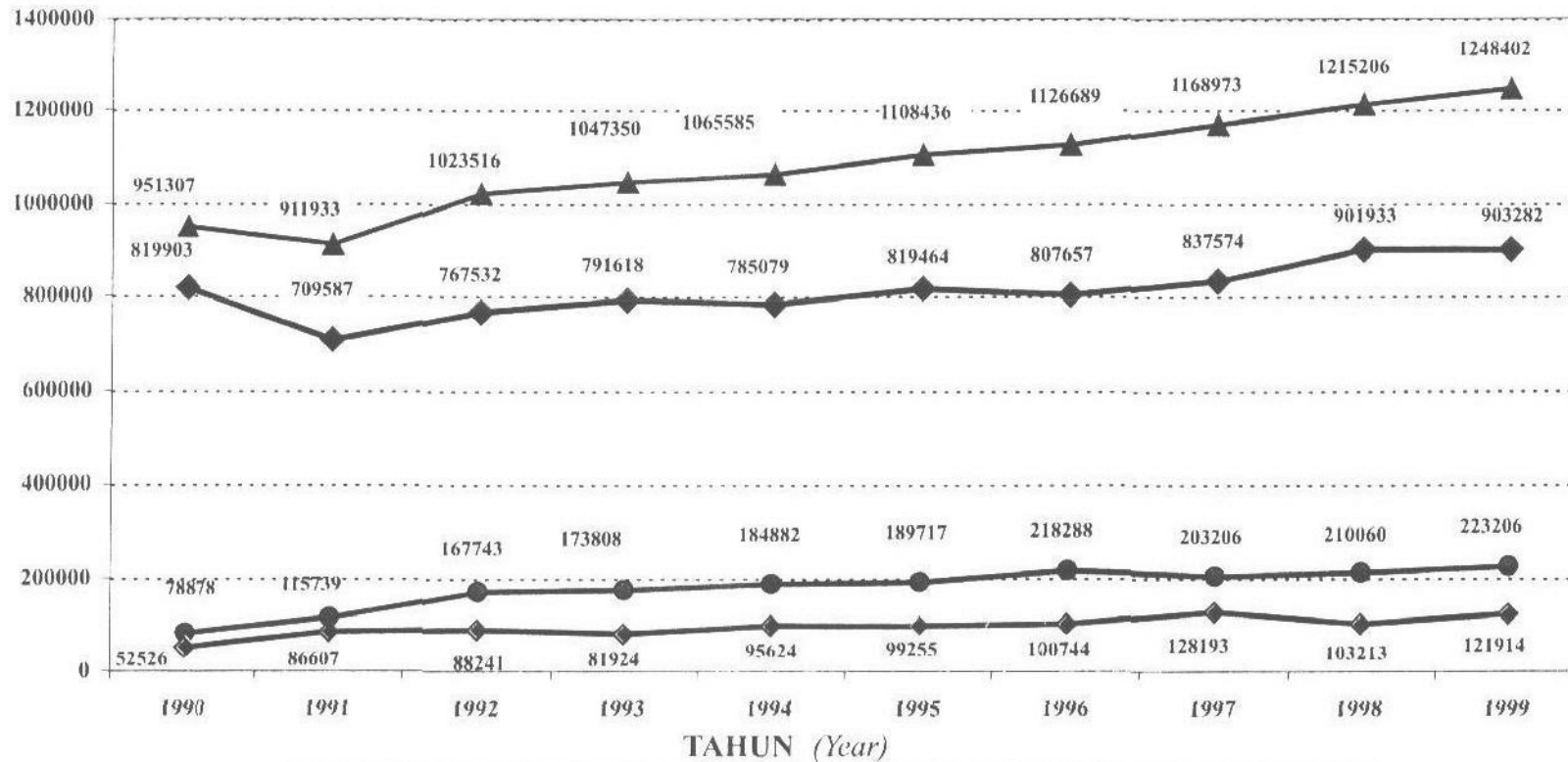
(Trend Of Marine Fish Landings, 1990-1999)

CARTA III
CHART III

MALAYSIA

KUANTITI DALAM TAN METRIK

(Quantity in Tonnes)



▲ MALAYSIA

◆ SEM. MALAYSIA
(Peninsular Malaysia)

◆ SARAWAK

● SABAH/LABUAN

ARAH ALIRAN PENDARATAN UDANG, 1990-1999

(Trend Of Prawn Landings, 1990-1999)

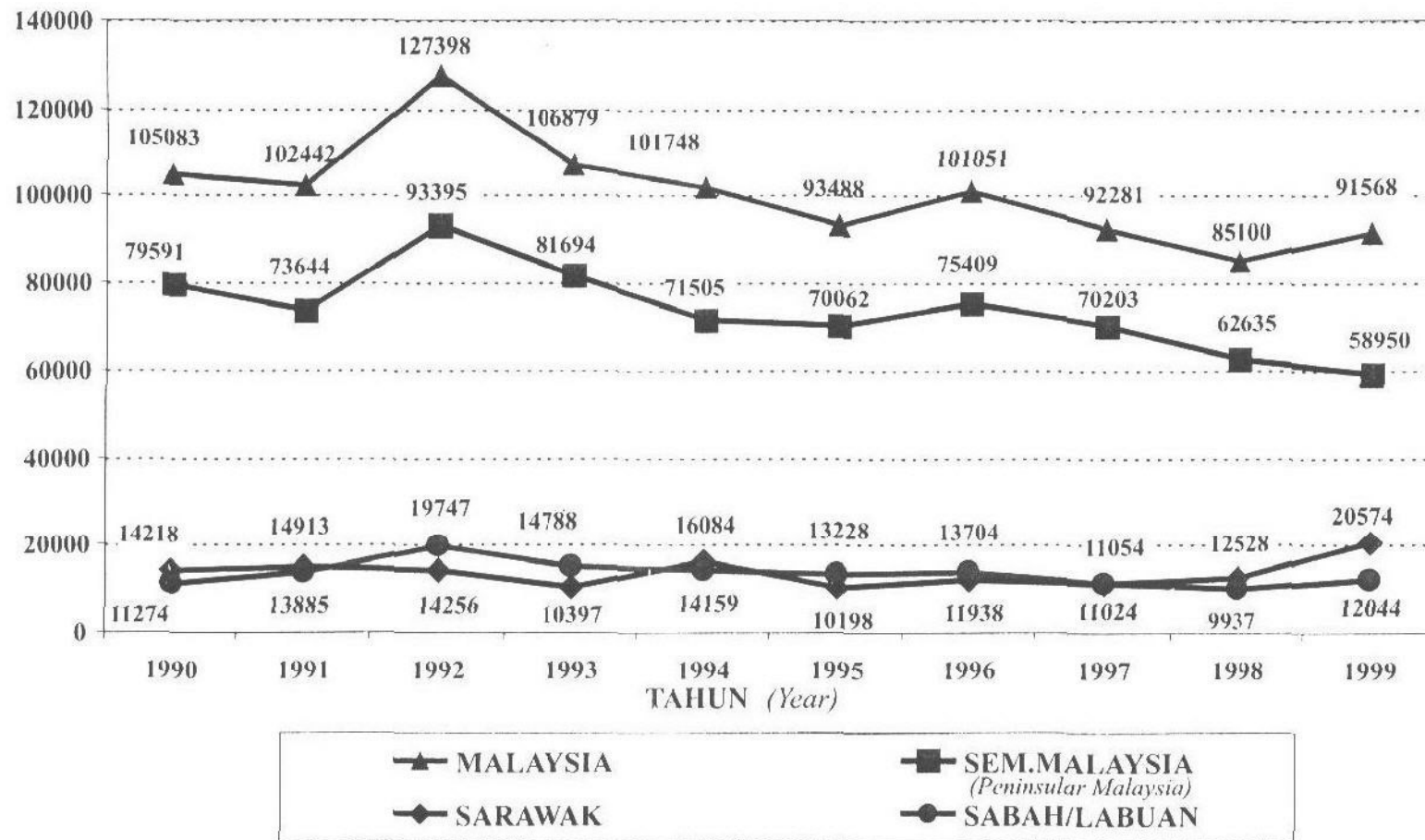
CARTA IV

CHART IV

MALAYSIA

KUANTITI DALAM TAN METRIK

(Quantity in Tonnes)



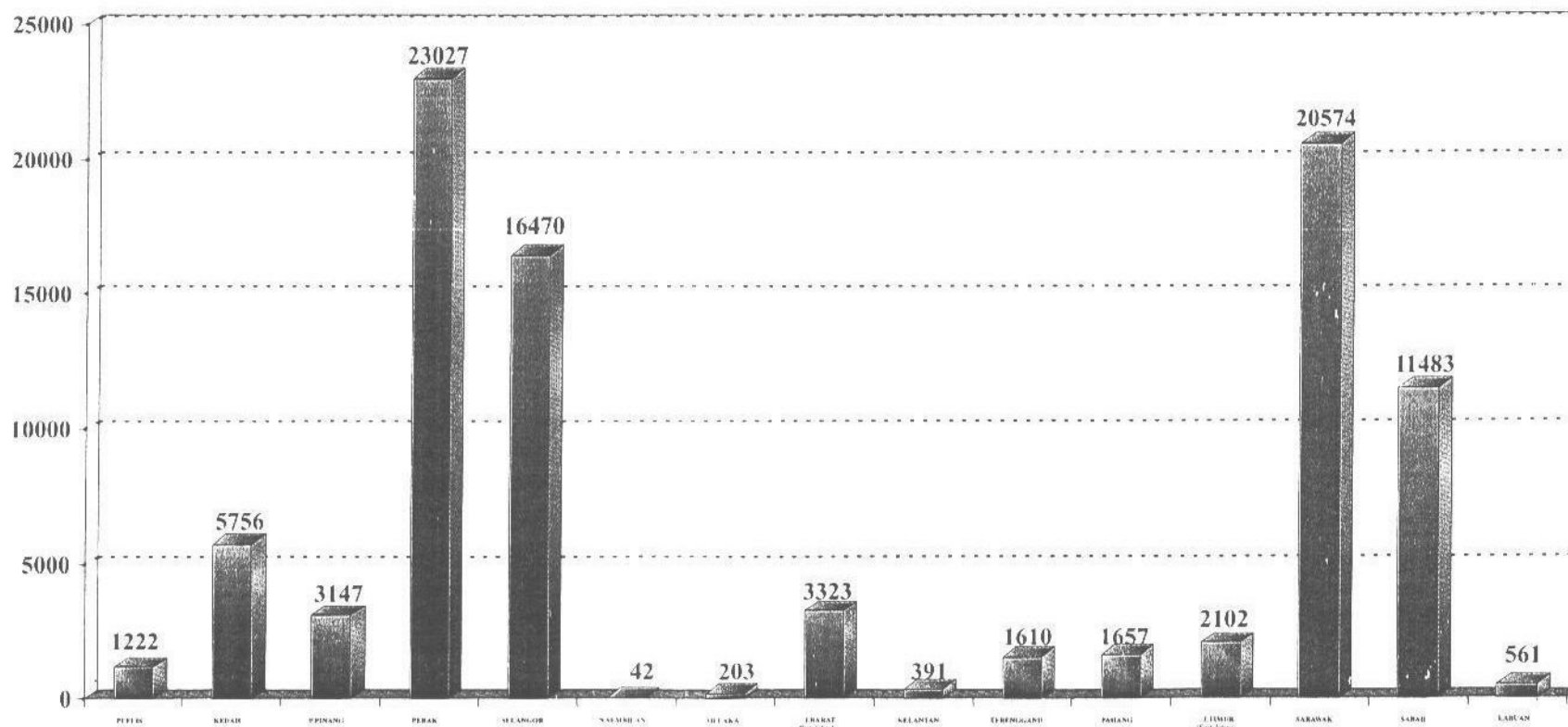
PENDARATAN UDANG, 1999

(Prawn Landings, 1999)

MALAYSIA

KUANTITI DALAM TAN METRIK

(Quantity in Tonnes)



■ PENDARATAN UDANG
(Landings)

PENDARATAN PUKAT TUNDA, 1995-1999

(Trawl Landings, 1995-1999)

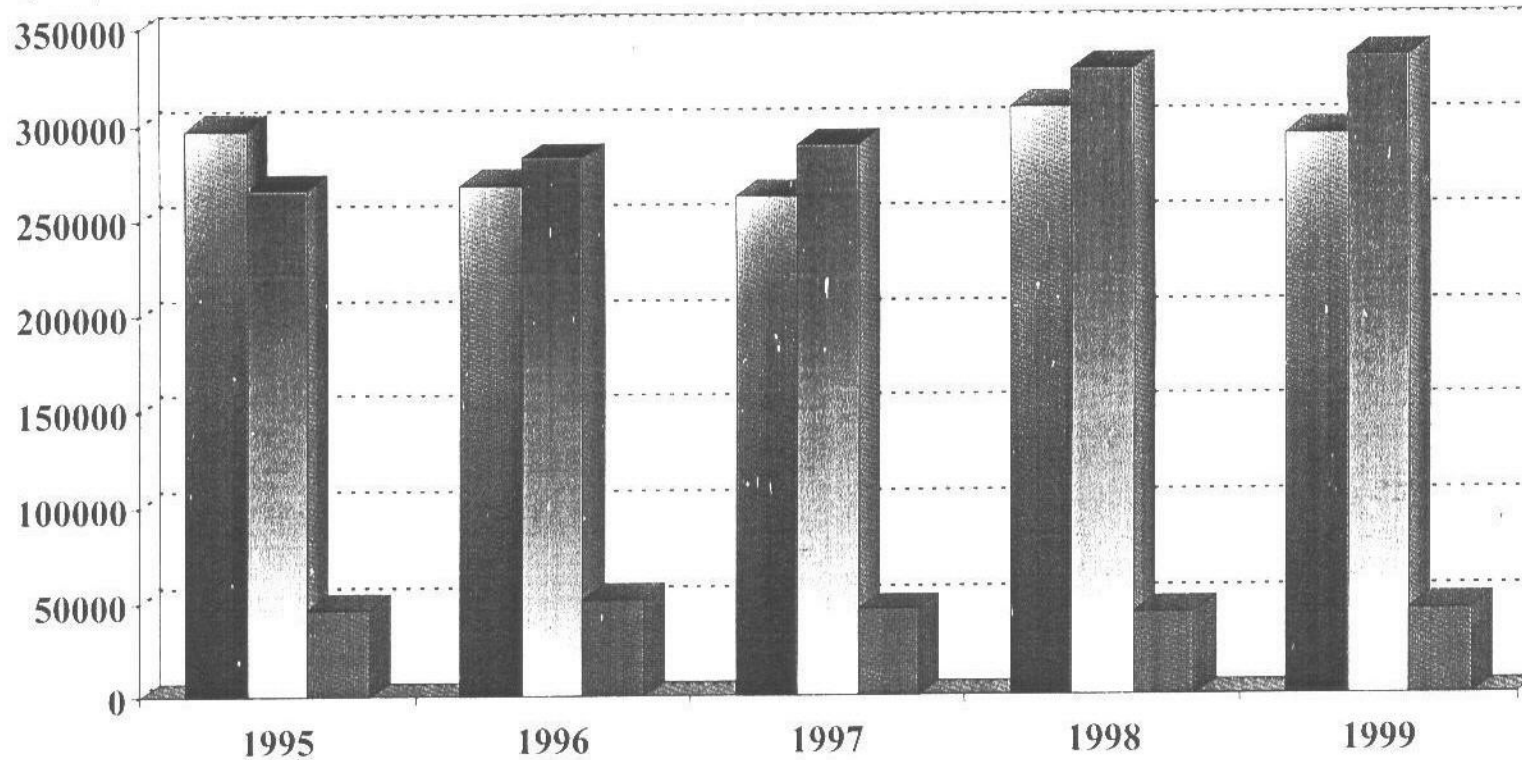
CARTA VI

CHART VI

MALAYSIA

KUANTITI DALAM TAN METRIK

(Quantity in Tonnes)



TAHUN (YEAR)

■ IKAN BAJA
(Trash Fish)

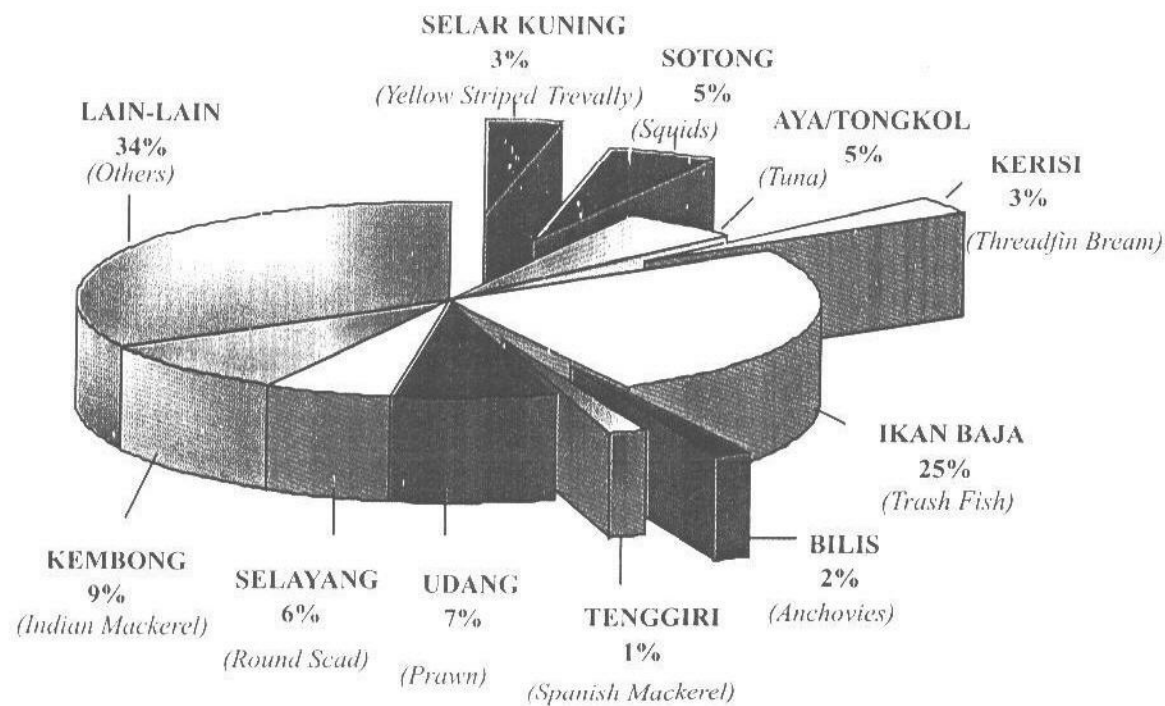
■ IKAN
(Fish)

■ UDANG
(Prawns)

PENDARATAN IKAN LAUT MENGIKUT SPESIES UTAMA, 1999

(Landings Of Marine Fish By Main Species, 1999)

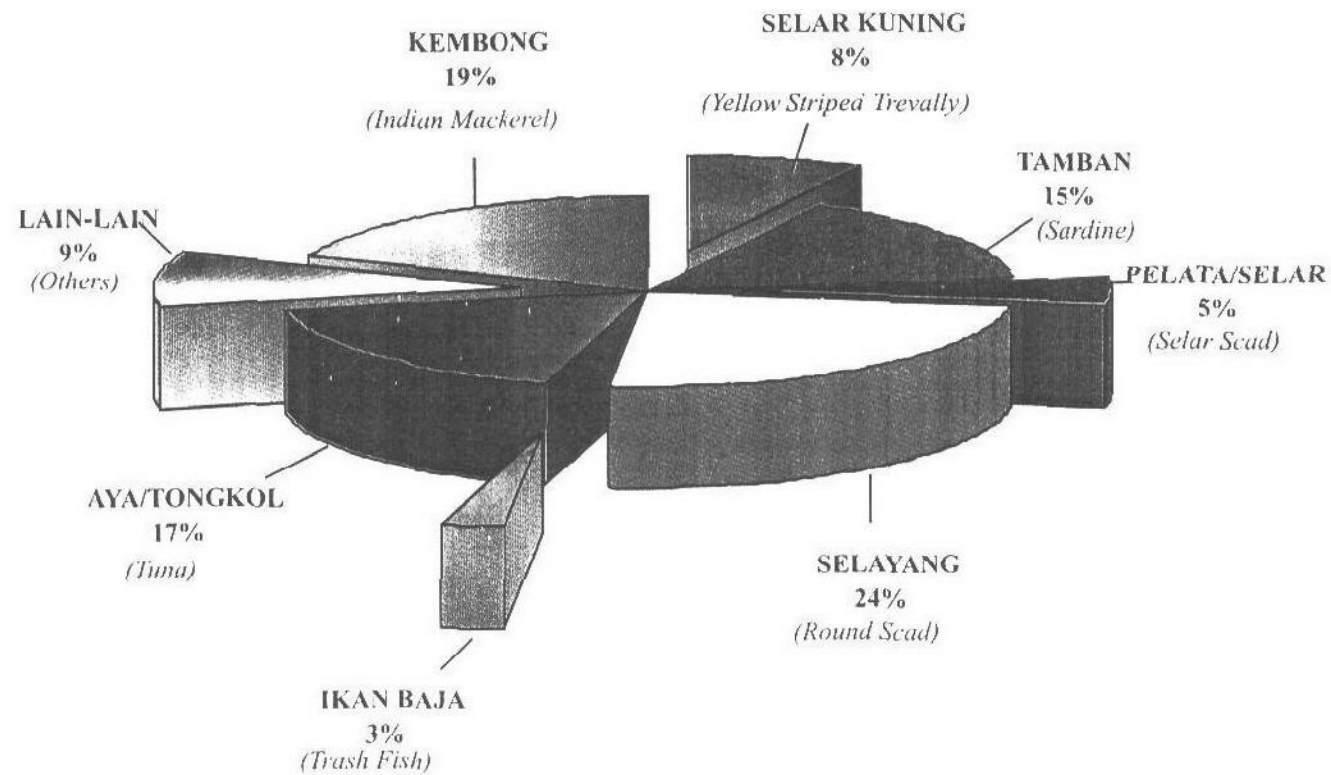
MALAYSIA



PENDARATAN PUKAT JERUT IKAN MENGIKUT SPESIS UTAMA, 1999

(Purse - Seine Fish Landings By Main Species, 1999)

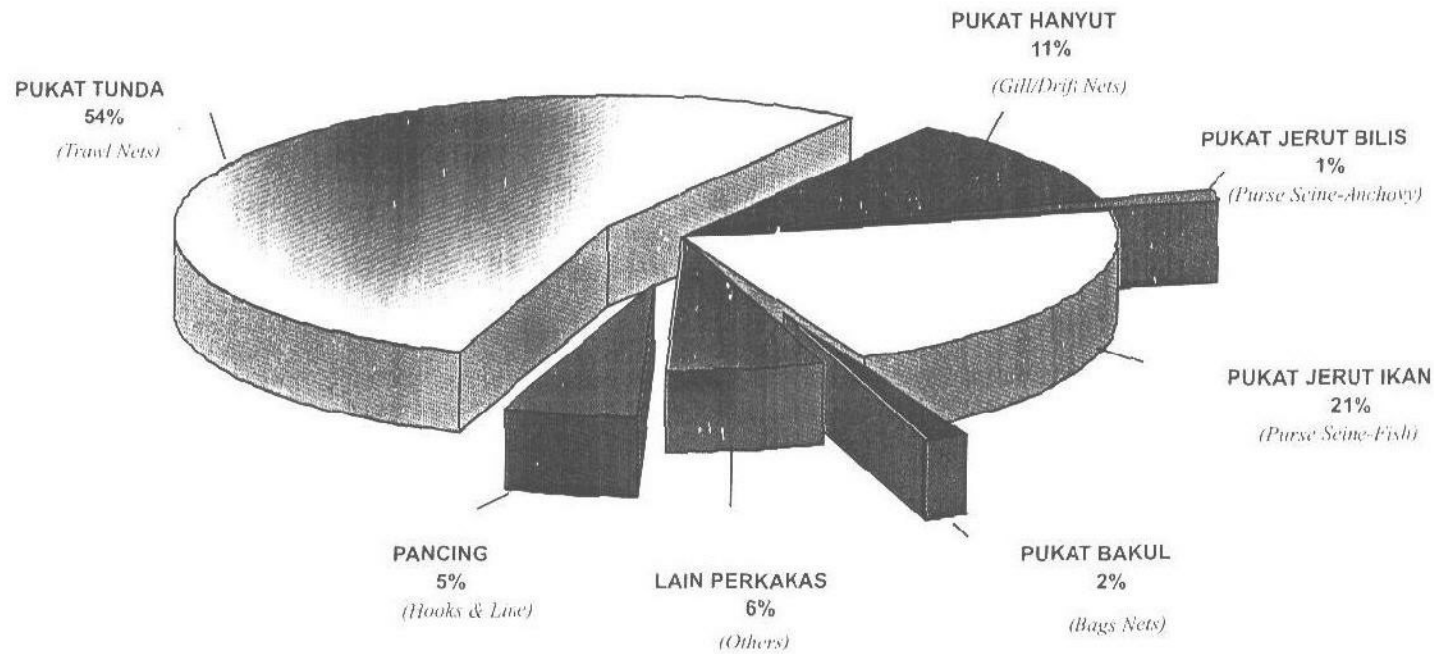
MALAYSIA



PENDARATAN IKAN LAUT MENGIKUT KUMPULAN PERKAKAS, 1999

(Landings Of Marine Fish By Gear Group, 1999)

MALAYSIA



ARAH ALIRAN NILAI PASARAN IKAN LAUT, 1990 -1999

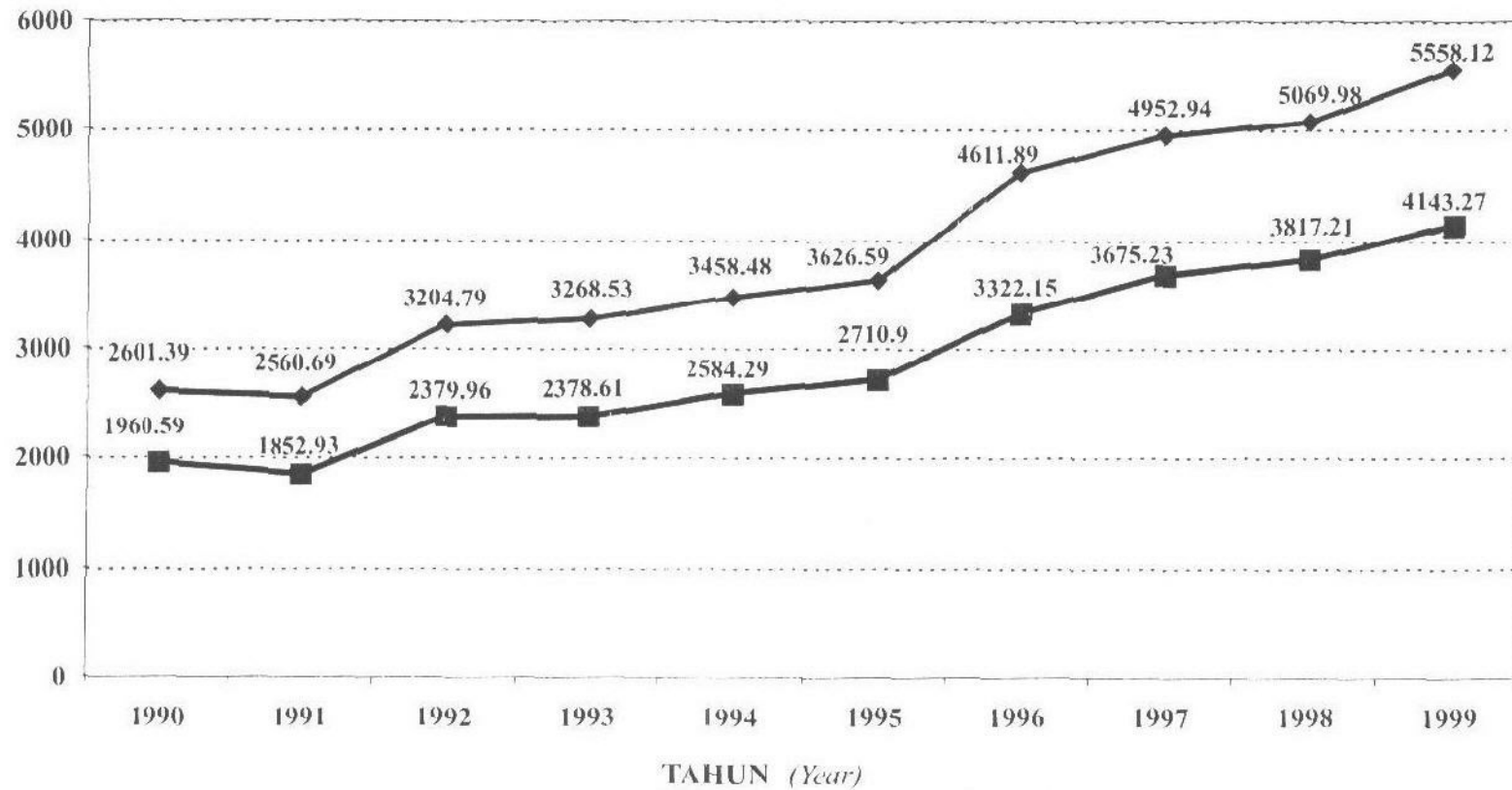
CARTA X
CHART X

(Trend Of Market Values Of Marine Fish, 1990 -1999)

MALAYSIA

NILAI DALAM RM JUTA

(Values in RM Million)



◆ NILAI RUNCIT

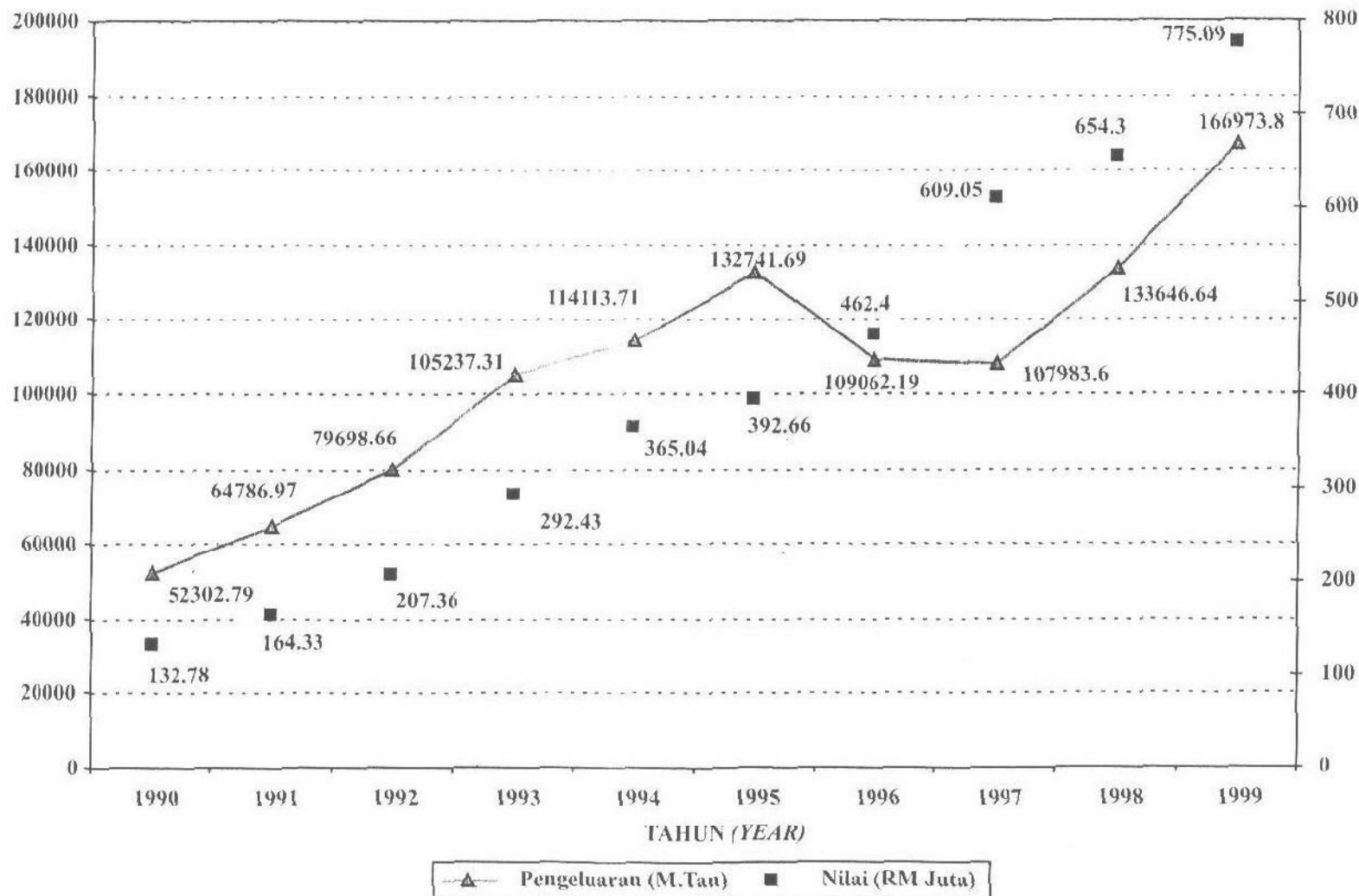
■ NILAI BORONG

CHARTA XI
CHART XI

ANGGARAN PENGELUARAN DAN NILAI PENGELUARAN TERNAKAIR DARI SEMUA
SISTEM AKUAKULTUR, MALAYSIA, 1990 - 1999
(ESTIMATED PRODUCTION AND VALUE OF AQUACULTURE FROM ALL
AQUACULTURE SYSTEM, MALAYSIA, 1990 - 1999)

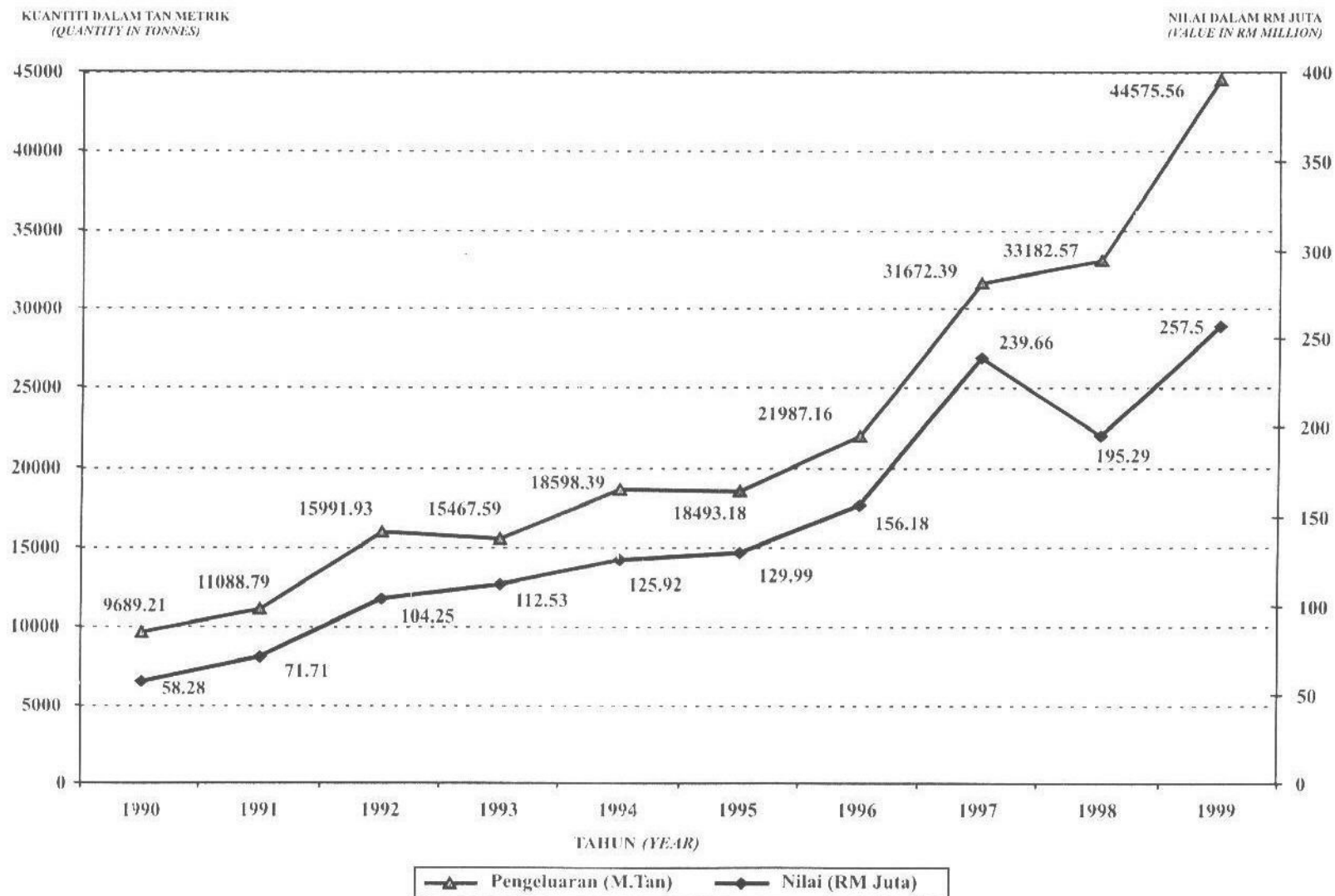
KUANTITI DALAM TAN METRIK
(QUANTITY IN TONNES)

NILAI DALAM RM JUTA
(VALUE IN RM MILLION)



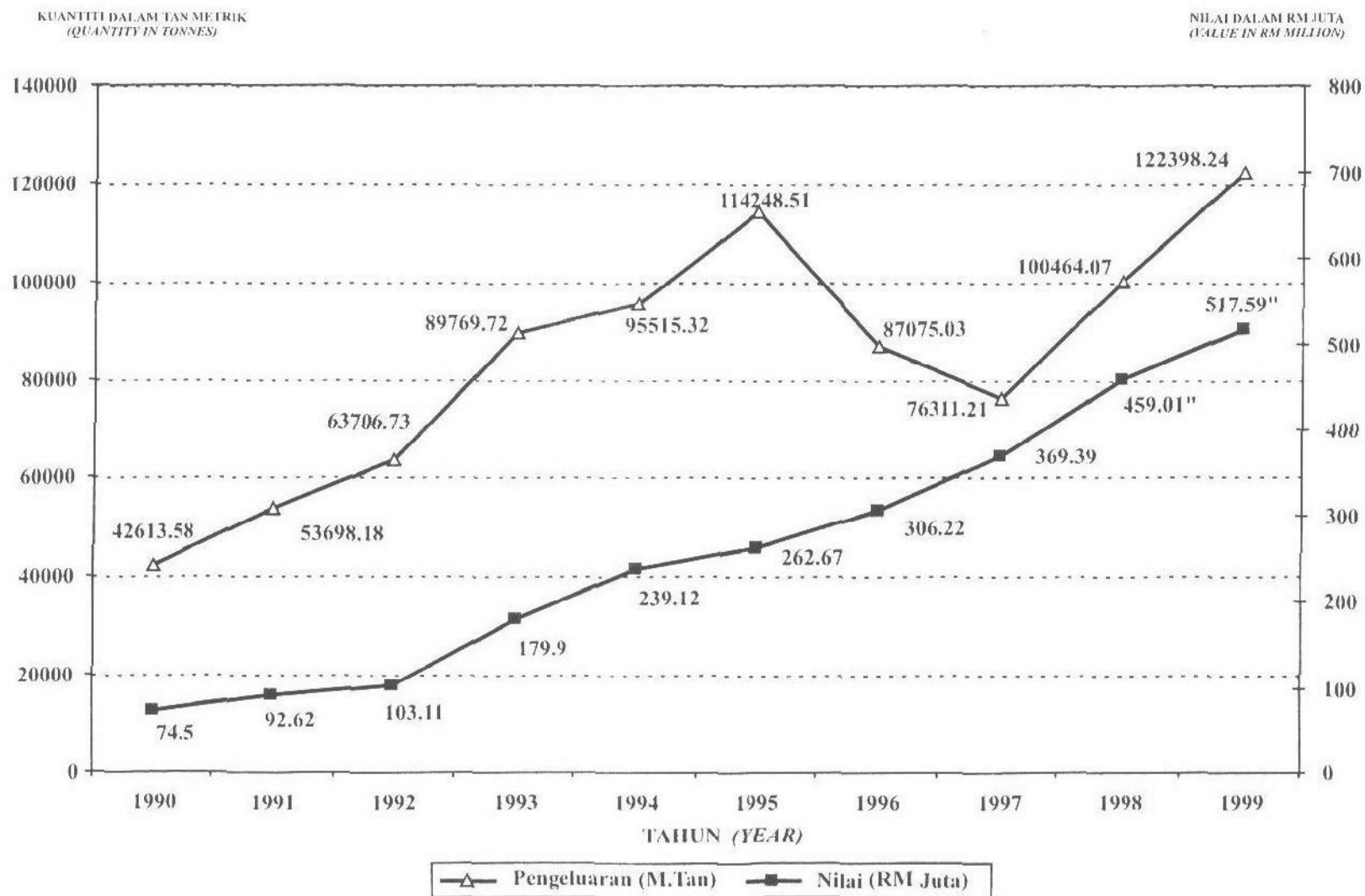
CARTA XII
CHART XII

ANGGARAN PENGELUARAN DAN NILAI IKAN AIRTAWAR DARI SEMUA
SISTEM AKUAKULTUR AIRTAWAR, MALAYSIA 1990 - 1999
(ESTIMATED PRODUCTION AND VALUE OF FRESHWATER FISH FROM ALL
FRESHWATER AQUACULTURE SYSTEM, MALAYSIA 1990 - 1999)



CHARTA XIII
CHART XIII

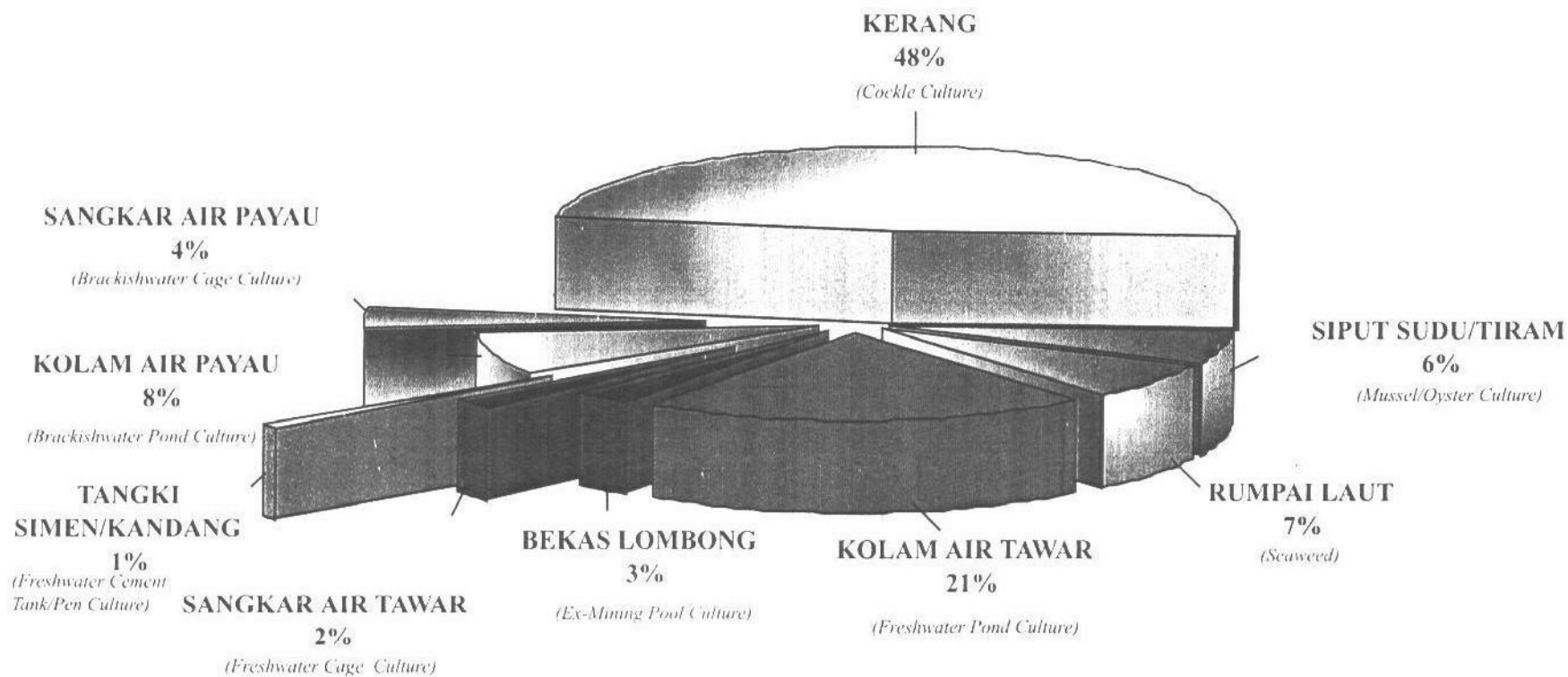
ANGGARAN PENGELUARAN DAN NILAI TERNAK AIR DARI SEMUA
SISTEM AKUAKULTUR AIRPAYAU, MALAYSIA, 1990 - 1999
(ESTIMATED PRODUCTION AND VALUE OF AQUACULTURE FROM ALL
BRACKISHWATER AQUACULTURE SYSTEM, MALAYSIA, 1990 - 1999)



PENGELUARAN TERNAKAIR MENGIKUT JENIS TERNAKAN, 1999

(Production Of Aquaculture By Type Of Culture, 1999)

MALAYSIA



JADUAL

TABLES

PERIKANAN LAUT

MARINE FISHERIES

JADUAL(TABLE) 1.1

MALAYSIA
BILANGAN NELAYAN YANG BEKERJA DIATAS VESEL-VESEL BERLESEN, 1999
NUMBER OF FISHERMEN WORKING ON LICENSED VESSELS, 1999

Negeri/ State Keturunan Ethnic Group	Pantai Barat/West Coast								Jumlah Kecil Sub- Total	Pantai Timur/East Coast				Jumlah Kecil Sub- Total	Sarawak	Sabah	W.P Labuan Federal Territory	Jumlah Kecil Sub- total	Jumlah Besar Grand Total
	Perlis	Kedah	Pulau Pinang Penang	Perak	Selangor	Negeri Sembilan	Melaka	Johor Barat West Johor		Kelantan	Terengganu	Pahang	Johor Timur East Johor						
Bumiputra Bumiputeras	1548	3155	833	1089	701	101	519	2856	10802	2256	6513	2730	2851	14350	9051	14835	112	23998	49150
Cina Chinese	350	259	1706	6801	4418	140	164	1463	15301	0	12	665	1229	1906	1536	243	10	1789	18996
India Indians	0	2	33	108	60	10		3	216	0	0	0	2	2	0	0	0	0	218
Portugis Portuguese	0	0	0	0	0	1	45		46	0	0	0	0	0	0	0	0	0	46
Thai Thais	3288	954	0	0	0	0	0		4242	1681	2078	211	44	4014	0	0	0	0	8256
Indonesia Indonesians	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	52	52	52
Lain-Lain Others	0	0	6	0	17	4	35		62	0	0	0	0	0	1202	5767	203	7172	7234
Jumlah Besar Grand Total	5186	4370	2578	7998	5196	256	763	4322	30669	3937	8603	3606	4126	20272	11789	20845	377	33011	83952

Nota: Bumiputera termasuk Orang Melayu dan Kumpulan Bumiputera Lain.

Note: Bumiputeras Including Malay and Other Indigenous Groups.

JADUAL (TABLE) 1.2

MALAYSIA

BILANGAN NELAYAN YANG BEKERJA DIATAS VESEL-VESEL BERLESEN MENGIKUT KUMPULAN PERKAKAS DAN NEGERI, 1999
NUMBER OF FISHERMEN WORKING ON LICENCED VESSELS BY GEAR GROUP AND STATE, 1999

NEGERI / State Kumpulan Perkakas Gear Group	Perlis	Kedah	Pulau Pinang Penang	Perak	Selangor	Negeri Sembilan	Melaka Malacca	Johor Barat West Johor	Kelantan	Terengganu	Pahang	Johor Timur East Johor	Jumlah kecil Sub - Total	Sarawak	Sabah	W.P Labuan Federal Territory Labuan	Jumlah kecil Sub - Total	Jumlah Besar Grand Total
Pukat Tunda Trawl Nets	832	1081	287	3404	1896	0	0	696	548	933	1250	1215	12142	5001	5123	70	10194	22336
Pukat Tarik Seine Nets																		
Pukat Jerut Ikan Purse Seine Fish	2898	243	244	302	160	0	0	0	1890	4631	930	546	11844	0	1011	147	1158	13002
Pukat Jerut Bilis P. Seine - Anchovy	0	1515	0	67	0	0	0	0	120	123	160	0	1985	0	285	34	319	2304
Lain-Lain Other Seines	0	18	330	1683	8	2	3	0	160	0	2	52	2258	4541	201	12	4754	7012
Pukat Hanyut Gill / Drift Nets	1456	1454	1568	2051	2594	227	714	3272	819	998	630	1773	17556	0	6134	0	6134	23690
Pukat Tangguk Lift Nets	0	0	0	0	0	0	0	0	103	77	80	0	260	0	1394	0	1394	1654
Perangkap/Traps.																	0	0
Belat-Belat Stationary	0	21	0	0	0	0	4	96	0	0	0	74	195	0	149	0	149	344
Bubu Portable	0	3	16	48	4	16	0	86	21	324	340	90	948	0	462	12	474	1422
Pancing Hooks&Lines	0	11	43	80	92	11	40	68	276	1517	214	291	2643	0	4806	102	4908	7551
Pukat Bakul Bag Nets	0	0	55	70	304	0	0	52	0	0	0	27	508	0	0	0	0	508
Pukat Surung Push/Scoop Nets	0	0	0	0	32	0	0	0	0	0	0	0	32	0	0	0	0	32
Pukat Rentang Barrier nets	0	0	0	0	10	0	0	7	0	0	0	0	17	0	11	0	11	28
Memungut Siput Shellfish Collection	0	24	0	103	0	0	0	17	0	0	0	0	144	0	219	0	219	363
Pembawa Ikan Fish Carriers	0	0	28	0	0	0	0	10	0	0	0	8	46	0	0	0	0	46
Rampaian Miscellaneous	0	0	7	190	96	0	2	18	0	0	0	50	363	2247	1050	0	3297	3660
Jumlah/Total	5186	4370	2578	7998	5196	256	763	4322	3937	8603	3606	4126	50941	11789	20845	377	33011	83952

JADUAL (TABLE) 1.3

MALAYSIA
BILANGAN NELAYAN YANG BEKERJA DIATAS VESEL-VESEL YANG DILESENKAN
MENGIKUT DAERAH-DAERAH PERIKANAN, 1999
NUMBER OF FISHERMEN WORKING IN LICENCED FISHING VESSELS
BY FISHERIES DISTRICTS, 1999

Daerah - Daerah Perikanan <i>Fisheries Districts</i>	Nelayan-Nelayan/ <i>Fisherman</i>				
	Bumiputera <i>Bumiputeras</i>	Cina <i>Chinese</i>	India <i>Indians</i>	Lain-Lain <i>Others</i>	Jumlah <i>Total</i>
SEMENANJUNG MALAYSIA <i>(PENINSULAR MALAYSIA)</i>					0
1 Kuala Perlis	1548	350	0	3288	5186
2 Langkawi	521	6	2	945	1474
3 Kedah Utara	1425	185	0	9	1619
4 Kedah Selatan	1209	68	0	0	1277
5 Timur Laut/P.Pinang	194	290	14	6	504
6 Barat Daya/P.Pinang	239	467	3	0	709
7 Seberang Prai Utara	173	103	2	0	278
8 Seberang Prai Tengah	78	41	0	0	119
9 Seberang Prai Selatan	149	805	14	0	968
10 Krian	318	1792	7	0	2117
11 Larut & Matang	63	1685	2	0	1750
12 Manjung	579	1822	92	0	2493
13 Hilir Perak	129	1502	7	0	1638
14 Selangor Utara	210	1724	0	0	1934
15 Selangor Tengah	157	874	6	0	1037
16 Pelabuhan Kelang 1	8	947	2	0	957
17 Pelabuhan Kelang 2	194	583	6	2	785
18 Selangor Selatan	132	290	46	15	483
19 Port Dickson	101	140	10	5	256
20 Melaka	519	164	0	80	763
21 Muar	711	285	1	0	997
22 Batu Pahat	739	521	0	0	1260
23 Pontian	568	517	0	0	1085
24 Johor Bharu	838	140	2	0	980
25 Pengerang(Kota Tinggi)	920	406	2	0	1328
26 Sedeli	657	319	0	19	995
27 Mersing	1274	504	0	25	1803
28 Kuantan	1235	470	0	206	1911
29 Pekan	778	21	0	0	799
30 Kuala Rompin	717	174	0	5	896
31 Kemaman	1225	3	105	0	1333
32 Dungun	1007	0	0	0	1007
33 Marang	909	0	42	0	951
34 Kuala Terengganu Utara	1031	0	605	0	1636
35 Kuala Terengganu Selatan	759	0	26	0	785
36 Besut	1133	0	1300	0	2433
37 Setiu	449	9	0	0	458
38 Kota Bharu	621	0	0	228	849
39 Bachok& Pasir Putih	696	0	0	1396	2092
40 Tumpat	939	0	0	57	996
Jumlah Kecil <i>Sub-Total</i>	25152	17207	2296	6286	50941

samb. Dari Jadual 1.3
(cont'd From Table 1.3)

Daerah - Daerah Perikanan <i>Fisheries Districts</i>	Nelayan-Nelayani/Fishermen				
	Bumiputera <i>Bumiputeras</i>	Cina <i>Chinese</i>	India <i>Indians</i>	Lain-Lain <i>Others</i>	Jumlah <i>Total</i>
SARAWAK					
1 Bandar Kuching	746	888	0	324	1958
2 Santubong	580	44	0	53	677
3 Pendam(Sadong Jaya)	542	6	0	0	548
4 Sematan	356	12	0	0	368
5 Batang Lupar (Sebuyau)	621	12	0	0	633
6 Saribas/Kalaka(Kabong)	744	14	0	0	758
7 Sibu/Igan	550	150	0	129	829
8 Sarikei/Bitangor	159	113	0	462	734
9 Mukah/Oya	1529	7	0	0	1536
10 Belawai	311	9	0	0	320
11 Matu Daro	1003	21	0	0	1024
12 Bintulu	479	62	0	60	601
13 Miri	788	197	0	174	1159
14 Limbang	107	1	0	0	108
15 Lawas	536	0	0	0	536
Jumlah Kecil/Sub - Total	9051	1536	0	1202	11789
SABAH					
1 Tawau	1130	105	0	801	2036
2 Semporna	723	0	0	1058	1781
3 Kunak	242	35	0	392	669
4 Lahad Datu	519	1	0	281	801
5 Sandakan	2228	7	0	1752	3987
6 Beluran	1560	0	0	8	1568
7 Kudat	2192	18	0	705	2915
8 Kota Marudu	711	2	0	0	713
9 Pitas	650	0	0	0	650
10 Kota Belut	1203	0	0	0	1203
11 Tuaran	490	0	0	0	490
12 Kota Kinabalu	987	41	0	691	1719
13 Papar	353	3	0	0	356
14 Beaufort	718	0	0	0	718
15 Kuala Penyu	743	29	0	79	851
16 Sipitang	386	2	0	0	388
Jumlah Kecil/Sub - Total	14835	243	0	5767	20845
W.P LABUAN/LABUAN FT					
1 Kg Bebuloh	19	10	0	0	29
2 Kg Ranca-Ranca	16	0	0	0	16
3 Kg Lubok Temiang	9	0	0	0	9
4 Kg Batu Manikar	10	0	0	0	10
5 Kg Tg. Aru	6	0	0	0	6
6 Kg Miri/Lada/Pagar	2	0	0	0	2
7 Kg Patau Patau	24	0	0	0	24
8 Lain Lain Kampung	26	0	0	255	281
Jumlah Kecil/Sub - Total	112	10	0	255	377
Jumlah Besar/Grand Total	49150	18996	2296	13510	83952

Nota: Bumiputera Termasuk Orang Melayu dan Kumpulan Bumiputra lain.

Note: Bumiputeras including Malay and Other Indigenous Groups.

JADUAL(TABLE) 1.4

MALAYSIA
BILANGAN NELAYAN ASING YANG DILULUSKAN MENGIKUT NEGERI, 1999
NUMBER OF APPROVED FOREIGN FISHERMEN BY STATE, 1999

Negeri/ State Keturunan Ethnic Group	Pantai Barat/West Coast								Jumlah Kecil Sub- Total	Pantai Timur/East Coast				Jumlah Kecil Sub - Total	Sarawak	Sabah	W.P Labuan Federal Territory	Jumlah Kecil Sub- total	Jumlah Besar Grand Total
	Perlis	Kedah	Pulau Pinang Penang	Perak	Selangor	Negeri Sembilan	Melaka	Johor Barat West Johor		Kelantan	Terengganu	Pahang	Johor Timur East Johor						
Thai Thais	3288	954	0	148	0	0	0	0	4390	1681	2078	206	644	4609	431	0	0	431	9430
Indonesia Indonesian	0	0	0	21	0	0	0	0	21	0	0	0	0	0	21	0	52	73	94
Lain-Lain Others	0	0	0	1	0	0	0	0	1	0	12	0	0	12	0	5767	35	5802	5815
Jum. Besar Grand Total	3288	954	0	170	0	0	0	0	4412	1681	2090	206	644	4621	452	5767	87	6306	15339

Nota: Bilangan yang diluluskan tidak semestinya menggambarkan bilangan nelayan yang bekerja diatas vesel.

Note: The approval given does not necessarily reflect the actual number of fishermen working in licenced vessels.

MALAYSIA

JADUAL (TABLE) 2.1

BILANGAN VESEL MENANGKAP IKAN YANG DILESENKAN MENGIKUT NEGERI DAN KELAS MUATAN 1999

NUMBER OF LICENCED FISHING VESSELS BY STATE AND TONNAGE CLASS, 1999

Jenis Type Negeri State	Jumlah Total	Vesel Tidak Berjentera Non - Powered Vessels	Vesel Berjentera Sangkut Outboard - Powered Vessels	Vesel Berjentera Dalam / In Board-Powered Vessels								
				Jumlah Kecil Sub-Total	0-4.9 GRT	5-9.9 GRT	10-14.9 GRT	15-19.9 GRT	20-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70 GRT & Keatas (& Above)
Pantai Barat/West Coast:												
Perlis	635	0	56	579	58	146	30	56	37	104	108	40
Kedah	1396	0	375	1021	184	245	83	66	60	202	133	48
Pulau Pinang/Penang	1309	3	791	515	46	337	10	4	0	82	34	2
Perak	4106	52	779	3275	560	1084	480	464	109	145	360	73
Selangor	2423	88	445	1890	52	1024	212	215	101	172	114	0
Negeri Sembilan	179	2	136	41	1	37	3	0	0	0	0	0
Melaka/Malacca	656	6	533	117	4	104	9	0	0	0	0	0
Johor Barat/West Johor	2922	31	2145	746	106	70	347	173	41	9	0	0
Jumlah/Total	13626	182	5260	8184	1011	3047	1174	978	348	714	749	163
Pantai Timur/East Coast:												
Kelantan	1108	0	243	865	313	148	175	87	15	35	37	55
Terengganu	2162	0	170	1992	312	640	406	229	142	141	56	66
Pahang	1050	5	198	847	38	250	182	40	33	88	143	73
Johor Timur/East Johor	1397	21	618	758	82	130	225	50	22	106	120	23
Jumlah/Total	5717	26	1229	4462	745	1168	988	406	212	370	356	217
Malaysia:												
Semenanjung Malaysia/ (Peninsular Malaysia)	19343	208	6489	12646	1756	4215	2162	1384	560	1084	1105	380
Sarawak	4171	60	1375	2736	873	635	468	201	132	137	151	139
Sabah	10456	2524	4653	3279	555	1199	614	231	220	402	52	6
W.Persekutuan Labuan/ Labuan F.Territory	81	0	58	23	0	0	0	0	0	8	4	11
Jumlah Besar Grand Total	34051	2792	12575	18684	3184	6049	3244	1816	912	1631	1312	536

Nota / Note: GRT- Gross Registered Tonnage.

MALAYSIA
BILANGAN VESEL MENANGKAP IKAN DILESENKAN MENGIKUT NEGERI DAN KUASA KUDA, 1999
NUMBER OF LICENCED FISHING VESSELS BY STATE AND HORSEPOWER, 1999

Negeri/ State Kuasa/Kuda Horsepower	Perlis	Kedah	Pulau Pinang Penang	Perak	Selangor	Negeri Sembilan	Melaka Malacca	Johor Barat West Johor	Jumlah Kecil Sub - Total	Kelantan	Terengganu	Pahang	Johor Timur East Johor	Jumlah Kecil Sub - Total	Sarawak	Sabah	W.P Labuan Federal Territory	Jumlah Kecil Sub - total	Jumlah Besar Grand Total
Enjin Dalam/ Inboard Powered																			
Kurang dan 5k.k (Under 5 h.p)	53	22	1	8	0	0	2	3	89	28	31	2	2	63	274	122	0	396	548
5-9 k.k(h.p)	0	31	1	36	0	0	36	58	162	236	88	7	8	339	394	301	0	695	1196
10-19 "	116	93	34	210	88	3	0	80	624	101	383	69	133	686	760	245	0	1005	2315
20-39 "	122	120	22	328	667	24	71	233	1587	297	756	294	220	1567	607	163	4	774	3928
40-59 "	0	87	4	1582	19	2	1	32	1727	14	81	31	16	142	140	603	2	745	2614
60-99 "	0	115	102	319	112	3	1	95	747	11	188	56	36	291	140	275	2	417	1455
100-149 "	0	172	218	114	311	9	6	60	890	30	204	47	42	323	107	296	0	403	1616
150-249 "	244	212	49	239	353	0	0	150	1247	41	151	42	76	310	136	750	4	890	2447
250 k.k keatas (250 h.p & Above)	44	169	84	439	340	0	0	35	1111	107	110	299	225	741	178	524	11	713	2565
Jumlah Kecil/ Sub - Total	579	1021	515	3275	1890	41	117	746	8184	865	1992	847	758	4462	2736	3279	23	6038	18684
Enjin Sangkut/ Outboard - Powered																			
Kurang dari 5k.k (Under 5 h.p)	5	49	27	229	40	22	39	474	885	125	70	34	158	387	203	252	0	455	1727
5-9 k.k(h.p)	44	252	39	147	122	21	144	568	1337	113	52	78	141	384	172	378	2	552	2273
10-19 "	7	44	91	145	159	53	263	589	1351	4	38	36	168	246	232	1746	5	1983	3580
20-39 "	0	24	297	169	104	27	84	341	1046	1	9	41	106	157	193	1854	10	2057	3260
40-59 "	0	6	337	73	20	13	2	173	624	0	0	9	45	54	501	361	30	802	1570
60-99 "	0	0	0	16	0	0	1	0	17	0	0	0	0	0	72	62	10	144	161
100-149 "	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	1	3	4
150-249 "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250 k.k keatas (250 h.p & Above)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jumlah Kecil/ Sub -Total	56	375	791	779	445	136	533	2145	5260	243	170	198	618	1229	1375	4653	58	713	12575
Jumlah Besar/ Grand Total	635	1396	1306	4054	2335	177	650	2891	13444	1108	2162	1045	1376	5691	4111	7932	81	6751	31259

MALAYSIA
BILANGAN VESEL MENANGKAP IKAN BERLESEN MENGIKUT KUMPULAN PERKAKAS, JENIS DAN KELAS MUATAN, 1999
NUMBER OF LICENCED FISHING VESSELS BY GEAR GROUP, TYPE AND TONNAGE CLASS, 1999

Jenis Dan Kelas Muatan/ Type And Tonnage Class Kumpulan Perkakas/ Gear Group	Jumlah Total	Vesel Tidak Berjentera Non - Powered Vessels	Vesel Berjentera Sangkut Outboard - Powered Vessels	SEM. MALAYSIA (PEN. MALAYSIA) Vesel Berjentera Dalam (Inboard-powered Vessels)									Bilangan Vesel/No of Vessels		
				Jumlah Kecil Sub-Total	0-4.9 GRT	5-9.9 GRT	10-14.9 GRT	15-19.9 GRT	20-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70 GRT & Keatas (& Above)	Sarawak	Sabah	W.P Labuan
Pukat Tunda <i>Trawl nets</i>	4006	0	0	4006	6	75	597	960	429	932	823	184	760	1422	7
Pukat Tarik <i>Seine Nets</i>	728	0	0	728	0	9	55	68	54	132	255	155	25	124	7
Pukat Jerut Ikan <i>Purse Seine Fish</i>	101	0	0	101	0	11	20	4	0	0	26	40	0	42	0
Pukat Jerut Bilis <i>Purse Seine Anchovy</i>	726	17	48	661	128	532	1	0	0	0	0	0	0	56	3
Lain-Lain <i>Other Seine</i>	10902	73	6043	4786	1047	2636	932	148	21	2	0	0	2395	4356	17
Pukat Hanyut <i> Gill/Drift Nets</i>	92	0	0	92	26	46	18	2	0	0	0	0	0	356	6
Pukat Tangguk <i>Lift Nets</i>	80	0	32	48	10	17	15	5	1	0	0	0	25	129	0
Perangkap /Traps <i>Stationary</i>	353	5	1	347	11	126	138	54	11	6	1	0	233	294	6
Bubu <i>Portable</i>	1548	4	173	1371	337	491	364	127	44	8	0	0	124	2734	35
Pancing <i>Hooks & Lines</i>	279	5	27	247	93	140	12	2	0	0	0	0	430	0	0
Pukat Bakul <i>Bag Nets</i>	4	0	4	0	0	0	0	0	0	0	0	0	43	0	0
Pukat Surung <i>Push / Scoop Nets</i>	17	0	3	14	0	14	0	0	0	0	0	0	136	5	0
Pukat Rentang <i>Barrier Nets</i>	125	7	19	99	82	17	0	0	0	0	0	0	0	134	0
Memungut Siput <i>Shellfish Collection</i>	36	4	1	31	0	28	3	0	0	0	0	0	0	0	0
Pembawa Ikan <i>Fish Carriers</i>	346	93	138	115	19	70	3	18	0	4	0	1	0	804	0
Rampaian <i>Miscellaneous</i>															
Jumlah/Total	19343	208	6489	12646	1759	4212	2158	1388	560	1084	1105	380	4171	10456	81

Nota / Note. GRT- Gross Registered Tonnage.

MALAYSIA
BILANGAN VESEL MENANGKAP IKAN YANG DILESENKAN MENGIKUT
DAERAH-DAERAH PERIKANAN, 1999
NUMBER OF LICENCED FISHING VESSELS BY FISHERIES DISTRICTS, 1999

Daerah - Daerah Perikanan <i>Fisheries Districts</i>	VESEL VESEL MENANGKAP IKAN (<i>Fishing Vessels</i>)			
	Berjentera Dalam <i>Inboard</i>	Berjentera Sangkut <i>Outboard</i>	Tidak Berjentera <i>Non - Powered</i>	Jumlah <i>Total</i>
SEMENANJUNG MALAYSIA <i>(PENINSULAR MALAYSIA)</i>				
1 Kuala Perlis	579	56	0	635
2 Langkawi	118	149	0	267
3 Kedah Utara	696	65	0	761
4 Kedah Selatan	207	161	0	368
5 Timur Laut/P.Pinang	57	206	0	263
6 Barat Daya/P.Pinang	139	357	0	496
7 Seberang Prai Utara	90	52	1	143
8 Seberang Prai Tengah	2	75	0	77
9 Seberang Prai Selatan	227	101	2	330
10 Krian	1012	269	24	1305
11 Larut & Matang	947	103	1	1051
12 Manjung	700	349	15	1064
13 Hilir Perak	616	58	12	686
14 Selangor Utara	646	112	0	758
15 Selangor Tengah	458	84	11	553
16 Pelabuhan Kelang 1	405	4	0	409
17 Pelabuhan Kelang 2	219	153	75	447
18 Selangor Selatan	162	92	2	256
19 Port Dickson	41	136	2	179
20 Melaka	117	533	6	656
21 Muar	194	340	8	542
22 Batu Pahat	274	341	2	617
23 Pontian	278	478	21	777
24 Johor Bharu	0	986	0	986
25 Pengerang(Kota Tinggi)	94	519	19	632
26 Sedeli	256	35	0	291
27 Mersing	408	64	2	474
28 Kuantan	384	45	4	433
29 Pekan	277	107	1	385
30 Kuala Rompin	186	46	0	232
31 Kemaman	383	2	0	385
32 Dungun	300	43	0	343
33 Marang	230	54	0	284
34 Kuala Terengganu Utara	220	36	0	256
35 Kuala Terengganu Selatan	335	9	0	344
36 Besut	345	10	0	355
37 Setiu	179	16	0	195
38 Kota Bharu	198	95	0	293
39 Bachok& Pasir Putih	395	61	0	456
40 Tumpat	272	87	0	359
Jumlah Kecil	12646	6489	208	19343
<i>Sub - Total</i>				

Daerah - Daerah Perikanan <i>Fisheries Districts</i>	Vesel-vesel Menangkap Ikan (<i>Fishing Vessels</i>)			
	Berjentera Dalam <i>Inboard</i>	Berjentera Sangkut <i>Outboard</i>	Tidak Berjentera <i>Non-Powered</i>	Jumlah Total
SARAWAK				
1 Bandar Kuching	243	0	0	243
2 Santubong	223	55	50	328
3 Pendam(Sadong Jaya)	399	0	0	399
4 Sematan	36	153	0	189
5 Batang Lupar (Sebuyau)	323	29	0	352
6 Saribas/Kalaka(Kabong)	539	2	9	550
7 Sibu/Igan	93	24	0	117
8 Sarikei/Bitangor	87	0	0	87
9 Mukah/Oya	147	112	0	259
10 Belawai	112	8	0	120
11 Matu Daro	336	246	0	582
12 Bintulu	83	44	0	127
13 Miri	115	273	1	389
14 Limbang	0	88	0	88
15 Lawas	0	341	0	341
Jumlah Kecil/Sub -Total	2736	1375	60	4171
SABAH				
1 Tawau	150	670	295	1115
2 Semporna	452	165	283	900
3 Kunak	12	94	90	196
4 Lahad Datu	146	108	112	366
5 Sandakan	854	360	485	1699
6 Beluran	164	634	178	976
7 Kudat	936	255	75	1266
8 Kota Marudu	37	390	129	556
9 Pitas	67	220	131	418
10 Kota Belut	93	340	343	776
11 Tuaran	35	162	61	258
12 Kota Kinabalu	246	254	15	515
13 Papar	1	145	20	166
14 Beaufort	38	383	65	486
15 Kuala Penyu	7	323	239	569
16 Sipitang	41	150	3	194
Jumlah Kecil/Sub -Total	3279	4653	2524	10456
W.P LABUAN/LABUAN FT				
1 Kg Bebuloh	0	15	0	15
2 Kg Ranca-Ranca	1	15	0	16
3 Kg Lubok Temiang	0	6	0	6
4 Kg Batu Manikar	0	0	0	0
5 Kg Tg. Aru	1	10	0	11
6 Kg Miri/Lada/Pagar	0	2	0	2
7 Kg Patau Patau	1	10	0	11
8 Lain Lain Kampung	20	0	0	20
Jumlah Kecil/Sub -Total	23	58	0	81
Jumlah Besar/Grand Total	18684	12575	2792	34051

SEMENANJUNG MALAYSIA / PENINSULAR MALAYSIA
BILANGAN VESEL MENANGKAP IKAN YANG DILESENKAN DAN BILANGAN
NELAYAN YANG BEKERJA DI VESEL-VESEL BERLESEN, 1977- 1999
NUMBER OF FISHING VESSELS AND NUMBER OF FISHERMEN
OPERATING LICENCED VESSELS, 1977- 1999

Bilangan Vesel Menangkap Ikan Yang dilesenkan <i>Number of fishing Vessels Licenced</i>					Bilangan Nelayan <i>Number of Fishermen</i>				
Tahun <i>Year</i>	Berjentera Dalam <i>Inboard</i>	Berjentera Sangkut <i>Outboard</i>	Tidak Berjentera <i>Non - Powered</i>	Jumlah <i>Total</i>	Melayu <i>Malays</i>	Cina <i>Chinese</i>	India <i>Indians</i>	Lain-Lain <i>Others</i>	Jumlah <i>Total</i>
1977	16977	2775	4329	24081	44373	30131	541	600	75645
1978	17775	3684	6038	27497	51265	30980	637	812	83694
1979	17741	5156	6256	29153	50816	30323	528	1259	82926
1980	18433	6585	5502	30520	55008	31802	410	1752	88972
1981	18585	7368	4437	30390	54538	30084	609	1694	86925
1982	17575	7246	2620	27441	49232	28306	739	1960	80237
1983	16285	7202	2208	25695	47322	25238	534	2496	75590
1984	16533	7458	1682	25673	48616	25077	564	2111	76368
1985	15324	6751	1296	23371	42620	23532	471	2907	69530
1986	14626	6864	986	22476	34269	21357	448	3378	59452
1987	14822	6430	886	22138	33815	21634	394	4726	60569
1988	14760	5832	749	21341	32386	21367	409	4121	58283
1989	15507	7146	806	23459	35907	22443	454	3776	62580
1990	15326	7029	779	23134	34719	21364	471	3247	59801
1991	15331	6760	718	22809	35609	21385	448	3867	61309
1992	14999	6223	632	21854	35279	21094	440	3597	60410
1993	14351	5206	463	20020	28607	18466	245	6569	53887
1994	13677	4988	424	19089	27499	17984	249	6463	52195
1995	13443	9050	491	22984	30440	17976	239	6347	55002
1996	12701	8112	437	21250	28418	17010	206	6676	52310
1997	12097	7875	393	20365	27457	17133	236	5909	50735
1998	12411	7230	330	19971	25538	16820	239	7441	50038
1999	12646	6489	208	19343	25152	17207	2296	6286	50941

JADUAL (Table) 3.1

MALAYSIA
BILANGAN PERKAKAS YANG DILESENKAN MENGIKUT NEGERI, 1999
NUMBER OF LICENCED FISHING GEARS BY STATE, 1999

Kumpulan Perkakas Gear Group	Pukat Tunda Trawl Nets	Pukat-Pukat Tarik / Seine Nets			Pukat Hanyut Drift/ Gill Nets	Pukat Tanguk Lift Nets	Perangkap-Perangkap Traps		Pancing Hooks & Lines	Pukat Bakul Bag Nets	Pukat Rentang Barrier Nets	Pukat Surung Push Scoop Nets	Memungut Siput Shellfish Collection	Rampaian Miscell - aneous	Jumlah Total
		Pukat Jerut Ikan Purse Seine- Fish	Pukat Jerut Bilis Purse Seine- Anchovy	Lain-Lain Other Seines			Belat Belat Stationary	Bubu Portable							
Pantai Barat/West Coast:															
Perlis	217	123	0	0	295	0	0	0	0	0	0	0	0	0	635
Kedah	484	21	54	0	773	20	21	1	11	0	0	0	0	11	1396
Pulau Pinang/Penang	95	23	0	67	1050	0	0	4	0	33	0	4	0	33	1309
Perak	1408	64	8	601	1578	0	0	16	68	70	0	0	103	190	4106
Selangor	685	16	0	4	1401	0	0	2	46	152	16	0	5	96	2423
Negeri Sembilan	0	0	0	1	165	0	0	6	7	0	0	0	0	0	179
Melaka/Malacca	0	0	0	4	616	0	2	0	34	0	0	0	0	0	656
Johor Barat/West Johor	202	0	0	6	2389	0	38	62	37	24	1	0	17	38	2814
Jumlah Kecil/Sub -Total	3091	247	62	683	8267	20	61	91	203	279	17	4	125	368	13518
Pantai Timur/East Coast															
Kelantan	83	63	9	41	661	32	0	10	209	0	0	0	0	0	1108
Terengganu	221	330	19	636	0	29	0	119	808	0	0	0	0	0	2162
Pahang	340	49	11	1	330	11	0	112	190	0	0	0	0	6	1050
Johor Timur/East Johor	271	39	0	1	1008	0	19	21	138	0	0	0	0	8	1505
Jumlah Kecil/Sub -Total	915	481	39	679	1999	72	19	262	1345	0	0	0	0	14	5825
Sarawak	760	25	0	36	2746	0	29	267	142	493	157	49	0	0	4704
Sabah	1335	191	0	12	1176	171	84	80	461	0	4	0	0	198	3712
W.Persekutuan Labuan/ Labuan F. Territory	7	7	0	3	17	6	0	6	35	0	0	0	0	0	81
Jumlah Kecil/Sub -Total	2102	223	0	51	3939	177	113	353	638	493	161	49	0	198	8497
Jumlah Besar Grand Total	6108	951	101	1413	14205	269	193	706	2186	772	178	53	125	580	27840

JADUAL (TABLE) 3.2

SEMENANJUNG MALAYSIA /PENINSULAR MALAYSIA
 ANGGARAN BILANGAN KUMULATIF PERKAKAS YANG DIUSAHAKAN MENGIKUT NEGERI , 1999
 ESTIMATED CUMULATIVE NUMBER OF FISHING GEARS IN OPERATION BY STATE, 1999

Kumpulan Perkakas <i>Gear Group</i>	Pukat Tunda	Pukat-Pukat Tarik <i>Seine Nets</i>			Pukat Hanyut	Pukat Tangguk	Perangkap-Perangkap <i>Traps</i>		Pancing	Pukat Bakul	Pukat Rentang	Pukat Surung	Memungut Siput	Rampaian	Jumlah Total
		Pukat Jerut Ikan	Pukat Jerut Bilis	Lain-Lain			Belat-Belat	Bubu							
Negeri State	Trawl Net	Purse Seine- Fish	Purse Seine- Anchovy	Other Seine	Drift/Gill Net	Lift Net	Stationary	Portable	Hook and Line	Bag Net	Barrier Net	Push/ Scoop Net	Shellfish Collection	Miscell-aneous	
Pantai Barat/West Coast:															
Perlis	2919	1050	0	0	7562	0	0	0	0	0	0	360	0	756	12647
Kedah	9950	132	562	756	24062	0	0	0	103	1106	399	433	0	1612	39115
Pulau Pinang	1105	168	0	1167	19778	0	0	204	1186	523	987	96	0	259	25473
Perak	16420	615	95	3945	19107	0	0	131	2472	1621	568	4213	260	3126	52573
Selangor	11356	169	0	300	26167	0	134	1587	4899	2035	517	1932	698	285	50079
Negeri Sembilan	0	0	0	19	1981	0	0	69	173	0	0	0	0	0	2242
Melaka	0	0	0	12	9024	0	0	12	862	0	0	1320	98	0	11328
Johor Barat/West Johor:	2488	0	0	0	25788	0	480	1533	144	363	329	2472	0	1106	34703
Jumlah/Total	44238	2134	657	6199	133469	0	614	3536	9839	5648	2800	10826	1056	7144	228160
Pantai Timur/East Coast:															
Kelantan	1956	637	72	0	3651	350	580	0	1852	0	0	0	0	595	9693
Terengganu	3170	2212	273	0	4125	258	0	3021	10126	0	0	0	0	0	23185
Pahang	5368	366	55	0	4152	35	0	934	1005	0	0	0	0	0	11915
Johor Timur/East Johor:	4011	414	0	0	3616	0	0	294	1049	657	0	0	0	760	10801
Jumlah Kecil/Sub - Total	14505	3629	400	0	15544	643	580	4249	14032	657	0	0	0	1355	55594
Jumlah Besar/Grand Total	58743	5763	1057	6199	149013	643	1194	7785	23871	6305	2800	10826	1056	8499	283754

MALAYSIA

JADUAL (TABLE) 4.1

PENDARATAN IKAN LAUT MENGIKUT NEGERI DAN KUMPULAN PERKAKAS , 1999

LANDINGS OF MARINE FISH BY STATE AND GEAR GROUP , 1999

(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

Kumpulan Perkakas Gear Group	Pukat Tunda Trawl Net	Pukat-Pukat Tarik Seine Nets		Lain Pukat Other Seine	Pukat Hanyut Drift/Gill Net	Pukat Tangguk Lift Net	Perangkap-Perangkap Traps		Pancing Hook and Line	Pukat Bakul Bag Net	Pukat Rentang Barrier Net	Pukat Surung Push/Scoop Net	Memungut Siput Shellfish Collection	Rampaian Miscel- laneous	Jumlah (Tan Metrik) Total (Tonnes)
		Pukat Jerut Ikan Purse Seine- Fish	Pukat Jerut Bills Purse Seine- Anchovy				Belat- Belat Stationary	Bubu Portable							
Negeri State															
Pantai Barat /West Coast															
Perlis	26,948	46,684	0	0	11,026	0	0	0	0	0	0	150	0	281	85,089
Kedah	54,589	9,839	9,678	139	10,291	0	0	0	23	376	80	105	0	109	85,229
Pulau Pinang	18,801	4,058	0	3,481	7,163	0	0	100	281	666	122	62	0	55	34,789
Perak	119,904	5,992	1,131	12,718	21,364	0	0	82	669	2,705	144	6,042	259	334	171,344
Selangor	78,235	3,693	0	216	10,169	0	323	117	3,013	10,797	1,106	778	311	205	108,963
Negeri Sembilan	0	0	0	4	262	0	0	22	39	0	0	0	0	0	327
Melaka	0	0	0	4	1,572	0	0	2	206	0	0	91	16	0	1,891
Johor Barat/West Johor	4,407	0	0	0	5,315	0	496	188	89	1,618	86	137	0	113	12,449
Jumlah/Total	302,884	70,266	10,809	16,562	67,162	0	819	511	4,320	16,162	1,538	7,365	586	1,097	500,081
Pantai Timurt /East Coast															
Kelantan	10,220	27,373	764	0	2,894	5,286	72	0	4,059	0	0	0	0	19	50,687
Terengganu	41,368	80,543	5,322	0	7,304	2,101	0	7,783	16,479	0	0	0	0	0	160,900
Pahang	93,572	25,131	1,029	0	2,659	315	0	1,706	2,419	0	0	0	0	0	126,831
Johor Timur/East Johor	54,470	7,007	0	0	750	0	0	189	1,512	828	0	0	0	27	64,783
Jumlah/Total	199,630	140,054	7,115	0	13,607	7,702	72	9,678	24,469	828	0	0	0	46	403,201
Malaysia															
Semenanjung Malaysia/ Peninsular Malaysia	502,514	210,320	17,924	16,562	80,769	7,702	891	10,189	28,789	16,990	1,538	7,365	586	1,143	903,282
Sarawak	73,866	3,055	0	0	33,091	0	937	332	4,414	4,245	489	492	5	988	121,914
Sabah	91,289	42,145	0	2,017	22,978	10,155	1,566	1,558	28,261	0	2	0	345	6,897	207,213
Wilayah Persekutuan Labuan/ Labuan, Federal Territory	5,636	8,140	0	16	615	138	21	33	1,389	0	0	0	5	0	15,993
Jumlah Tan M./Total Tonnes	673,305	263,660	17,924	18,595	137,453	17,995	3,415	12,112	62,853	21,235	2,029	7,857	941	9,028	1,248,402

JADUAL (TABLE) 4.2

MALAYSIA
PENDARATAN IKAN LAUT MENGIKUT BULAN DAN NEGERI, 1999
LANDINGS OF MARINE FISH BY MONTH AND STATE, 1999
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

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	(Tan Metrik) Total (Tonnes)
Pantai Barat/West Coast													
Perlis	6,407	6,702	8,102	9,011	9,673	7,495	6,888	6,734	7,250	6,368	5,677	4,782	85,089
Kedah	8,254	8,646	8,316	8,041	7,711	6,659	6,242	6,926	6,878	6,187	5,992	5,377	85,229
Pulau Pinang	3,228	3,100	3,132	3,494	3,159	2,900	2,737	3,002	3,084	2,678	2,193	2,082	34,789
Perak	17,691	15,135	14,301	13,431	12,974	11,648	14,393	13,408	12,321	17,430	13,562	15,050	171,344
Selangor	11,576	7,823	10,864	9,483	9,242	9,928	7,781	8,218	9,972	9,045	7,895	7,136	108,963
Negeri Sembilan	31	31	27	22	25	25	22	29	25	29	29	32	327
Melaka	148	153	163	183	148	152	158	189	168	145	149	135	1,891
Johor Barat/West Johor	1,231	1,094	1,121	1,096	1,331	1,182	1,072	1,023	892	811	822	774	12,449
Jumlah Kecil/Sub-Total	48,566	42,684	46,026	44,761	44,263	39,989	39,293	39,529	40,590	42,693	36,319	35,368	500,081
Pantai Timur/East Coast													
Kelantan	1,425	2,608	5,795	4,061	4,945	4,205	6,670	6,573	6,392	4,333	2,505	1,175	50,687
Terengganu	5,870	11,655	16,243	14,855	11,904	12,351	13,049	16,550	20,840	21,961	11,387	4,235	160,900
Pahang	6,339	7,973	11,041	11,274	9,662	10,018	14,079	11,152	13,043	12,846	12,060	7,344	126,831
Johor Timur/East Johor	3,359	3,400	4,784	4,566	5,951	6,068	6,212	6,420	6,413	7,475	5,802	4,333	64,783
Jumlah Kecil/Sub-Total	16,993	25,636	37,863	34,756	32,462	32,642	40,010	40,695	46,688	46,615	31,754	17,087	403,201
Malaysia:													
Semenanjung Malaysia/ Peninsular Malaysia	65,559	68,320	83,889	79,517	76,725	72,631	79,303	80,224	87,278	89,308	68,073	52,455	903,282
Sarawak	8,721	9,842	14,455	11,335	12,975	11,871	11,144	10,181	9,630	8,991	7,820	4,949	121,914
Sabah	18,069	17,686	19,075	16,582	18,499	19,456	17,771	14,813	14,698	16,903	16,659	17,002	207,213
Wilayah Persekutuan Labuan/ Labuan Federal Territory	1,419	1,621	1,324	1,800	1,486	1,157	896	900	1,802	1,011	1,500	1,077	15,993
Jumlah Besar(Tan Metrik) Grand Total (Tonnes)	93,768	97,469	118,743	109,234	109,685	105,115	109,114	106,118	113,408	116,213	94,052	75,483	1,248,402

JADUAL (TABLE) 4.3

SEMENANJUNG MALAYSIA
PENDARATAN IKAN LAUT MENGIKUT PERKAKAS DAN BULAN, 1999
LANDINGS OF MARINE FISH BY GEAR GROUP AND MONTH, 1999
(Kuantiti dalam Tan Metrik/Quantity in Tonnes)

Bulan/Month	Januari	Februari	Mac	April	Mei	Jun	Julai	Ogos	September	Oktober	November	Disember	Jumlah (Tan Metrik) Total (Tonnes)
Kumpulan Perkakas Gear Group	January	February	March	April	May	June	July	August	September	October	November	December	
Pukat-Pukat Tunda Trawl Net	43,167	39,407	44,200	44,283	42,182	40,742	40,627	41,716	43,216	46,492	40,613	35,869	502,514
Pukat-Pukat Tarik/Seine Net:													
Pukat-Pukat Jerut Ikan Purse Seine - Fish	8,349	13,981	23,327	19,583	18,779	16,122	21,235	19,954	24,094	24,777	15,148	4,971	210,320
Pukat Jerut Bilis Purse Seine - Anchovy	978	1,007	1,369	1,352	1,178	1,488	2,046	2,777	2,704	1,502	625	898	17,924
Lain-Lain Pukat Other Seine	1,845	1,787	1,107	1,105	1,198	1,200	1,183	1,360	1,317	1,456	1,557	1,447	16,562
Pukat-Pukat Hanyut Drift/Gill Net	6,139	6,039	7,188	7,176	7,182	7,749	8,356	6,583	7,122	6,949	4,724	5,562	80,769
Pukat-Pukat Tangguk Lift Net	155	377	562	533	417	530	1,044	1,274	1,731	816	263	0	7,702
Perangkap-Perangkap/Trap:													
Belat-Belat (Stationary)	71	53	77	69	86	76	88	76	72	71	78	74	891
Bubu (Portable)	550	754	1,170	760	645	779	793	981	1,363	1,102	790	502	10,189
Pancing (Hook & Line)	1,835	2,858	2,877	2,402	2,286	2,353	2,048	2,998	3,000	3,183	2,082	867	28,789
Pukat-Pukat Bakul (Bag Net)	1,582	1,232	1,274	1,305	1,764	756	904	1,728	1,779	2,041	1,364	1,261	16,990
Pukat-Pukat Rentang (Barrier Net)	150	189	54	207	212	74	77	148	138	90	77	122	1,538
Pukat-Pukat Surung (Push/Scoop Net)	528	451	512	651	691	649	733	498	593	691	657	711	7,365
Memungut Siput (Shellfish Collection)	59	41	28	17	27	40	94	53	63	60	12	92	586
Rampaian (Miscellaneous)	151	144	144	74	78	73	75	78	86	78	83	79	1,143
Jumlah Besar (Tan Metrik) Grand Total (Tonnes)	65,559	68,320	83,889	79,517	76,725	72,631	79,303	80,224	87,278	89,308	68,073	52,455	903,282

MALAYSIA

PENDARATAN IKAN LAUT MENGIKUT NEGERI DAN SPESIES IKAN, 1999

LANDINGS OF MARINE FISH BY STATE AND SPECIES, 1999

(Kuantiti Dalam Tan Metrik/Quantity in Tonnes)

ISCAAP GROUP NO.	Jenis/Ikan Species	Pantai Barat/West Coast								Jumlah Total	Pantai Timur/East Coast				Jumlah Total	Sarawak	Sabah	W.P.Labuan/ Labuan Federal Territory	Jumlah Total	Jumlah Besar Grand Total
	Nama Tempatan/ Local Name	Perlis	Kedah	P.Pinang	Perak	Selangor	Negeri Sembilan	Melaka	Johor Barat West Johor		Kelantan	Terengganu	Pahang	Johor Timur East Johor						
24	Kebasi/Selangat	57	480	1598	589	271	14	0	229	3238	0	0	0	2	2	415	704	14	1133	4373
	Puput/B. Mata/Tirok	37	145	108	2535	1612	11	0	162	4610	148	9	3	3	163	1664	2721	30	4415	9188
	Terubok	0	0	0	3	42	0	0	0	45	0	0	0	0	0	577	0	0	577	622
25	Siakap	1	2	2	7	41	2	0	102	157	27	31	10	1	69	65	1106	0	1171	1397
31	Lidah	574	307	53	758	606	0	0	184	2482	27	153	77	42	299	334	1711	13	525	3306
	Sebelah	3	142	37	120	76	0	0	10	388	9	223	101	165	498	548	1504	88	2140	3026
33	Bayan	0	0	0	2	0	0	0	3	5	0	99	34	27	160	0	2237	0	2237	2402
	Biji Nangka	67	5	126	1832	29	0	0	4	2063	466	2500	551	142	3659	2160	661	63	2884	8606
	Daun Baharu	0	0	1	9	37	11	30	64	152	6	30	34	71	141	324	180	46	550	843
	Delah/Pinang-Pinang	0	0	0	0	1	0	0	0	1	0	297	53	26	376	0	800	147	947	1324
	Duri/Pulutan/Utik	62	336	1066	1479	1412	13	266	395	5029	138	1208	608	602	2556	2864	4817	75	7756	15341
	Dengkis /Debam	0	0	0	25	2	0	0	16	43	19	314	42	79	454	0	649	62	711	1208
	Gelama/Tengkerong/Selampai	674	852	1066	5003	3349	12	201	550	11707	407	1433	492	823	3155	4083	3152	91	7326	22188
	Gerut-Gerut	15	160	41	215	112	5	23	45	616	10	131	7	28	176	779	597	67	1443	2235
	Jenahak	14	104	26	116	166	17	27	61	531	0	4	6	34	44	500	3299	87	3886	4461
	Kaci	0	0	0	6	0	3	0	6	15	7	426	225	353	1011	264	125	142	531	1557
	Kerapu	115	587	62	426	150	7	21	56	1424	55	2296	539	331	3221	824	6496	264	7584	12229
	Kerisi	2094	1126	458	6293	216	0	0	0	10187	796	15128	3701	1766	21391	1701	6150	265	8116	39694
	Kerisi Bali	0	0	0	410	4	0	0	0	414	1	2687	1473	68	4229	623	2230	291	3144	7787
	Kikek	37	22	4	21	0	0	0	38	122	110	918	108	48	1184	361	1324	58	1743	3049
	Malong	125	222	37	56	1945	5	78	301	2769	2	37	122	28	189	1520	1344	8	2872	5830
	Merah	10	10	30	68	50	4	1	24	197	138	1353	690	336	2517	1848	3572	339	5759	8473
	Mengkerong/Conor/Ubi-Ubi	1575	91	24	5714	64	0	0	23	7491	595	720	2424	228	3967	0	3584	8	3592	15050
	Remong/Kunyit-Kunyit/Tanda	6	2	8	88	11	0	0	0	115	199	1688	570	421	2878	0	1526	147	1673	4666
	Semilang	69	53	194	292	203	2	0	55	868	0	0	27	0	27	18	836	0	854	1749
	Shrumbu/Lemah	0	0	1	90	1	0	0	0	92	0	0	0	0	0	534	36	19	589	681
	Puntong Damar/Bulus	21	91	12	576	229	1	0	0	930	332	154	255	161	902	0	181	1	182	2014
	Pasir-Pasir/Timun-Timun	0	0	0	9	87	0	0	0	96	64	347	351	120	882	0	40	18	58	1036
34	Alu-Alu/Kacang-Kacang	24	351	56	345	94	2	23	20	915	97	561	588	400	1646	271	5180	91	5542	8103
	Aruan Tasik	2	15	2	68	23	1	0	2	113	20	402	157	64	643	0	0	0	0	756
	Bawal	56	1405	516	1474	2038	19	48	654	6210	151	719	356	284	1510	1192	1517	139	2848	10568
	Belanak/Kedera	0	217	439	584	1459	6	51	23	2779	99	0	1	0	100	33	1939	11	1983	4862
	Cermin/Sagai/Cupak	4	18	8	75	77	11	0	4	197	117	1293	525	498	2433	388	1094	480	1962	4592

Samb. Jadual 4.4/
(Cont' d Table 4.4)

	Cincaru	746	1126	571	1871	1557	1	25	164	6061	712	5446	1372	1281	8811	2833	2082	108	5023	19895
	Demuduk/Rambar	47	293	5	151	0	0	0	0	496	76	395	200	277	948	750	5844	60	6654	8098
	Kurau/Senangin/Senohong	10	49	98	297	452	22	49	210	1187	5	1	43	13	62	499	2150	13	2662	3911
	Pelata/Selar	655	1799	331	1187	358	1	0	30	4361	922	10832	2247	851	14852	1408	3116	217	4741	23954
	Selar Kuning/Lolong	1471	1129	309	1898	64	0	0	0	4871	2801	16035	11349	3200	33385	1526	1423	136	3085	41341
	Selayang/Curut	5752	1120	684	810	57	0	0	0	8423	13324	24973	4766	1968	45031	333	16145	228	16706	70160
	Pisang-Pisang	22	5	0	0	0	0	0	0	27	0	642	26	0	668	0	167	1	168	863
	Talang	11	83	103	66	107	10	13	83	476	1	136	52	70	259	606	2452	18	3076	3811
35	Blis/Bunga Air	0	9678	5	1354	385	0	0	18	11440	4267	3995	539	29	8830	3	2764	8	2775	23045
	Parang-Parang	58	296	56	302	699	15	189	394	2009	160	449	470	429	1508	765	434	17	1216	4733
	Tamban	2430	1239	548	356	10	0	0	80	4663	1108	10737	9192	2342	23379	2337	14973	165	17475	45517
	Bulan-Bulan	0	0	0	18	11	0	0	0	29	0	0	22	0	22	0	175	0	175	226
36	Aya/Kayu/Tongkol	4977	1244	116	1876	141	0	0	0	8354	12123	13598	1903	1281	28905	3816	11838	7106	22760	60019
	Layiran/Mersuji	0	0	0	0	0	0	0	0	0	0	1816	11	0	1827	0	209	10	219	2046
37	Kembong/Temenong/Pelaling	35342	16740	5797	19273	7513	0	0	0	84665	667	8096	3324	1102	13189	3772	9034	705	13511	111365
	Tenggiri	344	686	146	1258	1539	17	192	401	4583	266	1769	926	668	3629	3825	5527	200	9552	17764
	Timah/Layor/Selayor	561	366	304	4593	171	0	72	124	6191	289	965	255	172	1681	2498	7631	8	10137	18009
38	Pari	76	651	191	2771	1131	13	141	205	5179	140	2126	2148	1972	6386	2496	2864	108	5468	17033
	Yu	13	91	24	272	282	3	72	24	781	17	782	660	583	2042	2214	2935	120	5269	8092
39	Ikan Baja	19540	27482	14245	60665	49796	0	0	2854	174582	5173	9420	54286	29813	98692	21460	21499	1832	44791	318065
	Ikan Campur	2519	1857	315	4130	2281	36	149	663	11950	2493	3864	7407	2068	15832	20724	6270	917	27911	55693
	Jebong	0	0	112	126	10	0	0	6	254	8	1047	342	525	1922	0	591	59	650	2826
42	Ketam	1007	1679	378	1852	927	21	0	564	6428	52	548	584	453	1637	721	5609	35	6365	14430
45	Udang Karang/Lobok	0	0	0	10	5	0	0	0	15	19	107	243	205	574	17	423	65	505	1094
	Udang Putih	155	413	639	1677	1227	20	67	485	4683	46	200	195	159	600	2067	4788	118	6973	12256
	Udang Minyak	0	0	67	5009	3015	0	0	62	8153	14	89	54	221	378	20	654	0	674	9205
	Udang Merah Ros	81	268	0	0	602	0	0	0	951	0	9	0	0	9	797	685	0	1482	2442
	Udang Kulit Keras	0	0	297	1027	1257	0	0	114	2695	146	152	71	17	386	788	480	0	1268	4349
	Udang Harimau	37	187	5	58	118	0	0	6	411	2	68	2	103	175	2	374	80	456	1042
	Lain-lain Jenis Udang	800	4783	2076	13411	4505	22	86	1296	26979	164	985	1092	1190	3431	10981	3024	285	14290	44700
	Udang Baring	149	105	63	1835	5741	0	50	1360	9303	0	0	0	207	207	5902	1055	13	6970	16480
56	Sipu/Kepah/Kupang/Tiram	0	0	2	259	311	0	17	0	589	32	0	0	0	32	5	1051	0	1056	1677
57	Sotong Kereta	64	523	12	23	105	0	0	0	727	1	0	170	212	383	12	390	0	402	1512
	Sotong Katak	623	808	201	4916	3022	0	0	20	9590	349	2726	3207	2795	9077	415	2853	133	3401	22068
	Sotong Biasa	1957	3783	1114	8244	3066	0	0	124	18288	1270	3731	5543	3426	13970	2113	5748	164	8025	40283
76	Ubur-Ubur	0	3	0	461	4091	0	0	131	4686	0	0	0	0	0	2319	177	0	2496	7182
	Jumlah Tan M/Total Tonnes	85089	85229	34789	171344	108963	327	1891	12449	500081	50687	160900	126831	64783	403201	121914	207213	15993	345120	1248402

JADUAL (TABLE) 4.5

MALAYSIA
PENDARATAN IKAN LAUT MENGIKUT BULAN DAN SPESIES IKAN, 1999
LANDINGS OF MARINE FISH BY MONTH AND SPECIES, 1999
(Kuantiti dalam Tan Metrik/ Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis Ikan <i>Species</i>	Januari	Februari	Mac	April	Mei	Jun	Julai	Ogos	September	Oktober	November	Disember	Jumlah (Tan Metrik)
	Nama Tempatan <i>Local Name</i>	January	February	March	April	May	June	July	August	September	October	November	December	Total (Tonnes)
24	Kebasi Selangat	341	493	388	369	390	451	367	441	232	373	302	226	4,373
	Puput/B. Mata/Tirok	588	389	785	657	745	828	915	612	750	935	669	1,315	9,188
	Terubok	1	25	41	91	64	58	71	65	99	62	35	10	622
25	Siakap	113	105	152	101	185	129	91	96	102	74	153	96	1,397
31	Lidah	242	241	375	297	273	258	255	265	246	255	289	310	3,306
	Sebelah	254	241	251	274	265	315	292	288	261	244	192	149	3,026
33	Bayan	180	180	201	221	259	224	274	212	146	168	201	136	2,402
	Biji Nangka	348	352	482	538	536	765	648	811	1,144	1,205	1,034	743	8,606
	Daun Baharu	49	69	56	69	102	74	74	71	60	87	69	63	843
	Delah/Pinang-Pinang	108	95	116	163	127	88	86	131	161	80	105	64	1,324
	Duri/Pulutan/Utik	1,124	1,097	1,298	1,305	1,462	1,428	1,382	1,356	1,582	1,320	1,066	921	15,341
	Dengkis/Debam	101	58	90	113	97	111	111	97	113	108	116	93	1,208
	Gelama/Tengkerong/Selampai	1,848	1,696	1,980	2,043	1,837	2,051	1,971	1,889	1,961	1,816	1,737	1,359	22,188
	Gerut-Gerut	308	134	135	355	371	151	190	121	115	122	125	108	2,235
	Jenahak	352	344	449	350	450	472	460	351	331	355	261	286	4,461
	Kaci	73	81	126	127	156	138	169	161	180	154	121	71	1,557
	Kerapu	849	852	1,094	978	1,092	1,161	1,076	1,075	1,075	1,160	996	821	12,229
	Kerisi	2,718	2,575	3,446	3,878	3,263	3,154	3,447	3,621	3,530	4,414	3,078	2,570	39,694
	kerisi Bali	373	584	548	652	718	834	673	761	1,067	612	478	487	7,787
	Kikek	158	178	297	303	332	245	237	361	288	275	193	182	3,049
	Malong	510	462	664	522	366	455	329	571	358	426	704	463	5,830
	Merah	517	591	748	720	820	815	724	759	757	805	724	493	8,473
	Mengkerong/conor/Ubi-Ubi	1,150	1,233	1,168	1,118	1,193	1,052	1,101	1,105	1,446	1,692	1,516	1,276	15,050
	Remong/Kunyiit-Kunyiit/Tanda	311	351	430	424	408	453	451	362	412	444	365	255	4,666
	Semilang	174	159	180	137	148	147	121	109	158	129	147	140	1,749
	Shrumbu/Lemah	32	34	36	95	98	113	78	54	53	46	26	16	681
	Puntung Damar/Bulus	229	208	167	158	156	193	135	134	100	226	145	163	2,014
	Pasir-Pasir/Timun-Timun	67	73	82	86	77	98	90	71	113	114	104	61	1,036
	Alu-Alu/Kacang-Kacang	553	761	848	747	781	723	733	629	619	646	606	457	8,103
	Aruan Tasik	34	51	68	70	63	67	70	71	73	88	66	35	756
34	Bawal	1,098	1,153	1,237	989	1,063	986	760	719	839	633	636	455	10,568
	Belanak/Kedera	640	436	459	353	347	385	333	245	592	332	378	362	4,862
	Cermin/Sagai/Cupak	352	388	433	411	415	354	386	328	449	443	413	220	4,592

Samb.Dari Jadual 4.5
(Cont'd From Table 4.5)

	Cincaru	1,235	1,137	1,962	1,587	1,845	1,924	2,112	1,974	2,069	1,715	1,466	869	19,895
	Demuduk/Rambai	648	776	746	702	727	691	686	656	683	603	678	502	8,098
	Kurau/Senangin/Senohong	408	355	437	311	310	327	346	245	366	288	269	249	3,911
	Pelata/Selar	1,535	1,921	2,364	2,020	2,188	2,098	1,850	1,945	2,331	2,550	2,015	1,137	23,954
	Selar Kuning/Lolong	1,516	2,751	4,451	4,390	3,528	3,245	3,942	3,700	4,328	4,568	3,438	1,484	41,341
	Selayang/Curut	3,472	4,375	6,971	4,863	4,448	4,249	7,445	7,770	9,120	8,760	6,137	2,550	70,160
	Pisang-Pisang	18	15	12	27	17	20	621	30	22	34	32	15	863
	Talang	335	335	382	362	425	427	305	273	240	250	268	209	3,811
	Bilis/Bunga Air	1,317	1,252	1,695	1,585	1,421	1,771	2,903	3,654	3,719	1,736	871	1,121	23,045
	Parang-Parang	317	335	397	374	414	427	420	516	415	470	391	257	4,733
	Tamban	2,177	3,145	3,841	3,773	4,100	4,418	4,232	3,829	4,927	5,776	3,568	1,731	45,517
35	Bulan-Bulan	14	29	26	21	17	41	14	16	18	9	11	10	226
	Aya/Kayu/Tongkol	3,716	5,391	6,577	5,668	6,653	5,459	4,533	4,750	5,818	5,170	3,584	2,700	60,019
	Layaran/Mersuji	50	16	27	23	14	9	17	4	12	1,837	17	20	2,046
	Kembong/Temenong/Pelaling	8,500	8,298	10,037	11,716	11,757	10,805	10,406	9,394	8,552	8,879	7,414	5,607	111,365
36	Tenggiri	2,011	1,997	1,520	1,341	1,553	1,380	1,496	1,323	1,585	1,404	1,294	860	17,764
	Timah/layar/Selayor	1,812	2,192	2,127	1,936	1,775	1,794	1,677	1,063	1,043	1,044	916	630	18,009
37	Pari	1,530	1,253	1,241	1,268	1,453	1,533	1,847	1,485	1,428	1,607	1,337	1,051	17,033
	Yu	642	631	589	691	790	867	738	696	665	710	644	429	8,092
	Ikan Baja	26,219	24,068	27,932	27,860	27,592	26,994	26,959	25,417	26,989	28,854	25,761	23,420	318,065
38	Ikan Campur	3,898	4,377	4,518	4,830	5,028	4,981	5,416	4,842	5,368	4,847	4,302	3,266	55,693
	Jebong	112	112	163	130	121	126	186	245	661	532	309	129	2,826
39	Ketam	1,384	1,373	1,520	1,336	1,319	1,217	1,116	990	1,015	1,068	1,090	1,002	14,430
	Udang Karang/Lobok	70	57	102	86	92	108	108	89	104	102	76	100	1,094
	Udang Putih	1,216	1,062	1,432	1,023	1,082	998	907	796	918	844	909	1,069	12,256
42	Udang Minyak	634	673	845	972	891	877	636	650	542	742	863	880	9,205
45	Udang Merah Ros	265	478	274	280	188	123	103	94	149	117	145	226	2,442
	Udang Kulit Keras	469	362	474	376	359	250	240	454	335	305	355	370	4,349
	Udang Harimau	97	122	91	76	70	71	123	73	65	83	80	91	1,042
	Lain-lain Jenis Udang	4,649	5,458	4,268	3,743	3,758	3,353	2,988	2,986	3,030	3,149	3,179	4,139	44,700
	Udang Baring	1,198	1,533	6,386	618	916	622	833	872	866	1,090	624	922	16,480
	Siput/Kepah/Kupang/Tiram	126	109	122	102	112	161	153	131	179	153	146	183	1,677
	Sotong Kereta	100	96	88	112	127	161	163	148	158	154	127	78	1,512
	Sotong Katak	1,794	1,729	1,861	1,842	1,708	1,780	1,861	2,317	1,881	1,982	1,859	1,454	22,068
56	Sotong Biasa	3,634	3,318	3,873	3,991	3,624	2,909	3,432	3,893	3,527	3,587	2,413	2,082	40,283
57	Ubur-Ubur	855	649	562	485	604	123	200	856	868	1,351	414	215	7,182
	Jumlah Tan.M./Total Tonnes	93768	97469	118743	109234	109685	105115	109114	106118	113408	116213	94052	75483	1248402

SEMENANJUNG MALAYSIA/ PENINSULAR MALAYSIA
PENDARATAN IKAN LAUT MENGIKUT BULAN DAN SPESIES IKAN, 1999
LANDINGS OF MARINE FISH BY MONTH AND SPECIES, 1999
(Kuantiti dalam Tan Metrik/ Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis Ikan <i>Species</i>	Januari	Febuari	Mac	April	Mei	Jun	Julai	Ogos	September	Oktober	November	Disember	Jumlah (Tan Metrik)
	Nama Tempatan <i>Local Name</i>	January	February	March	April	May	June	July	August	September	October	November	December	Total (Tonnes)
24	Kebasi Selangat	242	425	306	288	273	326	263	332	155	288	208	134	3240
	Puput/B.Mata/Tirok	325	249	303	163	302	278	343	262	426	604	340	1178	4773
	Terubok	0	1	0	1	1	2	2	1	33	0	2	2	45
25	Siakap	12	27	33	23	17	18	17	13	16	13	20	17	226
31	Lidah	227	229	356	234	205	177	200	205	215	212	251	270	2781
	Sebelah	80	68	64	64	65	57	69	67	119	95	69	69	886
33	Bayan	7	9	14	14	12	28	13	17	22	15	10	4	165
	Biji Nangka	243	276	381	396	392	429	341	443	667	836	773	545	5722
	Daun Baharu	25	26	18	20	19	20	18	20	32	33	27	35	293
	Delah/Pinang-Pinang	18	16	36	34	28	30	26	51	71	33	21	13	377
	Duri/Pulutan/Utik	564	527	558	608	617	598	617	734	975	691	573	523	7585
	Dengkis/Debam	26	19	42	54	29	30	43	43	66	58	50	37	497
	Gelama/Tengkerong/Selampai	1354	1179	1309	1376	1136	1280	1259	1171	1339	1285	1163	1011	14862
	Gerut-Gerut	67	61	58	71	56	66	98	69	81	65	54	46	792
	Jenahak	51	42	47	44	46	49	45	43	46	58	42	62	575
	Kaci	48	61	90	81	78	93	106	103	115	110	81	60	1026
	Kerapu	255	341	518	368	312	347	383	472	488	539	402	220	4645
	Kerisi	2245	2105	2819	3239	2606	2551	2775	2930	2907	3490	2231	1680	31578
	kerisi Bali	161	390	338	384	388	477	325	501	806	391	278	204	4643
	Kikek	59	81	130	138	140	64	69	199	140	171	59	56	1306
	Malong	320	227	383	282	113	194	133	384	184	196	373	169	2958
	Merah	139	220	300	264	235	255	182	195	269	291	209	155	2714
	Mengkerong/conor/Ubi-Ubi	920	974	865	883	939	724	810	784	1118	1309	1089	1043	11458
	Remong/Kunyit-Kunyit/Tanda	179	211	264	254	230	276	255	276	303	340	246	159	2993
	Semilang	82	75	78	72	64	65	66	67	93	69	86	78	895
	Shrumbu/Lemah	16	20	15	13	12	8	6	2	0	0	0	0	92
	Puntung Damar/Bulus	218	191	154	144	147	183	118	116	88	208	129	136	1832
34	Pasir-Pasir/Timun-Timun	62	66	76	81	74	93	88	67	108	111	99	53	978
	Alu-Alu/Kacang-Kacang	154	162	201	230	229	227	195	189	263	272	223	216	2561
	Aruan Tasik	34	51	68	70	63	67	70	71	73	88	66	35	756
	Bawal	854	870	885	761	699	671	519	477	654	487	500	343	7720
	Belanak/Kedera	425	230	255	205	174	174	157	147	452	208	234	218	2879
	Cermin/Sagai/Cupak	134	254	290	231	192	193	215	211	283	294	234	99	2630

Samb.Dari Jadual 4.5.1
(Cont'd From Table 4.5.1)

	Cincaru	694	898	1481	1179	1334	1368	1683	1570	1744	1389	1121	411	14872
	Demuduk/Rambai	77	131	142	111	128	139	102	119	137	152	144	62	1444
	Kurau/Senangin/Senohong	134	93	140	84	102	94	82	80	140	106	99	95	1249
	Pelata/Selar	1188	1496	2017	1642	1755	1619	1439	1602	1970	2136	1680	669	19213
	Selar Kuning/Lolong	1348	2564	4177	4126	3041	2959	3703	3466	4079	4342	3130	1321	38256
	Selayang/Curut	1654	2997	5728	3712	3102	2749	6158	6851	8179	6826	4677	821	53454
	Pisang-Pisang	3	0	5	2	2	7	612	15	6	25	18	0	695
	Talang	55	59	121	78	61	84	49	39	42	60	58	29	735
	Bilis/Bunga Air	1033	1010	1375	1202	1095	1574	2739	3525	3598	1525	664	930	20270
	Parang-Parang	260	263	314	272	232	272	300	418	317	366	303	200	3517
	Tamban	492	1876	2623	2380	2310	2314	2884	2404	3630	4000	2529	600	28042
35	Bulan-Bulan	4	14	10	5	3	5	3	4	1	1	1	0	51
	Aya/Kayu/Tongkol	1678	3040	4807	4112	4632	3150	2931	3200	3682	3528	1669	830	37259
	Layaran/Mersuji	5	6	0	1	0	0	0	0	3	1812	0	0	1827
	Kembong/Temenong/Pelaling	7506	7480	9030	10629	10528	9381	9064	8200	7441	7698	6442	4455	97854
36	Tenggiri	731	720	783	507	571	604	868	672	911	796	623	426	8212
	Timah/layor/Selayor	1098	1296	1282	994	673	559	553	379	335	289	196	218	7872
37	Pari	1157	903	895	824	868	971	1303	942	976	1136	868	722	11565
	Yu	217	209	215	232	229	300	217	255	240	287	244	178	2823
	Ikan Baja	23342	21303	24343	23558	23076	22961	22855	21726	23170	25033	21648	20259	273274
38	Ikan Campur	1788	1919	2132	2064	2174	2325	2350	2660	3135	2844	2491	1900	27782
	Jebong	60	60	91	74	77	90	112	204	608	494	214	92	2176
39	Ketam	851	803	860	788	743	655	585	523	585	592	581	499	8065
	Udang Karang/Lobok	55	39	46	42	45	45	56	46	46	56	56	57	589
	Udang Putih	549	451	438	482	499	498	416	364	393	349	378	466	5283
42	Udang Minyak	575	612	760	918	806	786	555	626	527	724	820	822	8531
45	Udang Merah Ros	133	176	99	180	104	49	41	38	25	17	17	81	960
	Udang Kulit Keras	298	228	313	210	260	151	160	380	290	233	266	292	3081
	Udang Harimau	60	76	53	40	35	36	88	35	34	47	38	44	586
	Lain-lain Jenis Udang	2875	2480	2547	2747	2846	2480	2164	2263	2190	2380	2415	3023	30410
	Udang Baring	708	865	863	583	831	563	788	856	849	1080	617	907	9510
	Siput/Kepah/Kupang/Tiram	59	44	34	24	30	43	48	52	70	63	62	92	621
	Sotong Kereta	67	61	61	78	89	113	124	112	122	128	104	51	1110
	Sotong Katak	1545	1513	1595	1542	1377	1480	1569	2012	1606	1655	1561	1212	18667
56	Sotong Biasa	3096	2837	3042	2984	2729	2156	2768	3192	2873	3018	1872	1691	32258
57	Ubur-Ubur	618	115	213	21	445	1	108	732	717	1261	325	130	4686
	Jumlah Tan.M./Total Tonnes	65559	68320	83889	79517	76725	72631	79303	80224	87278	89308	68073	52455	903282

JADUAL (TABLE) 4.5.2

PANTAI BARAT SEMENANJUNG MALAYSIA/WEST COAST OF PENINSULAR MALAYSIA

PENDARATAN IKAN LAUT MENGIKUT BULAN DAN SPESIES IKAN, 1999

LANDINGS OF MARINE FISH BY MONTH AND SPECIES, 1999.

(Kuantiti dalam Tan Metrik/ Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis Ikan Species	Januari	Febuari	Mac	April	Mei	Jun	Julai	Ogos	September	Oktober	November	Disember	Jumlah (Tan Metrik)
	Nama Tempatan Local Name	January	February	March	April	May	June	July	August	September	October	November	December	Total (Tonnes)
24	Kebasi Selangat	242	425	305	288	273	326	263	332	154	288	208	134	3238
	Puput/B.Mata/Tirok	319	236	295	157	296	269	320	212	403	591	336	1176	4610
	Terubok	0	1	0	1	1	2	2	1	33	0	2	2	45
25	Siakap	12	19	24	14	8	9	7	11	11	10	17	15	157
31	Lidah	192	187	328	217	194	159	185	184	194	187	214	241	2482
	Sebelah	37	28	22	29	30	29	26	28	70	36	22	31	388
33	Bayan	1	0	2	2	0	0	0	0	0	0	0	0	5
	Biji Nangka	48	46	63	65	66	71	68	101	184	424	563	364	2063
	Daun Baharu	15	13	10	12	10	9	8	11	20	13	10	21	152
	Delah/Pinang-Pinang	0	0	0	0	0	0	0	0	0	1	0	0	1
	Duri/Pulutan/Utik	421	353	331	383	437	376	400	489	712	405	352	370	5029
	Dengkis/Debam	5	3	3	2	2	2	3	4	4	2	5	8	43
	Gelama/Tengkerong/Selampai	1106	911	1010	1072	959	1084	1028	896	1047	936	893	765	11707
	Gerut-Gerut	60	50	44	61	49	55	40	56	65	58	40	38	616
	Jenahak	47	39	45	41	44	43	40	40	42	54	39	57	531
	Kaci	1	1	1	1	1	2	1	2	2	0	1	2	15
	Kerapu	141	115	119	123	118	113	106	136	104	116	128	105	1424
	Kerisi	1372	1186	1010	909	763	520	673	655	564	1055	826	654	10187
	kerisi Bali	4	8	1	13	4	5	15	28	301	10	11	14	414
	Kikek	10	6	41	8	9	3	4	5	16	7	4	9	122
	Malong	304	210	361	262	97	179	120	363	172	187	362	152	2769
	Merah	17	8	21	17	11	19	17	20	23	19	12	13	197
	Mengkerong/conor/Ubi-Ubi	778	810	652	551	619	340	409	460	632	909	659	672	7491
	Remong/Kunyit-Kunyit/Tanda	6	3	2	8	7	5	40	5	7	12	9	11	115
	Semilang	82	75	76	72	61	59	57	67	93	69	80	77	868
	Shrumbu/Lemah	16	20	15	13	12	8	6	2	0	0	0	0	92
	Puntung Damar/Bulus	100	77	65	46	58	81	80	80	60	136	74	73	930
	Pasir-Pasir/Timun-Timun	5	6	9	9	3	17	7	1	5	14	15	5	96
	Alu-Alu/Kacang-Kacang	91	76	69	67	75	77	57	67	92	73	68	105	915
	Aruan Tasik	15	15	8	4	3	4	7	15	10	15	10	7	113
34	Bawal	715	618	567	563	579	548	448	414	573	439	442	304	6210
	Belanak/Kedera	420	229	249	199	168	162	146	136	434	190	231	215	2779
	Cermin/Sagai/Cupak	9	16	16	17	27	12	13	8	14	15	32	18	197

Samb.Dari Jadual 4.5.2
(Cont'd From Table 4.5.2)

	Cincaru	456	251	389	410	469	533	1006	759	717	462	411	198	6061
	Demuduk/Rambai	42	70	38	43	42	39	36	46	33	47	33	27	496
	Kurau/Senangin/Senohong	133	89	106	76	98	91	79	79	139	105	97	95	1187
	Pelata/Selar	534	435	325	334	304	326	323	393	384	406	412	185	4361
	Selar Kuning/Lolong	453	376	537	454	467	320	329	364	443	535	320	273	4871
	Selayang/Curut	690	766	1169	777	599	542	795	630	1133	683	496	143	8423
	Pisang-Pisang	1	0	0	0	0	0	0	5	6	0	15	0	27
	Talang	50	52	52	48	34	63	33	26	31	39	25	23	476
	Bilis/Bunga Air	1025	842	992	784	750	1008	1194	1483	1529	517	391	925	11440
	Parang-Parang	174	143	179	162	152	161	160	256	167	174	164	117	2009
	Tamban	252	455	588	533	667	353	251	313	316	225	363	347	4663
35	Bulan-Bulan	4	14	1	2	0	2	2	1	1	1	1	0	29
	Aya/Kayu/Tongkol	811	509	738	1093	711	307	660	774	1005	686	505	555	8354
	Layaran/Mersuji	0	0	0	0	0	0	0	0	0	0	0	0	0
	Kembong/Temenong/Pelaling	7127	6773	7770	9679	9736	8545	8204	6876	5319	5492	5098	4046	84665
36	Tenggiri	478	391	430	259	282	323	392	452	531	417	323	305	4583
	Timah/layor/Selayor	994	1106	1043	814	571	446	430	266	189	137	84	111	6191
37	Pari	712	427	395	267	303	408	685	394	390	510	342	346	5179
	Yu	74	57	81	51	59	72	57	67	67	78	67	51	781
	Ikan Baja	17645	15347	15927	14832	14740	14566	12352	12201	13447	16214	13677	13634	174582
38	Ikan Campur	1074	1040	1064	963	897	802	902	954	1154	1124	1002	974	11950
	Jebong	12	9	18	24	23	29	28	26	30	27	9	19	254
39	Ketam	701	631	718	673	617	511	436	366	460	466	462	387	6428
	Udang Karang/Lobok	2	1	1	1	1	2	1	1	1	1	2	1	15
	Udang Putih	441	324	390	446	474	475	393	343	373	323	324	377	4683
42	Udang Minyak	516	541	722	898	798	777	546	618	520	702	766	749	8153
45	Udang Merah Ros	124	176	99	180	104	49	41	38	25	17	17	81	951
	Udang Kulit Keras	213	156	252	198	253	145	155	374	286	226	233	204	2695
	Udang Harimau	33	41	32	31	26	26	77	26	27	39	26	27	411
	Lain-lain Jenis Udang	2292	1911	2206	2566	2685	2326	2001	2119	2052	2172	2101	2548	26979
	Udang Baring	708	865	863	583	831	563	788	856	849	873	617	907	9303
	Siput/Kepah/Kupang/Tiram	59	41	28	17	27	40	48	52	63	60	62	92	589
	Sotong Kereta	65	60	59	60	60	66	60	57	75	58	62	45	727
	Sotong Katak	1056	913	973	742	665	566	711	1047	707	767	757	686	9590
56	Sotong Biasa	2406	1967	1864	1514	1389	918	1414	1706	1363	1578	1067	1102	18288
57	Ubur-Ubur	618	115	213	21	445	1	108	732	717	1261	325	130	4686
	Jumlah Tan.M./Total Tonnes	48566	42684	46026	44761	44263	39989	39293	39529	40590	42693	36319	35368	500081

JADUAL (TABLE) 4.5.3

PANTAI TIMUR SEMENANJUNG MALAYSIA/EAST COAST OF PENINSULAR MALAYSIA

PENDARATAN IKAN LAUT MENGIKUT BULAN DAN SPESIES IKAN, 1999

LANDINGS OF MARINE FISH BY MONTH AND SPECIES, 1999.

(Kuantiti dalam Tan Metrik/ Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis Ikan Species	Januari	Febuari	Mac	April	Mei	Jun	Julai	Ogos	September	Oktober	November	Disember	Jumlah (Tan Metrik)
	Nama Tempatan Local Name	January	February	March	April	May	June	July	August	September	October	November	December	Total (Tonnes)
24	Kebasi Selangat	0	0	1	0	0	0	0	0	1	0	0	0	2
	Puput/B.Mata/Tirok	6	13	8	6	6	9	23	50	23	13	4	2	163
	Terubok	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Siakap	0	8	9	9	9	9	10	2	5	3	3	2	69
31	Lidah	35	42	28	17	11	18	15	21	21	25	37	29	299
	Sebelah	43	40	42	35	35	28	43	39	49	59	47	38	498
33	Bayan	6	9	12	12	12	28	13	17	22	15	10	4	160
	Biji Nangka	195	230	318	331	326	358	273	342	483	412	210	181	3659
	Daun Baharu	10	13	8	8	9	11	10	9	12	20	17	14	141
	Delah/Pinang-Pinang	18	16	36	34	28	30	26	51	71	32	21	13	376
	Duri/Pulutan/Utik	143	174	227	225	180	222	217	245	283	286	221	153	2556
	Dengkis/Debam	21	16	39	52	27	28	40	39	62	56	45	29	454
	Gelama/Tengkerong/Selampai	248	268	299	304	177	196	231	275	292	349	270	246	3155
	Gerut-Gerut	7	11	14	10	7	11	58	13	16	7	14	8	176
	Jenahak	4	3	2	3	2	6	5	3	4	4	3	5	44
	Kaci	47	60	89	80	77	91	105	101	113	110	80	58	1011
	Kerapu	114	226	399	245	194	234	277	336	384	423	274	115	3221
	Kerisi	873	919	1809	2330	1843	2031	2102	2275	2343	2435	1405	1026	21391
	kerisi Bali	157	382	337	371	384	472	310	473	505	381	267	190	4229
	Kikek	49	75	89	130	131	61	65	194	124	164	55	47	1184
	Malong	16	17	22	20	16	15	13	21	12	9	11	17	189
	Merah	122	212	279	247	224	236	165	175	246	272	197	142	2517
	Mengkerong/conor/Ubi-Ubi	142	164	213	332	320	384	401	324	486	400	430	371	3967
	Remong/Kunyit-Kunyit/Tanda	173	208	262	246	223	271	215	271	296	328	237	148	2878
	Semilang	0	0	2	0	3	6	9	0	0	0	6	1	27
	Shrumbu/Lemah	0	0	0	0	0	0	0	0	0	0	0	0	0
	Puntung Damar/Bulus	118	114	89	98	89	102	38	36	28	72	55	63	902
	Pasir-Pasir/Timun-Timun	57	60	67	72	71	76	81	66	103	97	84	48	882
34	Alu-Alu/Kacang-Kacang	63	86	132	163	154	150	138	122	171	199	157	111	1646
	Aruan Tasik	19	36	60	66	60	63	63	56	63	73	56	28	643
	Bawal	139	252	318	198	120	123	71	63	81	48	58	39	1510
	Belanak/Kedera	5	1	6	6	6	12	11	11	18	18	3	3	100
	Cermin/Sagai/Cupak	125	238	274	214	165	181	202	203	269	279	202	81	2433

Samb.Dari Jadual 4.5.3
(Cont'd From Table 4.5.3)

	Cincaru	238	647	1092	769	865	835	677	811	1027	927	710	213	8811
	Demuduk/Rambai	35	61	104	68	86	100	66	73	104	105	111	35	948
	Kurau/Senangin/Senohong	1	4	34	8	4	3	3	1	1	1	2	0	62
	Pelata/Selar	654	1061	1692	1308	1451	1293	1116	1209	1586	1730	1268	484	14852
	Selar Kuning/Lolong	895	2188	3640	3672	2574	2639	3374	3102	3636	3807	2810	1048	33385
	Selayang/Curut	964	2231	4559	2935	2503	2207	5363	6221	7046	6143	4181	678	45031
	Pisang-Pisang	2	0	5	2	2	7	612	10	0	25	3	0	668
	Talang	5	7	69	30	27	21	16	13	11	21	33	6	259
	Bilis/Bunga Air	8	168	383	418	345	566	1545	2042	2069	1008	273	5	8830
	Parang-Parang	86	120	135	110	80	111	140	162	150	192	139	83	1508
	Tamban	240	1421	2035	1847	1643	1961	2633	2091	3314	3775	2166	253	23379
35	Bulan-Bulan	0	0	9	3	3	3	1	3	0	0	0	0	22
	Aya/Kayu/Tongkol	867	2531	4069	3019	3921	2843	2271	2426	2677	2842	1164	275	28905
	Layaran/Mersuji	5	6	0	1	0	0	0	0	3	1812	0	0	1827
	Kembong/Temenong/Pelaling	379	707	1260	950	792	836	860	1324	2122	2206	1344	409	13189
36	Tenggiri	253	329	353	248	289	281	476	220	380	379	300	121	3629
	Timah/layor/Selayor	104	190	239	180	102	113	123	113	146	152	112	107	1681
37	Pari	445	476	500	557	565	563	618	548	586	626	526	376	6386
	Yu	143	152	134	181	170	228	160	188	173	209	177	127	2042
	Ikan Baja	5697	5956	8416	8726	8336	8395	10503	9525	9723	8819	7971	6625	98692
38	Ikan Campur	714	879	1068	1101	1277	1523	1448	1706	1981	1720	1489	926	15832
	Jebong	48	51	73	50	54	61	84	178	578	467	205	73	1922
39	Ketam	150	172	142	115	126	144	149	157	125	126	119	112	1637
	Udang Karang/Lobok	53	38	45	41	44	43	55	45	45	55	54	56	574
	Udang Putih	108	127	48	36	25	23	23	21	20	26	54	89	600
42	Udang Minyak	59	71	38	20	8	9	9	8	7	22	54	73	378
45	Udang Merah Ros	9	0	0	0	0	0	0	0	0	0	0	0	9
	Udang Kulit Keras	85	72	61	12	7	6	5	6	4	7	33	88	386
	Udang Harimau	27	35	21	9	9	10	11	9	7	8	12	17	175
	Lain-lain Jenis Udang	583	569	341	181	161	154	163	144	138	208	314	475	3431
	Udang Baring	0	0	0	0	0	0	0	0	0	207	0	0	207
	Siput/Kepah/Kupang/Tiram	0	3	6	7	3	3	0	0	7	3	0	0	32
	Sotong Kereta	2	1	2	18	29	47	64	55	47	70	42	6	383
	Sotong Katak	489	600	622	800	712	914	858	965	899	888	804	526	9077
56	Sotong Biasa	690	870	1178	1470	1340	1238	1354	1486	1510	1440	805	589	13970
57	Ubur-Ubur	0	0	0	0	0	0	0	0	0	0	0	0	0
	Jumlah Tan.M./Total Tonnes	16993	25636	37863	34756	32462	32642	40010	40695	46688	46615	31754	17087	403201

JADUAL (TABLE) 4.5.4

SARAWAK
PENDARATAN IKAN LAUT MENGIKUT BULAN DAN SPESIES IKAN, 1999
LANDINGS OF MARINE FISH BY MONTH AND SPECIES, 1999
(Kuantiti dalam Tan Metrik/ Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis Ikan Species	Januari	Febuari	Mac	April	Mei	Jun	Julai	Ogos	September	Oktober	November	Disember	Jumlah (Tan Metrik)
	Nama Tempatan Local Name	January	February	March	April	May	June	July	August	September	October	November	December	Total (Tonnes)
24	Kebasi Selangat	32	20	30	38	58	47	32	58	20	34	26	20	415
	Puput/B. Mata/Tirok	26	32	193	221	186	251	281	134	120	112	76	32	1,664
	Terubok	1	24	41	90	63	56	69	64	66	62	33	8	577
25	Siakap	0	0	1	0	56	0	0	8	0	0	0	0	65
31	Lidah	10	6	12	56	60	55	25	43	14	19	17	17	334
33	Sebelah	17	14	23	76	85	72	58	58	48	59	25	13	548
	Bayan	0	0	0	0	0	0	0	0	0	0	0	0	0
	Biji Nangka	43	23	29	56	83	266	240	317	427	326	218	132	2,160
	Daun Baharu	8	19	20	33	50	35	31	34	17	39	26	12	324
	Delah/Pinang-Pinang	0	0	0	0	0	0	0	0	0	0	0	0	0
	Duri/Pulutan/Utik	120	148	263	268	337	304	253	294	256	283	227	111	2,864
	Dengkis/Debam	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gelama/Tengkerong/Selampai	209	233	331	352	432	471	422	484	395	326	306	122	4,083
	Gerut-Gerut	199	24	30	205	252	25	37	2	1	2	2	0	779
	Jenahak	29	18	26	44	67	44	69	62	45	51	32	13	500
	Kaci	5	6	11	21	29	27	38	36	32	30	25	4	264
	Kerapu	23	29	45	76	130	110	90	85	68	82	57	29	824
	Kerisi	37	51	117	139	167	131	192	210	162	190	181	124	1,701
	kerisi Bali	30	39	45	63	75	35	79	68	46	74	40	29	623
	Kikek	9	12	25	46	69	65	47	32	20	16	16	4	361
	Malong	83	114	151	113	130	124	102	106	89	138	212	158	1,520
	Merah	48	73	86	149	216	163	226	292	183	198	169	45	1,848
	Mengkerong/conor/Ubi-Ubi	0	0	0	0	0	0	0	0	0	0	0	0	0
	Remong/Kunyit-Kunyit/Tanda	0	0	0	0	0	0	0	0	0	0	0	0	0
	Semilang	1	1	1	2	1	2	1	2	2	2	1	2	18
	Shrumbu/Lemah	14	10	18	72	79	98	70	49	49	42	22	11	534
	Puntung Damar/Bulus	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pasir-Pasir/Timun-Timun	0	0	0	0	0	0	0	0	0	0	0	0	0
	Alu-Alu/Kacang-Kacang	2	4	9	39	47	39	36	22	16	21	28	8	271
34	Aruan Tasik	0	0	0	0	0	0	0	0	0	0	0	0	0
	Bawal	46	79	138	134	191	129	109	113	89	79	70	15	1,192
	Belanak/Kedera	2	2	8	2	1	3	2	1	4	3	2	3	33
	Cermin/Sagai/Cupak	5	6	24	34	62	35	48	38	50	46	32	8	388

Samb.Dari Jadual 4.5.4
(Cont'd From Table 4.5.4)

	Cincaru	412	98	150	256	337	398	317	322	194	159	139	51	2,833
	Demuduk/Rambai	41	37	47	103	97	72	69	84	62	71	44	23	750
	Kurau/Senangin/Senohong	13	29	62	63	60	42	62	59	36	39	29	5	499
	Pelata/Selar	80	118	105	144	175	144	130	128	108	142	96	38	1,408
	Selar Kuning/Lolong	64	49	92	144	372	152	91	121	156	99	145	41	1,526
	Selayang/Curut	20	8	11	29	62	8	17	63	28	26	46	15	333
	Pisang-Pisang	0	0	0	0	0	0	0	0	0	0	0	0	0
	Talang	32	15	38	102	113	79	60	52	34	39	32	10	606
	Bilis/Bunga Air	0	0	0	0	0	0	0	0	3	0	0	0	3
	Parang-Parang	27	47	65	82	134	117	74	51	52	62	39	15	765
	Tamban	146	120	187	235	236	236	217	278	195	195	162	130	2,337
35	Bulan-Bulan	0	0	0	0	0	0	0	0	0	0	0	0	0
	Aya/Kayu/Tongkol	282	536	176	203	269	630	259	364	412	337	285	63	3,816
	Layaran/Mersuji	0	0	0	0	0	0	0	0	0	0	0	0	0
	Kembong/Temenong/Pelaling	233	141	216	291	406	532	454	409	388	314	200	188	3,772
36	Tenggiri	655	561	208	337	499	313	259	290	282	203	171	47	3,825
	Timah/layar/Selayor	54	33	58	205	405	612	461	229	142	147	116	36	2,498
37	Pari	129	99	81	191	298	293	322	287	231	238	193	134	2,496
	Yu	126	133	95	213	271	273	248	223	185	200	166	81	2,214
	Ikan Baja	1,498	1,187	1,474	2,548	2,581	1,985	1,785	1,880	1,992	1,858	1,710	962	21,460
38	Ikan Campur	1,416	1,593	1,704	1,994	2,289	2,126	2,609	1,650	1,647	1,530	1,270	896	20,724
	Jebong	0	0	0	0	0	0	0	0	0	0	0	0	0
39	Ketam	58	57	48	58	58	62	66	71	61	64	64	54	721
	Udang Karang/Lobok	1	1	1	0	0	2	5	2	1	3	1	0	17
	Udang Putih	237	218	259	157	146	147	155	120	200	119	158	151	2,067
42	Udang Minyak	2	4	6	3	1	0	0	0	1	1	1	1	20
45	Udang Merah Ros	88	248	109	39	6	6	6	3	70	50	86	86	797
	Udang Kulit Keras	102	110	124	64	65	50	50	56	27	54	51	35	788
	Udang Harimau	0	1	1	0	0	0	0	0	0	0	0	0	2
	Lain-lain Jenis Udang	1,519	2,703	1,455	735	602	570	548	463	577	495	509	805	10,981
	Udang Baring	145	144	5,450	10	50	46	33	4	5	5	3	7	5,902
	Siput/Kepah/Kupang/Tiram	0	0	0	0	0	0	0	0	0	4	1	0	5
	Sotong Kereta	0	0	0	4	4	3	0	1	0	0	0	0	12
	Sotong Katak	9	7	21	27	42	59	41	42	33	70	34	30	415
56	Sotong Biasa	104	33	201	321	331	222	173	215	152	161	147	53	2,113
57	Ubur-Ubur	229	525	334	448	140	105	76	102	137	72	79	72	2,319
	Jumlah Tan.M./Total Tonnes	8721	9842	14455	11335	12975	11871	11144	10181	9630	8991	7820	4949	121914

JADUAL (TABLE) 4.5.5

SABAH
PENDARATAN IKAN LAUT MENGIKUT BULAN DAN SPESIES IKAN, 1999
LANDINGS OF MARINE FISH BY MONTH AND SPECIES, 1999
(Kuantiti dalam Tan Metrik/ Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis Ikan <i>Species</i>	Januari	Febuari	Mac	April	Mei	Jun	Julai	Ogos	September	Oktober	November	Disember	Jumlah (Tan Metrik)
	Nama Tempatan <i>Local Name</i>	January	February	March	April	May	June	July	August	September	October	November	December	Total (Tonnes)
24	Kebasi Selangat	66	46	51	43	57	78	71	50	57	50	64	71	704
	Puput/B.Mata/Tirok	233	106	285	270	248	299	289	215	202	218	252	104	2,721
	Terubok	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Siakap	101	78	118	78	112	111	74	75	86	61	133	79	1,106
31	Lidah	4	5	6	6	7	26	29	16	16	22	18	23	178
33	Sebelah	151	149	154	123	104	184	157	156	85	86	90	65	1,504
	Bayan	173	171	187	207	247	196	261	195	124	153	191	132	2,237
	Biji Nangka	57	49	68	79	53	68	63	47	42	39	34	62	661
	Daun Baharu	11	11	12	13	25	18	23	15	9	14	14	15	180
	Delah/Pinang-Pinang	81	72	75	78	65	54	54	75	80	42	77	47	800
	Duri/Pulutan/Utik	433	414	468	417	495	524	506	325	345	342	263	285	4,817
	Dengkis/Debam	67	35	42	50	55	78	67	52	41	47	61	54	649
	Gelama/Tengkerong/Selampai	278	275	332	302	262	297	286	230	223	199	247	221	3,152
	Gerut-Gerut	36	42	44	66	52	58	50	47	28	52	63	59	597
	Jenahak	266	276	370	253	319	375	340	243	229	241	178	209	3,299
	Kaci	10	7	14	15	11	10	14	11	10	11	8	4	125
	Kerapu	549	450	510	494	605	696	591	509	502	528	499	563	6,496
	Kerisi	387	396	491	474	471	467	473	472	441	703	631	744	6,150
	kerisi Bali	168	132	151	153	216	300	246	184	181	136	117	246	2,230
	Kikek	84	83	131	114	114	114	118	126	123	85	113	119	1,324
	Malong	103	121	129	127	123	137	94	81	85	90	118	136	1,344
	Merah	300	263	341	257	323	378	289	247	279	298	315	282	3,572
	Mengkerong/conor/Ubi-Ubi	230	259	303	235	254	328	291	321	328	381	422	232	3,584
	Remong/Kunyit-Kunyit/Tanda	121	128	157	157	146	169	181	77	95	99	106	90	1,526
	Semilang	91	83	101	63	83	80	54	40	63	58	60	60	836
	Shrumbu/Lemah	1	2	1	8	3	6	2	2	2	3	2	4	36
	Puntung Damar/Bulus	11	17	13	14	9	10	17	18	12	18	15	27	181
	Pasir-Pasir/Timun-Timun	2	4	4	3	2	4	1	3	4	2	4	7	40
	Alu-Alu/Kacang-Kacang	392	588	625	464	492	455	498	415	331	344	346	230	5,180
34	Aruan Tasik	0	0	0	0	0	0	0	0	0	0	0	0	0
	Bawal	188	181	195	77	126	183	129	126	89	64	63	96	1,517
	Belanak/Kedera	211	203	195	144	170	208	173	97	135	121	141	141	1,939
	Cermin/Sagai/Cupak	75	92	96	100	95	107	99	51	77	87	119	96	1,094

Samb.Dari Jadual 4.5.5
(Cont'd From Table 4.5.5)

	Cincaru	110	126	315	140	164	154	109	76	124	161	197	406	2,082
	Demuduk/Rambai	525	605	550	485	493	477	512	449	471	378	484	415	5,844
	Kurau/Senangin/Senohong	260	232	234	159	146	190	201	105	190	143	141	149	2,150
	Pelata/Selar	243	266	219	221	237	329	268	203	233	260	222	415	3,116
	Selar Kuning/Lolong	95	106	173	114	102	129	142	107	79	116	145	115	1,423
	Selayang/Curut	1,789	1,317	1,217	1,051	1,264	1,487	1,261	841	899	1,902	1,407	1,710	16,145
	Pisang-Pisang	15	15	7	25	15	13	9	15	16	9	14	14	167
	Talang	248	261	223	180	241	263	195	182	162	151	177	169	2,452
	Bilis/Bunga Air	284	239	320	383	322	197	164	129	118	211	206	191	2,764
	Parang-Parang	28	23	15	17	41	38	46	47	46	42	49	42	434
	Tamban	1,514	1,123	1,010	1,132	1,536	1,863	1,121	1,139	1,092	1,575	871	997	14,973
35	Bulan-Bulan	10	15	16	16	14	36	11	12	17	8	10	10	175
	Aya/Kayu/Tongkol	1,165	1,470	903	718	1,290	882	964	785	658	760	1,026	1,217	11,838
	Layaran/Mersuji	44	9	26	22	7	9	17	4	9	25	17	20	209
	Kembong/Temenong/Pelaling	701	623	742	609	708	871	859	752	678	835	721	935	9,034
36	Tenggiri	606	688	512	459	450	458	359	350	378	397	488	382	5,527
	Timah/layar/Selayor	660	861	783	737	697	623	663	455	566	606	604	376	7,631
37	Pari	226	244	259	248	280	261	216	248	214	222	256	190	2,864
	Yu	285	277	271	240	274	289	267	211	229	214	214	164	2,935
	Ikan Baja	1,258	1,317	2,007	1,622	1,819	1,927	2,141	1,669	1,694	1,861	2,160	2,024	21,499
38	Ikan Campur	647	539	643	622	527	516	436	499	504	422	481	434	6,270
	Jebong	47	49	64	52	40	34	72	39	47	37	84	26	591
39	Ketam	473	508	604	487	510	499	464	395	368	410	443	448	5,609
	Udang Karang/Lobok	6	5	51	41	42	60	46	38	49	38	8	39	423
	Udang Putih	416	378	723	365	428	350	330	304	317	371	361	445	4,788
42	Udang Minyak	57	57	79	51	84	91	81	24	14	17	42	57	654
45	Udang Merah Ros	44	54	66	61	78	68	56	53	54	50	42	59	685
	Udang Kulit Keras	69	24	37	102	34	49	30	18	18	18	38	43	480
	Udang Harimau	29	32	32	29	30	33	31	30	24	30	32	42	374
	Lain-lain Jenis Udang	235	243	251	246	281	295	261	248	221	253	203	287	3,024
	Udang Baring	341	518	70	25	35	13	12	12	12	5	4	8	1,055
	Siput/Kepah/Kupang/Tiram	67	65	88	78	82	118	105	79	109	86	83	91	1,051
	Sotong Kereta	33	35	27	30	34	45	39	35	36	26	23	27	390
	Sotong Katak	230	193	238	262	276	232	243	248	229	249	247	206	2,853
56	Sotong Biasa	421	422	616	653	555	522	484	469	485	403	385	333	5,748
57	Ubur-Ubur	8	9	15	16	19	17	16	22	14	18	10	13	177
	Jumlah Tan.M./Total Tonnes	18069	17686	19075	16582	18499	19456	17771	14813	14698	16903	16659	17002	207213

JADUAL (TABLE) 4.5.6

LABUAN
PENDARATAN IKAN LAUT MENGIKUT BULAN DAN SPESIES IKAN, 1999
LANDINGS OF MARINE FISH BY MONTH AND SPECIES, 1999
(Kuantiti dalam Tan Metrik/ Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis Ikan <i>Species</i>	Januari	Febuari	Mac	April	Mei	Jun	Julai	Ogos	September	Oktober	November	Disember	Jumlah (Tan Metrik)
	Nama Tempatan <i>Local Name</i>	January	February	March	April	May	June	July	August	September	October	November	December	Total (Tonnes)
24	Kebasi Selangat	1	2	1	0	2	0	1	1	0	1	4	1	14
	Puput/B. Mata/Tirok	4	2	4	3	9	0	2	1	2	1	1	1	30
	Terubok	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Siakap	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Lidah	1	1	1	1	1	0	1	1	1	2	3	0	13
	Sebelah	6	10	10	11	11	2	8	7	9	4	8	2	88
33	Bayan	0	0	0	0	0	0	0	0	0	0	0	0	0
	Biji Nangka	5	4	4	7	8	2	4	4	8	4	9	4	63
	Daun Baharu	5	13	6	3	8	1	2	2	2	1	2	1	46
	Delah/Pinang-Pinang	9	7	5	51	34	4	6	5	10	5	7	4	147
	Duri/Pulutan/Utik	7	8	9	12	13	2	6	3	6	4	3	2	75
	Dengkis/Debam	8	4	6	9	13	3	1	2	6	3	5	2	62
	Gelama/Tengkerong/Selampai	7	9	8	13	7	3	4	4	4	6	21	5	91
	Gerut-Gerut	6	7	3	13	11	2	5	3	5	3	6	3	67
	Jenahak	6	8	6	9	18	4	6	3	11	5	9	2	87
	Kaci	10	7	11	10	38	8	11	11	23	3	7	3	142
	Kerapu	22	32	21	40	45	8	12	9	17	11	38	9	264
	Kerisi	49	23	19	26	19	5	7	9	20	31	35	22	265
	kerisi Bali	14	23	14	52	39	22	23	8	34	11	43	8	291
	Kikek	6	2	11	5	9	2	3	4	5	3	5	3	58
	Malong	4	0	1	0	0	0	0	0	0	2	1	0	8
	Merah	30	35	21	50	46	19	27	25	26	18	31	11	339
	Mengkerong/conor/Ubi-Ubi	0	0	0	0	0	0	0	0	0	2	5	1	8
	Remong/Kunyit-Kunyit/Tanda	11	12	9	13	32	8	15	9	14	5	13	6	147
	Semilang	0	0	0	0	0	0	0	0	0	0	0	0	0
	Shrumbu/Lemah	1	2	2	2	4	1	0	1	2	1	2	1	19
	Puntung Damar/Bulus	0	0	0	0	0	0	0	0	0	0	1	0	1
	Pasir-Pasir/Timun-Timun	3	3	2	2	1	1	1	1	1	1	1	1	18
34	Alu-Alu/Kacang-Kacang	5	7	13	14	13	2	4	3	9	9	9	3	91
	Aruan Tasik	0	0	0	0	0	0	0	0	0	0	0	0	0
	Bawal	10	23	19	17	47	3	3	3	7	3	3	1	139
	Belanak/Kedera	2	1	1	2	2	0	1	0	1	0	1	0	11
	Cermin/Sagai/Cupak	138	36	23	46	66	19	24	28	39	16	28	17	480

Samb.Dari Jadual 4.5.6
(Cont'd From Table 4.5.6)

	Cincaru	19	15	16	12	10	4	3	6	7	6	9	1	108
	Demuduk/Rambai	5	3	7	3	9	3	3	4	13	2	6	2	60
	Kuraw/Senangin/Senohong	1	1	1	5	2	1	1	1	0	0	0	0	13
	Pelata/Selar	24	41	23	13	21	6	13	12	20	12	17	15	217
	Selar Kuning/Lolong	9	32	9	6	13	5	6	6	14	11	18	7	136
	Selayang/Curut	9	53	15	71	20	5	9	15	14	6	7	4	228
	Pisang-Pisang	0	0	0	0	0	0	0	0	0	0	0	1	1
	Talang	0	0	0	2	10	1	1	0	2	0	1	1	18
	Bitis/Bunga Air	0	3	0	0	4	0	0	0	0	0	1	0	8
	Parang-Parang	2	2	3	3	7	0	0	0	0	0	0	0	17
	Tamban	25	26	21	26	18	5	10	8	10	6	6	4	165
35	Bulan-Bulan	0	0	0	0	0	0	0	0	0	0	0	0	0
	Aya/Kayu/Tongkol	591	345	691	635	462	797	379	401	1,066	545	604	590	7,106
	Layaran/Mersuji	1	1	1	0	7	0	0	0	0	0	0	0	10
	Kembong/Temenong/Pelaling	60	54	49	187	115	21	29	33	45	32	51	29	705
36	Tenggiri	19	28	17	38	33	5	10	11	14	8	12	5	200
	Timah/layor/Selayor	0	2	4	0	0	0	0	0	0	2	0	0	8
37	Pari	18	7	6	5	7	8	6	8	7	11	20	5	108
	Yu	14	12	8	6	16	5	6	7	11	9	20	6	120
	Ikan Baja	121	261	108	132	116	121	178	142	133	102	243	175	1,832
38	Ikan Campur	47	326	39	150	38	14	21	33	82	51	60	56	917
	Jebong	5	3	8	4	4	2	2	2	6	1	11	11	59
39	Ketam	2	5	8	3	8	1	1	1	1	2	2	1	35
	Udang Karang/Lobok	8	12	4	3	5	1	1	3	8	5	11	4	65
	Udang Putih	14	15	12	19	9	3	6	8	8	5	12	7	118
42	Udang Minyak	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Udang Merah Ros	0	0	0	0	0	0	0	0	0	0	0	0	0
	Udang Kulit Keras	0	0	0	0	0	0	0	0	0	0	0	0	0
	Udang Harimau	8	13	5	7	5	2	4	8	7	6	10	5	80
	Lain-lain Jenis Udang	20	32	15	15	29	8	15	12	42	21	52	24	285
	Udang Baring	4	6	3	0	0	0	0	0	0	0	0	0	13
	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	10	16	7	11	13	9	8	15	13	8	17	6	133
56	Sotong Biasa	13	26	14	33	9	9	7	17	17	5	9	5	164
57	Ubur-Ubur	0	0	0	0	0	0	0	0	0	0	0	0	0
	Jumlah Tan.M./Total Tonnes	1419	1621	1324	1800	1486	1157	896	900	1802	1011	1500	1077	15993

MALAYSIA
PENDARATAN IKAN LAUT MENGIKUT KUMPULAN PERKAKAS DAN SPESIES IKAN, 1999
LANDINGS OF MARINE FISH BY GEAR GROUP AND SPECIES, 1999
(Kuantiti Dalam Tan Metrik/Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis/Ikan Species	Pukat Tunda Trawl Net	Pukat-Pukat Tarik Seine Nets		Lain Pukat Tarik Other Seine	Pukat Hanyut Drift/Gill Net	Pukat Tangguk Lift Net	Perangkap-Perangkap Traps		Pancing Hook and Line	Pukat Bakul Bag Net	Pukat Rentang Barrier Net	Pukat Surung Push/Scoop Net	Memungut Siput Shellfish Collection	Rampaian Miscellaneous	Jumlah (Tan Metrik) Total (Tonnes)
	Nama Tempatan Local Name		Pukat Jerut Ikan Seine-Fish	Pukat Jerut Bilis Purse Seine- Anchovy				Belat-Belat Stationary	Bubu Portable							
24	Kebasi/Selangat	1113	155	0	600	2417	0	58	12	1	0	1	16	0	0	4373
	Puput/B. Mata/Tirok	5435	24	7	0	3708	3	9	0	2	0	0	0	0	0	9188
	Terubok	42	0	0	0	580	0	0	0	0	0	0	0	0	0	622
25	Siakap	52	0	0	0	731	0	30	118	456	0	7	0	0	3	1397
31	Lidah	2552	11	0	5	694	0	38	0	0	1	5	0	0	0	3306
	Sebelah	2677	0	0	0	269	0	68	3	0	6	3	0	0	0	3026
33	Bayan	191	0	0	192	61	0	6	166	1704	0	0	0	0	82	2402
	Biji Nangka	8238	0	0	0	140	0	0	221	7	0	0	0	0	0	8606
	Daun Baharu	496	4	0	0	297	0	1	11	15	0	0	0	0	19	843
	Delah/Pinang-Pinang	44	32	0	9	37	0	1	301	232	0	0	0	0	668	1324
	Duri/Pulutan/Utik	7173	34	35	145	5077	1	152	19	2502	16	159	28	0	0	15341
	Dengkis/Debam	366	0	1	70	121	7	90	476	28	0	4	0	0	45	1208
	Gelama/Tengkerong/Selampai	15216	46	139	217	5282	4	131	5	823	49	193	56	0	27	22188
	Gerut-Gerut	1767	2	0	0	156	1	31	19	253	1	2	3	0	0	2235
	Jenahak	1151	0	0	0	1343	0	1	314	1545	0	1	1	0	105	4461
	Kaci	821	0	0	0	24	0	1	211	500	0	0	0	0	0	1557
	Kerapu	2979	0	0	0	803	0	54	1136	7130	0	1	0	0	126	12229
	Kerisi	32325	1	0	0	1381	1	0	3834	2152	0	0	0	0	0	39694
	Kerisi Bali	4503	0	0	0	891	0	0	481	1912	0	0	0	0	0	7787
	Kikek	2441	80	7	0	325	105	90	0	1	0	0	0	0	0	3049
	Malong	2760	0	0	0	517	0	14	5	2534	0	0	0	0	0	5830
	Merah	2466	4	0	0	1279	4	7	577	4136	0	0	0	0	0	8473
	Mengkerong/Canor/Ubi-Ubi	15029	0	0	0	8	0	0	3	10	0	0	0	0	0	15050
	Remong/Kunyit-Kunyit/Tanda	1711	27	0	0	106	0	23	784	2015	0	0	0	0	0	4666
	Semilang	195	0	0	5	785	0	58	133	424	4	129	16	0	0	1749
	Shrumbu/Lemah	543	0	0	0	137	0	1	0	0	0	0	0	0	0	681
	Puntong Damar/Bulus	1353	1	0	7	600	0	0	21	31	0	0	1	0	0	2014
	Pasir-Pasir/Timun-Timun	668	0	0	0	24	0	1	329	14	0	0	0	0	0	1036
34	Alu-Alu/Kacang-Kacang	4884	311	0	1	278	622	82	10	1850	0	0	9	0	56	8103
	Aruan Tasik	284	86	0	0	14	0	0	61	311	0	0	0	0	0	756
	Bawal	6138	1595	1	16	2537	104	89	4	19	6	0	59	0	0	10568

Samb. Dari Jadual 4.6.
(Cont' d From Table 4.6.)

	Belanak/Kedera	643	4	1	295	3613	6	99	1	1	45	105	23	0	26	4862
	Cermin/Sagai/Cupak	1753	361	0	0	302	122	1	56	1997	0	0	0	0	0	4592
	Cincaru	6627	9514	1	0	1922	289	0	0	1466	0	0	0	0	76	19895
	Demudok/Rambai	3357	518	0	0	783	177	29	122	2636	0	0	0	0	476	8098
	Kurau/Senangin/Senohong	434	1	0	0	2987	0	63	6	403	2	14	1	0	0	3911
	Pelata/Setar	5481	12776	3	4	2368	717	1	42	2318	0	0	12	0	232	23954
	Selar Kuning/Lolong	10283	26945	0	53	338	2919	0	58	717	0	0	28	0	0	41341
	Selayang/Curut	6036	61039	0	4	41	1880	0	0	1160	0	0	0	0	0	70160
	Pisang-Pisang	8	644	0	0	30	6	0	5	170	0	0	0	0	0	863
	Talang	1228	134	2	0	1602	579	71	0	195	0	0	0	0	0	3811
35	Bilis/Bunga Air	766	83	15940	9	0	6180	52	0	0	0	0	0	0	15	23045
	Parang-Parang	3021	33	0	0	1677	0	0	0	2	0	0	0	0	0	4733
	Tamban	1651	38423	1097	339	1865	1971	65	0	51	0	0	0	0	55	45517
	Bulan-Bulan	149	4	0	0	33	0	40	0	0	0	0	0	0	0	226
36	Aya/Kayu/Tongkol	129	44725	268	895	5404	8	0	7	8583	0	0	0	0	0	60019
	Layaran/Mersuji	1	1812	0	0	186	0	0	0	47	0	0	0	0	0	2046
37	Kembong/Temenong/Pelaling	24660	48001	0	233	36390	466	56	0	1491	0	0	0	0	68	111365
	Tenggiri	5315	921	0	2	7485	5	2	5	4028	0	1	0	0	0	17764
	Timah/Layor/Selayor	13245	2927	71	1	758	161	17	0	824	5	0	0	0	0	18009
38	Pari	12534	8	0	13	1899	0	118	23	2401	1	16	12	0	8	17033
	Yu	4821	10	0	0	1903	0	16	7	1309	0	3	0	0	23	8092
39	Ikan Baja	293838	7667	260	8180	1780	2	163	0	3	2888	630	2654	0	0	318065
	Ikan Campur	38098	3633	91	224	9541	342	572	270	1397	895	321	250	0	59	55693
	Jebong	1857	0	0	0	68	0	0	815	86	0	0	0	0	0	2826
42	Ketam	6838	0	0	3	2615	0	100	786	1	22	138	69	0	3858	14430
45	Udang Karang/Lobok	1018	0	0	0	59	0	0	1	0	0	0	0	0	16	1094
	Udang Putih	5494	0	0	135	5598	0	51	0	0	220	13	237	0	508	12256
	Udang Minyak	6197	0	0	2079	42	0	0	0	0	831	0	56	0	0	9205
	Udang Merah Ros	2396	0	0	0	21	0	0	0	0	23	2	0	0	0	2442
	Udang Kulit Keras	2895	0	0	707	241	0	9	0	0	384	2	100	0	11	4349
	Udang Harimau	852	0	0	3	128	0	12	0	0	14	1	26	0	6	1042
	Lain-Lain Jenis Udang	26011	45	0	4063	9041	0	366	0	0	2217	118	2650	0	189	44700
	Udang Baring	0	10	0	8	5038	243	357	0	0	8600	0	1202	5	1017	16480
56	Siput/Kepah/Kupang/Tiram	602	0	0	0	0	0	0	0	0	0	3	0	935	137	1677
57	Sotong Kereta	1372	0	0	0	18	76	0	12	29	5	0	0	0	0	1512
	Sotong Katak	20142	12	0	20	682	310	0	561	0	138	0	186	0	17	22068
	Sotong Biasa	37315	997	0	58	72	684	92	81	931	17	0	0	0	36	40283
76	Ubur-Ubur	625	0	0	0	301	0	27	0	0	4845	157	162	1	1064	7182
	Jumlah Tan M./Total Tonnes	673305	263660	17924	18595	137453	17995	3415	12112	62853	21235	2029	7857	941	9028	1248402

SEMENANJUNG MALAYSIA/ PENINSULAR MALAYSIA
PENDARATAN IKAN LAUT MENGIKUT KUMPULAN PERKAKAS DAN SPESIES IKAN, 1999
LANDINGS OF MARINE FISH BY GEAR GROUP AND SPECIES, 1999
(Kuantiti Dalam Tan Metrik/Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis/Ikan Species	Pukat Tunda Trawl Net	Pukat-Pukat Tarik Seine Nets		Lain Pukat Tarik Other Seine	Pukat Hanyut Drift/Gill Net	Pukat Tangguk Lift Net	Perangkap-Perangkap Trels		Pancing Hook and Line	Pukat Bakul Bag Net	Pukat Rentang Barrier Net	Pukat Surung Push/ Scoop Net	Memungut Siput Shellfish Collection	Rampaian Miscellaneous	Jumlah (Tan Metrik) Total (Tonnes)
	Nama Tempatan Local Name		Pukat Jerut Ikan Purse Seine-Fish	Pukat Jerut Bilis Purse Seine- Anchovy				Belat-Belat Stationary	Bubu Portable							
24	Kebasi/Selangat	543	155	0	600	1924	0	0	0	1	0	1	16	0	0	3240
	Puput/B. Mata/Tirok	2021	24	7	0	2716	3	0	0	2	0	0	0	0	0	4773
	Terubok	37	0	0	0	8	0	0	0	0	0	0	0	0	0	45
25	Siakap	44	0	0	0	104	0	0	10	61	0	7	0	0	0	226
31	Lidah	2146	0	0	5	586	0	38	0	0	1	5	0	0	0	2781
	Sebelah	846	0	0	0	29	0	0	2	0	6	3	0	0	0	886
33	Bayan	38	0	0	0	0	0	0	112	15	0	0	0	0	0	165
	Biji Nangka	5470	0	0	0	35	0	0	210	7	0	0	0	0	0	5722
	Daun Baharu	161	4	0	0	108	0	0	11	9	0	0	0	0	0	293
	Delah/Pinang-Pinang	23	32	0	0	0	0	0	287	35	0	0	0	0	0	377
	Duri/Pulutan/Utik	3721	34	35	145	2598	1	19	19	826	13	146	28	0	0	7585
	Dengkis/Debam	158	0	1	0	8	1	2	311	12	0	4	0	0	0	497
	Gelama/Tengkerong/Selampai	9597	46	139	217	4364	4	47	5	164	46	177	56	0	0	14862
	Gerut-Gerut	626	2	0	0	57	1	0	18	82	1	2	3	0	0	792
	Jenahak	361	0	0	0	6	0	0	77	129	0	1	1	0	0	575
	Kaci	560	0	0	0	10	0	0	198	258	0	0	0	0	0	1026
	Kerapu	2121	0	0	0	24	0	0	924	1575	0	1	0	0	0	4645
	Kerisi	24863	1	0	0	1222	1	0	3822	1669	0	0	0	0	0	31578
	Kerisi Bali	3598	0	0	0	211	0	0	467	367	0	0	0	0	0	4643
	Kikek	1055	79	7	0	121	0	44	0	0	0	0	0	0	0	1306
	Malong	1074	0	0	0	282	0	12	5	1585	0	0	0	0	0	2958
	Merah	1058	0	0	0	16	1	0	266	1373	0	0	0	0	0	2714
	Mengkerong/Canor/Ubi-Ubi	11437	0	0	0	8	0	0	3	10	0	0	0	0	0	11458
	Remong/Kunyit-Kunyit/Tanda	1561	27	0	0	45	0	0	646	714	0	0	0	0	0	2993
	Semilang	194	0	0	5	306	0	0	38	206	4	126	16	0	0	895
	Shrumbu/Lemah	92	0	0	0	0	0	0	0	0	0	0	0	0	0	92
	Puntong Damar/Bulus	1214	0	0	7	570	0	0	21	19	0	0	1	0	0	1832
	Pasir-Pasir/Timun-Timun	619	0	0	0	17	0	0	328	14	0	0	0	0	0	978
34	Alu-Alu/Kacang-Kacang	1922	157	0	1	178	1	0	10	283	0	0	9	0	0	2561
	Aruan Tasik	284	86	0	0	14	0	0	61	311	0	0	0	0	0	756
	Bawal	5131	1458	1	16	996	18	57	4	19	6	0	14	0	0	7720

Samb. Dari Jadual 4.6.1
(Cont' d From Table 4.6.1.)

	Belanak/Kedera	634	4	1	295	1756	0	31	0	1	45	89	23	0	0	2879
	Cermin/Sagai/Cupak	1124	247	0	0	147	1	0	41	1070	0	0	0	0	0	2630
	Cincaru	4018	8593	1	0	875	0	0	0	1385	0	0	0	0	0	14872
	Demudok/Rambai	699	307	0	0	22	1	0	104	311	0	0	0	0	0	1444
	Kurau/Senangin/Senohong	406	1	0	0	765	0	12	6	46	2	10	1	0	0	1249
	Pelata/Selar	3624	11475	3	0	1705	84	0	42	2280	0	0	0	0	0	19213
	Selar Kuning/Lolong	8648	26349	0	0	235	2896	0	58	70	0	0	0	0	0	38256
	Selayang/Curut	2540	49620	0	0	41	94	0	0	1159	0	0	0	0	0	53454
	Pisang-Pisang	7	644	0	0	0	6	0	4	34	0	0	0	0	0	695
	Talang	411	134	2	0	150	0	0	0	38	0	0	0	0	0	735
35	Bilis/Bunga Air	688	0	15940	1	0	3641	0	0	0	0	0	0	0	0	20270
	Parang-Parang	2235	33	0	0	1248	0	0	0	1	0	0	0	0	0	3517
	Tamban	1257	24636	1097	0	423	515	8	0	51	0	0	0	0	55	28042
	Bulan-Bulan	28	0	0	0	23	0	0	0	0	0	0	0	0	0	51
36	Aya/Kayu/Tongkol	116	29216	268	0	1042	8	0	7	6602	0	0	0	0	0	37259
	Layaran/Mersuji	1	1812	0	0	0	0	0	0	14	0	0	0	0	0	1827
37	Kembong/Temenong/Pelaling	18347	43993	0	0	34664	27	0	0	823	0	0	0	0	0	97854
	Tenggiri	3246	815	0	0	2574	2	0	5	1569	0	1	0	0	0	8212
	Timah/Layor/Selayor	7150	185	71	1	429	3	17	0	11	5	0	0	0	0	7872
38	Pari	8471	8	0	13	1470	0	0	23	1566	1	1	12	0	0	11565
	Yu	1911	1	0	0	385	0	9	7	509	0	1	0	0	0	2823
39	Ikan Baja	250953	6535	260	8178	1775	2	1	0	3	2283	630	2654	0	0	273274
	Ikan Campur	20112	2715	91	94	3300	57	39	247	736	127	63	189	0	12	27782
	Jebong	1297	0	0	0	51	0	0	806	22	0	0	0	0	0	2176
42	Ketam	4821	0	0	3	1857	0	1	329	1	22	135	69	0	827	8065
45	Udang Karang/Lobok	534	0	0	0	47	0	0	1	0	0	0	0	0	7	589
	Udang Putih	1746	0	0	89	2989	0	18	0	0	189	9	237	0	6	5283
	Udang Minyak	5552	0	0	2079	13	0	0	0	0	831	0	56	0	0	8531
	Udang Merah Ros	958	0	0	0	0	0	0	0	0	0	2	0	0	0	960
	Udang Kulit Keras	1914	0	0	707	240	0	9	0	0	109	2	100	0	0	3081
	Udang Harimau	489	0	0	3	52	0	1	0	0	14	1	26	0	0	586
	Lain-Lain Jenis Udang	17117	45	0	4063	4855	0	197	0	0	1325	118	2650	0	40	30410
	Udang Baring	0	0	0	0	0	0	319	0	0	8173	0	1018	0	0	9510
56	Siput/Kepah/Kupang/Tiram	32	0	0	0	0	0	0	0	0	0	3	0	586	0	621
57	Sotong Kereta	1075	0	0	0	18	0	0	12	0	5	0	0	0	0	1110
	Sotong Katak	17069	11	0	20	682	0	0	561	0	138	0	186	0	0	18667
	Sotong Biasa	30147	836	0	20	72	334	10	81	741	17	0	0	0	0	32258
76	Ubur-Ubur	562	0	0	0	301	0	0	0	0	3627	0	0	0	196	4686
	Jumlah Tan M./Total Tonnes	502514	210320	17924	16562	80769	7702	891	10189	28789	16990	1538	7365	586	1143	903282

JADUAL (TABLE) 4.6.2.

PANTAI BARAT SEMENANJUNG MALAYSIA/WEST COAST OF PENINSULAR MALAYSIA
PENDARATAN IKAN LAUT MENGIKUT KUMPULAN PERKAKAS DAN SPESIES IKAN, 1999
LANDINGS OF MARINE FISH BY GEAR GROUP AND SPECIES, 1999

(Kuantiti Dalam Tan Metrik/Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis/Ikan Species	Pukat Tunda Trawl Net	Pukat-Pukat Tarik Seine Nets		Lain Pukat Tarik Other Seine	Pukat Hanyut Drift/Gill Net	Pukat Tangguk Lift Net	Perangkap-Perangkap Traps		Pancing Hook and Line	Pukat Bakul Bag Net	Pukat Rentang Barrier Net	Pukat Surung Push/ Scoop Net	Memungut Siput Shellfish Collection	Rampaian Miscellaneous	Jumlah (Tan Metrik)
	Nama Tempatan Local Name		Pukat Jerut Ikan Purse Seine-Fish	Pukat Jerut Bilis Purse Seine- Anchovy				Belat-Belat Stationary	Bubu Portable							Total (Tonnes)
24	Kebasi/Selangat	542	155	0	600	1923	0	0	0	1	0	1	16	0	0	3238
	Puput/B. Mata/Tirok	2013	24	0	0	2573	0	0	0	0	0	0	0	0	0	4610
	Terubok	37	0	0	0	8	0	0	0	0	0	0	0	0	0	45
25	Siakap	41	0	0	0	101	0	0	1	7	0	7	0	0	0	157
31	Lidah	1858	0	0	5	575	0	38	0	0	1	5	0	0	0	2482
	Sebelah	359	0	0	0	19	0	0	1	0	6	3	0	0	0	388
33	Bayan	1	0	0	0	0	0	0	4	0	0	0	0	0	0	5
	Biji Nangka	2050	0	0	0	13	0	0	0	0	0	0	0	0	0	2063
	Daun Baharu	34	4	0	0	106	0	0	5	3	0	0	0	0	0	152
	Delah/Pinang-Pinang	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	Duri/Pulutan/Utik	2002	4	0	145	2156	0	17	17	501	13	146	28	0	0	5029
	Dengkis/Debam	12	0	0	0	0	0	0	25	2	0	4	0	0	0	43
	Gelama/Tengkerong/Selampai	7244	8	0	217	3793	0	43	3	120	46	177	56	0	0	11707
	Gerut-Gerut	461	2	0	0	52	0	0	18	77	1	2	3	0	0	616
	Jenahak	325	0	0	0	6	0	0	72	126	0	1	1	0	0	531
	Kaci	6	0	0	0	0	0	0	8	1	0	0	0	0	0	15
	Kerapu	1267	0	0	0	10	0	0	60	86	0	1	0	0	0	1424
	Kerisi	10077	1	0	0	107	0	0	1	1	0	0	0	0	0	10187
	Kerisi Bali	406	0	0	0	8	0	0	0	0	0	0	0	0	0	414
	Kikek	49	35	0	0	0	0	38	0	0	0	0	0	0	0	122
	Malong	905	0	0	0	268	0	12	1	1583	0	0	0	0	0	2769
	Merah	160	0	0	0	6	0	0	19	12	0	0	0	0	0	197
	Mengkerong/Canor/Ubi-Ubi	7484	0	0	0	6	0	0	0	1	0	0	0	0	0	7491
	Remong/Kunyit-Kunyit/Tanda	111	0	0	0	1	0	0	0	3	0	0	0	0	0	115
	Semilang	168	0	0	5	306	0	0	37	206	4	126	16	0	0	868
	Shrumbu/Lemah	92	0	0	0	0	0	0	0	0	0	0	0	0	0	92
	Puntong Damar/Bulus	657	0	0	7	247	0	0	0	18	0	0	1	0	0	930
	Pasir-Pasir/Timun-Timun	94	0	0	0	0	0	0	0	2	0	0	0	0	0	96
34	Alu-Alu/Kacang-Kacang	794	6	0	1	75	0	0	0	30	0	0	9	0	0	915
	Aruan Tasik	90	0	0	0	5	0	0	0	18	0	0	0	0	0	113
	Bawal	4618	534	0	16	965	0	57	0	0	6	0	14	0	0	6210

Samb.Dari Jadual 4.6.2
(Cont' d From Table 4.6.2.)

	Belanak/Kedera	629	4	0	295	1693	0	0	0	1	45	89	23	0	0	2779
	Cemin/Sagai/Cupak	178	0	0	0	12	0	0	7	0	0	0	0	0	0	197
	Cincaru	2820	3073	0	0	167	0	0	0	1	0	0	0	0	0	6061
	Demudok/Rambai	487	0	0	0	8	0	0	1	0	0	0	0	0	0	496
	Kurau/Senangin/Senohong	394	1	0	0	716	0	12	6	45	2	10	1	0	0	1187
	Pelata/Selar	1860	2445	0	0	55	0	0	0	1	0	0	0	0	0	4361
	Selar Kuning/Lolong	2349	2418	0	0	104	0	0	0	0	0	0	0	0	0	4871
	Selayang/Curut	1335	7088	0	0	0	0	0	0	0	0	0	0	0	0	8423
	Pisang-Pisang	1	26	0	0	0	0	0	0	0	0	0	0	0	0	27
	Talang	310	13	0	0	140	0	0	0	13	0	0	0	0	0	476
35	Billis/Bunga Air	635	0	10804	1	0	0	0	0	0	0	0	0	0	0	11440
	Parang-Parang	1313	0	0	0	696	0	0	0	0	0	0	0	0	0	2009
	Tamban	1242	3362	0	0	4	0	0	0	0	0	0	0	0	55	4663
	Bulan-Bulan	27	0	0	0	2	0	0	0	0	0	0	0	0	0	29
36	Aya/Kayu/Tongkol	71	7679	0	0	604	0	0	0	0	0	0	0	0	0	8354
	Layaran/Mersuji	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	Kembong/Temenong/Pelaling	16915	35988	0	0	31762	0	0	0	0	0	0	0	0	0	84665
	Tenggin	2268	186	0	0	2123	0	0	3	2	0	1	0	0	0	4583
	Timah/Layor/Selayor	6069	10	0	1	89	0	17	0	0	5	0	0	0	0	6191
38	Pari	3240	7	0	13	531	0	0	3	1371	1	1	12	0	0	5179
	Yu	593	0	0	0	122	0	9	2	54	0	1	0	0	0	781
39	Ikan Baja	153219	6271	5	8178	1775	0	1	0	2	1847	630	2654	0	0	174582
	Ikan Campur	8076	832	0	94	2499	0	34	35	30	86	63	189	0	12	11950
	Jebong	247	0	0	0	0	0	0	6	1	0	0	0	0	0	254
42	Ketam	3519	0	0	3	1781	0	1	110	0	22	135	69	0	788	6428
45	Udang Karang/Lobok	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
	Udang Putih	1292	0	0	89	2852	0	18	0	0	180	9	237	0	6	4683
	Udang Minyak	5216	0	0	2079	13	0	0	0	0	789	0	56	0	0	8153
	Udang Merah Ros	949	0	0	0	0	0	0	0	0	0	2	0	0	0	951
	Udang Kulit Keras	1528	0	0	707	240	0	9	0	0	109	2	100	0	0	2695
	Udang Harimau	327	0	0	3	44	0	0	0	0	10	1	26	0	0	411
	Lain-Lain Jenis Udang	13905	44	0	4063	4739	0	184	0	0	1236	118	2650	0	40	26979
	Udang Baring	0	0	0	0	0	0	319	0	0	7966	0	1018	0	0	9303
56	Siput/Kepah/Kupang/Tiram	0	0	0	0	0	0	0	0	0	0	3	0	586	0	589
57	Sotong Kereta	692	0	0	0	18	0	0	12	0	5	0	0	0	0	727
	Sotong Katak	8535	6	0	20	681	0	0	24	0	138	0	186	0	0	9590
	Sotong Biasa	18109	40	0	20	62	0	10	30	0	17	0	0	0	0	18288
76	Ubur-Ubur	562	0	0	0	301	0	0	0	0	3627	0	0	0	196	4686
	Jumlah Tan M./Total Tonnes	302884	70266	10809	16562	67162	0	819	511	4320	16162	1538	7365	586	1097	500081

JADUAL (TABLE) 4.6.3.

PANTAI TIMUR SEMENANJUNG MALAYSIA/EAST COAST OF PENINSULAR MALAYSIA
PENDARATAN IKAN LAUT MENGIKUT KUMPULAN PERKAKAS DAN SPESIES IKAN, 1999
LANDINGS OF MARINE FISH BY GEAR GROUP AND SPECIES, 1999

(Kuantiti Dalam Tan Metrik/Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis/Ikan Species	Pukat Tunda Trawl Net	Pukat-Pukat Tarik Seine Nets		Lain Pukat Tarik Other Seine	Pukat Hanyut Drift/Gill Net	Pukat Tangguk Lift Net	Perangkap-Perangkap Traps		Pancing Hook and Line	Pukat Bakul Bag Net	Pukat Rentang Barrier Net	Pukat Surung Push/ Scoop Net	Memungut Siput Shellfish Collection	Rampaian Miscell aneous	Jumlah (Tan Metrik) Total (Tonnes)
	Nama Tempatan Local Name		Pukat Jerut Ikan Purse Seine-Fish	Pukat Jerut Bili Purse Seine- Anchovy				Belat-Belat Stationary	Bubu Portable							
24	Kebasi/Selangat	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
	Puput/B. Mata/Tirok	8	0	7	0	143	3	0	0	2	0	0	0	0	0	163
	Terubok	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 Siakap	3	0	0	0	3	0	0	9	54	0	0	0	0	0	69
	31 Lidah	288	0	0	0	11	0	0	0	0	0	0	0	0	0	299
	Sebelah	487	0	0	0	10	0	0	1	0	0	0	0	0	0	498
	33 Bayan	37	0	0	0	0	0	0	108	15	0	0	0	0	0	160
	Biji Nangka	3420	0	0	0	22	0	0	210	7	0	0	0	0	0	3659
	Daun Baharu	127	0	0	0	2	0	0	6	6	0	0	0	0	0	141
	Delah/Pinang-Pinang	23	32	0	0	0	0	0	287	34	0	0	0	0	0	376
	Duri/Pulutan/Utik	1719	30	35	0	442	1	2	2	325	0	0	0	0	0	2556
	Dengkis/Debam	146	0	1	0	8	1	2	286	10	0	0	0	0	0	454
	Gelama/Tengkerong/Selampai	2353	38	139	0	571	4	4	2	44	0	0	0	0	0	3155
	Gerut-Gerut	165	0	0	0	5	1	0	0	5	0	0	0	0	0	176
	Jenahak	36	0	0	0	0	0	0	5	3	0	0	0	0	0	44
	Kaci	554	0	0	0	10	0	0	190	257	0	0	0	0	0	1011
	Kerapu	854	0	0	0	14	0	0	864	1489	0	0	0	0	0	3221
	Kerisi	14786	0	0	0	1115	1	0	3821	1668	0	0	0	0	0	21391
	Kerisi Bali	3192	0	0	0	203	0	0	467	367	0	0	0	0	0	4229
	Kikek	1006	44	7	0	121	0	6	0	0	0	0	0	0	0	1184
	Malong	169	0	0	0	14	0	0	4	2	0	0	0	0	0	189
	Merah	898	0	0	0	10	1	0	247	1361	0	0	0	0	0	2517
	Mengkerong/Canor/Ubi-Ubi	3953	0	0	0	2	0	0	3	9	0	0	0	0	0	3967
	Remong/Kunyit-Kunyit/Tanda	1450	27	0	0	44	0	0	646	711	0	0	0	0	0	2878
	Semilang	26	0	0	0	0	0	0	1	0	0	0	0	0	0	27
	Shrumbu/Lemah	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Puntong Damar/Bulus	557	0	0	0	323	0	0	21	1	0	0	0	0	0	902
	Pasir-Pasir/Timun-Timun	525	0	0	0	17	0	0	328	12	0	0	0	0	0	882
34	Alu-Alu/Kacang-Kacang	1128	151	0	0	103	1	0	10	253	0	0	0	0	0	1646
	Aruan Tasik	194	86	0	0	9	0	0	61	293	0	0	0	0	0	643
	Bawal	513	924	1	0	31	18	0	4	19	0	0	0	0	0	1510

Samb.Dari Jadual 4.6.3
(Cont' d From Table 4.6.3.)

	Belanak/Kedera	5	0	1	0	63	0	31	0	0	0	0	0	0	0	100
	Cermin/Sagai/Cupak	946	247	0	0	135	1	0	34	1070	0	0	0	0	0	2433
	Cincaru	1198	5520	1	0	708	0	0	0	1384	0	0	0	0	0	8811
	Demudok/Rambai	212	307	0	0	14	1	0	103	311	0	0	0	0	0	948
	Kurau/Senangin/Senohong	12	0	0	0	49	0	0	0	1	0	0	0	0	0	62
	Pelata/Selar	1764	9030	3	0	1650	84	0	42	2279	0	0	0	0	0	14852
	Selar Kuning/Lolong	6299	23931	0	0	131	2896	0	58	70	0	0	0	0	0	33385
	Selayang/Curut	1205	42532	0	0	41	94	0	0	1159	0	0	0	0	0	45031
	Pisang-Pisang	6	618	0	0	0	6	0	4	34	0	0	0	0	0	668
	Talang	101	121	2	0	10	0	0	0	25	0	0	0	0	0	259
35	Bilis/Bunga Air	53	0	5136	0	0	3641	0	0	0	0	0	0	0	0	8830
	Parang-Parang	922	33	0	0	552	0	0	0	1	0	0	0	0	0	1508
	Tamban	15	21274	1097	0	419	515	8	0	51	0	0	0	0	0	23379
	Bulan-Bulan	1	0	0	0	21	0	0	0	0	0	0	0	0	0	22
36	Aya/Kayu/Tongkol	45	21537	268	0	438	8	0	7	6602	0	0	0	0	0	28905
	Layaran/Mersuji	1	1812	0	0	0	0	0	0	14	0	0	0	0	0	1827
37	Kembong/Temenong/Pelaling	1432	8005	0	0	2902	27	0	0	823	0	0	0	0	0	13189
	Tenggiri	978	629	0	0	451	2	0	2	1567	0	0	0	0	0	3629
	Timah/Layor/Selayor	1081	175	71	0	340	3	0	0	11	0	0	0	0	0	1681
38	Pari	5231	1	0	0	939	0	0	20	195	0	0	0	0	0	6386
	Yu	1318	1	0	0	263	0	0	5	455	0	0	0	0	0	2042
39	Ikan Baja	97734	264	255	0	0	2	0	0	1	436	0	0	0	0	98692
	Ikan Campur	12036	1883	91	0	801	57	5	212	706	41	0	0	0	0	15832
	Jebong	1050	0	0	0	51	0	0	800	21	0	0	0	0	0	1922
42	Ketam	1302	0	0	0	76	0	0	219	1	0	0	0	0	39	1637
45	Udang Karang/Lobok	519	0	0	0	47	0	0	1	0	0	0	0	0	7	574
	Udang Putih	454	0	0	0	137	0	0	0	0	9	0	0	0	0	600
	Udang Minyak	336	0	0	0	0	0	0	0	0	42	0	0	0	0	378
	Udang Merah Ros	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	Udang Kulit Keras	386	0	0	0	0	0	0	0	0	0	0	0	0	0	386
	Udang Harimau	162	0	0	0	8	0	1	0	0	4	0	0	0	0	175
	Lain-Lain Jenis Udang	3212	1	0	0	116	0	13	0	0	89	0	0	0	0	3431
	Udang Baring	0	0	0	0	0	0	0	0	0	207	0	0	0	0	207
56	Siput/Kepah/Kupang/Tiram	32	0	0	0	0	0	0	0	0	0	0	0	0	0	32
57	Sotong Kereta	383	0	0	0	0	0	0	0	0	0	0	0	0	0	383
	Sotong Katak	8534	5	0	0	1	0	0	537	0	0	0	0	0	0	9077
	Sotong Biasa	12038	796	0	0	10	334	0	51	741	0	0	0	0	0	13970
76	Ubur-Ubur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Jumlah Tan M./Total Tonnes	199630	140054	7115	0	13607	7702	72	9678	24469	828	0	0	0	46	403201

SARAWAK
PENDARATAN IKAN LAUT MENGIKUT KUMPULAN PERKAKAS DAN SPESIES IKAN, 1999
LANDINGS OF MARINE FISH BY GEAR GROUP AND SPECIES, 1999
(Kuantiti Dalam Tan Metrik/Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis/Ikan Species	Pukat Tunda Trawl Net	Pukat-Pukat Tarik Seine Nets		Lain Pukat Tarik Other Seine	Pukat Hanyut Drift/Gill Net	Pukat Tangguk Lift Net	Perangkap-Perangkap Traps		Parcing Hook and Line	Pukat Bakul Bag Net	Pukat Rentang Barrier Net	Pukat Surung Push/Scoop Net	Memungut Siput Shellfish Collection	Rampalan Miscellaneous	Jumlah (Tan Metrik)
	Nama Tempatan Local Name		Pukat Jerut Ikan Purse Seine- Fish	Pukat Jerut Bilis Purse Seine- Anchovy				Belat-Belat Stationary	Bubu Portable							Total (Tonnes)
24	Kebasi/Selangat	54	0	0	0	361	0	0	0	0	0	0	0	0	0	415
	Puput/B. Mata/Tirok	679	0	0	0	976	0	9	0	0	0	0	0	0	0	1664
	Terubok	5	0	0	0	572	0	0	0	0	0	0	0	0	0	577
25	Siakap	8	0	0	0	57	0	0	0	0	0	0	0	0	0	65
31	Lidah	215	11	0	0	108	0	0	0	0	0	0	0	0	0	334
	Sebelah	347	0	0	0	201	0	0	0	0	0	0	0	0	0	548
33	Bayan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Biji Nangka	2055	0	0	0	105	0	0	0	0	0	0	0	0	0	2160
	Daun Baharu	208	0	0	0	116	0	0	0	0	0	0	0	0	0	324
	Delah/Pinang-Pinang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Duri/Pulutan/Utik	1651	0	0	0	945	0	27	0	225	3	13	0	0	0	2864
	Dengkis/Debam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gelama/Tengkerong/Selampai	3406	0	0	0	651	0	7	0	0	3	16	0	0	0	4083
	Gerut-Gerut	731	0	0	0	3	0	0	0	45	0	0	0	0	0	779
	Jenahak	230	0	0	0	153	0	0	0	117	0	0	0	0	0	500
	Kaci	139	0	0	0	0	0	0	0	125	0	0	0	0	0	264
	Kerapu	368	0	0	0	148	0	0	0	308	0	0	0	0	0	824
	Kerisi	1436	0	0	0	130	0	0	0	135	0	0	0	0	0	1701
	Kerisi Bali	390	0	0	0	0	0	0	0	233	0	0	0	0	0	623
	Kikek	281	1	0	0	79	0	0	0	0	0	0	0	0	0	361
	Malong	720	0	0	0	229	0	2	0	569	0	0	0	0	0	1520
	Merah	1029	4	0	0	148	0	1	0	666	0	0	0	0	0	1848
	Mengkerong/Canor/Ubi-Ubi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Remong/Kunyit-Kunyit/Tanda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Semilang	0	0	0	0	0	0	15	0	0	0	3	0	0	0	18
	Shrumbu/Lemah	413	0	0	0	121	0	0	0	0	0	0	0	0	0	534
	Puntong Damar/Bulus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pasir-Pasir/Timun-Timun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	Alu-Alu/Kacang-Kacang	248	0	0	0	20	0	0	0	3	0	0	0	0	0	271
	Aruan Tasik	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Bawal	672	87	0	0	388	0	0	0	0	0	0	45	0	0	1192

Samb. Dari Jadual 4.6.4.
(Cont' d From Table 4.6.4.)

	Belanak/Kedera	8	0	0	0	4	0	5	0	0	0	16	0	0	0	33
	Cermin/Sagai/Cupak	255	0	0	0	50	0	0	0	83	0	0	0	0	0	388
	Cincaru	1872	16	0	0	905	0	0	0	40	0	0	0	0	0	2833
	Demudok/Rambai	474	0	0	0	233	0	0	0	43	0	0	0	0	0	750
	Kurau/Senangin/Senohong	14	0	0	0	478	0	3	0	0	0	4	0	0	0	499
	Pelata/Selar	676	109	0	0	586	0	0	0	25	0	0	12	0	0	1408
	Selar Kuning/Lolong	861	546	0	0	91	0	0	0	0	0	0	28	0	0	1526
	Selayang/Curut	224	109	0	0	0	0	0	0	0	0	0	0	0	0	333
	Pisang-Pisang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Talang	307	0	0	0	281	0	0	0	18	0	0	0	0	0	606
35	Bilis/Bunga Air	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	Parang-Parang	352	0	0	0	412	0	0	0	1	0	0	0	0	0	765
	Tamban	384	562	0	0	1391	0	0	0	0	0	0	0	0	0	2337
	Bulan-Bulan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	Aya/Kayu/Tongkol	2	434	0	0	2448	0	0	0	932	0	0	0	0	0	3816
	Layaran/Mersuji	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	Kembong/Temenong/Pelaling	1884	329	0	0	1559	0	0	0	0	0	0	0	0	0	3772
	Tenggiri	1153	13	0	0	2290	0	2	0	367	0	0	0	0	0	3825
	Timah/Layor/Selayor	2238	0	0	0	258	0	0	0	2	0	0	0	0	0	2498
38	Pari	2148	0	0	0	145	0	41	0	147	0	15	0	0	0	2496
	Yu	1370	9	0	0	653	0	7	0	173	0	2	0	0	0	2214
39	Ikan Baja	20688	0	0	0	5	0	162	0	0	605	0	0	0	0	21460
	Ikan Campur	12559	820	0	0	5641	0	460	0	157	768	258	61	0	0	20724
	Jebong	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Ketam	121	0	0	0	258	0	7	332	0	0	3	0	0	0	721
45	Udang Karang/Lobok	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
	Udang Putih	1133	0	0	0	864	0	31	0	0	31	2	0	0	6	2067
	Udang Minyak	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
	Udang Merah Ros	774	0	0	0	0	0	0	0	0	23	0	0	0	0	797
	Udang Kulit Keras	512	0	0	0	1	0	0	0	0	275	0	0	0	0	788
	Udang Harimau	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Lain-Lain Jenis Udang	6007	0	0	0	3989	0	93	0	0	892	0	0	0	0	10981
	Udang Baring	0	0	0	0	5038	0	38	0	0	427	0	184	0	215	5902
56	Siput/Kepah/Kupang/Tiram	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
57	Sotong Kereta	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	Sotong Katak	415	0	0	0	0	0	0	0	0	0	0	0	0	0	415
	Sotong Biasa	2072	5	0	0	0	0	0	0	0	0	0	0	0	36	2113
76	Ubur-Ubur	24	0	0	0	0	0	27	0	0	1218	157	162	0	731	2319
	Jumlah Tan M./Total Tonnes	73866	3055	0	0	33091	0	937	332	4414	4245	489	492	5	988	121914

JADUAL (TABLE) 4.6.5.

LABUAN
PENDARATAN IKAN LAUT MENGIKUT KUMPULAN PERKAKAS DAN SPESIES IKAN, 1999
LANDINGS OF MARINE FISH BY GEAR GROUP AND SPECIES, 1999
(Kuantiti Dalam Tan Metrik/Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis/Ikan Species	Pukat Tunda	Pukat-Pukat Tarik Seine Neis		Lain Pukat Tarik	Pukat Hanyut	Pukat Tangguk	Perangkap-Perangkap Traps		Pancing	Pukat Bakul	Pukat Rentang	Pukat Surung	Memungut Siput	Rampaiian Miscellaneous	Jumlah (Tan Metrik)
			Pukat Jerut Ikan Purse Seine- Fish	Pukat Jerut Bilis Purse Seine- Anchovy				Belat-Belat Stationary	Bubu Portable							
	Nama Tempatan Local Name	Trawl Net			Other Seine	Drift/Gill Net	Lift Net			Hook and Line	Bag Net	Barrier Net	Push/Scoop Net	Shellfish Collection		Total (Tonnes)
24	Kebasi/Selangat	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	Pupu/B. Mata/Tirok	15	0	0	0	15	0	0	0	0	0	0	0	0	0	30
	Terubok	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Siakap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Lidah	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
33	Sebelah	68	0	0	0	19	0	0	1	0	0	0	0	0	0	88
	Bayan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Biji Nangka	63	0	0	0	0	0	0	0	0	0	0	0	0	0	63
	Daun Baharu	20	0	0	0	19	0	1	0	6	0	0	0	0	0	46
	Delah/Pinang-Pinang	20	0	0	0	24	0	1	4	98	0	0	0	0	0	147
	Duri/Pulutan/Utik	45	0	0	0	28	0	2	0	0	0	0	0	0	0	75
	Dengkis/Debam	14	0	0	0	39	0	1	1	7	0	0	0	0	0	62
	Gelama/Tengkerong/Selampai	91	0	0	0	0	0	0	0	0	0	0	0	0	0	91
	Gerut-Gerut	17	0	0	0	9	0	1	1	39	0	0	0	0	0	67
	Jenahak	25	0	0	0	0	0	0	3	59	0	0	0	0	0	87
	Kaci	47	0	0	0	4	0	1	1	89	0	0	0	0	0	142
	Kerapu	70	0	0	0	12	0	1	3	178	0	0	0	0	0	264
	Kerisi	244	0	0	0	0	0	0	0	21	0	0	0	0	0	265
	Kerisi Bali	94	0	0	0	0	0	0	0	197	0	0	0	0	0	291
	Kikek	40	0	0	0	16	0	2	0	0	0	0	0	0	0	58
	Malong	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	Merah	132	0	0	0	1	0	0	3	203	0	0	0	0	0	339
	Mengkerong/Canor/Ubi-Ubi	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	Remong/Kunyit-Kunyit/Tanda	72	0	0	0	12	0	0	1	62	0	0	0	0	0	147
	Semilang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Shrumbu/Lemah	13	0	0	0	5	0	1	0	0	0	0	0	0	0	19
	Puntong Damar/Bulus	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Pasir-Pasir/Timun-Timun	9	0	0	0	7	0	1	1	0	0	0	0	0	0	18
	Alu-Alu/Kacang-Kacang	44	25	0	0	16	5	1	0	0	0	0	0	0	0	91
34	Aruan Tasik	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Bawal	49	49	0	0	0	41	0	0	0	0	0	0	0	0	139

Samb. Dari Jadual 4.6.5
(Cont' d From Table 4.6.5.)

	Belanak/Kedera	0	0	0	0	9	0	1	1	0	0	0	0	0	0	11
	Cermin/Sagai/Cupak	168	114	0	0	31	0	1	3	163	0	0	0	0	0	480
	Cincaru	39	11	0	0	58	0	0	0	0	0	0	0	0	0	108
	Demudok/Rambai	51	0	0	0	7	0	2	0	0	0	0	0	0	0	60
	Kurau/Senangin/Senohong	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	Pelata/Selar	135	62	0	0	7	12	1	0	0	0	0	0	0	0	217
	Selar Kuning/Lolong	111	13	0	0	0	12	0	0	0	0	0	0	0	0	136
	Selayang/Curut	116	94	0	0	0	18	0	0	0	0	0	0	0	0	228
	Pisang-Pisang	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Talang	1	0	0	0	17	0	0	0	0	0	0	0	0	0	18
35	Bilis/Bunga Air	0	0	0	8	0	0	0	0	0	0	0	0	0	0	8
	Parang-Parang	9	0	0	0	8	0	0	0	0	0	0	0	0	0	17
	Tamban	0	139	0	0	1	25	0	0	0	0	0	0	0	0	165
	Bulan-Bulan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	Aya/Kayu/Tongkol	11	7047	0	0	48	0	0	0	0	0	0	0	0	0	7106
	Layaran/Mersuji	0	0	0	0	10	0	0	0	0	0	0	0	0	0	10
37	Kembong/Temenong/Pelaling	118	375	0	0	102	24	0	0	86	0	0	0	0	0	705
	Tenggiri	62	21	0	0	33	0	0	0	84	0	0	0	0	0	200
	Timah/Layor/Selayor	5	0	0	0	3	0	0	0	0	0	0	0	0	0	8
38	Pari	106	0	0	0	1	0	0	0	1	0	0	0	0	0	108
	Yu	96	0	0	0	11	0	0	0	13	0	0	0	0	0	120
39	Ikan Baja	1730	102	0	0	0	0	0	0	0	0	0	0	0	0	1832
	Ikan Campur	717	68	0	0	36	1	3	9	83	0	0	0	0	0	917
	Jebong	52	0	0	0	6	0	0	1	0	0	0	0	0	0	59
42	Ketam	34	0	0	0	1	0	0	0	0	0	0	0	0	0	35
45	Udang Karang/Lobok	65	0	0	0	0	0	0	0	0	0	0	0	0	0	65
	Udang Putih	118	0	0	0	0	0	0	0	0	0	0	0	0	0	118
	Udang Minyak	0	0	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	0	0
	Udang Kulit Keras	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Udang Harimau	80	0	0	0	0	0	0	0	0	0	0	0	0	0	80
	Lain-Lain Jenis Udang	285	0	0	0	0	0	0	0	0	0	0	0	0	0	285
	Udang Baring	0	0	0	8	0	0	0	0	0	0	0	0	5	0	13
56	Siput/Kepah/Kupang/Tiram	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	Sotong Kereta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sotong Katak	133	0	0	0	0	0	0	0	0	0	0	0	0	0	133
	Sotong Biasa	144	20	0	0	0	0	0	0	0	0	0	0	0	0	164
76	Ubur-Ubur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Jumlah Tan M./Total Tonnes	5636	8140	0	16	615	138	21	33	1389	0	0	0	5	0	15993

SABAH
PENDARATAN IKAN LAUT MENGIKUT KUMPULAN PERKAKAS DAN SPESIES IKAN, 1999
LANDINGS OF MARINE FISH BY GEAR GROUP AND SPECIES, 1999
(Kuantiti Dalam Tan Metrik/Quantity in Tonnes)

ISSCAAP GROUP NO.	Jenis/Ikan Species	Pukat Tunda Trawl Net	Pukat-Pukat Tarik Seine Nets		Lain Pukat Tarik Other Seine	Pukat Hanyut Drift/Gill Net	Pukat Tangguk Lift Net	Perangkap-Perangkap Traps		Pancing Hook and Line	Pukat Bakul Bag Net	Pukat Rentang Barrier Net	Pukat Surung Push/Scoop Net	Memungut Siput Shellfish Collection	Rampaiian Miscellaneous	Jumlah (Tan Metrik)
	Nama Tempatan Local Name		Pukat Jerut Ikan Purse Seine- Fish	Pukat Jerut Bilis Purse Seine- Anchovy				Belat-Belat Stationary	Bubu Portable							Total (Tonnes)
24	Kebasi/Selangat	502	0	0	0	132	0	58	12	0	0	0	0	0	0	704
	Puput/B.Mata/Tirok	2720	0	0	0	1	0	0	0	0	0	0	0	0	0	2721
	Terubok	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Siakap	0	0	0	0	570	0	30	108	395	0	0	0	0	3	1106
31	Lidah	178	0	0	0	0	0	0	0	0	0	0	0	0	0	178
	Sebelah	1416	0	0	0	20	0	68	0	0	0	0	0	0	0	1504
33	Bayan	153	0	0	192	61	0	6	54	1689	0	0	0	0	82	2237
	Biji Nangka	650	0	0	0	0	0	0	11	0	0	0	0	0	0	661
	Daun Baharu	107	0	0	0	54	0	0	0	0	0	0	0	0	19	180
	Delah/Pinang-Pinang	1	0	0	9	13	0	0	10	99	0	0	0	0	668	800
	Duri/Pulutan/Utik	1756	0	0	0	1506	0	104	0	1451	0	0	0	0	0	4817
	Dengkis/Debam	194	0	0	70	74	6	87	164	9	0	0	0	0	45	649
	Gelama/Tengkerong/Selampai	2122	0	0	0	267	0	77	0	659	0	0	0	0	27	3152
	Gerut-Gerut	393	0	0	0	87	0	30	0	87	0	0	0	0	0	597
	Jenahak	535	0	0	0	1184	0	1	234	1240	0	0	0	0	105	3299
	Kaci	75	0	0	0	10	0	0	12	28	0	0	0	0	0	125
	Kerapu	420	0	0	0	619	0	53	209	5069	0	0	0	0	126	6496
	Kerisi	5782	0	0	0	29	0	0	12	327	0	0	0	0	0	6150
	Kerisi Bali	421	0	0	0	680	0	0	14	1115	0	0	0	0	0	2230
	Kikek	1065	0	0	0	109	105	44	0	1	0	0	0	0	0	1324
	Malong	958	0	0	0	6	0	0	0	380	0	0	0	0	0	1344
	Merah	247	0	0	0	1114	3	6	308	1894	0	0	0	0	0	3572
	Mengkerong/Canor/Ubi-Ubi	3584	0	0	0	0	0	0	0	0	0	0	0	0	0	3584
	Remong/Kunyit-Kunyit/Tanda	78	0	0	0	49	0	23	137	1239	0	0	0	0	0	1526
	Semilang	1	0	0	0	479	0	43	95	218	0	0	0	0	0	836
	Shrumbu/Lemah	25	0	0	0	11	0	0	0	0	0	0	0	0	0	36
	Puntong Damar/Bulus	138	1	0	0	30	0	0	0	12	0	0	0	0	0	181
	Pasir-Pasir/Timun-Timun	40	0	0	0	0	0	0	0	0	0	0	0	0	0	40
34	Alu-Alu/Kacang-Kacang	2670	129	0	0	64	616	81	0	1564	0	0	0	0	56	5180
	Aruan Tasik	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Bawal	286	1	0	0	1153	45	32	0	0	0	0	0	0	0	1517

Samb. Dari Jadual 4.6.6
(Cont' d From Table 4.6.6.)

	Belanak/Kedera	1	0	0	0	1844	6	62	0	0	0	0	0	0	26	1939
	Cerm.n/Sagai/Cupak	206	0	0	0	74	121	0	12	681	0	0	0	0	0	1094
	Cincaru	698	894	0	0	84	289	0	0	41	0	0	0	0	76	2082
	Demudok/Rambai	2133	211	0	0	521	176	27	18	2282	0	0	0	0	476	5844
	Kurau/Senangin/Senohong	1	0	0	0	1744	0	48	0	357	0	0	0	0	0	2150
	Pelata/Selar	1046	1130	0	4	70	621	0	0	13	0	0	0	0	232	3116
	Selar Kuning/Lolong	663	37	0	53	12	11	0	0	647	0	0	0	0	0	1423
	Selayang/Curut	3156	11216	0	4	0	1768	0	0	1	0	0	0	0	0	16145
	Pisang-Pisang	0	0	0	0	30	0	0	1	136	0	0	0	0	0	167
	Talang	509	0	0	0	1154	579	71	0	139	0	0	0	0	0	2452
35	Bilis/Bunga Air	75	83	0	0	0	2539	52	0	0	0	0	0	0	15	2764
	Parang-Parang	425	0	0	0	9	0	0	0	0	0	0	0	0	0	434
	Tamban	10	13086	0	339	50	1431	57	0	0	0	0	0	0	0	14973
	Bulan-Bulan	121	4	0	0	10	0	40	0	0	0	0	0	0	0	175
36	Aya/Kayu/Tongkol	0	8028	0	895	1866	0	0	0	1049	0	0	0	0	0	11838
	Layaran/Mersuji	0	0	0	0	176	0	0	0	33	0	0	0	0	0	209
37	Kembong/Temenong/Pelaling	4311	3304	0	233	65	415	56	0	582	0	0	0	0	68	9034
	Tenggiri	854	72	0	2	2588	3	0	0	2008	0	0	0	0	0	5527
	Timah/Layor/Selayor	3852	2742	0	0	68	158	0	0	811	0	0	0	0	0	7631
38	Pari	1809	0	0	0	283	0	77	0	687	0	0	0	0	8	2864
	Yu	1444	0	0	0	854	0	0	0	614	0	0	0	0	23	2935
39	Ikan Baja	20467	1030	0	2	0	0	0	0	0	0	0	0	0	0	21499
	Ikan Campur	4710	30	0	130	564	284	70	14	421	0	0	0	0	47	6270
	Jebong	508	0	0	0	11	0	0	8	64	0	0	0	0	0	591
42	Ketam	1862	0	0	0	499	0	92	125	0	0	0	0	0	3031	5609
45	Udang Karang/Lobok	402	0	0	0	12	0	0	0	0	0	0	0	0	9	423
	Udang Putih	2497	0	0	46	1745	0	2	0	0	0	2	0	0	496	4788
	Udang Minyak	625	0	0	0	29	0	0	0	0	0	0	0	0	0	654
	Udang Merah Ros	664	0	0	0	21	0	0	0	0	0	0	0	0	0	685
	Udang Kulit Keras	469	0	0	0	0	0	0	0	0	0	0	0	0	11	480
	Udang Harimau	281	0	0	0	76	0	11	0	0	0	0	0	0	6	374
	Lain-Lain Jenis Udang	2602	0	0	0	197	0	76	0	0	0	0	0	0	149	3024
	Udang Baring	0	10	0	0	0	243	0	0	0	0	0	0	0	802	1055
56	Siput/Kepah/Kupang/Tiram	570	0	0	0	0	0	0	0	0	0	0	0	344	137	1051
57	Sotong Kereta	285	0	0	0	0	76	0	0	29	0	0	0	0	0	390
	Sotong Katak	2525	1	0	0	0	310	0	0	0	0	0	0	0	17	2853
	Sotong Biasa	4952	136	0	38	0	350	82	0	190	0	0	0	0	0	5748
76	Ubur-Ubur	39	0	0	0	0	0	0	0	0	0	0	0	1	137	177
	Jumlah Tan M./Total Tonnes	91289	42145	0	2017	22978	10155	1566	1558	28261	0	2	0	345	6897	207213

JADUAL (TABLE) 4.7

SEMENANJUNG MALAYSIA/ PENINSULAR MALAYSIA
 USAHA MENANGKAP IKAN DAN PENDARATAN PUKAT TUNDA MENGIKUT KELAS MUATAN DAN SPESIES IKAN, 1999
 FISHING EFFORT AND LANDINGS OF TRAWLERS BY TONNAGE CLASS AND SPECIES, 1999

ISSCAAP GROUP NO.	Usaha Menangkap Ikan <i>Fishing Effort</i>	Jumlah Total	Kelas Muatan/Tonnage Class				
			0-9.9 GRT	10-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70 GRT & Above
	<i>Cumulative no. of Fishing Units</i>	58743	10827	26793	10749	8182	2192
	<i>Cumulative no. of Trips</i>	706462	157719	412275	101094	29955	5419
	<i>Cumulative no. of Days</i>	1023244	170620	448580	192871	166951	44222
	<i>Cumulative no. of Hauls</i>	3345458	425291	1328581	730445	705979	155162
24	Kebasi Selangat	543	3	129	317	81	13
	Puput/B. Mata/Tirok	2021	5	641	654	625	96
	Terubok	37	0	3	34	0	0
25	Siakap	44	0	33	7	3	1
31	Lidah	2146	88	981	530	196	351
	Sebelah	846	30	222	253	278	63
33	Bayan	38	1	5	9	9	14
	Biji Nangka	5470	57	1099	1077	2193	1044
	Daun Baharu	161	6	56	46	35	18
	Delah/Pinang-Pinang	23	1	1	5	6	10
	Duri/Pulutan/Utik	3721	173	851	1512	843	342
	Dengkis/Debam	158	2	12	58	59	27
	Gelama/Tengkerong/Selampai	9597	380	3723	3072	1690	732
	Gerut-Gerut	626	5	137	259	179	46
	Jenahak	361	0	48	84	184	45
	Kaci	560	1	28	86	245	200
	Kerapu	2121	37	258	659	839	328
	Kerisi	24863	139	5711	7083	8787	3143
	kerisi Bali	3598	9	822	816	1129	822
	Kikek	1055	33	493	316	143	70
	Malong	1074	34	364	258	257	161
	Merah	1058	9	129	214	383	323
	Mengkerong/conor/Ubi-Ubi	11437	56	463	1144	6889	2885
	Remong/Kunyit-Kunyit/Tanda	1561	25	265	401	593	277
	Semilang	194	4	104	44	36	6
	Shrumbu/Lemah	92	0	0	1	71	20
	Puntung Damar/Bulus	1214	79	213	260	533	129
	Pasir-Pasir/Timun-Timun	619	15	190	174	189	51
34	Alu-Alu/Kacang-Kacang	1922	34	286	591	793	218
	Aruan Tasik	284	6	20	71	133	54
	Bawal	5131	149	1367	2257	1203	155

Samb.Dari Jadual 4.7
(Cont'd From Table 4.7)

	Belanak/Kedera	634	18	228	341	47	0
	Cermin/Sagai/Cupak	1124	9	179	326	418	192
	Cincaru	4018	14	425	1357	1732	490
	Demuduk/Rambai	699	0	56	197	300	146
	Kurau/Senangin/Senohong	406	5	172	153	70	6
	Pelata/Selar	3624	271	307	946	1573	527
	Selar Kuning/Lolong	8648	34	921	2429	3718	1546
	Selayang/Curut	2540	1	20	513	1333	673
	Pisang-Pisang	7	0	1	4	1	1
	Talang	411	5	104	210	61	31
35	Bitis/Bunga Air	688	4	466	182	28	8
	Parang-Parang	2235	79	603	855	548	150
	Tamban	1257	13	151	406	664	23
	Bulan-Bulan	28	0	14	8	6	0
36	Aya/Kayu/Tongkol	116	0	11	37	50	18
	Layaran/Mersuji	1	0	0	1	0	0
37	Kembong/Temenong/Pelaling	18347	348	2585	6733	7283	1398
	Tenggiri	3246	64	499	1240	1109	334
	Timah/layor/Selayor	7150	130	1100	1914	2822	1184
38	Pari	8471	781	2092	2240	2491	867
	Yu	1911	92	370	619	610	220
39	Ikan Baja	250953	10565	53338	80543	81036	25471
	Ikan Campur	20112	786	3348	4314	7222	4442
	Jebong	1297	10	207	428	407	245
42	Ketam	4821	624	1626	1348	1013	210
45	Udang Karang/Lobok	534	25	59	198	179	73
	Udang Putih	1746	266	1078	314	69	19
	Udang Minyak	5552	499	4759	268	26	0
	Udang Merah Ros	958	314	613	31	0	0
	Udang Kulit Keras	1914	389	1460	51	8	6
	Udang Harimau	489	59	149	142	123	16
	Lain-lain Jenis Udang	17117	3104	9535	2818	1523	137
	Udang Baring	0	0	0	0	0	0
56	Siput/Kepah/Kupang/Tiram	32	0	6	0	26	0
57	Sotong Kereta	1075	96	261	394	298	26
	Sotong Katak	17069	1103	4732	4912	4800	1522
	Sotong Biasa	30147	721	5420	10011	11124	2871
	Ubur-Ubur	562	16	476	70	0	0
	Jumlah Tan.M./Total Tonnes	502514	21826	116025	148845	161322	54496

JADUAL (TABLE) 4.7.1

PANTAI BARAT SEMENANJUNG MALAYSIA/WEST COAST PENINSULAR MALAYSIA
 USAHA MENANGKAP IKAN DAN PENDARATAN PUKAT TUNDA MENGIKUT KELAS MUATAN DAN SPESIES IKAN, 1999
 FISHING EFFORT AND LANDINGS OF TRAWLERS BY TONNAGE CLASS AND SPECIES, 1999

ISSCAAP GROUP NO.	Usaha Menangkap Ikan <i>Fishing Effort</i>	Jumlah <i>Total</i>	Kelas Muatan/ <i>Tonnage Class</i>				
			0-9.9 GRT	10-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70 GRT & Above
	<i>Cumulative no. of Fishing Units</i>	44238	7360	22268	7981	5656	973
	<i>Cumulative no. of Trips</i>	593282	118312	360465	88153	23360	2992
	<i>Cumulative no. of Days</i>	784824	119183	383196	143039	118810	20596
	<i>Cumulative no. of Hauls</i>	2191254	264138	1008365	413153	444879	60719
24	Kebasi Selangat	542	3	129	316	81	13
	Pupu/B. Mata/Tirok	2013	5	637	653	622	96
	Terubok	37	0	3	34	0	0
25	Siakap	41	0	32	7	1	1
31	Lidah	1858	25	845	471	174	343
	Sebelah	359	1	51	107	178	22
33	Bayan	1	0	1	0	0	0
	Biji Nangka	2050	0	39	178	1349	484
	Daun Baharu	34	0	28	2	3	1
	Delah/Pinang-Pinang	0	0	0	0	0	0
	Duri/Pulutan/Utik	2002	3	465	1016	427	91
	Dengkis/Debam	12	0	0	1	10	1
	Gelama/Tengkerong/Selampai	7244	139	2874	2312	1288	631
	Gerut-Gerut	461	1	58	207	161	34
	Jenahak	325	0	47	82	161	35
	Kaci	6	0	1	0	4	1
	Kerapu	1267	3	103	465	544	152
	Kerisi	10077	5	720	2012	5715	1625
	kerisi Bali	406	0	0	10	375	21
	Kikek	49	0	3	17	27	2
	Malong	905	9	340	219	202	135
	Merah	160	2	11	57	58	32
	Mengkerong/conor/Ubi-Ubi	7484	1	107	406	4970	2000
	Remong/Kunyit-Kunyit/Tanda	111	2	1	17	84	7
	Semilang	168	2	101	31	30	4
	Shrumbu/Lemah	92	0	0	1	71	20
	Puntung Damar/Bulus	657	1	69	61	422	104
	Pasir-Pasir/Timun-Timun	94	0	60	19	15	0
34	Alu-Alu/Kacang-Kacang	794	0	145	256	349	44
	Aruan Tasik	90	0	12	18	49	11
	Bawal	4618	72	1267	2101	1070	108

Samb.Dari Jadual 4.7.1
(Cont'd From Table 4.7.1)

	Belanak/Kedera	629	18	223	341	47	0
	Cermin/Sagai/Cupak	178	0	43	69	56	10
	Cincaru	2820	9	379	955	1207	270
	Demuduk/Rambai	487	0	48	143	206	90
	Kurau/Senangin/Senohong	394	3	166	149	70	6
	Pelata/Selar	1860	0	221	583	889	167
	Selar Kuning/Lolong	2349	0	353	415	1347	234
	Selayang/Curut	1335	0	15	312	759	249
	Pisang-Pisang	1	0	0	1	0	0
	Talang	310	0	69	158	55	28
35	Billis/Bunga Air	635	4	465	164	2	0
	Parang-Parang	1313	2	369	547	318	77
	Tamban	1242	9	149	403	661	20
	Bulan-Bulan	27	0	14	8	5	0
36	Aya/Kayu/Tongkol	71	0	9	20	33	9
	Layaran/Mersuji	0	0	0	0	0	0
37	Kembong/Temenong/Pelaling	16915	302	2544	6375	6625	1069
	Tenggiri	2268	27	384	933	758	166
	Timah/layor/Selayor	6069	3	731	1640	2589	1106
38	Pari	3240	366	741	390	1271	472
	Yu	593	12	151	182	185	63
39	Ikan Baja	153219	5409	41319	49223	46530	10738
	Ikan Campur	8076	593	2033	1366	2749	1335
	Jebong	247	0	25	137	72	13
42	Ketam	3519	404	1196	986	794	139
45	Udang Karang/Lobok	15	2	4	1	6	2
	Udang Putih	1292	107	885	235	49	16
	Udang Minyak	5216	368	4596	230	22	0
	Udang Merah Ros	949	314	606	29	0	0
	Udang Kulit Keras	1528	291	1208	17	6	6
	Udang Harimau	327	23	94	95	99	16
	Lain-lain Jenis Udang	13905	2162	8457	2042	1145	99
	Udang Baring	0	0	0	0	0	0
56	Siput/Kepah/Kupang/Tiram	0	0	0	0	0	0
57	Sotong Kereta	692	80	160	238	198	16
	Sotong Katak	8535	567	2907	1912	2543	606
	Sotong Biasa	18109	531	3326	5831	7330	1091
	Ubur-Ubur	562	16	476	70	0	0
	Jumlah Tan.M./Total Tonnes	302884	11896	82515	87276	97066	24131

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, 1999
 FISHING EFFORT AND LANDINGS OF TRAWLERS BY TONNAGE CLASS AND SPECIES, 1999

ISSCAAP GROUP NO.	Usaha Menangkap Ikan <i>Fishing Effort</i>	Jumlah Total	Kelas Muatan/Tonnage Class				
			0-9.9 GRT	10-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70 GRT & Above
	<i>Cumulative no. of Fishing Units</i>	14505	3467	4525	2768	2526	1219
	<i>Cumulative no. of Trips</i>	113180	39407	51810	12941	6595	2427
	<i>Cumulative no. of Days</i>	238420	51437	65384	49832	48141	23626
	<i>Cumulative no. of Hauls</i>	1154204	161153	320216	317292	261100	94443
24	Kebasi Selangat	1	0	0	1	0	0
	Puput/B. Mata/Tirok	8	0	4	1	3	0
	Terubok	0	0	0	0	0	0
25	Siakap	3	0	1	0	2	0
31	Lidah	288	63	136	59	22	8
	Sebelah	487	29	171	146	100	41
33	Bayan	37	1	4	9	9	14
	Biji Nangka	3420	57	1060	899	844	560
	Daun Baharu	127	6	28	44	32	17
	Delah/Pinang-Pinang	23	1	1	5	6	10
	Duri/Pulutan/Utik	1719	170	386	496	416	251
	Dengkis/Debam	146	2	12	57	49	26
	Gelama/Tengkerong/Selampai	2353	241	849	760	402	101
	Gerut-Gerut	165	4	79	52	18	12
	Jenahak	36	0	1	2	23	10
	Kaci	554	1	27	86	241	199
	Kerapu	854	34	155	194	295	176
	Kerisi	14786	134	4991	5071	3072	1518
	kerisi Bali	3192	9	822	806	754	801
	Kikek	1006	33	490	299	116	68
	Malong	169	25	24	39	55	26
	Merah	898	7	118	157	325	291
	Mengkerong/conor/Ubi-Ubi	3953	55	356	738	1919	885
	Remong/Kunyit-Kunyit/Tanda	1450	23	264	384	509	270
	Semilang	26	2	3	13	6	2
	Shrumbu/Lemah	0	0	0	0	0	0
	Puntung Damar/Bulus	557	78	144	199	111	25
	Pasir-Pasir/Timun-Timun	525	15	130	155	174	51
34	Alu-Alu/Kacang-Kacang	1128	34	141	335	444	174
	Aruan Tasik	194	6	8	53	84	43
	Bawal	513	77	100	156	133	47

Samb.Dari Jadual 4.7.2
(Cont'd From Table 4.7.2)

	Belanak/Kedera	5	0	5	0	0	0
	Cermin/Sagai/Cupak	946	9	136	257	362	182
	Cencaru	1198	5	46	402	525	220
	Demuduk/Rambai	212	0	8	54	94	56
	Kurau/Senangin/Senohong	12	2	6	4	0	0
	0	0	0	0	0	0	0
	Pelata/Selar	1764	271	86	363	684	360
	Selar Kuning/Lolong	6299	34	568	2014	2371	1312
	Selayang/Curut	1205	1	5	201	574	424
	Pisang-Pisang	6	0	1	3	1	1
	Talang	101	5	35	52	6	3
35	Bilis/Bunga Air	53	0	1	18	26	8
	Parang-Parang	922	77	234	308	230	73
	Tamban	15	4	2	3	3	3
	Bulan-Bulan	1	0	0	0	1	0
36	Aya/Kayu/Tongkol	45	0	2	17	17	9
	Layaran/Mersuji	1	0	0	1	0	0
37	Kembong/Temenong/Pelaling	1432	46	41	358	658	329
	Tenggiri	978	37	115	307	351	168
	Timah/layar/Selayor	1081	127	369	274	233	78
38	Pari	5231	415	1351	1850	1220	395
	Yu	1318	80	219	437	425	157
39	Ikan Baja	97734	5156	12019	31320	34506	14733
	Ikan Campur	12036	193	1315	2948	4473	3107
	Jebong	1050	10	182	291	335	232
42	Ketam	1302	220	430	362	219	71
45	Udang Karang/Lobok	519	23	55	197	173	71
	Udang Putih	454	159	193	79	20	3
	Udang Minyak	336	131	163	38	4	0
	Udang Merah Ros	9	0	7	2	0	0
	Udang Kulit Keras	386	98	252	34	2	0
	Udang Harimau	162	36	55	47	24	0
	Lain-lain Jenis Udang	3212	942	1078	776	378	38
	Udang Baring	0	0	0	0	0	0
56	Siput/Kepah/Kupang/Tiram	32	0	6	0	26	0
57	Sotong Kereta	383	16	101	156	100	10
	Sotong Katak	8534	536	1825	3000	2257	916
	Sotong Biasa	12038	190	2094	4180	3794	1780
	Ubur-Ubur	0	0	0	0	0	0
	Jumlah Tan.M./Total Tonnes	199630	9930	33510	61569	64256	30365

JADUAL (TABLE) 4.8.

SEMENANJUNG MALAYSIA/ PENINSULAR MALAYSIA
 USAHA MENANGKAP IKAN DAN PENDARATAN PUKAT JERUT IKAN MENGIKUT KELAS MUATAN DAN SPESIES IKAN, 1999
 FISHING EFFORT AND LANDINGS OF FISH PURSE SEINE BY TONNAGE CLASS AND SPECIES, 1999

ISSCAAP GROUP NO.	Usaha Menangkap Ikan <i>Fishing Effort</i>	Jumlah/ Total	Kelas Muatan/Tonnage Class				
			0-9.9 GRT	10-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70 GRT & Above
	<i>Cumulative no. of Fishing Units</i>	5,763	91	1,073	1,103	2,236	1,260
	<i>Cumulative no. of Trips</i>	56,075	854	13,646	10,407	26,763	4,405
	<i>Cumulative no. of Days</i>	91,328	1,324	15,561	17,271	34,857	22,315
	<i>Cumulative no. of Hauls</i>	310,253	3,161	45,352	69,584	97,235	94,921
24	Kebasi Selangat	155	0	0	0	155	0
	Puput/B.Mata/Tirok	24	0	0	0	23	1
	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	4	0	0	0	0	4
	Delah/Pinang-Pinang	32	0	18	0	14	0
	Duri/Pulutan/Utik	34	0	4	0	30	0
	Dengkis/Debam	0	0	0	0	0	0
	Gelama/Tengkerong/Selampai	46	0	40	0	6	0
	Gerut-Gerut	2	0	0	0	2	0
	Jenahak	0	0	0	0	0	0
	Kaci	0	0	0	0	0	0
	Kerapu	0	0	0	0	0	0
	Kerisi	1	0	0	0	1	0
	kerisi Bali	0	0	0	0	0	0
	Kikek	79	0	0	0	44	35
	Malong	0	0	0	0	0	0
	Merah	0	0	0	0	0	0
	Mengkerong/conor/Ubi-Ubi	0	0	0	0	0	0
	Remong/Kunyit-Kunyit/Tanda	27	0	15	0	12	0
	Semilang	0	0	0	0	0	0
	Shrumbu/Lemah	0	0	0	0	0	0
	Puntung Damar/Bulus	0	0	0	0	0	0
	Pasir-Pasir/Timun-Timun	0	0	0	0	0	0
34	Alu-Alu/Kacang-Kacang	157	0	114	18	23	2
	Aruan Tasik	86	0	61	24	1	0
	Bawal	1458	11	221	256	641	329

Samb.Dari Jadual 4.8.
(Cont'd From Table 4.8.)

	Belanak/Kedera	4	0	0	4	0	0
	Cermin/Sagai/Cupak	247	0	191	47	6	3
	Cencaru	8593	9	1254	1118	4693	1519
	Demuduk/Rambai	307	43	121	37	44	62
	Kurau/Senangin/Senohong	1	0	0	0	1	0
		0	0	0	0	0	0
	Pelata/Selar	11475	28	3357	2498	4074	1518
	Selar Kuning/Lolong	26349	0	4690	4649	12304	4706
	Selayang/Curut	49620	109	7283	8599	12864	20765
	Pisang-Pisang	644	0	1	0	13	630
	Talang	134	4	47	15	56	12
35	Bilis/Bunga Air	0	0	0	0	0	0
	Parang-Parang	33	0	19	10	3	1
	Tamban	24636	13	5112	4441	12592	2478
	Bulan-Bulan	0	0	0	0	0	0
36	Aya/Kayu/Tongkol	29216	327	1145	5491	8451	13802
	Layaran/Mersuji	1812	0	0	1812	0	0
37	Kembong/Temenong/Pelaling	43993	19	2082	17029	20808	4055
	Tenggiri	815	0	134	311	222	148
	Timah/layor/Selayor	185	0	64	70	30	21
38	Pari	8	0	1	4	3	0
	Yu	1	0	0	0	1	0
39	Ikan Baja	6535	170	212	1570	2776	1807
	Ikan Campur	2715	1	274	424	872	1144
	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	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	45	0	0	41	4	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	11	0	1	0	6	4
	Sotong Biasa	836	4	401	193	201	37
	Ubur-Ubur	0	0	0	0	0	0
	Jumlah Tan.M./Total Tonnes	210,320	738	26,862	48,661	80,976	53,083

JADUAL (TABLE) 4.8.1

PANTAI BARAT SEMENANJUNG MALAYSIA/WEST COAST PENINSULAR MALAYSIA
 USAHA MENANGKAP IKAN DAN PENDARATAN PUKAT JERUT IKAN MENGIKUT KELAS MUATAN DAN SPESIES IKAN, 1999
 FISHING EFFORT AND LANDINGS OF FISH PURSE SEINE BY TONNAGE CLASS AND SPECIES, 1999

ISSCAAP GROUP NO.	Usaha Menangkap Ikan <i>Fishing Effort</i>	Jumlah/ Total	Kelas Muatan/Tonnage Class				
			0-9.9 GRT	10-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70 GRT & Above
	<i>Cumulative no. of Fishing Units</i>	2134	5	9	442	1288	390
	<i>Cumulative no. of Trips</i>	21698	74	134	2869	16748	1873
	<i>Cumulative no. of Days</i>	34656	94	134	6140	20600	7688
	<i>Cumulative no. of Hauls</i>	57894	396	1079	14170	35218	7031
24	Kebasi Selangat	155	0	0	0	155	0
	Puput/B.Mata/Tirok	24	0	0	0	23	1
	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	4	0	0	0	0	4
	Delah/Pinang-Pinang	0	0	0	0	0	0
	Duri/Pulutan/Utik	4	0	0	0	4	0
	Dengkis/Debam	0	0	0	0	0	0
	Gelama/Tengkerong/Selampai	8	0	2	0	6	0
	Gerut-Gerut	2	0	0	0	2	0
	Jenahak	0	0	0	0	0	0
	Kaci	0	0	0	0	0	0
	Kerapu	0	0	0	0	0	0
	Kerisi	1	0	0	0	1	0
	kerisi Bali	0	0	0	0	0	0
	Kikek	35	0	0	0	0	35
	Malong	0	0	0	0	0	0
	Merah	0	0	0	0	0	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
	Puntung Damar/Bulus	0	0	0	0	0	0
	Pasir-Pasir/Timun-Timun	0	0	0	0	0	0
34	Alu-Alu/Kacang-Kacang	6	0	0	1	5	0
	Aruan Tasik	0	0	0	0	0	0
	Bawal	534	0	73	3	445	13

Samb.Dari Jadual 4.8.1
(Cont'd From Table 4.8.1)

	Belanak/Kedera	4	0	0	4	0	0
	Cermin/Sagai/Cupak	0	0	0	0	0	0
	Cencaru	3073	0	10	11	2572	480
	Demuduk/Rambai	0	0	0	0	0	0
	Kurau/Senangin/Senohong	1	0	0	0	1	0
		0					
	Pelata/Selar	2445	0	173	6	1886	380
	Selar Kuning/Lolong	2418	0	33	8	1661	716
	Selayang/Curut	7088	0	23	13	3981	3071
	Pisang-Pisang	26	0	1	0	7	18
	Talang	13	4	1	0	0	8
35	Billis/Bunga Air	0	0	0	0	0	0
	Parang-Parang	0	0	0	0	0	0
	Tamban	3362	0	287	409	1476	1190
	Bulan-Bulan	0	0	0	0	0	0
36	Aya/Kayu/Tongkol	7679	0	896	11	3694	3078
	Layaran/Mersuji	0	0	0	0	0	0
37	Kembong/Temenong/Pelaling	35988	2	385	14694	18135	2772
	Tenggiri	186	0	3	0	71	112
	Timah/layor/Selayor	10	0	0	0	0	10
38	Pari	7	0	1	4	2	0
	Yu	0	0	0	0	0	0
39	Ikan Baja	6271	170	212	1570	2648	1671
	Ikan Campur	832	1	50	266	316	199
	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	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	44	0	0	40	4	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	6	0	0	0	6	0
	Sotong Biasa	40	0	0	0	20	20
	Ubur-Ubur	0	0	0	0	0	0
	Jumlah Tan.M./Total Tonnes	70266	177	2150	17040	37121	13778

JADUAL (TABLE) 4.8.2

PANTAI TIMUR SEMENANJUNG MALAYSIA/EAST COAST PENINSULAR MALAYSIA
 USAHA MENANGKAP IKAN DAN PENDARATAN PUKAT JERUT IKAN MENGIKUT KELAS MUATAN DAN SPESIES IKAN, 1999
 FISHING EFFORT AND LANDINGS OF FISH PURSE SEINE BY TONNAGE CLASS AND SPECIES, 1999

ISSCAAP GROUP NO.	Usaha Menangkap Ikan <i>Fishing Effort</i>	Jumlah/ <i>Total</i>	Kelas Muatan/ <i>Tonnage Class</i>				
			0-9.9 GRT	10-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70 GRT & Above
	<i>Cumulative no. of Fishing Units</i>	3629	86	1064	661	948	870
	<i>Cumulative no. of Trips</i>	34377	780	13512	7538	10015	2532
	<i>Cumulative no. of Days</i>	56672	1230	15427	11131	14257	14627
	<i>Cumulative no. of Hauls</i>	252359	2765	44273	55414	62017	87890
24	Kebasi Selangat	0	0	0	0	0	0
	Pupu/B. Mata/Tirok	0	0	0	0	0	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	32	0	18	0	14	0
	Duri/Pulutan/Utik	30	0	4	0	26	0
	Dengkis/Debam	0	0	0	0	0	0
	Gelama/Tengkerong/Selampai	38	0	38	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	44	0	0	0	44	0
	Malong	0	0	0	0	0	0
	Merah	0	0	0	0	0	0
	Mengkerong/conor/Ubi-Ubi	0	0	0	0	0	0
	Remong/Kunyit-Kunyit/Tanda	27	0	15	0	12	0
	Semilang	0	0	0	0	0	0
	Shrumbu/Lemah	0	0	0	0	0	0
	Puntung Damar/Bulus	0	0	0	0	0	0
	Pasir-Pasir/Timun-Timun	0	0	0	0	0	0
34	Alu-Alu/Kacang-Kacang	151	0	114	17	18	2
	Aruan Tasik	86	0	61	24	1	0
	Bawal	924	11	148	253	196	316

Samb. Dari Jadual 4.8.2
(Cont'd From Table 4.8.2)

	Belanak/Kedera	0	0	0	0	0	0
	Cermin/Sagai/Cupak	247	0	191	47	6	3
	Cencaru	5520	9	1244	1107	2121	1039
	Demuouk/Rambai	307	43	121	37	44	62
	Kurau/Senangin/Senohong	0	0	0	0	0	0
		0				0	0
	Pelata/Selar	9030	28	3184	2492	2188	1138
	Selar Kuning/Lolong	23931	0	4657	4641	10643	3990
	Selayang/Curut	42532	109	7260	8586	8883	17694
	Pisang-Pisang	618	0	0	0	6	612
	Talang	121	0	46	15	56	4
35	Billis/Bunga Air	0	0	0	0	0	0
	Parang-Parang	33	0	19	10	3	1
	Tamban	21274	13	4825	4032	11116	1288
	Bulan-Bulan	0	0	0	0	0	0
36	Aya/Kayu/Tongkol	21537	327	249	5480	4757	10724
	Layaran/Mersuji	1812	0	0	1812	0	0
37	Kembong/Temenong/Pelaling	8005	17	1697	2335	2673	1283
	Tenggiri	629	0	131	311	151	36
	Timah/layor/Selayor	175	0	64	70	30	11
38	Pari	1	0	0	0	1	0
	Yu	1	0	0	0	1	0
39	Ikan Baja	264	0	0	0	128	136
	Ikan Campur	1883	0	224	158	556	945
	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	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	1	0	0	1	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	5	0	1	0	0	4
	Sotong Biasa	796	4	401	193	181	17
	Ubur-Ubur	0	0	0	0	0	0
	Jumlah Tan.M./Total Tonnes	140054	561	24712	31621	43855	39305

Jadual (Table) 5.1

SEMENANJUNG MALAYSIA/PENINSULAR MALAYSIA
USAHA MENANGKAP IKAN: BILANGAN TRIP MENANGKAP IKAN MENGIKUT JENIS PERKAKAS DAN NEGERI, 1999
FISHING EFFORT: NUMBER OF TRIPS BY TYPE OF GEAR AND STATE, 1999

Jenis Perkakas <i>Type Of Gear</i>	Pukat Tunda <i>Trawl Net</i>					Pukat Tarik (Seine Nets)										Lain-Lain Tarik Other Seine	Pukat Hanyut Drift Net	Pukat Tangkap Lift Net	Perangkap - Perangkap <i>Traps</i>		Pancing Hook & Line	Pukat Bakul Bag Net	Pukat Rentang Spear Net	Pukat Surung Push/Scoop Net	Memungut Siput Shellfish Collection	Rampasan Macellaneous
						Pukat Jerut Ikan <i>Purse Seine - Fish</i>					Pukat Jerut Bilis <i>Purse Seine - Anchovy</i>								Bulat Bulat Stationary	Bubu Portable						
	0-9.9 GRT	10-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70GRT &Above	0-9.9 GRT	10-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70GRT &Above	0-9.9 GRT	10-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70GRT &Above											
Pantai Barat/West Coast:																										
Perlis	8000	7633	1532	1478	327	0	0	1853	3368	1636	0	0	0	0	0	0	52739	0	0	0	0	0	0	10467	0	7020
Kedah	60123	23622	19451	2214	399	0	0	0	2408	169	0	0	0	0	11063	6671	386522	0	357	2863	7988	26116	6953	39428	2726	21997
Pulau Pinang	0	0	14211	1197	25	0	0	936	298	0	0	0	0	0	0	21334	329536	0	0	1944	21619	10115	10267	1161	2766	14762
Perak	20352	196886	20588	10904	2241	74	134	0	9072	128	0	0	0	4404	0	81190	330774	0	0	2185	70208	26255	11646	90119	3883	50931
Selangor	26045	102520	31683	7567	0	0	0	80	1602	0	0	0	0	0	0	3452	351450	0	1351	18408	48067	26134	6253	20269	13953	835
Negeri Sembilan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132	24093	0	0	251	1412	0	0	0	0	0
Melaka	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	131072	0	0	32	11498	0	0	11640	1440	0
Johor Barat/West Johor:	3792	29802	688	0	0	0	0	0	0	0	0	0	0	0	0	0	362833	0	21400	15598	2086	3114	5157	28042	0	16591
Pantai Timur/East Coast:																										
Kelantan	0	14153	1200	405	39	0	0	67	237	1453	0	1127	0	0	0	0	41956	4105	6455	207	13591	0	0	0	0	7332
Terengganu	8042	22167	2238	255	37	780	12962	6736	3029	819	324	1830	336	0	0	0	48114	2560	0	33062	101499	0	0	0	0	0
Pahang	24554	9095	5382	2881	1829	0	0	410	4524	195	0	429	0	660	0	0	88142	472	0	12919	5685	0	0	0	0	0
Johor Timur/East Johor:	6811	6395	4121	3054	522	0	550	325	2225	65	0	0	0	0	0	0	54376	0	0	2434	8509	9115	0	0	0	8345

* GRT: Gross Registered Tonnage

Jadual (Table) 5.2

SEMENANJUNG MALAYSIA/PENINSULAR MALAYSIA
USAHA MENANGKAP IKAN: BILANGAN HARI MENANGKAP IKAN MENGIKUT JENIS PERKAKAS DAN NEGERI, 1999
FISHING EFFORT: NUMBER OF DAYS BY TYPE OF GEAR AND STATE, 1999

Jenis Perkakas Type Of Gear	PukatTunda Trawl Net					Pukat Tarik (Seine Nets)										Lain- LainTarik Other Seine	Pukat Hanyut Drift/Gill Net	Pukat Tangkap Lift Net	Perangkap - Perangkap Traps		Pancing Hook & Line	Pukat Bekul Bag Net	Pukat Rentang Barrier Net	Pukat Surung Push/Scoop Net	Memungut Siput Shellfish Collection	Rampalan Miscellaneous
						Pukat Jerut Ikan Purse Seine - Fish					Pukat Jerut Bilis Purse Seine - Anchovy								Belat Belat Stationary	Bubu Portable						
	0-9.9 GRT	10-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70GRT &Above	0-9.9 GRT	10-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70GRT &Above	0-0.9 GRT	10-24.9 GRT	25-39.9 GRT	40-69.9 GRT	70GRT &Above											
Pantai Barat/West Coast:																										
Perlis	4098	19175	15707	7359	3559	0	0	4660	6352	7197	0	0	0	0	0	0	100604	0	0	0	0	0	5208	0	11066	
Kedah	66575	45054	47811	29870	1348	0	0	0	2053	288	0	0	0	0	9821	10123	304544	0	0	0	1417	12437	4864	6097	0	19428
Pulau Pinang	0	0	17341	3381	134	0	0	1207	1205	0	0	0	0	0	0	23783	312689	0	0	2718	17892	8101	13817	1111	0	4519
Perak	19924	195526	26207	57210	15555	94	134	118	8462	203	0	0	0	2714	0	72463	298151	0	0	2785	26159	21348	7444	72997	4191	48968
Selangor	25274	95844	35456	20990	0	0	0	155	2528	0	0	0	0	0	0	3500	300363	0	1676	15483	46712	29413	6114	22703	5748	1945
Negeri Sembilan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	129	19936	0	0	641	1615	0	0	0	0	0
Melaka	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	118713	0	0	38	11421	0	0	10670	1060	0
Johor Barat/West Johor:	3312	27597	517	0	0	0	0	0	0	0	0	0	0	0	0	0	392233	0	9600	43508	1983	1950	4459	36837	0	17804
Pantai Timur/East Coast:																										
Kelantan	0	15683	5324	4862	663	0	0	162	979	9356	0	1157	0	0	0	0	42990	4362	8055	0	23114	0	0	0	0	8580
Terengganu	9679	28948	9290	4070	562	1230	14663	10227	5129	4086	1259	2605	0	0	0	0	66336	3679	0	45462	158848	0	0	0	0	0
Pahang	34339	10823	14885	20995	17524	0	0	435	4122	904	0	372	0	668	0	0	75297	635	0	15225	21144	0	0	0	0	0
Johor Timur/East Johor:	7419	9930	20333	18214	4877	0	764	307	4027	281	0	0	0	0	0	0	53040	0	0	8750	15512	9098	0	0	0	8483

* GRT: Gross Registered Tonnage

Jadual (Table) 5.3

SEMENANJUNG MALAYSIA/PENINSULAR MALAYSIA
USAHA MENANGKAP IKAN: BILANGAN KALI MENANGKAP IKAN MENGIKUT JENIS PERKAKAS DAN NEGERI, 1999
FISHING EFFORT: NUMBER OF HAULS BY TYPE OF GEAR AND STATE, 1999

Jenis Perkakas <

*GRT: Gross Registered Tonnage

JADUAL (TABLE) 6.1

SEMENANJUNG MALAYSIA/PENINSULAR MALAYSIA
HARGA PURATA IKAN DIPANTAI MENGIKUT BULAN, 1999
MONTHLY AVERAGE EX-VESSEL PRICES OF FRESH FISH, 1999
HARGA DALAM RM/KG/PRICES AT RM/KG

Jenis-Jenis Ikan Species	Januari /January	Februari /February	Mac /March	April /April	Mei /May	Jun /June	Julai /July	Ogos /August	September /September	Oktober /October	November /November	Disember /December	Purata, 1999 Average, 1999
Bawal Putih	18.45	20.15	18.21	17.43	17.42	17.09	17.14	17.07	17.68	17.46	18.13	18.43	17.89
Bawal Hitam	8.91	8.88	8.21	8.36	8.25	8.57	9.72	9.34	8.52	8.42	9.15	9.31	8.80
Kerapu	13.09	14.26	13.45	12.52	12.45	12.08	12.24	11.64	12.17	12.13	11.99	12.31	12.53
Tenggiri	10.01	10.28	9.50	9.18	9.69	9.67	9.73	9.66	10.10	9.91	10.24	10.46	9.87
Jenahak	11.38	12.54	9.71	11.04	11.28	11.07	10.27	10.89	10.24	10.19	11.47	10.46	10.88
Merah	7.60	7.06	7.63	7.60	7.69	8.02	7.07	7.05	7.06	7.20	7.49	7.40	7.41
Kaci	4.00	4.12	5.35	3.76	3.79	3.94	4.19	3.83	3.97	3.99	3.96	5.02	4.16
Cermin	3.96	4.85	4.26	4.40	4.25	4.66	4.52	4.37	4.31	4.78	4.94	4.23	4.46
Gelama	2.23	2.33	2.15	2.49	1.90	2.44	2.59	2.36	2.52	2.17	2.26	2.63	2.34
Kembong	4.30	4.57	4.18	4.10	4.30	4.25	4.55	4.45	4.49	3.87	4.53	4.93	4.38
Kerisi	3.00	3.05	2.88	3.05	2.88	3.30	3.15	3.17	3.02	3.03	3.02	3.60	3.10
Selayang	1.83	1.96	1.70	1.64	1.85	1.87	2.18	1.82	1.51	1.45	1.86	2.05	1.81
Tamban	1.54	1.93	1.43	1.40	1.62	1.52	1.50	1.55	1.28	1.38	1.30	1.69	1.51
Solar/Pelata	3.39	3.36	2.97	2.97	3.00	2.84	3.28	3.06	2.82	2.66	3.14	3.32	3.07
Sotong Biasa	5.05	5.15	5.05	5.07	4.92	5.33	5.48	5.47	5.16	5.34	5.52	5.63	5.26
Aya/Tongkol	2.72	2.70	2.59	2.60	2.57	2.74	2.72	2.73	2.44	2.76	2.54	2.75	2.66
Udang Putih	23.93	25.52	23.96	22.71	22.37	22.43	22.69	23.23	23.28	22.68	22.94	23.80	23.30
Udang Harimau	26.27	26.94	26.21	27.57	28.21	27.20	26.94	25.74	25.95	26.62	26.29	28.02	26.83
Lain-Lain Udang	7.21	7.80	7.14	7.28	6.98	7.01	6.46	8.32	7.00	6.51	6.61	7.19	7.13

JADUAL (TABLE) 7.1

MALAYSIA
NILAI HARGA BORONG PENDARATAN IKAN LAUT, 1999
WHOLESALE VALUE OF MARINE FISH LANDING, 1999

Negeri/State	Gred 1 Grade1		Gred 11 Grade11		Gred 111 Grade111		Udang Prawn		Ikan Baja Manure Fish		Kerang-Kerangan Shellfish		Jumlah Total	
	Tan.metrik M. Tonnes	RM	Tan.Metrik M. Tonnes	RM	Tan.Metrik M. Tonnes	RM	Tan.metrik M. Tonnes	RM	Tan.metrik M. Tonnes	RM	Tan.metrik M. Tonnes	RM	Tan.metrik M. Tonnes	RM
Pantai Barat/West Coast														
Perlis	597	4,999,715	99	404,990	63,631	129,866,875	1,222	15,276,775	19,540	4,885,003	0	0	85,089	155,433,358
Kedah	3,127	42,013,382	468	2,060,465	48,396	202,697,973	5,756	87,787,715	27,482	10,344,130	0	0	85,229	344,903,665
Pulau-Pinang	904	16,594,702	153	1,046,846	16,338	51,161,887	3,147	62,244,875	14,245	6,576,707	2	15,501	34,789	137,640,518
Perak	3,873	53,335,705	2,845	18,694,305	80,675	296,180,437	23,027	223,873,270	60,665	24,045,318	259	288,144	171,344	616,417,179
Selangor	5,044	64,328,097	1,822	14,839,781	35,520	123,487,942	16,470	134,240,957	49,796	16,463,687	311	249,263	108,963	353,609,727
Negeri-Sembilan	97	1,574,662	31	209,419	157	492,197	42	1,000,955	0	0	0	0	327	3,277,233
Melaka	526	9,102,466	1	13,443	1,144	3,958,453	203	4,772,131	0	0	17	49,197	1,891	17,895,690
Johor Barat/West Johor	1,776	25,696,047	298	3,215,500	4,198	17,141,881	3,323	37,261,185	2,854	958,849	0	0	12,449	84,273,462
Jumlah Kecil/Sub.Total	15,944	217,644,776	5,717	40,484,749	250,059	824,987,645	53,190	566,457,863	174,582	63,273,694	589	602,105	500,081	1,713,450,832
Pantai Timur/East Coast														
Kelantan	637	5,330,587	513	2,595,396	43,941	113,144,221	391	5,029,106	5,173	977,734	32	47,169	50,687	127,124,213
Terengganu	5,238	63,057,872	3,507	27,779,419	141,125	513,198,099	1,610	27,885,932	9,420	2,922,664	0	0	160,900	634,843,986
Pahang	2,340	26,321,219	1,653	11,560,977	66,895	222,012,906	1,657	19,972,970	54,286	10,733,501	0	0	126,831	290,601,573
Johor Timur/East Johor	1,759	19,944,492	1,468	11,186,693	29,641	102,827,031	2,102	26,597,350	29,813	5,937,607	0	0	64,783	166,493,173
Jumlah Kecil/Sub.Total	9,974	114,654,170	7,141	53,122,485	281,602	951,182,257	5,760	79,485,358	98,692	20,571,506	32	47,169	403,201	1,219,062,945
Sem. Malaysia/ Jumlah/Total	25,918	332,298,946	12,858	93,607,234	531,661	1,776,169,902	58,950	645,943,221	273,274	83,845,200	621	649,274	903,282	2,932,513,777
Sarawak	7,605	54,459,405	5,292	28,185,192	66,978	173,606,976	20,574	193,621,914	21,460	2,424,980	5	14,950	121,914	452,313,417
Sabah	19,423	180,633,900	14,337	62,079,210	139,420	322,735,253	11,483	123,419,284	21,499	5,362,066	1,051	4,085,237	207,213	698,314,950
W.Persekutuan Labuan/ Labuan F.Territory	720	4,384,800	909	5,101,308	11,971	44,244,816	561	6,232,710	1,832	168,544	0	0	15,993	60,132,178
Jumlah Kecil/Sub.Total	27,748	239,478,105	20,538	95,365,710	218,369	540,587,045	32,618	323,273,908	44,791	7,955,590	1,056	4,100,187	345,120	1,210,760,545
Jumlah Besar/ Grand Total	53,666	571,777,051	33,396	188,972,944	750,030	2,316,756,947	91,568	969,217,129	318,065	91,800,790	1,677	4,749,461	1,248,402	4,143,274,322

NOTA/NOTE

- Gred 1** - Termasuk Bawal Tambak, Bawal Putih, Bawal hitam, Bawal Selatan, Senangin/Kurau/Senohong, Tenggiri, Parang, Kerapu, dan Jenahak.
- (Gred 1)* - Includes Chinese Pomfret, Silver Pomfret, Black pomfret, Small Pomfret, Threadfin, Spanish Mackerel, Wolf Herring, Grouper and Mangrove Snapper
- (Gred 11)** - Termasuk Terubuk, Puput/Beliak Mata/Tirok, Merah, Kaci, Cermin/Sagai/Cupak, Demuduk/Rambai dan Siakap.
- (Grade 11)* - Includes Longtail Shad, Shads/Slender Shads, Red Snapper, Sweetlip, Horse Mackerel and Giant Sea Perch.
- (Gred 111)** - Lain-Lain Ikan Termasuk Ikan Bills, Sotong, Ketam dan Ubor-ubor.
- (Gred 111)* - Other Species Including Anchovy, Squids, Crabs and Jellyfish.

JADUAL (TABLE) 7.2

MALAYSIA
NILAI HARGA RUNCIT PENDARATAN IKAN LAUT, 1999
RETAIL VALUE OF MARINE FISH LANDING, 1999

Negeri/State	Gred 1 Grade1		Gred 11 Grade11		Gred 111 Grade111		Udang Prawn		Ikan Baja Manure Fish		Kerang-Kerangan Shellfish		Jumlah Total	
	Tan.Metrik M.Tonnes	RM	Tan.Metrik M.Tonnes	RM	Tan.Metrik M.Tonnes	RM	Tan.Metrik M.Tonnes	RM	Tan.Metrik M.Tonnes	RM	Tan.Metrik M.Tonnes	RM	Tan.Metrik M.Tonnes	RM
Pantai Barat/West Coast														
Perlis	597	7,140,551	99	558,178	63,631	214,175,631	1,222	18,959,078	19,540	6,839,003	0	0	85,089	247,672,441
Kedah	3,127	47,100,997	468	2,760,187	48,396	259,393,728	5,756	96,364,573	27,482	12,121,226	0	0	85,229	417,740,711
Pulau-Pinang	904	19,575,992	153	1,289,884	16,338	65,645,964	3,147	72,272,195	14,245	6,586,367	2	18,779	34,789	165,389,181
Perak	3,873	66,417,085	2,845	24,010,027	80,675	390,385,490	23,027	278,079,610	60,665	31,689,906	259	501,352	171,344	791,083,470
Selangor	5,044	73,416,722	1,822	17,524,999	35,520	158,483,794	16,470	152,220,335	49,796	21,012,972	311	356,784	108,963	423,015,606
Negeri-Sembilan	97	1,795,244	31	254,939	157	678,879	42	1,183,834	0	0	0	0	327	3,912,896
Melaka	526	9,795,349	1	15,928	1,144	4,576,782	203	5,223,889	0	0	17	57,210	1,891	19,669,158
Johor Barat/West Johor	1,776	30,357,666	298	3,780,664	4,198	21,916,730	3,323	44,858,773	2,854	958,849	0	0	12,449	101,872,682
Jumlah Kecil/Sub.Total	15,944	255,599,606	5,717	50,194,806	250,059	1,115,256,998	53,190	669,162,287	174,582	79,208,323	589	934,125	500,081	2,170,356,145
Pantai Timur/East Coast														
Kelantan	637	5,883,569	513	3,071,900	43,941	139,988,502	391	5,546,748	5,173	1,020,107	32	58,303	50,687	155,569,129
Terengganu	5,238	72,586,480	3,507	33,598,906	141,125	686,138,958	1,610	33,395,685	9,420	5,502,299	0	0	160,900	831,222,328
Pahang	2,340	32,209,053	1,653	15,494,450	66,895	315,234,424	1,657	24,216,287	54,286	10,733,501	0	0	126,831	397,887,715
Johor Timur/East Johor	1,759	23,918,932	1,468	13,988,438	29,641	141,696,190	2,102	32,108,115	29,813	5,937,607	0	0	64,783	217,649,282
Jumlah Kecil/Sub.Total	9,974	134,598,034	7,141	66,153,694	281,602	1,283,058,074	5,760	95,266,835	98,692	23,193,514	32	58,303	403,201	1,602,328,454
Sem.Malaysia/ Jumlah/Total	25,918	390,197,640	12,858	116,348,500	531,661	2,398,315,072	58,950	764,429,122	273,274	102,401,837	621	992,428	903,282	3,772,684,599
Sarawak	7,605	92,203,020	5,292	53,211,060	66,978	280,828,754	20,574	211,850,478	21,460	2,811,260	5	16,000	121,914	640,920,572
Sabah	19,423	239,602,128	14,337	81,047,061	139,420	527,548,956	11,483	142,699,241	21,499	7,137,668	1,051	4,903,966	207,213	1,002,939,020
W.Persekutuan Labuan/ Labuan F. Territory	720	11,533,680	909	13,005,063	11,971	107,667,174	561	8,970,951	1,832	395,712	0	0	15,993	141,572,580
Jumlah Kecil/Sub.Total	27,748	343,338,828	20,538	147,263,184	218,369	916,044,884	32,618	363,520,670	44,791	10,344,640	1,056	4,919,966	345,120	1,785,432,172
Jumlah Besar/ GrandTotal	53,666	733,536,468	33,396	263,611,684	750,030	3,314,359,956	91,568	1,127,949,792	318,065	112,746,477	1,677	5,912,354	1248402	5,558,116,771

NOTA/NOTE

- Gred 1 - Termasuk Bawal Tambak, Bawal Putih, Bawal hitam, Bawal Selatan, Senangin/Kurau/Senohong, Tenggiri, Parang, Kerapu, dan Jenahak.
 (Gred 1) - Includes Chinese Pomfret, Silver Pomfret, Black pomfret, Small Pomfret, Threadfin, Spanish Mackerel, Wolf Herring, Grouper and Mangrove Snapper.
 (Gred 11) - Termasuk Terubuk, Puput/Beliak Mata/Tirok, Merah, Kaci, Cermin/Sagai/Cupak, Demuduk/Rambai dan Siakap.
 (Grade 11) - Includes Longtail Shad, Shads/Slender Shads, Red Snapper, Sweetlip, Horse Mackerel and Giant Sea Perch.
 (Gred 111) - Lain-Lain Ikan Termasuk Ikan Bilis, Sotong, Ketam dan Ubor-ubor.
 (Gred 111) - Other Species Including Anchovy, Squids, Crabs and Jellyfish.

JADUAL (TABLE) 7.3

SEMENANJUNG MALAYSIA /PENINSULAR MALAYSIA
NILAI PENDARATAN IKAN LAUT MENGIKUT KUMPULAN PERKAKAS DAN GRED IKAN, 1999
VALUE OF MARINE FISH LANDINGS BY GEAR GROUP AND GRADE OF FISH, 1999

Pendaratan dan Nilai Landings and Values		Pukat Tunda/ Trawl Nets	Pukat Tarik / Seine Nets		Lain Pukat Tarik/ Other Seine	Pukat Hanyut Drift/ Gill Nets	Pukat Tangguk/ Lift Nets	Perangkap-Perangkap Traps		Pancing / Hooks and Lines	Pukat Bakul/ Bag Nets	Pukat Rentang/ Barrier Nets	Pukat Surung Push/ Scoop Nets	Memungut Siput/ Shellfish Collection	Rampaiian Miscell- aneous	Jumlah Besar Grand Total
			Pukat Jerut Ikan/ Purse Seine-Fish	Pukat Jerut Bilis/ Purse Seine - Anchovy				Belat-Belat/ Stationary	Bubu/ Portable							
Gred 1 (Gred 1)	<i>Tonnes</i>	13,500	2,307	1	16	5,613	20	69	1,016	3,339	8	13	16	0	0	25,918
	N.B.RM	173,085,724	29,578,427	12,821	205,139	71,965,197	256,423	884,660	13,026,303	42,809,869	102,569	166,675	205,139	0	0	332,298,946
	N.R.RM	203,243,620	34,732,076	15,055	240,881	84,504,181	301,102	1,038,801	15,295,964	50,268,922	120,441	195,716	240,881	0	0	390,197,640
Gred 11 (Gred 11)	<i>Tonnes</i>	5,543	578	7	0	3,023	6	0	619	3,075	0	7	0	0	0	12,858
	N.B.RM	40,353,467	4,207,885	50,961	0	22,007,674	43,680	0	4,506,368	22,386,238	0	50,961	0	0	0	93,607,234
	N.R.RM	50,157,081	5,230,163	63,341	0	27,354,294	54,292	0	5,601,160	27,824,828	0	63,341	0	0	0	116,348,500
Gred 111 (Gred 111)	<i>Tonnes</i>	204,176	200,855	17,656	1,427	62,162	7,674	277	8,553	22,372	4,058	753	608	0	1,090	531,661
	N.B.RM	682,109,965	671,015,188	58,985,060	4,767,313	207,670,439	25,637,253	925,400	28,573,811	74,740,244	13,556,942	2,515,618	2,031,203	0	3,641,466	1,776,169,902
	N.R.RM	921,034,981	906,053,396	79,645,960	6,437,176	280,411,882	34,617,303	1,249,543	38,582,459	100,919,768	18,305,579	3,396,772	2,742,679	0	4,916,974	2,398,315,072
Udang (Prawn)	<i>Tonnes</i>	28,310	45	0	6,941	8,196	0	544	1	0	10,641	132	4,087	0	53	58,950
	N.B.RM	310,206,152	493,086	0	76,055,842	89,807,475	0	5,960,867	10,957	0	116,598,504	1,446,387	44,783,205	0	580,746	645,943,221
	N.R.RM	367,107,523	583,534	0	90,006,828	106,280,934	0	7,054,274	12,967	0	137,986,264	1,711,699	52,997,826	0	687,273	764,429,122
Ikan Baja (Manure Fish)	<i>Tonnes</i>	250,953	6,535	260	8,178	1,775	2	1	0	3	2,283	630	2,654	0	0	273,274
	N.B.RM	76,996,730	2,005,051	79,773	2,509,152	544,601	614	307	0	920	700,464	193,295	814,293	0	0	83,845,200
	N.R.RM	94,037,662	2,448,810	97,428	3,064,478	665,132	749	375	0	1,124	855,491	236,075	994,513	0	0	102,401,837
Kerang Kerangan (Shellfish)	<i>Tonnes</i>	32	0	0	0	0	0	0	0	0	0	3	0	586	0	621
	N.B.RM	33,457	0	0	0	0	0	0	0	0	0	3,137	0	612,680	0	649,274
	N.R.RM	51,140	0	0	0	0	0	0	0	0	0	5,919	0	935,369	0	992,428
Jumlah Total	<i>Tonnes</i>	502,514	210,320	17,924	16,562	80,769	7,702	891	10,189	28,789	16,990	1,538	7,365	586	1,143	903,282
	N.B.RM	1,282,785,495	707,299,637	59,128,615	83,537,446	391,995,386	25,937,970	7,771,234	46,117,439	139,937,271	130,958,479	4,376,073	47,833,840	612,680	4,222,212	2,932,513,777
	N.R.RM	1,635,632,007	949,048,579	79,821,784	99,749,363	499,216,423	34,973,446	9,342,993	59,492,550	179,014,642	157,267,775	5,609,522	56,975,899	935,369	5,604,247	3,772,684,599

Nota/Note

Gred 1 - Termasuk Bawal Tambak, Bawal Putih, Bawal Hitam, Bawal Selatan, Senangin/ Kurau/ Senohong, Tenggiri, Parang, Kerapu dan Jenahak.

(Gred 1 - Includes Chines Pomfret, Silver Pomfret, Black Pomfret, Small Pomfret, Threadfin, Spanish Mackerel, Wolf Herring, Grouper and Mangrove Snapper.

Gred 11 - Termasuk Terubuk, Puput/ Beliak Mata/Tirok, Merah, Kaci, Cermin/Sagai/ Cupak, Demuduk/ Rambai dan Siapak.

(Gred 11) - Includes Longtail Shad, Shads/Slender Shads, Red Snapper, Sweetlip, Horse Mackerel, and Giant Sea Perch.

Gred 111 - Lain - Lain Ikan Termasuk Ikan Bilis, Sotong, Ketam dan Ubor-Ubor.

(Gred 111) - Other Species Including Anchovy, Squid, Crabs and Jellyfish

N.B.RM - Nilai Borong Dalam Ringgit Malaysia/Wholesale Value In Ringgit Malaysia

N.R.RM - Nilai Runcit Dalam Ringgit Malaysia/Retail Value In Ringgit Malaysia

JADUAL (TABLE) 8.1

MALAYSIA
SIRI TAHUNAN PENDARATAN IKAN LAUT DAN NILAI TAHUN 1995-1999
ANNUAL SERIES OF MARINE FISH LANDINGS AND VALUE, 1995-1999

Negeri/State	1995		1996		1997		1998		1999	
	Tan.metrik M.Tonnes	RM	Tan.metrik M. Tonnes	RM	Tan.metrik M. Tonnes	RM	Tan.metrik M. Tonnes	RM	Tan.metrik M. Tonnes	RM
Pantai Barat/West Coast										
Perlis	44,468	121,003,635	44,763	117,592,180	54,273	157,140,411	73,781	155,045,472	85,089	155,433,358
Kedah	86,781	180,350,948	76,269	240,641,450	87,863	341,785,473	93,361	355,487,585	85,229	344,903,665
Pulau-Pinang	46,177	152,599,130	37,612	154,910,298	37,532	158,833,466	35,476	189,177,487	34,789	137,640,518
Perak	215,537	543,739,309	225,079	843,024,682	201,212	668,933,588	213,984	616,714,466	171,344	616,417,179
Selangor	111,105	251,950,872	110,368	313,374,407	118,408	321,944,429	117,663	357,985,412	108,963	353,609,727
Negeri-Sembilan	512	3,988,937	385	3,376,660	377	3,678,568	376	3,811,342	327	3,277,233
Melaka	1,933	12,373,973	1,928	14,878,785	1,750	14,954,187	1,895	16,300,799	1,891	17,895,690
Johor Barat/West Johor	22,305	104,378,013	23,091	110,157,089	14,014	82,828,973	14,646	82,765,361	12,449	84,273,462
Jumlah Kecil/Sub.Total	528,818	1,370,384,817	519,495	1,797,955,551	515,429	1,750,099,095	551,182	1,777,287,924	500,081	1,713,450,832
Pantai Timur/East Coast										
Kelantan	25,446	51,131,023	32,729	64,337,510	34,136	77,936,565	41,546	108,574,267	50,687	127,124,213
Terengganu	80,566	233,933,168	92,167	281,965,564	139,581	471,382,230	143,694	514,070,864	160,900	634,843,986
Pahang	126,002	191,478,104	104,859	184,083,672	91,175	171,984,744	108,961	230,237,113	126,831	290,601,573
Johor Timur/East Johor	58,632	100,973,908	58,407	111,789,022	57,253	124,592,372	56,550	131,077,354	64,783	166,493,173
Jumlah Kecil/Sub.Total	290,646	577,516,203	288,162	642,175,768	322,145	845,895,911	350,751	983,959,598	403,201	1,219,062,945
Sem.Malaysia/ Jumlah/Total	819,464	1,947,901,020	807,657	2,440,131,319	837,574	2,595,995,006	901,933	2,761,247,522	903,282	2,932,513,777
Sarawak	99,255	242,772,805	100,744	300,078,640	128,193	408,050,416	103,213	338,612,446	121,914	452,313,417
Sabah	166,462	460,991,640	180,143	503,880,156	174,265	569,163,500	196,227	660,078,990	207,213	698,314,950
W.Persekutuan Labuan	23,255	59,240,200	38,145	78,067,262	28,941	102,022,244	13,833	57,284,249	15,993	60,132,178
Jumlah Kecil/Sub.Total	288,972	763,004,645	319,032	882,026,058	331,399	1,079,236,160	313,273	1,055,975,685	345,120	1,210,760,545
Jumlah Besar/ Grand.Total	1,108,436	2,710,905,665	1,126,689	3,322,157,377	1,168,973	3,675,231,166	1,215,206	3,817,223,207	1,248,402	4,143,274,322

NOTA/NOTE

- Gred 1 - Termasuk Bawal Tambak, Bawal Putih, Bawal hitam, Bawal Selatan, Senangin/Kurau/Senohong, Tenggiri, Parang, Kerapu, dan Jenahak.
 (Gred 1) - Includes Chinese Pomfret, Silver Pomfret, Black pomfret, Small Pomfret, Threadfin, Spanish Mackerel, Wolf Herring, Grouper and Mangrove Snapper
 (Gred 11) - Termasuk Terubuk, Puput/Beliak Mata/Tiok, Merah, Kaci, Cermin/Sagai/Cupak, Demuduk/Rambai dan Siakap.
 (Grade 11) - Includes Longtail Shad, Shads/Slender Shads, Red Snapper, Sweetlip, Horse Mackerel and Giant Sea Perch.
 (Gred 111) - Lain-Lain Ikan Termasuk Ikan Bilis, Sotong, Ketam dan Ubor-ubor.
 (Gred 111) - Other Species Including Anchovy, Squids, Crabs and Jellyfish.

JADUAL (TABLE) 9.1

MALAYSIA
 KUANTITI PERATUS PENDARATAN SERTA NILAI IKAN LAUT MENGIKUT NEGERI, 1999
 QUANTITY AND PERCENTAGE OF LANDINGS AND VALUES OF MARINE FISH BY STATE, 1999

Negeri/State	Kuantiti Pendaratan Dalam Tan Metrik /Quantity Of Landings (Tonnes)	Peratus/ Percentage %	Nilai Dalam Ringgit Malaysia Values In Ringgit Malaysia	Peratus Percentage %
Pantai Barat (West Coast)				
Perlis	85,089	6.82	155,433,358	3.75
Kedah	85,229	6.83	344,903,665	8.32
Pulau Pinang	34,789	2.79	137,640,518	3.32
Perak	171,344	13.73	616,417,179	14.88
Selangor	108,963	8.73	353,609,727	8.54
Negeri Sembilan	327	0.02	3,277,233	0.08
Melaka	1,891	0.15	17,895,690	0.43
Johor Barat/West Johor	12,449	0.99	84,273,462	2.03
Jumlah Kecil/Sub.Total	500,081	40.06	1,713,450,832	41.35
Pantai Timur/East Coast				
Kelantan	50,687	4.06	127,124,213	3.07
Terengganu	160,900	12.89	634,843,986	15.32
Pahang	126,831	10.16	290,601,573	7.01
Johor Timur/East Johor	64,783	5.19	166,493,173	4.02
Jumlah Kecil/Sub.Total	403,201	32.30	1,219,062,945	29.42
Sarawak	121,914	9.76	452,313,417	10.92
Sabah	207,213	16.60	698,314,950	16.86
W.Persekutuan Labuan	15,993	1.28	60,132,178	1.45
Jumlah Kecil/Sub.Total	345,120	27.64	1,210,760,545	29.23
Jumlah Besar/GrandTotal	1,248,402	100	4,143,274,322	100

SEMANANJUNG MALAYSIA / PENINSULAR MALAYSIA
 PENGGUNAAN PENDARATAN IKAN LAUT, 1999
 DISPOSITION OF MARINE FISH LANDINGS, 1999

JADUAL (TABLE) 10.1

Aliran Penggunaan Disposition Channel	Pantai Barat / West Coast								Jumlah Kecil Sub-Total	Pantai Timur / East Coast				Jumlah Kecil Sub-Total	Jumlah Besar Grand-Total
	Perlis	Kedah	P.Pinang	Perak	Selangor	Negeri Sembilan	Melaka	Johor Barat West Johor		Kelantan	Terengganu	Pahang	Johor Timur East Johor		
Digunakan secara hidup Disposed alive	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Digunakan secara basah Disposed fresh	84,609	52,292	33,751	84,241	43,888	327	1,560	8,885	309,553	49,296	139,140	119,508	31,820	339,764	649,317
Digunakan untuk dibeku Disposed for freezing	0	0	0	3,615	0	0	0	432	4,046	0	0	0	0	0	4,046
Digunakan untuk mengetin Disposed for canning	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na	Na
Digunakan untuk diawetkan: Disposed for curing:															
Kering/Masin/Diasap Dried/Salted/Smoked	54	16,276	789	4,703	8,033	0	95	63	30,013	467	4,236	417	0	5,121	35,134
Rebus Steamed/Boiled	0	0	0	430	0	0	0	0	430	0	0	0	0	0	430
Diragikan Fermented	37	216	128	1,970	5,473	0	236	774	8,834	620	140	0	562	1,322	10,156
Lain-Lain Others	8	3,487	0	6,270	1,763	0	0	2,295	13,823	304	17,383	3,471	444	21,602	35,425
Digunakan untuk mengubahkan Disposed for reduction	0	12,896	63	46,882	49,773	0	0	0	109,614	0	0	0	31,957	31,957	141,570
Digunakan untuk lain-lain Disposed for others	381	63	58	23,232	33	0	0	0	4,077	0	0	3,436	0	3,436	7,513
Jumlah (Tan Metrik) Total (Tonnes)	85,089	85,229	34,789	171,344	108,963	327	1,891	12,449	500,080	50,687	160,900	126,832	64,783	403,202	903,282

Nota: Na: Tiada maklumat
 Not available

SEMENANJUNG MALAYSIA / PENINSULAR MALAYSIA
HASIL LAUT YANG DIAWETKAN, 1999
PROCESSED MARINE FISH PRODUCTS, 1999
(Timbangan dalam Tan Metrik / Weight in Tonnes)

JADUAL (TABLE) 10.2

Negeri State	Ikan Masin/ Ikan Kering Salted/Dried Fish	Bilis Kering Dried Anchovies	Udang Kering Dried Prawn	Sotong Kering Dried Cuttle Fish	Ubur- Ubur Dried Jellyfish	Lala Kering Dried Shell-fish	Ikan Salai Smoked Fish	Ikan Baja Fish Manure	Tepung Ikan Fish Meal	Otak Udang Prawn/cut Paste	Belacan Shrimp Paste	Cingaluk Pickled Prawn	Budu Fermented Anchovies	Bebola Ikan Fish Ball	Bebola Sotong Cuttlefish Ball	Kek Ikan Fish Cake	Otak- Otak Fish Paste	Surimi Surimi	Keropok Crackers		Satay Ikan Fish Satay	Sotong Beku Frozen Cuttlefish	Udang/Kupang Beku Frozen Prawn	Ikan Rebus Boiled Fish	JUMLAH Total
																			Ikan Fish	Udang/Sotong Prawn/Cuttle Fish					
Pantai Barat West Coast																									
Perlis	24.60	0.00	3.20	0.00	0.00	0.00	0.00	228.40	0.00	0.00	11.95	0.00	0.00	3.70	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.00	0.00	0.00	273.05
Kedah	124.00	4,015.26	1.95	0.00	0.00	0.00	0.00	37.50	3,224.00	8.00	43.52	0.00	0.00	829.00	0.00	0.00	0.00	946.00	320.50	23.00	0.00	0.00	0.00	0.00	9,572.73
Pulau Pinang	169.40	0.00	116.46	0.00	4.10	0.00	0.00	34.70	15.80	8.54	41.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	390.00
Perak	1,037.42	393.01	237.12	0.00	45.40	0.00	0.00	14,264.90	11,374.59	0.00	630.55	0.00	0.00	3,289.23	0.00	0.00	0.00	0.00	0.00	0.00	472.73	1,474.76	694.21	344.06	34,257.98
Selangor	1,801.87	0.00	48.53	32.49	409.04	61.54	0.00	19.92	12,443.20	0.00	1,751.24	0.00	0.00	1,058.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17,625.86
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Malaka	57.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.50	35.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	130.00
Johor Barat West Johore	21.94	0.00	4.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	233.48	11.70	1.60	480.51	575.50	0.50	251.40	0.00	70.60	4.40	0.00	0.00	259.00	0.00	1,916.00
Jum. Kecil Sub-Total	3,236.23	4,408.27	411.77	32.49	459.40	61.54	0.00	14,585.42	27,057.59	16.54	2,749.24	47.20	1.60	5,860.47	575.50	0.50	251.40	946.00	392.30	27.40	472.73	1,474.76	993.21	344.06	64,165.62
Pantai Timur East Coast																									
Kelantan	280.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	186.00	0.00	0.00	0.00	0.00	0.00	197.50	0.00	0.00	0.00	0.00	0.00	664.00
Trengganu	1,454.11	261.45	0.00	165.10	0.00	0.00	32.00	0.00	0.00	0.00	14.60	0.00	28.40	254.81	0.00	85.76	0.00	0.00	10,929.90	0.00	0.00	0.00	0.00	0.00	13,226.13
Pahang	91.16	67.22	0.00	0.00	0.00	0.00	0.00	2,061.89	0.00	0.00	0.00	0.00	0.00	167.32	0.00	180.36	0.00	0.00	1,879.44	0.00	0.00	0.00	0.00	0.00	4,447.39
Johor Timur East Johore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,989.20	0.00	179.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	298.64	0.00	0.00	0.00	0.00	0.00	8,457.71
Jum. Kecil Sub-Total	1,825.77	328.67	0.00	165.10	0.00	0.00	32.00	2,061.89	7,989.20	0.00	194.47	0.00	214.40	422.13	0.00	266.12	0.00	0.00	13,295.48	0.00	0.00	0.00	0.00	0.00	28,795.23
Jumlah Besar Grand Total	5,062.00	4,736.94	411.77	197.59	459.40	61.54	32.00	16,647.31	35,046.79	16.54	2,943.71	47.20	216.00	6,082.60	575.50	266.62	251.40	946.00	13,687.78	27.40	472.73	1,474.76	993.21	344.06	90,960.85

Nota : Tiada hasil awet bagi ikan beku.

Note : No production of processed marine fish products or frozen fish.

JADUAL (TABLE) 11.1

MALAYSIA
KILANG-KILANG AIR BATU DAN KEMUDAHAN-KEMUDAHAN PENYEJUKAN SEHINGGA 31-12-1999
ICE FACTORIES AND REFRIGERATION FACILITIES AS AT 31-12-1999
(Kuantiti Dalam Tan Metrik / Quantity in Tonnes)

Negeri / State	Bilangan Kilang Air Batu (No. of ice factories)	Daya Pengeluaran Harian (Daily Production Capacity)					Kemudahan Menyimpan (Storage Capacity)		
		Kuantiti (Tan Metrik) Quantity (Tonnes)	Purata Harga Seblok (RM) Average Price / Block (RM)				Bilangan Bilik Sejuk (No. of cold rooms)	Kuantiti / Quantity (Tan Metrik / Tonnes)	
			0-50kg	51-100kg	101-150kg	151-200kg		Ais (Ice)	Ikan (Fish)
Perlis	2	145	6.50	8.00	-	-	79	68	1,129
Kedah	2	100	-	8.50	-	-	46	421	617
P. Pinang	7	755	-	-	9.00	-	121	1,176	11,623
Perak	12	1,814	-	7.65	8.55	11.00	94	1,692	2,316
Selangor	14	421	-	9.00	-	-	54	551	265
Melaka	2	117	-	-	-	13.60	32	109	-
Negeri Sembilan	-	-	-	-	-	-	-	-	-
Johor Barat / West Johor	6	332	3.00	6.00	6.00	24.00	13	185	64
Johor Timur / East Johor	7	181	4.00-5.00	7.00-9.90	-	-	15	306	-
Kelantan	7	737	4.00	-	7.00-9.00	-	23	407	125
Terengganu	6	456	-	6.00	7.00	10.00	41	742	692
Pahang	6	598	-	-	8.00	8.50	41	495	125
Sarawak	47	699	-	1.00-6.00	3.60-10.00	-	179	2,018	7,102
Sabah	56	574	4.20	6.75	10.00	-	155	1,483	3,000
W.P. Labuan/Labuan Fed. Territory	2	64	4.00	5.00	16.00	-	3	135	280
JUMLAH / TOTAL	176	6,993					896	9,788	27,338

JADUAL (TABLE) 12.1

SEMENANJUNG MALAYSIA/PENINSULAR MALAYSIA

HASIL PERIKANAN, 1999

FISHERIES REVENUE, 1999

(HASIL DALAM RM /REVENUE IN RM)

Jenis Hasil Type Of Revenue	Hasil Perikanan State Revenue					Hasil Persekutuan Federal Revenue				Jumlah Besar
Negeri State	Lesen License		Patil Perahu	Sistem Kultur Laut	Jumlah Total	Ikan Fish	Kompaun/ Denda	Jualan Pelbagai	Jumlah Total	Grand Total
	Perahu Vessel	Alat Menangkap Ikan Fishing Appliances	Boat No. Plate	Marine Culture System			Compound/ Fine	Miscellaneous		
Perlis	51,788.50	186,718.00	2,840.00	0.00	241,346.50	0.00	0.00	3,200.50	3,200.50	244,547.00
Kedah	45,787.00	272,632.00	6,980.00	0.00	325,399.00	12,155.60	164,645.00	29,701.70	206,502.30	531,901.30
P.Pinang	24,825.50	40,733.00	6,555.00	90.00	72,203.50	110,210.00	104,900.00	420.40	215,530.40	287,733.90
Perak	190,190.00	454,809.00	20,635.00	10,641.00	676,275.00	20,087.00	171,900.00	44,704.70	236,691.70	912,966.70
Selangor	75,638.50	91,185.00	9,245.00	6,995.00	183,063.50	4,355.00	55,900.00	247.80	60,502.80	243,566.30
N. Sembilan	956.50	573.50	914.00	90.00	2,534.00	0.00	0.00	49.00	49.00	2,583.00
Melaka	2,260.50	1,734.00	3,430.00	500.00	7,924.50	0.00	1,000.00	1,152.80	2,152.80	10,077.30
Kelantan	16,650.00	322,156.00	4,240.00	1,155.00	344,201.00	3,676.00	13,600.00	31,289.80	48,565.80	392,766.80
Terengganu	42,970.00	306,317.50	9,555.00	4,195.00	363,037.50	34,270.00	44,360.00	28,776.70	107,406.70	470,444.20
Pahang	64,458.50	331,260.00	5,281.00	0.00	400,999.50	6,780.00	81,000.00	8,686.80	96,466.80	497,466.30
Johor	71,872.00	194,191.00	21,660.00	9,030.00	296,753.00	12,161.00	100,100.00	31,391.11	143,652.11	440,405.11
Jumlah Besar Grand Total	587,397.00	2,202,309.00	91,335.00	32,636.00	2,913,737.00	203,694.60	737,405.00	179,621.31	1,120,720.91	4,034,457.91

AKUAKULTUR/TERNAKAIR

AQUACULTURE

MALAYSIA

ANGGARAN BILANGAN DAN LUAS KOLAM AIRTAWAR, BEKAS LOMBONG, SANGKAR AIRTAWAR, TANGKI SIMEN DAN KANDANG

SERTA BILANGAN PENTERNAK MENGIKUT SISTEM TERNAKAN DAN NEGERI, 1999

ESTIMATED NUMBER AND AREA OF FRESHWATER PONDS, EX-MINING POOLS, FRESHWATER CAGES, CEMENT TANKS AND PEN CULTURE

AND NUMBER OF CULTURISTS BY CULTURE SYSTEM AND STATE, 1999

Negeri State	Kolam Airtawar Freshwater Ponds			Bekas Lombong Ex-Mining Ponds			Sangkar Airtawar Freshwater cages			Tangki simen Cement Tanks			Kandang ikan Pen Culture			Jumlah penternak Airtawar Total Freshwater Culturists
	Bil No	Luas (Ha) Area (Ha)	Bil Penternak No. Of Culturist	Bil No	Luas (Ha) Area (Ha)	Bil Penternak No. Of Culturist	Bil No	Luas (M ²) Area (M ²)	Bil Penternak No. Of Culturist	Bil No	Luas (M ²) Area (M ²)	Bil Penternak No. Of Culturist	Bil No	Luas (Ha) Area (Ha)	Bil Penternak No. Of Culturist	
Perlis	193	27.49	112	0	0.00	0	68	612.00	7	15	610.00	3	23	0.38	16	138
Kedah	1,516	181.40	586	1	4.10	1	125	1,395.73	12	16	527.15	8	34	2.66	38	645
Pulau Pinang	98	18.63	36	0	0.00	0	9	67.00	2	11	150.00	2	0	0.00	0	40
Perak	2,573	718.12	1,230	262	1,086.59	163	564	7,200.00	50	44	10,100.00	14	110	15.21	75	1,532
Selangor	2,089	495.69	661	109	216.38	57	583	11,297.46	9	146	25,322.88	26	0	0.00	0	753
Negeri Sembilan	1,752	412.57	1,018	9	14.75	9	1020	14,682.00	5	162	5,653.37	27	0	0.00	0	1,059
Melaka	526	113.02	275	0	0.00	0	291	6,314.00	3	5	602.85	2	0	0.00	0	280
Johor	2,267	289.95	426	0	0.00	0	260	2,861.41	11	139	3,236.73	28	0	0.00	0	465
Pahang	2,813	998.02	1,419	9	280.00	235	2956	35,824.73	706	64	442.64	23	21	1.53	20	2,403
Terengganu	1,369	112.45	694	0	0.00	0	1404	28,349.48	185	190	3,327.58	75	60	3.60	60	1,014
Kelantan	2,073	214.27	1,409	0	0.00	0	255	6,295.40	56	89	4,240.50	30	932	208.22	907	2,402
Sarawak	1,332	104.63	936	0	0.00	0	967	26,839.00	468	0	0.00	0	0	0.00	0	1,404
Sabah	14,937	1,433.64	5,144	0	0.00	0	12	86.40	3	121	4,117.46	35	0	0.00	0	5,182
Jumlah/Total	33,538	5,119.88	13,946	390	1,601.82	465	8,514	141,824.61	1,517	1,002	58,331.16	273	1,180	231.60	1,116	17,317

JADUAL (TABLE) 13.1b

MALAYSIA

ANGGARAN BILANGAN DAN LUAS KOLAM AIRPAYAU, SANGKAR AIRPAYAU, KERANG, SIPUT SUDU, TIRAM DAN RUMPAI LAUT

SERTA BILANGAN PENTERNAK MENGIKUT SISTEM TERNAKAN DAN NEGERI, 1999

ESTIMATED NUMBER AND AREA OF BRACKISHWATER PONDS, BRACKISHWATER CAGES, COCKLES, MUSSELS, OYSTERS AND SEAWEEEDS.

AND NUMBER OF CULTURISTS BY CULTURE SYSTEM AND STATE, 1999

Negeri State	Kolam Airpayau Brackishwater Ponds			Sangkar Airpayau Brackishwater cages			Kerang Cockles			Siput Sudu Mussels			Tiram Oysters			Rumpai Laut Seaweeds			Jumlah penternak Airpayau Total Brackish water Culturists	Jumlah Penternak Akuakultur Grand Total Aquaculture Culturists
	Bil No	Luas (Ha) Area (Ha)	Bil Pen- ternak No. Of Cul- turst	Bil No	Luas (M ²) Area (M ²)	Bil Pen- ternak No. Of Cul- turst	Bil No	Luas (Ha) Area (Ha)	Bil Pen- ternak No. Of Cul- turst	Bil No	Luas (M ²) Area (M ²)	Bil Pen- ternak No. Of Cul- turst	Bil No	Luas (M ²) Area (M ²)	Bil Pen- ternak No. Of Cul- turst	Bil No	Luas (Ha) Area (Ha)	Bil Pen- ternak No. Of Cul- turst		
Perlis	44	35.37	8	100	250.00	2	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0	10	148
Kedah	945	694.69	151	3322	37,323.34	122	3	38.91	2	8	1,469.10	4	34	2,458.32	2	0	0.00	0	281	926
Pulau Pinang	209	136.48	123	26783	246,608.00	355	63	800.00	51	0	0.00	0	20	300.00	1	0	0.00	0	530	570
Perak	1200	910.82	152	16600	143,000.00	159	209	3,258.57	179	1	440.00	1	0	0.00	0	0	0.00	0	491	2023
Selangor	758	385.01	146	6739	114,083.79	33	24	954.07	24	0	0.00	0	0	0.00	0	0	0.00	0	203	956
Negeri Sembilan	84	78.60	3	15	140.00	1	0	0.00	0	29	4,981.21	29	0	0.00	0	0	0.00	0	33	1092
Melaka	90	48.41	19	163	4,142.12	3	9	8.00	9	43	10,638.62	46	0	0.00	0	0	0.00	0	77	357
Johor	903	801.24	102	6001	134,457.32	177	1	129.67	4	300	56,464.82	69	7	7,000.00	10	0	0.00	0	362	827
Pahang	396	184.74	22	36	324.00	12	0	0.00	0	4	1,000.00	2	0	0.00	0	0	0.00	0	36	2439
Terengganu	238	74.14	57	1002	11,404.18	81	0	0.00	0	0	0.00	0	82	19,555.32	26	0	0.00	0	164	1178
Kelantan	190	78.87	81	909	28,070.90	125	0	0.00	0	0	0.00	0	34	1,823.52	9	0	0.00	0	215	2617
Sarawak	407	305.21	162	858	8,273.50	142	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0	304	1708
Sabah	1452	1,128.92	74	1613	55,161.11	247	0	0.00	0	119	2,479.86	119	130	60,370.42	130	511	280.00	511	1081	6263
Jumlah/Total	6,916	4,862.50	1,100	64,141	783,238.26	1,459	309	5,189.22	269	504	77,473.61	270	307	91,507.58	178	511	280.00	511	3,787	21,104

MALAYSIA
 ANGGARAN JUMLAH PENGELUARAN IKAN TERNAKAN, KERANG, SIPUT SUDU , TIRAM DAN RUMPAI LAUT
 MENGIKUT NEGERI DAN SISTEM TERNAKAN, 1999
 ESTIMATED PRODUCTION OF FISH, COCKLES, MUSSELS, OYSTERS AND SEAWEEDS
 BY STATE AND CULTURE SYSTEM, 1999
 (KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Negeri State	Airtawar/Freshwater						Airpayau/Brackishwater							Jumlah Besar Grand Total Tan Metrik Tonnes
	Kolam Ponds	Bekas Lombong Ex-Mining Pools	Sangkar Cages	Tangki Simen Cement Tanks	Kandang Ikan Pen Culture	Jumlah Kecil Sub Total	Kolam Ponds	Sangkar Cages	Kerang Cockles	Siput Sudu Mussels	Tiram Oyster	Rumpai Laut Seaweed	Jumlah Kecil Sub Total	
Perlis	89.96	0.00	6.77	3.78	1.71	102.22	123.80	49.50	0.00	0.00	0.00	0.00	173.30	275.52
Kedah	803.72	2.24	13.51	8.15	11.87	839.49	580.54	205.32	194.93	11.85	8.87	0.00	1,001.51	1,841.00
Pulau Pinang	110.68	0.00	0.00	0.48	0.00	111.16	300.78	1,247.42	13,985.43	0.00	6.94	0.00	15,540.57	15,651.73
Perak	4,607.64	5,343.40	86.13	254.49	70.31	10,361.97	2,032.65	698.72	56,031.91	4.00	0.00	0.00	58,767.28	69,129.25
Selangor	4,999.89	413.65	55.48	401.63	0.00	5,870.65	1,330.59	2,063.19	9,621.60	0.00	0.00	0.00	13,015.38	18,886.03
Negeri Sembilan	1,438.45	98.32	488.55	23.79	0.00	2,049.11	207.95	0.00	0.00	19.65	0.00	0.00	227.60	2,276.71
Melaka	1,050.57	0.00	16.50	3.05	0.00	1,070.12	64.10	1.60	50.50	329.29	0.00	0.00	445.49	1,515.61
Johor	4,714.74	0.00	32.70	81.55	0.00	4,828.99	3,192.62	1,918.39	0.48	9,366.76	4.98	0.00	14,483.23	19,312.22
Pahang	9,857.05	23.04	846.57	16.13	0.00	10,742.79	2,019.48	6.49	0.00	0.00	0.00	0.00	2,025.97	12,768.76
Terengganu	458.03	0.00	1,246.29	51.39	0.00	1,755.71	194.59	117.92	0.00	0.00	77.87	0.00	390.38	2,146.09
Kelantan	481.42	0.00	26.52	75.78	272.62	856.34	75.54	137.29	0.00	0.00	5.30	0.00	218.13	1,074.47
Sarawak	719.22	0.00	138.22	0.00	0.00	857.44	1,676.87	45.30	0.00	0.00	0.00	0.00	1,722.17	2,579.61
Sabah	5,017.74	0.00	75.15	36.68	0.00	5,129.57	1,843.06	542.85	27.36	32.89	93.67	11,847.40	14,387.23	19,516.80
Jumlah/Total	34,349.11	5,880.65	3,032.39	956.90	356.51	44,575.56	13,642.57	7,033.99	79,912.21	9,764.44	197.63	11,847.40	122,398.24	166,973.80

JADUAL(TABLE) 14.2

MALAYSIA
 ANGGARAN NILAI BORONG IKAN TERNAKAN, KERANG, SIPUT SUDU , TIRAM DAN RUMPAI LAUT
 MENGIKUT NEGERI DAN SISTEM TERNAKAN, 1999
 ESTIMATED WHOLESAL VALUE OF FISH, COCKLES, MUSSELS, OYSTERS AND SEAWEEDS
 BY STATE AND CULTURE SYSTEM, 1999
 (NILAI DALAM RM ' 000/ VALUE IN RM ' 000)

Negeri State	Airtawar/Freshwater						Airpayau/Brackishwater							Jumlah Besar Grand Total
	Kolam Ponds	Bekas Lombong Ex-Mining Pools	Sangkar Cages	Tangki Simen Cement Tanks	Kandang Ikan Pen Culture	Jumlah Kecil Sub Total	Kolam Ponds	Sangkar Cages	Kerang Cockles	Siput Sudu Mussels	Tiram Oyster	Rumpai Laut Seaweed	Jumlah Kecil Sub Total	
Perlis	293.73	0.00	25.97	16.12	6.69	342.51	2,447.59	594.00	0.00	0.00	0.00	0.00	3,041.59	3,384.10
Kedah	2,811.48	10.83	51.70	25.18	44.93	2,944.12	13,110.59	3,239.46	146.20	13.39	110.88	0.00	16,620.52	19,564.64
Pulau Pinang	332.55	0.00	0.00	1.31	0.00	333.86	5,637.80	13,586.15	9,789.80	0.00	104.10	0.00	29,117.85	29,451.71
Perak	17,956.27	18,302.55	420.37	933.33	273.58	37,886.10	55,318.27	9,087.89	44,825.53	8.00	0.00	0.00	109,239.69	147,125.79
Selangor	18,288.24	1,700.28	253.15	1,787.11	0.00	22,028.78	32,478.90	18,708.48	7,023.77	0.00	0.00	0.00	58,211.15	80,239.93
Negeri Sembilan	7,289.49	368.31	1,813.21	76.68	0.00	9,547.69	5,715.18	0.00	0.00	24.17	0.00	0.00	5,739.35	15,287.04
Melaka	3,745.16	0.00	54.25	10.11	0.00	3,809.52	1,812.65	17.20	50.50	263.43	0.00	0.00	2,143.78	5,953.30
Johor	23,916.29	0.00	165.02	268.63	0.00	24,349.94	78,897.77	28,772.85	0.31	4,215.04	75.55	0.00	111,961.52	136,311.46
Pahang	90,073.59	115.50	5,705.76	68.23	0.00	95,963.08	60,436.99	60.58	0.00	0.00	0.00	0.00	60,497.57	156,460.65
Terengganu	2,169.16	0.00	6,354.55	211.26	0.00	8,734.97	3,725.01	1,035.19	0.00	0.00	883.82	0.00	5,644.02	14,378.99
Kelantan	2,447.31	0.00	132.21	315.81	1,312.92	4,208.25	1,622.28	1,380.54	0.00	0.00	40.49	0.00	3,043.31	7,251.56
Sarawak	4,082.44	0.00	621.99	0.00	0.00	4,704.43	49,387.89	439.80	0.00	0.00	0.00	0.00	49,827.69	54,532.12
Sabah	41,746.83	0.00	601.20	293.44	0.00	42,641.47	51,605.68	4,088.88	54.72	49.34	187.34	6,516.07	62,502.03	105,143.50
Jumlah/Total	215,152.54	20,497.47	16,199.38	4,007.21	1,638.12	257,494.72	362,196.60	81,011.02	61,890.83	4,573.37	1,402.18	6,516.07	517,590.07	775,084.79

MALAYSIA
 ANGGARAN NILAI RUNCIT IKAN TERNAKAN, KERANG, SIPUT SUDU, TIRAM DAN RUMPAI LAUT
 MENGIKUT NEGERI DAN SISTEM TERNAKAN, 1999
 ESTIMATED RETAIL VALUE OF FISH, COCKLES, MUSSELS, OYSTERS AND SEAWEEDS
 BY STATE AND CULTURE SYSTEM, 1999
 (NILAI DALAM RM ' 000/ VALUE IN RM ' 000)

Negeri State	Airtawar/Freshwater						Airpayau/Brackishwater							Jumlah Besar Grand Total
	Kolam Ponds	Bekas Lombong Ex-Mining Pools	Sangkar Cages	Tangki Simen Cement Tanks	Kandang Ikan Pen Culture	Jumlah Kecil Sub Total	Kolam Ponds	Sangkar Cages	Kerang Cockles	Siput Sudu Mussels	Tiram Oyster	Rumpai Laut Seaweed	Jumlah Kecil Sub Total	
Perlis	384.43	0.00	32.74	19.90	8.40	445.47	3,183.40	792.00	0.00	0.00	0.00	0.00	3,975.40	4,420.87
Kedah	4,219.02	14.84	69.24	40.50	60.20	4,403.80	15,606.38	3,879.13	233.92	20.38	166.31	0.00	19,906.12	24,309.92
Pulau Pinang	543.01	0.00	0.00	2.28	0.00	545.29	7,085.77	16,976.42	11,188.34	0.00	104.10	0.00	35,354.63	35,899.92
Perak	26,267.31	27,524.76	595.99	1,353.09	402.44	56,143.59	67,579.62	11,245.10	72,281.16	10.00	0.00	0.00	151,115.88	207,259.47
Selangor	26,215.34	2,370.26	340.25	2,405.50	0.00	31,331.35	37,162.08	22,969.23	11,353.49	0.00	0.00	0.00	71,484.80	102,816.15
Negeri Sembilan	11,155.56	595.35	2,980.48	141.97	0.00	14,873.36	6,582.82	0.00	0.00	29.48	0.00	0.00	6,612.30	21,485.66
Melaka	5,681.43	0.00	84.71	14.80	0.00	5,780.94	1,921.18	20.13	60.60	345.75	0.00	0.00	2,347.66	8,128.60
Johor	33,447.31	0.00	226.97	414.24	0.00	34,088.52	94,258.12	36,609.27	0.72	7,025.07	87.55	0.00	137,980.73	172,069.25
Pahang	115,745.83	151.97	6,647.82	83.39	0.00	122,629.01	80,583.77	83.99	0.00	0.00	0.00	0.00	80,667.76	203,296.77
Terengganu	2,881.54	0.00	8,507.48	290.89	0.00	11,679.91	4,344.15	1,256.24	0.00	0.00	1,020.10	0.00	6,620.49	18,300.40
Kelantan	3,227.20	0.00	172.68	440.38	1,714.99	5,555.25	1,831.79	1,652.62	0.00	0.00	50.88	0.00	3,535.29	9,090.54
Sarawak	6,473.12	0.00	1,174.87	0.00	0.00	7,647.99	59,357.00	656.40	0.00	0.00	0.00	0.00	60,013.40	67,661.39
Sabah	51,702.74	0.00	751.50	366.80	0.00	52,821.04	58,977.92	6,133.32	82.08	65.78	234.18	6,516.07	72,009.35	124,830.39
Jumlah/Total	287,943.84	30,657.18	21,584.73	5,573.74	2,186.03	347,945.52	438,474.00	102,273.85	95,200.31	7,496.46	1,663.12	6,516.07	651,623.81	999,569.33

JADUAL (TABLE) 14.4

MALAYSIA
 ANGGARAN PENGELUARAN IKAN DARI KOLAM AIRTAWAR, SANGKAR AIRTAWAR,
 BEKAS LOMBONG, TANGKI SIMEN DAN KANDANG MENGIKUT SPESIS IKAN, 1999
 ESTIMATED FISH PRODUCTION FROM FRESHWATER PONDS, FRESHWATER CAGES,
 EX-MINING POOLS, CEMENT TANKS AND PEN CULTURE BY FISH SPECIES, 1999
 (KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Spesis Species	Sistem Ternakan Culture system					Jumlah Total
	Kolam Airtawar Freshwater Ponds	Bekas Lombong Ex-Mining Pools	Sangkar Airtawar Freshwater Cages	Tangki Simen Cement Tanks	Kandang Pen Culture	
Lampam Jawa Javanese Carp	1,275.73	445.13	27.76	0.00	38.98	1,787.60
Lee Koh Common Carp	887.21	154.82	0.00	0.00	0.13	1,042.16
Kap Rumput Grass Carp	812.85	609.97	22.71	0.00	8.10	1,453.63
Kap Kepala Besar Big Head Carp	146.25	974.18	0.00	0.00	5.03	1,125.46
Udang Galah Giant Freshwater Prawn	652.58	0.00	0.00	0.00	0.00	652.58
Tilapia Hitam Black Tilapia	1,716.64	521.54	54.69	11.79	0.75	2,305.41
Tilapia Merah Red Tilapia	7,942.85	2,230.62	1,955.14	666.87	246.05	13,041.53
Jelawat River Carp	472.41	160.05	13.75	0.00	7.48	653.69
Keli Freshwater Catfish	8,931.85	4.50	0.00	259.97	0.61	9,196.93
Ketutu Goby	203.20	0.00	0.00	0.00	0.00	203.20
Belut Eel	1,500.00	0.00	0.00	0.00	0.00	1,500.00
Patin River Catfish	1,221.74	2.48	621.69	8.98	34.50	1,889.39
Toman Giant Snakehead	1,241.24	0.00	0.00	0.00	0.00	1,241.24
Baung River Catfish	371.10	21.80	279.41	0.00	9.13	681.44
Pelbagai Others	6,973.46	755.56	57.24	9.29	5.75	7,801.30
Jumlah Total	34,349.11	5,880.65	3,032.39	956.90	356.51	44,575.56

MALAYSIA

ANGGARAN NILAI BORONG PENGELUARAN IKAN DARI KOLAM AIRTAWAR, SANGKAR AIRTAWAR,
BEKAS LOMBONG, TANGKI SIMEN DAN KANDANG MENGIKUT SPESIS IKAN, 1999
ESTIMATED WHOLESALE VALUE OF FISH PRODUCTION FROM FRESHWATER PONDS, FRESHWATER CAGES,
EX-MINING POOLS, CEMENT TANKS AND PEN CULTURE BY FISH SPECIES, 1999
(NILAI DALAM RM ' 000/ VALUE IN RM ' 000)

Spesis Species	Sistem Ternakan Culture system					Jumlah Total
	Kolam Airtawar Freshwater Ponds	Bekas Lombong Ex-Mining Pools	Sangkar Airtawar Freshwater Cages	Tangki Simen Cement Tanks	Kandang Pen Culture	
Lampam Jawa Javanese Carp	6,758.22	1,846.59	125.91	0.00	188.81	8,919.53
Lee Koh Common Carp	6,060.63	619.28	0.00	0.00	0.53	6,680.44
Kap Rumput Grass Carp	4,031.07	2,680.70	94.81	0.00	35.64	6,842.22
Kap Kepala Besar Big Head Carp	484.43	2,463.99	0.00	0.00	12.63	2,961.05
Udang Galah Giant Freshwater Prawn	15,249.75	0.00	0.00	0.00	0.00	15,249.75
Tilapia Hitam Black Tilapia	12,464.23	1,563.78	337.91	90.72	2.22	14,458.86
Tilapia Merah Red Tilapia	40,377.86	8,425.40	8,491.00	2,919.97	1,103.61	61,317.84
Jelawat River Carp	3,253.06	970.23	90.77	0.00	45.74	4,359.80
Keli Freshwater Catfish	29,050.21	15.20	0.00	913.25	2.29	29,980.95
Ketutu Goby	7,162.59	0.00	0.00	0.00	0.00	7,182.59
Belut Eel	42,780.00	0.00	0.00	0.00	0.00	42,780.00
Patin River Catfish	6,822.26	19.62	4,724.60	41.46	154.90	11,762.84
Toman Giant Snakehead	8,365.66	0.00	0.00	0.00	0.00	8,365.66
Baung River Catfish	3,298.64	176.18	2,128.75	0.00	78.05	5,681.62
Pelbagai Others	28,973.93	1,716.50	205.63	41.81	13.70	30,951.57
Jumlah Total	215,152.54	20,497.47	16,199.38	4,007.21	1,638.12	257,494.72

MALAYSIA

ANGGARAN NILAI RUNCIT PENGELUARAN IKAN DARI KOLAM AIRTAWAR, SANGKAR AIRTAWAR,
BEKAS LOMBONG, TANGKI SIMEN DAN KANDANG MENGIKUT SPESIS IKAN, 1999
ESTIMATED RETAIL VALUE OF FISH PRODUCTION FROM FRESHWATER PONDS, FRESHWATER CAGES,
EX-MINING POOLS, CEMENT TANKS AND PEN CULTURE BY FISH SPECIES, 1999
(NILAI DALAM RM ' 000/VALUE IN RM ' 000)

Spesis Species	Sistem Ternakan Culture system					Jumlah Total
	Kolam Airtawar Freshwater Ponds	Bekas Lombong Ex-Mining Pools	Sangkar Airtawar Freshwater Cages	Tangki Simen Cement Tanks	Kandang Pen Culture	
Lampam Jawa Javanese Carp	8,971.26	2,605.45	164.68	0.00	246.87	11,988.26
Lee Koh Common Carp	7,856.65	933.49	0.00	0.00	0.79	8,790.93
Kap Rumpot Grass Carp	5,602.93	4,004.93	141.50	0.00	53.38	9,802.74
Kap Kepala Besar Big Head Carp	731.01	4,045.32	0.00	0.00	20.77	4,797.10
Udang Galah Giant Freshwater Prawn	18,053.27	0.00	0.00	0.00	0.00	18,053.27
Tilapia Hitam Black Tilapia	15,712.39	2,340.18	434.34	114.27	3.36	18,604.54
Tilapia Merah Red Tilapia	54,038.96	12,135.17	11,983.62	3,977.45	1,463.21	83,598.41
Jelawat River Carp	4,565.17	1,386.23	129.34	0.00	65.16	6,145.90
Keli Freshwater Catfish	43,678.24	22.60	0.00	1,371.63	3.23	45,075.70
Ketutu Goby	8,343.05	0.00	0.00	0.00	0.00	8,343.05
Belut Eel	57,045.00	0.00	0.00	0.00	0.00	57,045.00
Patin River Catfish	9,216.29	22.52	5,498.17	55.31	209.02	15,001.31
Toman Giant Snakehead	11,121.66	0.00	0.00	0.00	0.00	11,121.66
Baung River Catfish	4,362.63	238.92	2,935.52	0.00	98.41	7,635.48
Pelbagai Others	38,645.33	2,922.37	297.56	55.08	21.83	41,942.17
Jumlah Total	287,943.84	30,657.18	21,584.73	5,573.74	2,186.03	347,945.52

MALAYSIA
 ANGGARAN PENGELUARAN IKAN DARI KOLAM AIRPAYAU, SANGKAR AIRPAYAU,
 TERNAKAN KERANG, TERNAKAN SIPUT SUDU, TERNAKAN TIRAM DAN TERNAKAN RUMPAI LAUT MENGIKUT SPESIS IKAN, 1999
 ESTIMATED FISH PRODUCTION FROM BRACKISHWATER PONDS, BRACKISHWATER CAGES,
 COCKLE CULTURE, MUSSEL CULTURE, OYSTER CULTURE AND SEAWEED CULTURE BY FISH SPECIES, 1999
 (KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Spesis Species	Sistem Ternakan Culture system						Jumlah Total
	Kolam Airpayau Brackishwater Ponds	Sangkar airpayau Brackishwater Cages	Kerang Cockles	Siput Sudu Mussels	Tiram Oysters	Rumpai Laut (Basah) Seaweed (wet)	
Siakap Barramundi	989.38	2,149.18	0.00	0.00	0.00	0.00	3,138.56
Siakap Merah Mangrove Red Snapper	0.00	2,070.95	0.00	0.00	0.00	0.00	2,070.95
Kerapu Grouper	70.23	878.14	0.00	0.00	0.00	0.00	948.37
Jenahak Mangrove Snapper	221.87	1,092.76	0.00	0.00	0.00	0.00	1,314.63
Udang Putih Banana Prawn	454.30	0.00	0.00	0.00	0.00	0.00	454.30
Udang Harimau Tiger Prawn	11,733.05	0.00	0.00	0.00	0.00	0.00	11,733.05
Ketam Mud Crab	29.27	151.79	0.00	0.00	0.00	0.00	181.06
Ketam Telur Berried crabs	0.00	6.24	0.00	0.00	0.00	0.00	6.24
Tilapia Merah Red Tilapia	36.83	58.72	0.00	0.00	0.00	0.00	95.55
Merah Red Snapper	0.00	173.95	0.00	0.00	0.00	0.00	173.95
Kerang Dewasa Cockles	0.00	0.00	79,912.21	0.00	0.00	0.00	79,912.21
Siput sudu Mussels	0.00	0.00	0.00	9,764.44	0.00	0.00	9,764.44
Tiram Oysters	0.00	0.00	0.00	0.00	197.63	0.00	197.63
Rumpai laut Seaweed	0.00	0.00	0.00	0.00	0.00	11,847.40	11,847.40
Pelbagai Others	107.64	452.26	0.00	0.00	0.00	0.00	559.90
Jumlah Total	13,642.57	7,033.99	79,912.21	9,764.44	197.63	11,847.40	122,398.24

MALAYSIA
 ANGGARAN NILAI BORONG PENGELUARAN IKAN DARI KOLAM AIRPAYAU, SANGKAR AIRPAYAU,
 TERNAKAN KERANG, TERNAKAN SIPUT SUDU, TERNAKAN TIRAM DAN TERNAKAN RUMPAI LAUT MENGIKUT SPESIS IKAN, 1999
 ESTIMATED WHOLESALE VALUE OF FISH PRODUCTION FROM BRACKISHWATER PONDS, BRACKISHWATER CAGES,
 COCKLE CULTURE, MUSSEL CULTURE, OYSTER CULTURE AND SEAWEED CULTURE BY FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/ VALUE IN RM ' 000)

Spesis Species	Sistem Ternakan Culture system						Jumlah Total
	Kolam Airpayau Brackishwater Ponds	Sangkar airpayau Brackishwater Cages	Kerang Cockles	Siput Sudu Mussels	Tiram Oysters	Rumpai Laut (basah) Seaweed (wet)	
Siakap Barramundi	12,227.86	24,867.13	0.00	0.00	0.00	0.00	37,094.99
Siakap Merah Mangrove Red Snapper	0.00	16,020.72	0.00	0.00	0.00	0.00	16,020.72
Kerapu Grouper	1,898.20	14,369.29	0.00	0.00	0.00	0.00	16,267.49
Jenahak Mangrove Snapper	2,981.80	14,419.80	0.00	0.00	0.00	0.00	17,401.60
Udang Putih Banana Prawn	14,645.40	0.00	0.00	0.00	0.00	0.00	14,645.40
Udang Harimau Tiger Prawn	328,092.52	0.00	0.00	0.00	0.00	0.00	328,092.52
Ketam Mud Crab	291.67	1,906.39	0.00	0.00	0.00	0.00	2,198.06
Ketam Telur Berried crabs	0.00	71.70	0.00	0.00	0.00	0.00	71.70
Tilapia Merah Red Tilapia	190.46	287.83	0.00	0.00	0.00	0.00	478.29
Merah Red Snapper	0.00	2,338.71	0.00	0.00	0.00	0.00	2,338.71
Kerang Dewasa Cockles	0.00	0.00	61,890.83	0.00	0.00	0.00	61,890.83
Siput sudu Mussels	0.00	0.00	0.00	4,573.37	0.00	0.00	4,573.37
Tiram Oysters	0.00	0.00	0.00	0.00	1,402.18	0.00	1,402.18
Rumpai laut Seaweed	0.00	0.00	0.00	0.00	0.00	6,516.07	6,516.07
Pelbagai Others	1,868.69	6,729.45	0.00	0.00	0.00	0.00	8,598.14
Jumlah Total	362,196.60	81,011.02	61,890.83	4,573.37	1,402.18	6,516.07	517,590.07

MALAYSIA

ANGGARAN NILAI RUNCIT PENGELUARAN IKAN DARI KOLAM AIRPAYAU, SANGKAR AIRPAYAU,
TERNAKAN KERANG, TERNAKAN SIPUT SUDU, TERNAKAN TIRAM DAN TERNAKAN RUMPAI LAUT MENGIKUT SPESIS IKAN, 1999
ESTIMATED RETAIL VALUE OF FISH PRODUCTION FROM BRACKISHWATER PONDS, BRACKISHWATER CAGES,
COCKLE CULTURE, MUSSEL CULTURE, OYSTER CULTURE AND SEAWEED CULTURE BY FISH SPECIES, 1999
(NILAI DALAM RM ' 000/ VALUE IN RM ' 000)

Spesis Species	Sistem Ternakan Culture system						Jumlah Total
	Kolam Airpayau Brackishwater Ponds	Sangkar airpayau Brackishwater Cages	Kerang Cockles	Siput Sudu Mussels	Tiram Oysters	Rumpai Laut (basah) Seaweed (wet)	
Siakap Barramundi	15,483.47	31,619.27	0.00	0.00	0.00	0.00	47,102.74
Siakap Merah Mangrove Red Snapper	0.00	20,198.22	0.00	0.00	0.00	0.00	20,198.22
Kerapu Grouper	2,390.98	18,479.97	0.00	0.00	0.00	0.00	20,870.95
Jenahak Mangrove Snapper	3,854.24	18,269.90	0.00	0.00	0.00	0.00	22,124.14
Udang Putih Banana Prawn	17,183.86	0.00	0.00	0.00	0.00	0.00	17,183.86
Udang Harimau Tiger Prawn	396,677.88	0.00	0.00	0.00	0.00	0.00	396,677.88
Ketam Mud Crab	401.07	2,440.78	0.00	0.00	0.00	0.00	2,841.85
Ketam Telur Berried crabs	0.00	120.24	0.00	0.00	0.00	0.00	120.24
Tilapia Merah Red Tilapia	249.56	360.92	0.00	0.00	0.00	0.00	610.48
Merah Red Snapper	0.00	2,882.69	0.00	0.00	0.00	0.00	2,882.69
Kerang Dewasa Cockles	0.00	0.00	95,200.31	0.00	0.00	0.00	95,200.31
Siput sudu Mussels	0.00	0.00	0.00	7,496.46	0.00	0.00	7,496.46
Tiram Oysters	0.00	0.00	0.00	0.00	1,663.12	0.00	1,663.12
Rumpai laut Seaweed	0.00	0.00	0.00	0.00	0.00	6,516.07	6,516.07
Pelbagai Others	2,232.94	7,901.86	0.00	0.00	0.00	0.00	10,134.80
Jumlah Total	438,474.00	102,273.85	95,200.31	7,496.46	1,663.12	6,516.07	651,623.81

JADUAL(TABLE) 15.1

MALAYSIA
BILANGAN DAN LUAS KOLAM AIRTAWAR YANG DIUSAHAKAN
SERTA BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1999
NUMBER AND AREA OF FRESHWATER PONDS IN OPERATION AND
NUMBER OF CULTURISTS BY RACE AND STATE, 1999

Negeri State	Kolam Airtawar <i>Freshwater Ponds</i>		Bilangan Penternak <i>No. Of Culturists</i>				
	Bilangan <i>Number</i>	Luas (ha) <i>Area(ha)</i>	Melayu <i>Malay</i>	Cina <i>Chinese</i>	India <i>Indian</i>	Lain-Lain <i>Others</i>	Jumlah <i>Total</i>
Perlis	193	27.49	109	2	0	1	112
Kedah	1,516	181.40	558	15	0	13	586
Pulau Pinang	98	18.63	28	5	0	3	36
Perak	2,573	718.12	1,007	192	9	22	1,230
Selangor	2,089	495.69	386	163	34	78	661
Negeri Sembilan	1,752	412.57	825	172	9	12	1,018
Melaka	526	113.02	226	48	1	0	275
Johor	2,267	289.95	248	143	3	32	426
Pahang	2,813	998.02	1,262	128	4	25	1,419
Terengganu	1,369	112.45	690	4	0	0	694
Kelantan	2,073	214.27	1,394	6	0	9	1,409
Sarawak	1,332	104.63	42	88	0	806	936
Sabah	14,937	1,433.64	91	837	2	4,214	5,144
Jumlah/Total	33,538	5,119.88	6,866	1,803	62	5,215	13,946

JADUAL(TABLE) 15.2

MALAYSIA
 ANGGARAN PENGELUARAN IKAN DARI KOLAM AIRTAWAR
 MENGIKUT NEGERI DAN SPESIS IKAN, 1999
 ESTIMATED FISH PRODUCTION FROM FRESHWATER PONDS
 BY STATE AND FISH SPECIES,1999
 (KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Negeri State	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Kap Rumput Grass Carp	Kap Kepala Besar Big Head Carp	Udang Galah Giant Fresh- water Prawn	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Keli Freshwater Catfish	Ketutu Goby	Belut Eel	Patin River Catfish	Toman Giant SnakeHead	Baung River Catfish	Pelbagai Miscellaneous	Jumlah Total
Perlis	0.00	0.00	0.00	0.00	0.00	3.43	20.47	0.60	56.80	0.00	0.00	0.00	0.00	0.00	8.66	89.96
Kedah	53.72	8.52	9.00	0.00	5.07	22.77	134.98	15.54	482.30	0.00	0.00	1.18	0.00	1.48	69.16	803.72
Pulau Pinang	5.75	2.94	0.00	0.00	0.38	0.00	13.30	0.00	87.88	0.00	0.00	0.00	0.00	0.00	0.43	110.68
Perak	441.12	180.87	393.51	111.50	59.57	20.08	1,578.83	114.97	1,435.50	0.00	0.00	0.00	0.00	42.16	229.53	4,607.64
Selangor	22.84	24.36	38.80	0.43	0.40	51.90	559.47	6.26	3,408.55	0.10	0.00	244.73	0.00	182.58	459.47	4,999.89
Negeri Sembilan	69.84	11.53	37.41	0.00	82.86	10.37	950.28	3.83	211.06	0.62	0.00	0.00	0.00	0.30	60.35	1,438.45
Melaka	33.85	2.57	4.37	0.14	6.15	71.49	48.40	7.63	701.40	3.86	0.00	2.51	0.00	0.00	168.20	1,050.57
Johor	5.97	79.50	73.66	3.26	8.42	24.46	576.55	0.00	2,019.54	51.32	0.00	307.47	1,211.33	123.54	229.72	4,714.74
Pahang	166.98	89.55	185.39	24.92	487.60	2.07	1,503.83	33.31	50.79	67.82	1,500.00	104.12	29.91	0.00	5,610.76	9,857.05
Terengganu	38.01	18.28	13.69	2.58	2.13	36.85	196.71	11.67	80.64	0.00	0.00	30.63	0.00	19.27	7.57	458.03
Kelantan	66.23	14.79	20.66	0.57	0.00	43.88	150.30	59.65	51.46	0.54	0.00	29.86	0.00	1.77	41.71	481.42
Sarawak	90.46	90.41	0.00	0.00	0.00	0.39	147.17	217.85	29.54	0.00	0.00	55.50	0.00	0.00	87.90	719.22
Sabah	280.96	363.89	36.36	2.85	0.00	1,428.95	2,062.56	1.10	316.39	78.94	0.00	445.74	0.00	0.00	0.00	5,017.74
Jumlah/Total	1,275.73	887.21	812.85	146.25	652.58	1,716.64	7,942.85	472.41	8,931.85	203.20	1,500.00	1,221.74	1,241.24	371.10	6,973.46	34,349.11

Nota: Pelbagai - Termasuk ikan Haruan, Sepat Siam dan lain lain

Note: Miscellaneous - Includes Snake Head, Snakeskin Gouramy and Others

MALAYSIA
 ANGARAN NILAI BORONG PENGELUARAN IKAN DARI KOLAM AIRTAWAR
 MENGIKUT NEGERI DAN SPESIS IKAN 1999
 ESTIMATED WHOLESALE VALUE OF FISH PRODUCTION FROM FRESHWATER PONDS
 BY STATE AND FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/VALUE IN RM '000)

Negeri State	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Kap Rumput Grass Carp	Kap Kepala Besar Big Head Carp	Udang Galah Giant Fresh- water Prawn	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Keli Freshwater Catfish	Ketutu Goby	Belut Eel	Patin River Catfish	Toman Giant SnakeHead	Baung River Catfish	Pelbagai Miscell- aneous	Jumlah Total
Perlis	0.00	0.00	0.00	0.00	0.00	12.01	81.88	3.46	170.40	0.00	0.00	0.00	0.00	0.00	25.98	293.73
Kedah	210.58	39.45	42.75	0.00	101.40	81.52	516.97	135.35	1,446.90	0.00	0.00	9.91	0.00	10.18	216.47	2,811.48
Pulau Pinang	22.48	7.94	0.00	0.00	8.99	0.00	52.27	0.00	239.03	0.00	0.00	0.00	0.00	0.00	1.84	332.55
Perak	1,813.00	723.48	1,731.44	279.87	1,649.49	59.44	5,810.09	695.57	4,363.92	0.00	0.00	0.00	0.00	341.07	488.90	17,956.27
Selangor	123.79	97.44	179.64	1.17	9.67	173.35	2,579.16	42.63	11,418.64	4.78	0.00	616.72	0.00	1,593.92	1,447.33	18,288.24
Negeri Sembilan	265.39	45.43	152.63	0.00	2,415.37	32.98	3,506.53	18.96	679.61	19.13	0.00	0.00	0.00	2.58	150.88	7,289.49
Melaka	124.57	11.31	15.95	0.31	148.89	233.77	205.22	32.81	2,020.03	119.66	0.00	6.78	0.00	0.00	825.86	3,745.16
Johor	22.03	373.65	478.79	26.08	197.03	84.88	2,513.76	0.00	6,240.38	2,307.86	0.00	1,202.21	8,188.59	1,192.16	1,088.87	23,916.29
Pahang	879.98	419.09	880.60	127.84	10,683.32	6.21	6,361.20	449.69	177.77	2,349.28	42,780.00	823.59	177.07	0.00	23,957.95	90,073.59
Terengganu	166.86	80.43	67.08	12.33	35.59	158.46	889.13	80.76	329.01	0.00	0.00	183.47	0.00	143.56	22.48	2,169.16
Kelantan	339.10	81.05	118.59	2.63	0.00	188.25	698.90	472.43	205.33	13.68	0.00	136.16	0.00	15.17	176.02	2,447.31
Sarawak	542.76	542.46	0.00	0.00	0.00	1.76	662.27	1,307.10	177.24	0.00	0.00	277.50	0.00	0.00	571.35	4,082.44
Sabah	2,247.68	3,638.90	363.60	34.20	0.00	11,431.60	16,500.48	14.30	1,581.95	2,368.20	0.00	3,565.92	0.00	0.00	0.00	41,746.83
Jumlah/Total	6,758.22	6,060.63	4,031.07	484.43	15,249.75	12,464.23	40,377.86	3,253.06	29,050.21	7,182.59	42,780.00	6,822.26	8,365.66	3,298.64	28,973.93	215,152.54

Nota: Pelbagai - Termasuk Ikan Haruan, Sepat Siam dan Lain - lain

Note: Miscellaneous - Includes Snake Head, Snake skin Gouramy and Others.

MALAYSIA
 ANGGARAN NILAI RUNCIT PENGELUARAN IKAN DARI KOLAM AIRTAWAR
 MENGIKUT NEGERI DAN SPESIS IKAN 1999
 ESTIMATED RETAIL VALUE OF FISH PRODUCTION FROM FRESHWATER PONDS
 BY STATE AND FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/VALUE IN RM '000)

Negeri State	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Kap Rumput Grass Carp	Kap Kepala Besar Big Head Carp	Udang Galah Giant Fresh- water Prawn	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Keli Freshwater Catfish	Ketutu Goby	Belut Eel	Patin River Catfish	Toman Giant SnakeHead	Baung River Catfish	Pelbagai Miscell- aneous	Jumlah Total
Perlis	0.00	0.00	0.00	0.00	0.00	15.44	102.35	4.80	227.20	0.00	0.00	0.00	0.00	0.00	34.64	384.43
Kedah	284.18	58.62	64.89	0.00	124.62	108.16	692.45	185.86	2,387.39	0.00	0.00	13.22	0.00	14.00	285.63	4,219.02
Pulau Pinang	30.36	8.82	0.00	0.00	12.01	0.00	71.82	0.00	417.43	0.00	0.00	0.00	0.00	0.00	2.57	543.01
Perak	2,567.32	1,088.84	2,593.23	460.50	2,063.50	89.96	8,415.16	994.49	6,689.43	0.00	0.00	0.00	0.00	462.50	842.38	26,267.31
Selangor	160.79	155.42	240.95	1.72	11.54	236.15	3,446.34	56.59	16,395.13	5.87	0.00	1,020.52	0.00	2,099.67	2,384.65	26,215.34
Negeri Sembilan	440.69	73.79	229.32	0.00	2,985.45	54.65	5,777.70	32.71	1,260.03	26.51	0.00	0.00	0.00	3.74	270.97	11,155.56
Melaka	178.05	14.52	21.81	0.41	180.13	305.96	265.72	42.42	3,212.41	165.59	0.00	11.02	0.00	0.00	1,283.37	5,681.43
Johor	32.00	546.96	552.45	29.34	234.24	136.00	3,534.25	0.00	9,915.94	2,759.99	0.00	1,850.97	10,889.86	1,564.02	1,401.29	33,447.31
Pahang	1,056.98	559.69	1,219.87	180.67	12,394.79	9.32	7,774.80	557.94	304.74	2,605.64	57,045.00	945.41	231.80	0.00	30,859.18	115,745.83
Terengganu	207.91	107.30	86.25	15.17	46.99	213.36	1,166.49	100.01	454.81	0.00	0.00	247.80	0.00	199.64	35.81	2,881.54
Kelantan	434.47	107.52	157.84	3.30	0.00	250.55	915.33	613.20	293.84	16.55	0.00	181.55	0.00	19.06	233.99	3,227.20
Sarawak	768.91	768.49	0.00	0.00	0.00	3.32	1,250.95	1,960.65	221.55	0.00	0.00	488.40	0.00	0.00	1,010.85	6,473.12
Sabah	2,809.60	4,366.68	436.32	39.90	0.00	14,289.50	20,625.60	16.50	1,898.34	2,762.90	0.00	4,457.40	0.00	0.00	0.00	51,702.74
Jumlah/Total	8,971.26	7,856.65	5,602.93	731.01	18,053.27	15,712.39	54,038.96	4,565.17	43,678.24	8,343.05	57,045.00	9,216.29	11,121.66	4,362.63	38,645.33	287,943.84

Nota: Pelbagai - Termasuk Ikan Haruan, Sepat Siam dan Lain - lain

Note: Miscellaneous - Includes Snake Head, Snake skin Gouramy and Others.

JADUAL(TABLE) 16.1

MALAYSIA
 BILANGAN DAN LUAS BEKAS LOMBONG YANG DIUSAHAKAN
 SERTA BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1999
 NUMBER AND AREA OF EX-MINING POOLS IN OPERATION AND
 NUMBER OF CULTURISTS BY RACE AND STATE, 1999

Negeri State	Bekas Lombong Ex-Mining Pools		Bilangan Penternak No. Of Culturists				
	Bilangan Number	Luas (ha) Area(ha)	Melayu Malay	Cina Chinese	India Indian	Lain-Lain Others	Jumlah Total
Perlis	0	0.00	0	0	0	0	0
Kedah	1	4.10	0	1	0	0	1
Pulau Pinang	0	0.00	0	0	0	0	0
Perak	262	1,086.59	51	102	0	10	163
Selangor	109	216.38	36	14	1	6	57
Negeri Sembilan	9	14.75	0	9	0	0	9
Melaka	0	0.00	0	0	0	0	0
Johor	0	0.00	0	0	0	0	0
Pahang	9	280.00	235	0	0	0	235
Terengganu	0	0.00	0	0	0	0	0
Kelantan	0	0.00	0	0	0	0	0
Sarawak	0	0.00	0	0	0	0	0
Sabah	0	0.00	0	0	0	0	0
Jumlah/Total	390	1,601.82	322	126	1	16	465

MALAYSIA
 ANGGARAN PENGELUARAN IKAN DARI BEKAS LOMBONG
 MENGIKUT NEGERI DAN SPESIS IKAN, 1999
 ESTIMATED FISH PRODUCTION FROM EX-MINING POOLS
 BY STATE AND FISH SPECIES, 1999
 (KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Negeri State	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Kap Rumput Grass Carp	Kap Kepala Besar Big Head Carp	Patin River Catfish	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Keli Freshwater Catfish	Baung River Catfish	Pelbagai Miscellaneous	Jumlah 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
Kedah	1.00	0.00	0.19	0.00	0.00	0.00	0.30	0.35	0.00	0.15	0.25	2.24
Pulau Pinang	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Perak	430.78	150.72	571.73	956.78	0.00	468.86	1,925.66	158.66	0.00	21.65	658.56	5,343.40
Selangor	11.99	4.10	11.72	7.49	0.00	52.68	231.56	1.01	3.70	0.00	89.40	413.65
Negeri Sembilan	0.00	0.00	22.60	3.72	0.00	0.00	72.00	0.00	0.00	0.00	0.00	98.32
Melaka	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	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	1.36	0.00	3.73	6.19	2.48	0.00	1.10	0.03	0.80	0.00	7.35	23.04
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
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
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
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
Jumlah/Total	445.13	154.82	609.97	974.18	2.48	521.54	2,230.62	160.05	4.50	21.80	755.56	5,880.65

Nota: Pelbagai-Termasuk Ikan Haruan, Sepat Siam dan lain Lain

Note: Miscellaneous-Includes SnakeHead, Snakeskin Gouramy and others

MALAYSIA
 ANGGARAN NILAI BORONG PENGELUARAN IKAN DARI BEKAS LOMBONG
 MENGIKUT NEGERI DAN SPESIS IKAN 1999
 ESTIMATED WHOLESALE VALUE OF FISH PRODUCTION FROM EX-MINING POOLS
 BY STATE AND FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/VALUE IN RM ' 000)

Negeri State	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Kap Rumput Grass Carp	Kap Kepala Besar Big Head Carp	Baung River Catfish	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Keli Freshwater Catfish	Patin River Catfish	Pelbagai Miscell- aneous	Jumlah 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
Kedah	3.92	0.00	0.90	0.00	1.03	0.00	1.15	3.05	0.00	0.00	0.78	10.83
Pulau Pinang	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Perak	1,770.51	602.88	2,515.61	2,401.52	175.15	1,387.83	7,086.43	959.89	0.00	0.00	1,402.73	18,302.55
Selangor	64.99	16.40	54.26	20.30	0.00	175.95	1,067.49	6.88	12.40	0.00	281.61	1,700.28
Negeri Sembilan	0.00	0.00	92.21	10.42	0.00	0.00	265.68	0.00	0.00	0.00	0.00	368.31
Melaka	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	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	7.17	0.00	17.72	31.75	0.00	0.00	4.65	0.41	2.80	19.62	31.38	115.50
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
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
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
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
Jumlah/Total	1,846.59	619.28	2,680.70	2,463.99	176.18	1,563.78	8,425.40	970.23	15.20	19.62	1,716.50	20,497.47

Nota: Pelbag

am dan Lain - lain

Note: Miscellaneous - Includes Snake Head, Snake skin Gouramy and Others.

MALAYSIA
 ANGGARAN NILAI RUNCIT PENGELUARAN IKAN DARI BEKAS LOMBONG
 MENGIKUT NEGERI DAN SPESIS IKAN 1999
 ESTIMATED RETAIL VALUE OF FISH PRODUCTION FROM EX-MINING POOLS
 BY STATE AND FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/VALUE IN RM ' 000)

Negeri State	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Kap Rumput Grass Carp	Kap Kepala Besar Big Head Carp	Baung River Catfish	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Keli Freshwater Catfish	Patin River Catfish	Pelbagai Miscell- aneous	Jumlah 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
Kedah	5.29	0.00	1.37	0.00	1.42	0.00	1.54	4.19	0.00	0.00	1.03	14.84
Pulau Pinang	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Perak	2,507.14	907.33	3,767.70	3,951.50	237.50	2,100.49	10,263.77	1,372.41	0.00	0.00	2,416.92	27,524.76
Selangor	84.41	26.16	72.78	29.89	0.00	239.69	1,426.41	9.13	17.80	0.00	463.99	2,370.26
Negeri Sembilan	0.00	0.00	138.54	19.05	0.00	0.00	437.76	0.00	0.00	0.00	0.00	595.35
Melaka	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	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	8.61	0.00	24.54	44.88	0.00	0.00	5.69	0.50	4.80	22.52	40.43	151.97
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
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
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
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
Jumlah/Total	2,605.45	933.49	4,004.93	4,045.32	238.92	2,340.18	12,135.17	1,386.23	22.60	22.52	2,922.37	30,657.18

Nota: Pelbagai - Termasuk Ikan Haruan, Sepat Siam dan Lain - lain

Note: Miscellaneous - Includes Snake Head, Snake skin Gouramy and Others.

JADUAL(TABLE) 17.1

MALAYSIA
BILANGAN DAN LUAS SANGKAR AIRTAWAR YANG DIUSAHAKAN
SERTA BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1999
NUMBER AND AREA OF FRESHWATER CAGES IN OPERATION AND
NUMBER OF CULTURISTS BY RACE AND STATE, 1999

Negeri State	Sangkar Airtawar <i>Freshwater Cages</i>		Bilangan Penternak <i>No. Of Culturists</i>				
	Bilangan <i>Number</i>	Luas (M ²) <i>Area(M²)</i>	Melayu <i>Malay</i>	Cina <i>Chinese</i>	India <i>Indian</i>	Lain-Lain <i>Others</i>	Jumlah <i>Total</i>
Perlis	68	612.00	5	0	0	2	7
Kedah	125	1,395.73	11	0	0	1	12
Pulau Pinang	9	67.00	2	0	0	0	2
Perak	564	7,200.00	47	3	0	0	50
Selangor	583	11,297.46	2	4	0	3	9
Negeri Sembilan	1,020	14,682.00	1	4	0	0	5
Melaka	291	6,314.00	1	2	0	0	3
Johor	260	2,861.41	7	1	1	2	11
Pahang	2956	35,824.73	664	3	0	39	706
Terengganu	1404	28,349.48	180	4	0	1	185
Kelantan	255	6,295.40	56	0	0	0	56
Sarawak	967	26,839.00	0	0	0	468	468
Sabah	12	86.40	0	0	0	3	3
Jumlah/Total	8,514	141,824.61	976	21	1	519	1,517

JADUAL(TABLE)17.2

MALAYSIA
ANGGARAN PENGELUARAN IKAN DARI SANGKAR AIRTAWAR
MENGIKUT NEGERI DAN SPESIS IKAN, 1999
ESTIMATED FISH PRODUCTION FROM FRESHWATER CAGES
BY STATE AND FISH SPECIES,1999
(KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Negeri State	Lampam Jawa Javanese Carp	Lee Koh Commom Carp	Kap Rumput Grass Carp	Kap Kepala Besar Big Head Carp	Ketutu Goby	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Patin River Catfish	Toman Giant Snakehead	Baung River Catfish	Pelbagai Miscellaneous	Jumlah Total
Perlis	0.00	0.00	0.00	0.00	0.00	0.00	5.66	0.00	0.00	0.00	0.00	1.11	6.77
Kedah	0.00	0.00	0.00	0.00	0.00	0.17	13.34	0.00	0.00	0.00	0.00	0.00	13.51
Pulau Pinang	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
Perak	4.36	0.00	3.10	0.00	0.00	0.08	47.34	4.50	3.54	0.00	20.94	2.27	86.13
Selangor	4.13	0.00	0.00	0.00	0.00	1.18	46.80	0.34	1.26	0.00	0.00	1.77	55.48
Negeri Sembilan	2.50	0.00	18.17	0.00	0.00	0.00	456.30	4.82	6.76	0.00	0.00	0.00	488.55
Melaka	0.00	0.00	0.00	0.00	0.00	0.00	1.68	0.00	11.60	0.00	0.00	3.22	16.50
Johor	0.00	0.00	0.00	0.00	0.00	0.00	19.99	0.40	3.59	0.00	3.98	4.74	32.70
Pahang	2.26	0.00	1.24	0.00	0.00	5.47	249.89	1.35	565.10	0.00	4.16	17.10	846.57
Terengganu	13.82	0.00	0.00	0.00	0.00	16.81	913.95	2.34	24.61	0.00	247.97	26.79	1,246.29
Kelantan	0.69	0.00	0.20	0.00	0.00	0.92	16.88	0.00	5.23	0.00	2.36	0.24	26.52
Sarawak	0.00	0.00	0.00	0.00	0.00	0.00	138.22	0.00	0.00	0.00	0.00	0.00	138.22
Sabah	0.00	0.00	0.00	0.00	0.00	30.06	45.09	0.00	0.00	0.00	0.00	0.00	75.15
Jumlah/Total	27.76	0.00	22.71	0.00	0.00	54.69	1,955.14	13.75	621.69	0.00	279.41	57.24	3,032.39

Nota: Pelbagai-Termasuk Ikan Haruan, Sepat siam dan lain Lain

Note: Micellaneous-Includes SnakeHead, Snakeskin Gouramy and others

MALAYSIA
 ANGGARAN NILAI BORONG PENGELUARAN IKAN DARI SANGKAR AIRTAWAR
 MENGIKUT NEGERI DAN SPESIS IKAN 1999
 ESTIMATED WHOLESALE VALUE OF FISH PRODUCTION FROM FRESHWATER CAGES
 BY STATE AND FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/VALUE IN RM ' 000)

Negeri State	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Kap Rumput Grass Carp	Kap Kepala Besar Big Head Carp	Ketutu Goby	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Patin River Catfish	Toman Giant Snakehead	Baung River Catfish	Pelbagai Miscell- aneous	Jumlah Total
Perlis	0.00	0.00	0.00	0.00	0.00	0.00	22.64	0.00	0.00	0.00	0.00	3.33	25.97
Kedah	0.00	0.00	0.00	0.00	0.00	0.61	51.09	0.00	0.00	0.00	0.00	0.00	51.70
Pulau Pinang	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
Perak	17.92	0.00	13.64	0.00	0.00	0.24	174.21	27.23	12.89	0.00	169.40	4.84	420.37
Selangor	22.38	0.00	0.00	0.00	0.00	3.94	215.75	2.32	3.18	0.00	0.00	5.58	253.15
Negeri Sembilan	9.50	0.00	74.13	0.00	0.00	0.00	1,683.75	23.86	21.97	0.00	0.00	0.00	1,813.21
Melaka	0.00	0.00	0.00	0.00	0.00	0.00	7.12	0.00	31.32	0.00	0.00	15.81	54.25
Johor	0.00	0.00	0.00	0.00	0.00	0.00	87.16	2.94	14.04	0.00	38.41	22.47	165.02
Pahang	11.91	0.00	5.89	0.00	0.00	16.41	1,057.03	18.23	4,469.94	0.00	53.33	73.02	5,705.76
Terengganu	60.67	0.00	0.00	0.00	0.00	72.28	4,131.05	16.19	147.41	0.00	1,847.38	79.57	6,354.55
Kelantan	3.53	0.00	1.15	0.00	0.00	3.95	78.49	0.00	23.85	0.00	20.23	1.01	132.21
Sarawak	0.00	0.00	0.00	0.00	0.00	0.00	621.99	0.00	0.00	0.00	0.00	0.00	621.99
Sabah	0.00	0.00	0.00	0.00	0.00	240.48	360.72	0.00	0.00	0.00	0.00	0.00	601.20
Jumlah/Total	125.91	0.00	94.81	0.00	0.00	337.91	8,491.00	90.77	4,724.60	0.00	2,128.75	205.63	16,199.38

Nota: Pelbagai - Termasuk Ikan Haruan, Sepat Siam dan Lain - lain
 Note: Miscellaneous - Includes Snake Head, Snake skin Gouramy and Others.

MALAYSIA
ANGGARAN NILAI RUNCIT PENGELUARAN IKAN DARI SANGKAR AIRTAWAR
MENGIKUT NEGERI DAN SPESIS IKAN 1999
ESTIMATED RETAIL VALUE OF FISH PRODUCTION FROM FRESHWATER CAGES
BY STATE AND FISH SPECIES, 1999
(NILAI DALAM RM ' 000/VALUE IN RM ' 000)

Negeri State	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Kap Rumput Grass Carp	Kap Kepala Besar Big Head Carp	Ketutu Goby	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Patin River Catfish	Toman Giant Snakehead	Baung River Catfish	Pelbagai Miscell- aneous	Jumlah Total
Perlis	0.00	0.00	0.00	0.00	0.00	0.00	28.30	0.00	0.00	0.00	0.00	4.44	32.74
Kedah	0.00	0.00	0.00	0.00	0.00	0.81	68.43	0.00	0.00	0.00	0.00	0.00	69.24
Pulau Pirang	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
Perak	25.38	0.00	20.43	0.00	0.00	0.36	252.32	38.93	20.53	0.00	229.71	8.33	595.99
Selangor	29.08	0.00	0.00	0.00	0.00	5.37	288.29	3.07	5.25	0.00	0.00	9.19	340.25
Negeri Sembilan	15.78	0.00	111.38	0.00	0.00	0.00	2,774.30	41.16	37.86	0.00	0.00	0.00	2,980.48
Melaka	0.00	0.00	0.00	0.00	0.00	0.00	9.22	0.00	50.92	0.00	0.00	24.57	84.71
Johor	0.00	0.00	0.00	0.00	0.00	0.00	122.54	3.52	21.61	0.00	50.39	28.91	226.97
Pahang	14.31	0.00	8.16	0.00	0.00	24.62	1,291.93	22.61	5,131.11	0.00	61.03	94.05	6,647.82
Terengganu	75.60	0.00	0.00	0.00	0.00	97.33	5,419.72	20.05	199.09	0.00	2,568.97	126.72	8,507.48
Kelantan	4.53	0.00	1.53	0.00	0.00	5.25	102.80	0.00	31.80	0.00	25.42	1.35	172.68
Sarawak	0.00	0.00	0.00	0.00	0.00	0.00	1,174.87	0.00	0.00	0.00	0.00	0.00	1,174.87
Sabah	0.00	0.00	0.00	0.00	0.00	300.60	450.90	0.00	0.00	0.00	0.00	0.00	751.50
Jumlah/Total	164.68	0.00	141.50	0.00	0.00	434.34	11,983.62	129.34	5,498.17	0.00	2,935.52	297.56	21,584.73

Nota: Pelbagai - Termasuk Ikan Haruan, Sepat Siam dan Lain - lain

Note: Miscellaneous - Includes Snake Head, Snake skin Gouramy and Others.

JADUAL(TABLE) 18.1

MALAYSIA
BILANGAN DAN LUAS TANGKI SIMEN YANG DIUSAHAKAN
SERTA BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1999
NUMBER AND AREA OF CEMENT TANKS IN OPERATION AND
NUMBER OF CULTURISTS BY RACE AND STATE, 1999

Negeri State	Tangki Simen Cement tanks		Bilangan Penternak No. Of Culturists				
	Bilangan Number	Luas (M ²) Area(M ²)	Melayu Malay	Cina Chinese	India Indian	Lain-Lain Others	Jumlah Total
Perlis	15	610.00	2	0	0	1	3
Kedah	16	527.15	8	0	0	0	8
Pulau Pinang	11	150.00	2	0	0	0	2
Perak	44	10,100.00	13	1	0	0	14
Selangor	146	25,322.88	17	7	1	1	26
Negeri Sembilan	162	5,653.37	26	0	0	1	27
Melaka	5	602.85	2	0	0	0	2
Johor	139	3,236.73	27	1	0	0	28
Pahang	64	442.64	22	1	0	0	23
Terengganu	190	3,327.58	74	1	0	0	75
Kelantan	89	4,240.50	30	0	0	0	30
Sarawak	0	0.00	0	0	0	0	0
Sabah	121	4,117.46	3	8	0	24	35
Jumlah/Total	1,002	58,331.16	226	19	1	27	273

JADUAL(TABLE) 18.2

MALAYSIA
 ANGGARAN PENGELUARAN IKAN DARI TANGKI SIMEN
 MENGIKUT NEGERI DAN SPESIS IKAN, 1999
 ESTIMATED FISH PRODUCTION OF FISH FROM CEMENT TANKS
 BY STATE AND FISH SPECIES, 1999
 (KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Negeri State	Keli <i>Freshwater Catfish</i>	Tilapia Merah <i>Red Tilapia</i>	Tilapia Hitam <i>Black Tilapia</i>	Patin <i>River Catfish</i>	Lampam Jawa <i>Javanese Carp</i>	Pelbagai <i>Miscellaneous</i>	Jumlah <i>Total</i>
Perlis	0.70	2.23	0.00	0.85	0.00	0.00	3.78
Kedah	7.27	0.88	0.00	0.00	0.00	0.00	8.15
Pulau Pinang	0.48	0.00	0.00	0.00	0.00	0.00	0.48
Perak	4.99	249.50	0.00	0.00	0.00	0.00	254.49
Selangor	50.19	350.64	0.00	0.00	0.00	0.80	401.63
Negeri Sembilan	23.49	0.24	0.00	0.00	0.00	0.06	23.79
Melaka	2.01	0.94	0.10	0.00	0.00	0.00	3.05
Johor	69.63	3.27	0.69	1.09	0.00	6.87	81.55
Pahang	0.00	16.13	0.00	0.00	0.00	0.00	16.13
Terengganu	47.78	3.61	0.00	0.00	0.00	0.00	51.39
Kelantan	53.43	13.75	0.00	7.04	0.00	1.56	75.78
Sarawak	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sabah	0.00	25.68	11.00	0.00	0.00	0.00	36.68
Jumlah/total	259.97	666.87	11.79	8.98	0.00	9.29	956.90

Nota: Pelbagai - Termasuk ikan Haruan, Sepat Siam dan lain - lain.

Note: Miscellaneous - Includes Snakehead, Snakeskin Gouramy and Others.

JADUAL(TABLE) 18.3

MALAYSIA
 ANGGARAN NILAI BORONG PENGELUARAN IKAN DARI TANGKI SIMEN
 MENGIKUT NEGERI DAN SPESIS IKAN, 1999
 ESTIMATED WHOLESALE VALUE OF FISH PRODUCTION FROM CEMENT TANKS
 BY STATE AND FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/VALUE IN RM ' 000)

Negeri State	Keli Freshwater Catfish	Tilapia Merah Red Tilapia	Tilapia Hitam Black Tilapia	Patin River Catfish	Lampam Jawa Javanese Carp	Pelbagai Miscellaneous	Jumlah Total
Perlis	2.10	8.92	0.00	5.10	0.00	0.00	16.12
Kedah	21.81	3.37	0.00	0.00	0.00	0.00	25.18
Pulau Pinang	1.31	0.00	0.00	0.00	0.00	0.00	1.31
Perak	15.17	918.16	0.00	0.00	0.00	0.00	933.33
Selangor	168.14	1,616.45	0.00	0.00	0.00	2.52	1,787.11
Negeri Sembilan	75.64	0.89	0.00	0.00	0.00	0.15	76.68
Melaka	5.79	3.99	0.33	0.00	0.00	0.00	10.11
Johor	215.16	14.26	2.39	4.26	0.00	32.56	268.63
Pahang	0.00	68.23	0.00	0.00	0.00	0.00	68.23
Terengganu	194.94	16.32	0.00	0.00	0.00	0.00	211.26
Kelantan	213.19	63.94	0.00	32.10	0.00	6.58	315.81
Sarawak	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sabah	0.00	205.44	88.00	0.00	0.00	0.00	293.44
Jumlah/total	913.25	2,919.97	90.72	41.46	0.00	41.81	4,007.21

Nota: Pelbagai - Termasuk ikan Haruan, Sepat Siam dan lain - lain.

Note: Miscellaneous - Includes Snakehead, Snakeskin Gouramy and Others.

MALAYSIA
 ANGGARAN NILAI RUNCIT PENGELUARAN IKAN DARI TANGKI SIMEN
 MENGIKUT NEGERI DAN SPESIS IKAN, 1999
 ESTIMATED RETAIL VALUE OF FISH PRODUCTION FROM CEMENT TANKS
 BY STATE AND FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/VALUE IN RM ' 000)

Negeri State	Keli <i>Freshwater Catfish</i>	Tilapia Merah <i>Red Tilapia</i>	Tilapia Hitam <i>Black Tilapia</i>	Patin <i>River Catfish</i>	Lampam Jawa <i>Javanese Carp</i>	Pelbagai <i>Miscellaneous</i>	Jumlah <i>Total</i>
Perlis	2.80	11.15	0.00	5.95	0.00	0.00	19.90
Kedah	35.99	4.51	0.00	0.00	0.00	0.00	40.50
Pulau Pinang	2.28	0.00	0.00	0.00	0.00	0.00	2.28
Perak	23.25	1,329.84	0.00	0.00	0.00	0.00	1,353.09
Selangor	241.41	2,159.94	0.00	0.00	0.00	4.15	2,405.50
Negeri Sembilan	140.24	1.46	0.00	0.00	0.00	0.27	141.97
Melaka	9.21	5.16	0.43	0.00	0.00	0.00	14.80
Johor	341.88	20.05	3.84	6.56	0.00	41.91	414.24
Pahang	0.00	83.39	0.00	0.00	0.00	0.00	83.39
Terengganu	269.48	21.41	0.00	0.00	0.00	0.00	290.89
Kelantan	305.09	83.74	0.00	42.80	0.00	8.75	440.38
Sarawak	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sabah	0.00	256.80	110.00	0.00	0.00	0.00	366.80
Jumlah/total	1,371.63	3,977.45	114.27	55.31	0.00	55.08	5,573.74

Nota: Pelbagai - Termasuk ikan Haruan, Sepat Siam dan lain - lain.

Note: Miscellaneous - Includes Snakehead, Snakeskin Gouramy and Others.

JADUAL(TABLE) 19.1

MALAYSIA
BILANGAN DAN LUAS KANDANG IKAN YANG DIUSAHAKAN
SERTA BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1999
NUMBER AND AREA OF PEN CULTURE IN OPERATION AND
NUMBER OF CULTURISTS BY RACE AND STATE, 1999

Negeri State	Kandang ikan <i>Pen Culture</i>		Bilangan Penternak <i>No. Of Culturists</i>				
	Bilangan Number	Luas (Ha) Area(Ha)	Melayu Malay	Cina Chinese	India Indian	Lain-Lain Others	Jumlah Total
Perlis	23	0.38	14	0	0	2	16
Kedah	34	2.66	38	0	0	0	38
Pulau Pinang	0	0.00	0	0	0	0	0
Perak	110	15.21	75	0	0	0	75
Selangor	0	0.00	0	0	0	0	0
Negeri Sembilan	0	0.00	0	0	0	0	0
Melaka	0	0.00	0	0	0	0	0
Johor	0	0.00	0	0	0	0	0
Pahang	21	1.53	20	0	0	0	20
Terengganu	60	3.60	60	0	0	0	60
Kelantan	932	208.22	907	0	0	0	907
Sarawak	0	0.00	0	0	0	0	0
Sabah	0	0.00	0	0	0	0	0
Jumlah/Total	1,180	231.60	1,114	0	0	2	1,116

MALAYSIA
 ANGGARAN PENGELUARAN IKAN DARI KANDANG AIRTAWAR
 MENGIKUT NEGERI DAN SPESIS IKAN, 1999
 ESTIMATED FISH PRODUCTION FROM FRESHWATER PEN CULTURE
 BY STATE AND FISH SPECIES, 1999
 (KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Negeri State	Lampam Jawa Javanese Carp	Lee Koh Commom Carp	Kap Rumpit Grass Carp	Kap Kepala Besar Big Head Carp	Ketutu Goby	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Keli Freshwater Catfish	Udang Galah Giant Fresh- Water Prawn	Patin River Catfish	Toman Giant Snakehead	Baung River Catfish	Pelbagai Miscellaneous	Jumlah Total
Perlis	0.00	0.00	0.00	0.00	0.00	0.00	1.56	0.00	0.15	0.00	0.00	0.00	0.00	0.00	1.71
Kedah	2.43	0.01	0.00	0.00	0.00	0.00	8.10	0.03	0.00	0.00	0.00	0.00	0.00	1.30	11.87
Pulau Pinang	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	0.00	0.00
Perak	7.77	0.12	8.10	5.03	0.00	0.75	33.89	7.23	0.00	0.00	2.63	0.00	0.41	4.38	70.31
Selangor	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	0.00	0.00
Negeri 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	0.00	0.00
Melaka	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	0.00	0.00
Johor	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	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	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	0.00	0.00
Kelantan	28.78	0.00	0.00	0.00	0.00	0.00	202.50	0.22	0.46	0.00	31.87	0.00	8.72	0.07	272.62
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	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	0.00	0.00
Jumlah/Total	38.98	0.13	8.10	5.03	0.00	0.75	246.05	7.48	0.61	0.00	34.50	0.00	9.13	5.75	356.51

Nota: Pelbagai-Termasuk Ikan Haruan, Sepat Siam dan lain Lain

Note: Micellaneous-Includes SnakeHead, Snakeskin Gouramy and Others

MALAYSIA
 ANGGARAN NILAI BORONG PENGELUARAN IKAN DARI KANDANG AIRTAWAR
 MENGIKUT NEGERI DAN SPESIS IKAN 1999
 ESTIMATED WHOLESALE VALUE OF FISH PRODUCTION FROM FRESHWATER PEN CULTURE
 BY STATE AND FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/VALUE IN RM ' 000)

Negeri State	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Kap Rumput Grass Carp	Kap Kepala Besar Big Head Carp	Udang Galah Giant Fresh- water Prawn	Ketutu Goby	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Keli Freshwater Catfish	Patin River Catfish	Toman Giant SnakeHead	Baung River Catfish	Pelbagai Miscell- aneous	Jumlah Total
Perlis	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.24	0.00	0.45	0.00	0.00	0.00	0.00	6.69
Kedah	9.53	0.05	0.00	0.00	0.00	0.00	0.00	31.02	0.26	0.00	0.00	0.00	0.00	4.07	44.93
Pulau Pinang	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	0.00	0.00
Perak	31.93	0.48	35.64	12.63	0.00	0.00	2.22	124.72	43.74	0.00	9.57	0.00	3.32	9.33	273.58
Selangor	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	0.00	0.00
Negeri 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	0.00	0.00
Melaka	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	0.00	0.00
Johor	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	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	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	0.00	0.00
Kelantan	147.35	0.00	0.00	0.00	0.00	0.00	0.00	941.63	1.74	1.84	145.33	0.00	74.73	0.30	1,312.92
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	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	0.00	0.00
Jumlah/Total	188.81	0.53	35.64	12.63	0.00	0.00	2.22	1,103.61	45.74	2.29	154.90	0.00	78.05	13.70	1,638.12

Nota: Pelbagai - Termasuk Ikan Haruan, Sepat Siam dan Lain - lain

Note: Miscellaneous - Includes Snake Head, Snake skin Gouramy and Others.

MALAYSIA
 ANGGAHAN NILAI RUNCIT PENGELUARAN IKAN DARI KANDANG AIRTAWAR
 MENGIKUT NEGERI DAN SPESIS IKAN 1999
 ESTIMATED RETAIL VALUE OF FISH PRODUCTION FROM FRESHWATER PEN CULTURE
 BY STATE AND FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/VALUE IN RM ' 000)

Negeri State	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Kap Rumput Grass Carp	Kap Kepala Besar Big Head Carp	Udang Galah Giant Fresh- water Prawn	Ketutu Goby	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Keli Freshwater Catfish	Patin River Catfish	Toman Giant SnakeHead	Baung River Catfish	Pelbagai Miscell- aneous	Jumlah Total
Perlis	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.80	0.00	0.60	0.00	0.00	0.00	0.00	8.40
Kedah	12.85	0.07	0.00	0.00	0.00	0.00	0.00	41.55	0.36	0.00	0.00	0.00	0.00	5.37	60.20
Pulau Pinang	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	0.00	0.00
Perak	45.22	0.72	53.38	20.77	0.00	0.00	3.36	180.63	62.54	0.00	15.25	0.00	4.50	16.07	402.44
Selangor	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	0.00	0.00
Negeri 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	0.00	0.00
Melaka	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	0.00	0.00
Johor	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	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	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	0.00	0.00
Kelantan	188.80	0.00	0.00	0.00	0.00	0.00	0.00	1,233.23	2.28	2.63	193.77	0.00	93.91	0.39	1,714.99
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	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	0.00	0.00
Jumlah/Total	246.87	0.79	53.38	20.77	0.00	0.00	3.36	1,463.21	65.16	3.23	209.02	0.00	98.41	21.83	2,186.03

Nota: Pelbagai - Termasuk Ikan Haruan, Sepat Siam dan Lain - lain

Note: Miscellaneous - Includes Snake Head, Snake skin Gouramy and Others.

MALAYSIA
 BILANGAN DAN LUAS KOLAM AIRPAYAU YANG DIUSAHAKAN
 SERTA BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1999
 NUMBER AND AREA OF BRACKISHWATER PONDS IN OPERATION AND
 NUMBER OF CULTURISTS BY RACE AND STATE, 1999

Negeri State	Kolam Airpayau <i>Brackishwater Ponds</i>		Bilangan Penternak <i>No. Of Culturists</i>				
	Bilangan <i>Number</i>	Luas (Ha) <i>Area(Ha)</i>	Melayu <i>Malay</i>	Cina <i>Chinese</i>	India <i>Indian</i>	Lain-Lain <i>Others</i>	Jumlah <i>Total</i>
Perlis	44	35.37	5	3	0	0	8
Kedah	945	694.69	88	30	1	32	151
Pulau Pinang	209	136.48	21	74	4	24	123
Perak	1,200	910.82	44	45	4	59	152
Selangor	758	385.01	90	30	0	26	146
Negeri Sembilan	84	78.60	0	0	0	3	3
Melaka	90	48.41	14	1	0	4	19
Johor	903	801.24	29	66	1	6	102
Pahang	396	184.74	16	3	2	1	22
Terengganu	238	74.14	57	0	0	0	57
Kelantan	190	78.87	77	2	0	2	81
Sarawak	407	305.21	81	36	0	45	162
Sabah	1,452	1,128.92	0	40	0	34	74
Jumlah/Total	6,916	4,862.50	522	330	12	236	1,100

JADUAL(TABLE) 20.2

MALAYSIA
 ANGGARAN PENGELUARAN IKAN DARI KOLAM AIRPAYAU/MASIN
 MENGIKUT NEGERI DAN SPESIS IKAN,1999
 ESTIMATED FISH PRODUCTION FROM BRACKISHWATER/MARINE PONDS
 BY STATE AND FISH SPECIES, 1999
 (KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Negeri State	Siakap Barramundi	Kerapu Grouper	Jenahak Mangrove Snapper	Udang Putih Banana Prawn	Udang Harimau Tiger Prawn	Ketam Mud Crab	Tilapia Merah Red Tilapia	Pelbagai Miscellaneous	Jumlah Total
Perlis	0.00	0.00	0.00	0.00	120.50	3.00	0.30	0.00	123.80
Kedah	39.34	0.23	0.00	0.55	539.15	1.27	0.00	0.00	580.54
Pulau Pinang	90.08	0.33	0.00	0.00	202.67	7.70	0.00	0.00	300.78
Perak	53.50	0.20	0.00	0.00	1,975.35	3.60	0.00	0.00	2,032.65
Selangor	159.52	0.00	0.00	0.20	1,170.67	0.00	0.20	0.00	1,330.59
Negeri Sembilan	0.85	0.00	0.00	0.00	197.10	0.00	10.00	0.00	207.95
Melaka	1.44	0.35	1.13	1.25	59.55	0.00	0.00	0.38	64.10
Johor	598.79	68.97	219.65	450.80	1,747.36	0.00	0.00	107.05	3,192.62
Pahang	6.74	0.00	1.09	1.50	2,010.15	0.00	0.00	0.00	2,019.48
Terengganu	16.42	0.15	0.00	0.00	169.29	2.35	6.17	0.21	194.59
Kelantan	10.00	0.00	0.00	0.00	63.02	0.00	2.52	0.00	75.54
Sarawak	12.70	0.00	0.00	0.00	1,635.18	11.35	17.64	0.00	1,676.87
Sabah	0.00	0.00	0.00	0.00	1,843.06	0.00	0.00	0.00	1,843.06
Jumlah/Total	989.38	70.23	221.87	454.30	11,733.05	29.27	36.83	107.64	13,642.57

Nota: Pelbagai - Termasuk Ikan tanda, Dengkis, Cermin, Talang dan Lain Lain

Note: Miscellaneous - Includes Snapper, Rabbitfish, Horse Mackerel, Queenfish and Others

MALAYSIA
 ANGGARAN NILAI BORONG PENGELUARAN IKAN DARI KOLAM AIRPAYAU/MASIN
 MENGIKUT NEGERI DAN SPESIS IKAN, 1999
 ESTIMATED WHOLESALE VALUE OF FISH PRODUCTION FROM BRACKISHWATER/MARINE PONDS
 BY STATE AND FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/VALUE ' 000)

Negeri State	Siakap <i>Barramundi</i>	Kerapu <i>Grouper</i>	Jenahak <i>Mangrove Snapper</i>	Udang Putih <i>Banana Prawn</i>	Udang Harimau <i>Tiger Prawn</i>	Ketam <i>Mud Crab</i>	Tilapia Merah <i>Red Tilapia</i>	Pelbagai <i>Miscellaneous</i>	Jumlah <i>Total</i>
Perlis	0.00	0.00	0.00	0.00	2,410.00	36.00	1.59	0.00	2,447.59
Kedah	422.12	5.06	0.00	3.85	12,670.03	9.53	0.00	0.00	13,110.59
Pulau Pinang	962.05	8.25	0.00	0.00	4,586.42	81.08	0.00	0.00	5,637.80
Perak	645.21	5.27	0.00	0.00	54,618.43	49.36	0.00	0.00	55,318.27
Selangor	1,939.76	0.00	0.00	7.00	30,531.07	0.00	1.07	0.00	32,478.90
Negeri Sembilan	11.05	0.00	0.00	0.00	5,666.63	0.00	37.50	0.00	5,715.18
Melaka	15.48	5.60	14.41	43.75	1,726.95	0.00	0.00	6.46	1,812.65
Johor	7,766.31	1,870.47	2,956.49	14,538.30	49,904.60	0.00	0.00	1,861.60	78,897.77
Pahang	69.09	0.00	10.90	52.50	60,304.50	0.00	0.00	0.00	60,436.99
Terengganu	169.29	3.55	0.00	0.00	3,506.00	16.05	29.49	0.63	3,725.01
Kelantan	100.50	0.00	0.00	0.00	1,506.81	0.00	14.97	0.00	1,622.28
Sarawak	127.00	0.00	0.00	0.00	49,055.40	99.65	105.84	0.00	49,387.89
Sabah	0.00	0.00	0.00	0.00	51,605.68	0.00	0.00	0.00	51,605.68
Jumlah/Total	12,227.86	1,898.20	2,981.80	14,645.40	328,092.52	291.67	190.46	1,868.69	362,196.60

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

Note: Miscellaneous - Includes Milkfish, Snapper, Rabbitfish, Horse Mackerel, Queenfish and Others

MALAYSIA
 ANGGARAN NILAI RUNCIT PENGELUARAN IKAN DARI KOLAM AIRPAYAU/MASIN
 MENGIKUT NEGERI DAN SPESIS IKAN, 1999
 ESTIMATED RETAIL VALUE OF FISH PRODUCTION FROM BRACKISHWATER/MARINE PONDS
 BY STATE AND FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/VALUE IN RM ' 000)

Negeri State	Siakap <i>Barramundi</i>	Kerapu <i>Grouper</i>	Jenahak <i>Mangrove Snapper</i>	Udang Putih <i>Banana Prawn</i>	Udang Harimau <i>Tiger Prawn</i>	Ketam <i>Mud Crab</i>	Tilapia Merah <i>Red Tilapia</i>	Pelbagai <i>Miscellaneous</i>	Jumlah <i>Total</i>
Perlis	0.00	0.00	0.00	0.00	3,133.00	48.00	2.40	0.00	3,183.40
Kedah	529.52	5.90	0.00	5.50	15,047.68	17.78	0.00	0.00	15,606.38
Pulau Pinang	1,259.32	9.88	0.00	0.00	5,723.40	93.17	0.00	0.00	7,085.77
Perak	803.57	6.13	0.00	0.00	66,707.57	62.35	0.00	0.00	67,579.62
Selangor	2,300.28	0.00	0.00	9.60	34,850.85	0.00	1.35	0.00	37,162.08
Negeri Sembilan	12.75	0.00	0.00	0.00	6,520.07	0.00	50.00	0.00	6,582.82
Melaka	18.12	6.30	17.05	47.50	1,824.61	0.00	0.00	7.60	1,921.18
Johor	9,945.90	2,358.77	3,824.11	17,053.76	58,851.08	0.00	0.00	2,224.50	94,258.12
Pahang	97.19	0.00	13.08	67.50	80,406.00	0.00	0.00	0.00	80,583.77
Terengganu	204.92	4.00	0.00	0.00	4,076.50	20.87	37.02	0.84	4,344.15
Kelantan	121.40	0.00	0.00	0.00	1,692.72	0.00	17.67	0.00	1,831.79
Sarawak	190.50	0.00	0.00	0.00	58,866.48	158.90	141.12	0.00	59,357.00
Sabah	0.00	0.00	0.00	0.00	58,977.92	0.00	0.00	0.00	58,977.92
Jumlah/Total	15,483.47	2,390.98	3,854.24	17,183.86	396,677.88	401.07	249.56	2,232.94	438,474.00

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

Note: Miscellaneous - Includes Milkfish, Snapper, Rabbitfish, Horse Mackerel, Queenfish and Others

JADUAL(TABLE) 21.1

MALAYSIA
 BILANGAN DAN LUAS SANGKAR AIRPAYAU YANG DIUSAHAKAN
 SERTA BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1999
 NUMBER AND AREA OF BRACKISHWATER CAGES IN OPERATION AND
 NUMBER OF CULTURISTS BY RACE AND STATE, 1999

Negeri State	Sangkar Airpayau Brackishwater Cages		Bilangan Penternak No. Of Culturists				
	Bilangan Number	Luas (M ²) Area(M ²)	Melayu Malay	Cina Chinese	India Indian	Lain-Lain Others	Jumlah Total
Perlis	100	250.00	0	2	0	0	2
Kedah	3,322	37,323.34	98	21	0	3	122
Pulau Pinang	26,783	246,608.00	123	221	7	4	355
Perak	16,600	143,000.00	7	152	0	0	159
Selangor	6,739	114,083.79	2	31	0	0	33
Negeri Sembilan	15	140.00	1	0	0	0	1
Melaka	163	4,142.12	1	1	0	1	3
Johor	6,001	134,457.32	73	98	2	4	177
Pahang	36	324.00	11	1	0	0	12
Terengganu	1002	11,404.18	80	1	0	0	81
Kelantan	909	28,070.90	124	1	0	0	125
Sarawak	858	8,273.50	142	0	0	0	142
Sabah	1,613	55,161.11	0	12	0	235	247
Jumlah/Total	64,141	783,238.26	662	541	9	247	1,459

MALAYSIA
 ANGGARAN PENGELUARAN IKAN DARI SANGKAR AIRPAYAU/MASIN
 MENGIKUT NEGERI DAN SPESIS IKAN,1999
 ESTIMATED FISH PRODUCTION FROM BRACKISHWATER/MARINE CAGES
 BY STATE AND FISH SPECIES, 1999
 (KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Negeri State	Siakap Barramundi	Siakap Merah Mangrove Red Snapper	Kerapu Grouper	Jenahak Mangrove Snapper	Merah Red Snapper	Udang Putih Banana Prawn	Udang Harimau Tiger Prawn	Ketam Mud Crab	Ketam Telur Berried Crabs	Tilapia Merah Red Tilapia	Pelbagai Miscellaneous	Jumlah Total
Perlis	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.50	0.00	0.00	0.00	49.50
Kedah	92.86	0.00	87.77	23.01	0.92	0.00	0.00	0.00	0.00	0.00	0.76	205.32
Pulau Pinang	552.21	527.91	96.78	52.19	0.00	0.00	0.00	12.09	6.24	0.00	0.00	1,247.42
Perak	274.04	123.70	47.24	147.30	0.00	0.00	0.00	79.29	0.00	7.85	19.30	698.72
Selangor	246.43	1,419.34	8.59	113.01	84.35	0.00	0.00	0.00	0.00	0.00	191.47	2,063.19
Negeri 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
Melaka	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60
Johor	684.61	0.00	177.09	744.73	88.60	0.00	0.00	6.59	0.00	1.10	215.67	1,918.39
Pahang	5.28	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	1.13	0.00	6.49
Terengganu	76.73	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	34.43	3.89	117.92
Kelantan	115.88	0.00	7.20	0.00	0.00	0.00	0.00	0.00	0.00	14.21	0.00	137.29
Sarawak	42.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30	45.30
Sabah	57.54	0.00	450.60	12.52	0.00	0.00	0.00	4.32	0.00	0.00	17.87	542.85
Jumlah/Total	2,149.18	2,070.95	878.14	1,092.76	173.95	0.00	0.00	151.79	6.24	58.72	452.26	7,033.99

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

Note: Miscellaneous - Includes Snapper, Rabbitfish, Horse Mackerel, Queenfish and Others

MALAYSIA
 ANGARAN NILAI BORONG PENGELUARAN IKAN DARI SANGKAR AIRPAYAU/MASIN
 MENGIKUT NEGERI DAN SPESIS IKAN, 1999
 ESTIMATED WHOLESALE VALUE OF FISH PRODUCTION FROM BRACKISHWATER/MARINE CAGES
 BY STATE AND FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/VALUE IN RM ' 000)

Negeri State	Siakap <i>Barramundi</i>	Siakap Merah Mangrove <i>Red Snapper</i>	Kerapu <i>Grouper</i>	Jenahak Mangrove Snapper	Merah <i>Red Snapper</i>	Udang Putih <i>Banana Prawn</i>	Udang Harimau Tiger Prawn	Ketam <i>Mud Crab</i>	Ketam Telur Berried Crabs	Tilapia Merah <i>Red Tilapia</i>	Pelbagai <i>Miscellaneous</i>	Jumlah <i>Total</i>
Perlis	0.00	0.00	0.00	0.00	0.00	0.00	0.00	594.00	0.00	0.00	0.00	594.00
Kedah	996.39	0.00	1,930.94	300.97	7.36	0.00	0.00	0.00	0.00	0.00	3.80	3,239.46
Pulau Pinang	5,897.60	4,381.65	2,419.50	688.39	0.00	0.00	0.00	127.31	71.70	0.00	0.00	13,586.15
Perak	3,304.92	1,306.27	1,246.19	2,023.90	0.00	0.00	0.00	1,087.07	0.00	27.48	92.06	9,087.89
Selangor	2,996.59	10,332.80	165.79	1,332.39	1,100.77	0.00	0.00	0.00	0.00	0.00	2,780.14	18,708.48
Negeri 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
Melaka	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.20
Johor	8,879.39	0.00	4,802.68	10,024.07	1,229.77	0.00	0.00	80.73	0.00	5.71	3,750.50	28,772.85
Pahang	54.12	0.00	0.00	0.00	0.81	0.00	0.00	0.00	0.00	5.65	0.00	60.58
Terengganu	791.09	0.00	67.85	0.00	0.00	0.00	0.00	0.00	0.00	164.58	11.67	1,035.19
Kelantan	1,164.59	0.00	131.54	0.00	0.00	0.00	0.00	0.00	0.00	84.41	0.00	1,380.54
Sarawak	420.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.80	439.80
Sabah	345.24	0.00	3,604.80	50.08	0.00	0.00	0.00	17.28	0.00	0.00	71.48	4,088.88
Jumlah/Total	24,867.13	16,020.72	14,369.29	14,419.80	2,338.71	0.00	0.00	1,906.39	71.70	287.83	6,729.45	81,011.02

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

Note: Miscellaneous - Includes Snapper, Rabbitfish, Horse Mackerel, Queenfish and Others

MALAYSIA
 ANGGARAN NILAI RUNCIT PENGELUARAN IKAN DARI SANGKAR AIRPAYAU/MASIN
 MENGIKUT NEGERI DAN SPESIS IKAN,1999
 ESTIMATED RETAIL VALUE OF FISH PRODUCTION FROM BRACKISHWATER/MARINE CAGES
 BY STATE AND FISH SPECIES, 1999
 (NILAI DALAM RM ' 000/VALUE IN RM ' 000)

Negeri State	Siakap Barramundi	Siakap Merah Mangrove Red Snapper	Kerapu Grouper	Jenahak Mangrove Snapper	Merah Red Snapper	Udang Putih Banana Prawn	Udang Harimau Tiger Prawn	Ketam Mud Crab	Ketam Telur Berried Crabs	Tilapia Merah Red Tilapia	Pelbagai Miscellaneous	Jumlah Total
Perlis	0.00	0.00	0.00	0.00	0.00	0.00	0.00	792.00	0.00	0.00	0.00	792.00
Kedah	1,249.90	0.00	2,253.06	362.41	9.20	0.00	0.00	0.00	0.00	0.00	4.56	3,879.13
Pulau Pinang	7,719.90	5,294.94	2,897.59	797.46	0.00	0.00	0.00	146.29	120.24	0.00	0.00	16,976.42
Perak	4,116.08	1,731.80	1,448.85	2,411.30	0.00	0.00	0.00	1,373.30	0.00	41.21	122.56	11,245.10
Selangor	3,553.52	13,171.48	194.05	1,657.86	1,248.38	0.00	0.00	0.00	0.00	0.00	3,143.94	22,969.23
Negeri 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
Melaka	20.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.13
Johor	11,371.37	0.00	6,056.48	12,965.75	1,624.04	0.00	0.00	103.27	0.00	6.74	4,481.62	36,609.27
Pahang	76.14	0.00	0.00	0.00	1.07	0.00	0.00	0.00	0.00	6.78	0.00	83.99
Terengganu	957.59	0.00	76.51	0.00	0.00	0.00	0.00	0.00	0.00	206.58	15.56	1,256.24
Kelantan	1,406.78	0.00	146.23	0.00	0.00	0.00	0.00	0.00	0.00	99.61	0.00	1,652.62
Sarawak	630.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.40	656.40
Sabah	517.86	0.00	5,407.20	75.12	0.00	0.00	0.00	25.92	0.00	0.00	107.22	6,133.32
Jumlah/Total	31,619.27	20,198.22	18,479.97	18,269.90	2,882.69	0.00	0.00	2,440.78	120.24	360.92	7,901.86	102,273.85

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

Note: Miscellaneous - Includes Snapper, Rabbitfish, Horse Mackerel, Queenfish and Others

JADUAL(TABLE) 22.1

MALAYSIA
 BILANGAN DAN LUAS KAWASAN TERNAKAN KERANG
 SERTA BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1999
 NUMBER AND AREA OF COCKLE CULTURE AND
 NUMBER OF CULTURISTS BY RACE AND STATE, 1999

Negeri State	Ternakan Kerang <i>Cockle culture</i>		Bilangan Penternak <i>No. Of Culturists</i>				
	Bilangan <i>Number</i>	Luas (Ha) <i>Area(Ha)</i>	Melayu <i>Malay</i>	Cina <i>Chinese</i>	India <i>Indian</i>	Lain-Lain <i>Others</i>	Jumlah <i>Total</i>
Perlis	0	0.00	0	0	0	0	0
Kedah	3	38.91	1	0	0	1	2
Pulau Pinang	63	800.00	2	27	0	22	51
Perak	209	3,258.57	24	132	0	23	179
Selangor	24	954.07	16	2	0	6	24
Negeri Sembilan	0	0.00	0	0	0	0	0
Melaka	9	8.00	9	0	0	0	9
Johor	1	129.67	2	2	0	0	4
Pahang	0	0.00	0	0	0	0	0
Terengganu	0	0.00	0	0	0	0	0
Kelantan	0	0.00	0	0	0	0	0
Sarawak	0	0.00	0	0	0	0	0
Sabah	0	0.00	0	0	0	0	0
Jumlah/Total	309	5,189.22	54	163	0	52	269

JADUAL(TABLE) 22.2

MALAYSIA
 PENGELUARAN KERANG DEWASA MENGIKUT BULAN DAN NEGERI, 1999
 PRODUCTION OF COCKLES BY MONTH AND STATE, 1999
 (KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Negeri State	Januari January	Februari February	Mac March	April April	Mei May	Jun June	Julai July	Ogos August	September September	Oktober October	November November	Disember December	Jumlah 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	29.66	17.35	0.00	0.00	0.00	0.00	0.00	0.00	46.30	26.02	21.60	54.00	194.93
Pulau Pinang	2,362.20	1,457.92	1,448.43	908.53	950.39	911.50	941.80	843.75	731.37	1,125.61	1,163.36	1,140.57	13,985.43
Perak	5,931.65	4,525.76	5,234.24	4,755.94	4,738.58	4,601.12	4,471.89	4,498.62	4,467.80	4,162.36	4,256.72	4,387.23	56,031.91
Selangor	975.54	521.12	504.83	809.02	676.16	770.00	735.36	782.20	797.71	946.85	825.57	1,277.24	9,621.60
Negeri 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	4.00	3.00	8.00	4.00	4.00	2.00	3.00	5.00	2.50	5.00	4.00	6.00	50.50
Johor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.48
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	1.24	1.19	1.22	1.06	0.95	0.67	0.87	0.00	1.04	8.04	5.13	5.95	27.36
Jumlah/Total	9,304.29	6,526.34	7,196.72	6,478.55	6,370.08	6,285.29	6,152.92	6,129.57	6,046.72	6,273.88	6,276.38	6,871.47	79,912.21

JADUAL (TABLE) 22.3

MALAYSIA
PENGELUARAN BENIH KERANG MENGIKUT BULAN DAN NEGERI, 1999
PRODUCTION OF COCKLE SEEDS BY MONTH AND STATE, 1999
(KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Negeri State	Januari January	Februari February	Mac March	April April	Mei May	Jun June	Julai July	Ogos August	September September	Oktober October	November November	Disember December	Jumlah 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
Pulau Pinang	50.40	37.16	153.17	89.35	50.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	380.59
Perak	0.00	241.50	376.09	41.91	100.65	109.79	0.00	40.97	0.00	0.00	0.00	0.00	910.91
Selangor	0.00	213.72	814.90	304.92	275.53	337.02	200.46	0.00	0.00	192.48	1,192.94	738.33	4,270.30
Negeri 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	0.00	0.00	0.00	0.00	0.00	157.01	61.39	0.00	0.00	0.00	0.00	0.00	218.40
Johor	0.00	0.00	0.00	0.00	0.00	0.00	283.84	127.68	4.24	4.98	0.00	0.00	420.74
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	50.40	492.38	1,344.16	436.18	426.69	603.82	545.69	168.65	4.24	197.46	1,192.94	738.33	6,200.94

JADUAL(TABLE) 23.1

MALAYSIA
 BILANGAN DAN LUAS KAWASAN TERNAKAN SIPUT SUDU
 SERTA BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1999
 NUMBER AND AREA OF MUSSEL CULTURE AND
 NUMBER OF CULTURISTS BY RACE AND STATE, 1999

Negeri State	Ternakan Siput Sudu Mussel culture		Bilangan Penternak No. Of Culturists				
	Bilangan Number	Luas (M ²) Area(M ²)	Melayu Malay	Cina Chinese	India Indian	Lain-Lain Others	Jumlah Total
Perlis	0	0.00	0	0	0	0	0
Kedah	8	1,469.10	4	0	0	0	4
Pulau Pinang	0	0.00	0	0	0	0	0
Perak	1	440.00	1	0	0	0	1
Selangor	0	0.00	0	0	0	0	0
Negeri Sembilan	29	4,981.21	25	4	0	0	29
Melaka	43	10,638.62	41	4	0	1	46
Johor	300	56,464.82	51	15	0	3	69
Pahang	4	1,000.00	2	0	0	0	2
Terengganu	0	0.00	0	0	0	0	0
Kelantan	0	0.00	0	0	0	0	0
Sarawak	0	0.00	0	0	0	0	0
Sabah	119	2,479.86	0	0	0	119	119
Jumlah/Total	504	77,473.61	124	23	0	123	270

JADUAL(TABLE) 23.2

MALAYSIA
 PENGELUARAN SIPUT SUDU MENGIKUT BULAN DAN NEGERI, 1999
 PRODUCTION OF MUSSELS BY MONTH AND STATE, 1999
 (KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Negeri State	Januari January	Februari February	Mac March	April April	Mei May	Jun June	Julai July	Ogos August	September September	Oktober October	November November	Disember December	Jumlah 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	1.50	1.41	0.63	0.86	0.45	0.66	0.86	0.81	0.81	0.99	0.99	1.88	11.85
Pulau Pinang	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
Perak	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	0.00	4.00
Selangor	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
Negeri Sembilan	1.35	0.55	1.55	0.00	3.90	1.90	0.80	1.70	2.30	1.50	2.40	1.70	19.65
Melaka	21.50	13.85	21.15	19.53	28.05	25.70	29.40	29.69	33.96	32.86	40.71	32.89	329.29
Johor	106.47	287.52	312.50	324.03	999.20	640.95	694.77	698.80	738.78	1,634.77	1,494.08	1,434.89	9,366.76
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	2.80	2.84	1.88	3.76	2.82	2.50	3.14	2.60	2.66	2.50	2.76	2.63	32.89
Jumlah/Total	133.62	306.17	337.71	348.18	1,034.42	671.71	728.97	733.60	782.51	1,672.62	1,540.94	1,473.99	9,764.44

JADUAL(TABLE) 24.1

MALAYSIA
 BILANGAN DAN LUAS KAWASAN TERNAKAN TIRAM
 SERTA BILANGAN PENTERNAK MENGIKUT KAUM DAN NEGERI, 1999
 NUMBER AND AREA OF OYSTER CULTURE AND
 NUMBER OF CULTURISTS BY RACE AND STATE, 1999

Negeri State	Ternakan Tiram Oyster culture		Bilangan Penternak No. Of Culturists				
	Bilangan Number	Luas (M ²) Area(M ²)	Melayu Malay	Cina Chinese	India Indian	Lain-Lain Others	Jumlah Total
Perlis	0	0.00	0	0	0	0	0
Kedah	34	2,458.32	2	0	0	0	2
Pulau Pinang	20	300.00	1	0	0	0	1
Perak	0	0.00	0	0	0	0	0
Selangor	0	0.00	0	0	0	0	0
Negeri Sembilan	0	0.00	0	0	0	0	0
Melaka	0	0.00	0	0	0	0	0
Johor	7	7,000.00	10	0	0	0	10
Pahang	0	0.00	0	0	0	0	0
Terengganu	82	19,555.32	26	0	0	0	26
Kelantan	34	1,823.52	9	0	0	0	9
Sarawak	0	0.00	0	0	0	0	0
Sabah	130	60,370.42	0	0	0	130	130
Jumlah/Total	307	91,507.58	48	0	0	130	178

JADUAL(TABLE) 24.2

MALAYSIA
 PENGELUARAN TIRAM MENGIKUT BULAN DAN NEGERI, 1999
 PRODUCTION OF OYSTER BY MONTH AND STATE, 1999
 (KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Negeri State	Januari January	Februari February	Mac March	April April	Mei May	Jun June	Julai July	Ogos August	September September	Oktober October	November November	Disember December	Jumlah 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	0.57	0.53	0.53	0.63	0.67	0.70	0.67	0.73	0.71	0.93	1.03	1.17	8.87
Pulau Pinang	0.60	0.45	0.65	0.55	0.45	0.63	0.58	0.50	0.60	0.65	0.65	0.63	6.94
Perak	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
Selangor	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
Negeri 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	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	0.26	0.39	0.63	0.60	0.50	0.48	0.39	0.41	0.26	0.39	0.26	0.41	4.98
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	3.10	3.16	3.11	3.07	3.05	9.26	8.60	8.83	8.77	8.57	8.10	10.25	77.87
Kelantan	0.00	0.05	0.06	0.07	0.06	1.70	0.15	0.38	0.00	0.50	0.25	2.08	5.30
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	8.01	8.05	7.80	8.26	8.02	7.99	8.07	7.49	6.98	8.01	7.49	7.50	93.67
Jumlah/Total	12.54	12.63	12.78	13.18	12.75	20.76	18.46	18.34	17.32	19.05	17.78	22.04	197.63

JADUAL (TABLE) 25.1

MALAYSIA
HARGA BORONG IKAN AIRTAWAR DI PASAR-PASAR UTAMA MENGIKUT
NEGERI DAN SPESIS IKAN, 1999
WHOLESALE PRICES OF FRESHWATER FISH AT MAJOR MARKETS
BY STATE AND FISH SPECIES, 1999
(RM/KG)

Jenis/Negeri Species/State	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Kap Rumput Grass Carp	Kap Kepala Besar Big Head Carp	Udang Galah Giant Fresh- water Prawn	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Keli Fresh- water Catfish	Ketutu Goby	Belut Eel	Patin River Catfish	Toman Giant Snake- Head	Baung River Catfish	Pelbagai Miscell- aneous
Perlis	3.00	3.00	0.00	0.00	15.00	3.50	4.00	5.76	3.00	0.00	0.00	6.00	0.00	0.00	3.00
Kedah	3.92	4.63	4.75	3.46	20.00	3.58	3.83	8.71	3.00	15.58	0.00	8.40	0.00	6.88	3.13
Pulau Pinang	3.91	2.70	0.00	0.00	23.67	3.14	3.93	0.00	2.72	0.00	0.00	0.00	0.00	0.00	4.29
Perak	4.11	4.00	4.40	2.51	27.69	2.96	3.68	6.05	3.04	42.62	0.00	3.64	2.77	8.09	2.13
Selangor	5.42	4.00	4.63	2.71	24.18	3.34	4.61	6.81	3.35	47.82	0.00	2.52	8.32	8.73	3.15
Negeri Sembilan	3.80	3.94	4.08	2.80	29.15	3.18	3.69	4.95	3.22	30.85	0.00	3.25	0.00	8.59	2.50
Melaka	3.68	4.40	3.65	2.22	24.21	3.27	4.24	4.30	2.88	31.00	0.00	2.70	0.00	8.73	4.91
Johor	3.69	4.70	6.50	8.00	23.40	3.47	4.36	7.34	3.09	44.97	0.00	3.91	6.76	9.65	4.74
Pahang	5.27	4.68	4.75	5.13	21.91	3.00	4.23	13.50	3.50	34.64	28.52	7.91	5.92	12.82	4.27
Terengganu	4.39	4.40	4.90	4.78	16.71	4.30	4.52	6.92	4.08	26.96	0.00	5.99	3.83	7.45	2.97
Kelantan	5.12	5.48	5.74	4.62	16.25	4.29	4.65	7.92	3.99	25.34	0.00	4.56	4.42	8.57	4.22
Sarawak	6.00	6.00	5.00	5.00	20.00	4.50	4.50	6.00	6.00	0.00	0.00	5.00	0.00	0.00	6.50
Sabah	8.00	10.00	10.00	12.00	8.00	8.00	8.00	13.00	5.00	30.00	0.00	8.00	0.00	0.00	0.00
Harga Bertimbang Weighted price	4.99	6.41	4.71	2.63	23.37	6.27	4.70	6.67	3.26	35.35	28.52	6.23	6.74	8.34	3.97

Nota: Pelbagai - Termasuk ikan Haruan dan Sepat Siam

Note: Miscellaneous - Includes Snake Head, and Snakeskin Gouramy

JADUAL (TABLE) 25.2

MALAYSIA
HARGA RUNCIT IKAN AIRTAWAR DI PASAR-PASAR UTAMA MENGIKUT
NEGERI DAN SPESIS IKAN, 1999
RETAIL PRICES OF FRESHWATER FISH AT MAJOR MARKETS
BY STATE AND FISH SPECIES, 1999
(RM/KG)

Jenis/Negeri Species/State	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Kap Rumpot Grass Carp	Kap Kepala Besar Big Head Carp	Udang Galah Giant Fresh- water Prawn	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Jelawat River Carp	Keli Fresh- water Catfish	Ketutu Goby	Belut Eel	Patin River Catfish	Toman Giant Snake- Head	Baung River Catfish	Pelbagai Miscell- aneous
Perlis	4.50	4.50	0.00	0.00	20.00	4.50	5.00	8.00	4.00	0.00	0.00	7.00	0.00	0.00	4.00
Kedah	5.29	6.88	7.21	4.50	24.58	4.75	5.13	11.96	4.95	29.33	0.00	11.20	0.00	9.46	4.13
Pulau Pinang	5.28	3.00	0.00	0.00	31.61	4.01	5.40	0.00	4.75	0.00	0.00	0.00	0.00	0.00	5.97
Perak	5.82	6.02	6.59	4.13	34.64	4.48	5.33	8.65	4.66	54.86	0.00	5.80	4.06	10.97	3.67
Selangor	7.04	6.38	6.21	3.99	28.85	4.55	6.16	9.04	4.81	58.72	0.00	4.17	9.46	11.50	5.19
Negeri Sembilan	6.31	6.40	6.13	5.12	36.03	5.27	6.08	8.54	5.97	42.75	0.00	5.60	0.00	12.48	4.49
Melaka	5.26	5.65	4.99	2.91	29.29	4.28	5.49	5.56	4.58	42.90	0.00	4.39	0.00	11.38	7.63
Johor	5.36	6.88	7.50	9.00	27.82	5.56	6.13	8.80	4.91	53.78	0.00	6.02	8.99	12.66	6.10
Pahang	6.33	6.25	6.58	7.25	25.42	4.50	5.17	16.75	6.00	38.42	38.03	9.08	7.75	14.67	5.50
Terengganu	5.47	5.87	6.30	5.88	22.06	5.79	5.93	8.57	5.64	32.33	0.00	8.09	5.40	10.36	4.73
Kelantan	6.56	7.27	7.64	5.79	19.89	5.71	6.09	10.28	5.71	30.65	0.00	6.08	5.71	10.77	5.61
Sarawak	8.50	8.50	8.00	8.00	20.00	8.50	8.50	9.00	7.50	0.00	0.00	8.80	0.00	0.00	11.50
Sabah	10.00	12.00	12.00	14.00	16.00	10.00	10.00	15.00	6.00	35.00	0.00	10.00	0.00	0.00	0.00
Harga Bertimbang Weighted price	6.78	8.44	6.74	4.26	27.66	8.07	6.41	9.40	4.90	41.06	38.03	7.94	8.96	11.20	5.38

Nota: Pelbagai - Termasuk ikan Haruan dan Sepat Siam

Note: Miscellaneous - Includes Snake Head, and Snakeskin Gouramy

JADUAL (TABLE) 26.1

MALAYSIA
HARGA BORONG IKAN AIRPAYAU/MASIN DI PASAR - PASAR UTAMA MENGIKUT
NEGERI DAN SPESIS IKAN, 1999
WHOLESALE PRICES OF BRACKISHWATER/MARINE FISH AT MAJOR MARKETS
BY STATE AND FISH SPECIES, 1999
(RM/KG)

Negeri State	Siakap <i>Barramundi</i>	Siakap Merah <i>Mangrove Red Snapper</i>	Kerapu <i>Grouper</i>	Jenahak <i>Mangrove Snapper</i>	Merah <i>Red Snapper</i>	Udang Putih <i>Banana Prawn</i>	Ketam <i>Mud Crab</i>	Ketam Telur <i>Berried Crabs</i>	Udang Harimau <i>Tiger Prawn</i>	Kerang <i>Cockles</i>	Siput Sudu <i>Mussels</i>	Tilapia Merah <i>Red Tilapia</i>	Tiram <i>Oyster</i>	Rumpai Laut <i>Sea- Weeds</i>	Pelbagai <i>Miscell- aneous</i>
Perlis	10.00	0.00	0.00	0.00	0.00	0.00	12.00	0.00	20.00	0.00	0.00	5.29	0.00	0.00	0.00
Kedah	10.73	0.00	22.00	13.08	0.00	7.00	7.50	0.00	23.50	0.75	1.13	0.00	12.50	0.00	5.00
Pulau Pinang	10.68	8.30	25.00	13.19	0.00	0.00	10.53	11.49	22.63	0.70	0.00	4.02	15.00	0.00	0.00
Perak	12.06	10.56	26.38	13.74	0.00	0.00	13.71	0.00	27.65	0.80	2.00	0.00	0.00	0.00	4.77
Selangor	12.16	7.28	19.30	11.79	13.05	35.00	13.96	0.00	26.08	0.73	1.20	5.34	0.00	0.00	14.52
Negeri Sembilan	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.75	0.00	1.23	3.75	0.00	0.00	0.00
Melaka	10.75	0.00	16.00	12.75	0.00	35.00	0.00	0.00	29.00	1.00	0.80	0.00	0.00	0.00	17.00
Johor	12.97	0.00	27.12	13.46	13.88	32.25	12.25	0.00	28.56	0.65	0.45	5.19	15.17	0.00	17.39
Pahang	10.25	0.00	17.00	10.00	10.14	35.00	7.83	0.00	30.00	0.96	0.00	5.00	0.00	0.00	0.00
Terengganu	10.31	0.00	23.64	0.00	0.00	28.86	6.83	0.00	20.71	0.00	0.00	4.78	11.35	0.00	3.00
Kelantan	10.05	0.00	18.27	10.00	8.67	30.91	6.71	0.00	23.91	0.00	0.00	5.94	7.64	0.00	0.00
Sarawak	10.00	0.00	7.90	6.35	6.45	17.00	3.78	0.00	30.00	0.00	0.00	6.00	0.00	0.00	6.00
Sabah	6.00	0.00	8.00	4.00	5.50	9.00	4.00	0.00	28.00	2.00	1.50	0.00	2.00	0.55	4.00
Harga Bertimbang <i>Weighted price</i>	11.82	7.74	17.15	13.24	13.44	32.24	12.14	11.49	27.97	0.77	0.47	5.00	7.09	0.55	15.36

Nota: Pelbagai - Termasuk ikan Tanda, Dengkis, Cupak/Cermin dan Talang

Nota: Miscellaneous - Includes Snapper, Rabbit fish, Horse Mackerel and Queen fish

JADUAL (TABLE) 26.2

MALAYSIA
HARGA RUNCIT IKAN AIRPAYAU/MASIN DI PASAR - PASAR UTAMA MENGIKUT
NEGERI DAN SPESIS IKAN, 1999
RETAIL PRICES OF BRACKISHWATER/MARINE FISH AT MAJOR MARKETS
BY STATE AND FISH SPECIES, 1999
(RM/KG)

Negeri State	Siakap <i>Barramundi</i>	Siakap Merah Mangrove <i>Red Snapper</i>	Kerapu Grouper	Jenahak Mangrove Snapper	Merah <i>Red Snapper</i>	Udang Putih Banana Prawn	Ketam Mud Crab	Ketam Telur Berried Crabs	Udang Harimau Tiger Prawn	Kerang Cockles	Siput Sudu Mussels	Tilapia Merah <i>Red Tilapia</i>	Tiram Oyster	Rumpai Laut Sea- Weeds	Pelbagai <i>Miscell- neous</i>
Perlis	12.00	0.00	0.00	0.00	0.00	0.00	16.00	0.00	26.00	0.00	0.00	8.00	0.00	0.00	0.00
Kedah	13.46	0.00	25.67	15.75	0.00	10.00	14.00	0.00	27.91	1.20	1.72	0.00	18.75	0.00	6.00
Pulau Pinang	13.98	10.03	29.94	15.28	0.00	0.00	12.10	19.27	28.24	0.80	0.00	6.07	15.00	0.00	0.00
Perak	15.02	14.00	30.67	16.37	0.00	0.00	17.32	0.00	33.77	1.29	2.50	0.00	0.00	0.00	6.35
Selangor	14.42	9.28	22.59	14.67	14.80	48.00	16.08	0.00	29.77	1.18	1.55	6.74	0.00	0.00	16.42
Negeri Sembilan	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.08	0.00	1.50	5.00	0.00	0.00	0.00
Melaka	12.58	0.00	18.00	15.09	0.00	38.00	0.00	0.00	30.64	1.20	1.05	0.00	0.00	0.00	20.00
Johor	16.61	0.00	34.20	17.41	18.33	37.83	15.67	0.00	33.68	1.50	0.75	6.13	17.58	0.00	20.78
Pahang	14.42	0.00	22.00	12.00	13.43	45.00	11.75	0.00	40.00	1.20	0.00	6.00	0.00	0.00	0.00
Terengganu	12.48	0.00	26.66	0.00	0.00	34.06	8.88	0.00	24.08	0.00	0.00	6.00	13.10	0.00	4.00
Kelantan	12.14	0.00	20.31	12.00	12.00	32.82	8.29	0.00	26.86	0.00	0.00	7.01	9.60	0.00	0.00
Sarawak	15.00	0.00	8.00	8.00	8.00	22.00	14.00	0.00	36.00	0.00	0.00	8.00	0.00	0.00	8.00
Sabah	9.00	0.00	12.00	6.00	9.00	13.00	6.00	0.00	32.00	3.00	2.00	0.00	2.50	0.55	6.00
Harga Bertimbang Weighted price	15.01	9.75	22.01	16.83	16.57	37.82	15.70	19.27	33.81	1.19	0.77	6.39	8.42	0.55	18.10

Nota: Pelbagai - Termasuk ikan Tanda, Dengkis, Cupak/Cermin dan Talang

Nota: Miscellaneous - Includes Snapper, Rabbit fish, Horse Mackerel and Queen fish

JADUAL (TABLE) 27.1

MALAYSIA
 PENGELUARAN IKAN HIASAN MENGIKUT NEGERI 1999
 PRODUCTION OF ORNAMENTAL FISH BY STATE, 1999
 (BILANGAN DALAM EKOR/NUMBER IN PIECES)

Negeri/Kumpulan State/Group	Cyprinids Barb/Daino/ Goldfish/Koi	Cyprinodontids	Anabantids	Poeciliids	Characins	Cichlid	Osteoglossids	Callichthyids	Cobitids	Aquatic Plants	Lain Lain Others	Jumlah Total
Perlis	0	0	0	0	0	0	0	0	0	0	0	0
Kedah	0	0	0	14,220	0		0	0	0	0	0	14,220
Pulau Pinang	71,562	0	2,824	112,348	21,389	3,576,002	4,942	0	0	0	66,869	3,855,936
Perak	42,473,239	121,142	8,385,295	12,975,118	48,855	6,961,267	871	20,056	40,498	0	174,144	71,200,485
Selangor	3,180,218	1,993,676	0	1,254,032	549,941	6,107	0	0	0	0	588,826	7,572,800
Negeri Sembilan	23,500	0	0	7,400	350	0	0	0	0	0	0	31,250
Melaka	42,200	0	14,500	78,000	12,300	11,300	0	0	0	0	500	158,800
Johor	51,889,471	312,403	24,638,835	88,738,340	30,004,378	11,789,578	40,807	0	1,934,773	47,061,845	1,160,834	257,571,264
Pahang	0	0	0	0	0	0	0	0	0	0	0	0
Terengganu	0	0	0	0	0	0	0	0	0	0	0	0
Kelantan	15,000	0	0	3,801	0	0	0	0	0	0	100	18,901
Sarawak	0	0	0	0	0	0	0	0	0	0	0	0
Sabah	13,600	0	64	1,954	0	350	0	0	0	97		16,065
Jumlah/Total	97,708,790	2,427,221	33,041,518	103,185,213	30,637,213	22,344,604	46,620	20,056	1,975,271	47,061,942	1,991,273	340,439,721

JADUAL(TABLE) 27.2

MALAYSIA
PENGELUARAN DAN NILAI IKAN HIASAN MENGIKUT NEGERI, 1999
PRODUCTION AND VALUE OF ORNAMENTAL FISH BY STATE, 1999
(BILANGAN DALAM EKOR/NUMBER IN PIECES)

Negeri State	Pengeluaran (Ekor) Production (Pieces)	Nilai (RM) Value (RM)
Perlis	0	0.00
Kedah	14,220	2,794.00
Pulau Pinang	3,855,936	3,499,199.00
Perak	71,200,485	15,110,239.00
Selangor	7,572,800	1,414,229.00
Negeri Sembilan	31,250	3,316.00
Melaka	158,800	31,439.00
Johor	257,571,264	60,076,248.00
Pahang	0	0.00
Terengganu	0	0.00
Kelantan	18,901	3,685.00
Sarawak	0	0.00
Sabah	16,065	87,605.00
Jumlah/Total	340,439,721	80,228,754.00

JADUAL(TABLE) 28.1

MALAYSIA
 BILANGAN DAN PENGELUARAN PUSAT PENGELUARAN BENIH IKAN/UDANG SWASTA
 MENGIKUT NEGERI, 1999
 NUMBER AND PRODUCTION OF PRIVATE FISH/PRAWN FRY HATCHERY CENTRES
 BY STATE, 1999

Negeri State	Bilangan Numbers	Pengeluaran (Juta Ekor) Production (Million Pieces)	
		Benih Udang Prawn Fry	Benih Ikan Fish Fry
Perlis	0	0.00	0.00
Kedah	18	639.50	23.40
Pulau Pinang	15	241.00	2.67
Perak	37	331.25	18.19
Selangor	30	108.00	167.28
Negeri Sembilan	9	3.39	4.74
Melaka	13	1.95	40.42
Johor	16	421.76	1.77
Pahang	7	1.02	4.94
Terengganu	2	0.00	0.00
Kelantan	4	0.00	0.20
Sarawak	11	239.30	0.00
Sabah	27	234.80	0.04
Jumlah/Total	189	2,221.97	263.65

JADUAL (TABLE) 29.1

MALAYSIA
 BILANGAN DAN PENGELUARAN KILANG "FEEDMILL"
 MENGIKUT NEGERI, 1999
 NUMBER AND PRODUCTION OF FEEDMILLS
 BY STATE, 1999

Negeri State	Bilangan Number	Pengeluaran (Tan metrik) Production (Tonnes)
Perlis	1	216.00
Kedah	4	5,400.00
Pulau Pinang	0	0.00
Perak	6	18,964.00
Selangor	3	9,000.00
Negeri Sembilan	0	0.00
Melaka	4	6,574.00
Johor	3	7,989.20
Pahang	2	2,073.92
Terengganu	0	0.00
Kelantan	0	0.00
Sarawak	3	3,327.45
Sabah	6	13,865.61
Jumlah/Total	32	67,410.18

PERAIRAN UMUM

PUBLIC WATER BODIES

MALAYSIA
PENDARATAN IKAN AIRTAWAR DARI PERAIRAN UMUM /PERIKANAN DARAT
MENGIKUT BULAN DAN NEGERI, 1999
LANDINGS OF FRESHWATER FISH FROM PUBLIC WATERBODIES/INLAND FISHERIES
BY MONTH AND STATE, 1999
(KUANTITI DALAM TAN METRIK/QUANTITY IN TONNES)

Negeri State	Januari January	Februari February	Mac March	April April	Mei May	Jun June	Julai July	Ogos August	September September	Oktober October	November November	Disember December	Jumlah Total
Perlis	1.11	1.08	1.40	1.48	1.66	1.68	11.60	10.50	8.37	8.29	8.36	8.31	63.84
Kedah	20.45	20.68	18.86	20.09	22.09	20.04	24.99	24.97	23.87	23.87	24.43	24.20	268.54
Pulau Pinang	1.80	2.31	2.25	2.23	2.77	3.35	3.35	3.53	4.05	3.25	2.60	1.38	32.87
Perak	90.75	95.68	99.08	90.94	81.37	93.25	122.88	106.22	88.54	111.50	101.77	105.82	1,187.80
Selangor	74.38	83.82	100.43	85.38	78.43	83.76	77.53	78.75	76.62	69.20	75.80	58.42	942.52
Negeri 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	1.03	0.93	1.16	1.00	0.98	1.36	1.36	1.05	1.09	1.09	1.27	1.33	13.65
Johor	16.57	19.89	16.36	18.15	17.61	24.59	28.59	25.78	25.56	26.31	24.60	24.41	268.42
Pahang	23.16	17.54	18.52	12.69	30.73	22.57	24.01	24.84	24.72	38.88	32.47	38.40	308.53
Terengganu	14.79	13.34	12.60	11.17	8.59	9.61	11.63	10.12	11.49	14.42	15.52	15.65	148.93
Kelantan	9.10	10.03	9.82	9.78	9.92	9.75	11.70	10.80	9.76	12.26	12.00	13.57	128.49
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	7.11	7.61	7.89	7.92	7.97	8.12	7.48	7.03	6.93	7.39	6.77	7.37	89.59
Jumlah/Total	260.25	272.91	288.37	260.83	262.12	278.08	325.12	303.59	281.00	316.46	305.59	298.86	3,453.18

JADUAL(TABLE) 31.1

MALAYSIA
 PENGELUARAN BENIH IKAN AIR TAWAR DARI PUSAT-PUSAT PEMBAIKBIAK IKAN
 KERAJAAN MENGIKUT PUSAT DAN SPESIS, 1999
 PRODUCTION OF FRESHWATER FINGERLINGS FROM GOVERNMENT HATCHERIES
 BY HATCHERY AND SPECIES, 1999
 (KUANTITI DALAM EKOR/QUANTITY IN PIECES)

Spesis (Species) Pusat Pembaikbiak (Hatchery)	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Sepat Siam Snakeskin Gouramy	Tilapia Nilotika Tilapia Nilotica	Tilapia Merah Red Tilapia	Kap Kepala Besar Big Head Carp	Jelawat River Carp	Keli Freshwater Catfish	Baung River Catfish	Lain-Lain Others	Jumlah Total
PPAT Bukit Tinggi, Pahang	2,870,449	0	0	0	124,850	0	0	2,504,900	0	385,300	5,885,499
PPA Jitra, Kedah	976,178	0	41,800	29,700	2,286,417	0	18,590	944,969	385	16,434	4,314,473
PLPD Enggor, Perak	251,750	0	64,000	0	170,180	0	0	3,207,266	0	0	3,693,196
PPIAT Bt Berendam, Melaka	200	0	0	230	4,240	0	0	1,141,077	0	0	1,145,747
PPA Ajil, Terengganu	0	0	0	0	0	0	0	231,200	0	0	231,200
PPA Tapah, Perak	190,800	0	0	0	266,015	0	0	0	0	0	456,815
Sarawak	3,968,100	1,539,865	7,570	13,000	2,991,319	0	2,857,439	66,000	0	4,190,153	15,633,446
Sabah	250,228	213,888	0	870,636	2,110,929	0	0	0	0	22,478	3,468,159
Jumlah/Total	8,507,705	1,753,753	113,370	913,566	7,953,950	0	2,876,029	8,095,412	385	4,614,365	34,828,535

JADUAL(TABLE) 31.2

MALAYSIA
 PENGELUARAN BENIH-BENIH IKAN/UDANG AIRPAYAU DAN UDANG GALAH DARI PUSAT-PUSAT
 KERAJAAN MENGIKUT PUSAT DAN SPESIS, 1999
 PRODUCTION OF BRACKISHWATER FISH/PRAWN FINGERLINGS FROM
 GOVERNMENT HATCHERIES BY HATCHERY AND SPECIES, 1999
 (KUANTITI DALAM EKOR/QUANTITY IN PIECES)

Spesis (<i>Species</i>) Pusat Penetasan (<i>Hatchery</i>)	Udang Galah <i>Giant Fresh</i> <i>water Prawn</i>	Udang Harimau <i>Tiger</i> <i>Prawn</i>	Udang Putih <i>Banana</i> <i>Prawn</i>	Siakap <i>Barramundi</i>	Lain-Lain <i>Others</i>	Jumlah <i>Total</i>
PPUG Kg. Acheh, Perak	4,544,010	0	0	0	0	4,544,010
PPIUL Tg. Demong, Terengganu	0	0	0	127,185,376	155,522,110	282,707,486
PPPBK Kg. Pulau Sayak, Kedah	1,303,500	5,268,000	300,000	253,890	1,000	7,126,390
PPTAP Gelang patah, Johor	0	0	0	37,120	14,100	51,220
Sarawak	191,364	3,010,000	0	1,872,502	0	5,073,866
Sabah	0	0	0	134,245	0	134,245
Jumlah/Total	6,038,874	8,278,000	300,000	129,483,133	155,537,210	299,637,217

MALAYSIA
PEMBAHAGIAN BENIH-BENIH IKAN UNTUK KEGUNAAN PELBAGAI DAN PELEPASAN
KE PERAIRAN UMUM MENGIKUT NEGERI DAN SPESIS IKAN, 1999
DISTRIBUTION OF FRESHWATER FRY FOR MISCELLANEOUS PURPOSES AND RELEASED
INTO PUBLIC WATERBODIES BY STATE AND SPECIES, 1999
(KUANTITI DALAM EKOR/QUANTITY IN PIECES)

Negeri State	Kegunaan Pelbagai/Miscellaneous							Pelepasan ke perairan Umum/Released in Public Waters						Jumlah Kecil Sub Total	Jumlah Besar Grand Total
	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Keli Freshwater Catfish	Tilapia Hitam Black Tilapia	Tilapia Merah Red Tilapia	Pelbagai Others	Jumlah Kecil Sub Total	Lampam Jawa Javanese Carp	Lee Koh Common Carp	Udang Galah Giant Fresh- Water Prawn	Tilapia Merah Red Tilapia	Baung River Catfish	Pelbagai Others		
Perlis	202	0	110	0	2,365	0	2,677	22,000	0	0	0	0	0	22,000	24,677
Kedah	9,097	0	28,105	51,495	0	0	88,697	220,200	41,800	0	0	0	2,420	264,420	353,117
P. Pinang	0	0	0	0	0	0	0	0	0	30,000	0	0	110,000	140,000	140,000
Perak	11,950	0	1,000	0	21,550	0	34,500	374,000	0	330,000	10,000	0	0	714,000	748,500
Selangor	1,106	0	26,000	0	0	17,800	44,906	0	0	0	0	0	7,900	7,900	52,806
N. Sembilan	0	0	0	0	0	0	0	51,500	0	0	0	0	0	51,500	51,500
Melaka	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Johor	0	0	78,000	0	98,000	20,000	196,000	0	0	30,000	0	0	50,000	80,000	276,000
Pahang	63,500	14,720	15,500	0	3,000	15,100	111,820	48,000	6,000	30,000	21,000	0	12,000	117,000	228,820
Terengganu	0	0	0	0	0	0	0	60,000	0	0	0	5,000	20,000	85,000	85,000
Kelantan	7,500	49,695	365,835	0	2,641,460	259,200	3,323,690	0	0	0	550	0	200	750	3,324,440
Sarawak	2,998,308	1,375,392	54,510	0	2,955,443	4,895,507	12,279,160	236,450	5,600	0	14,500	0	819,200	1,075,750	13,354,910
Sabah	213,066	156,173	0	686,063	1,622,630	12,305	2,690,237	22,870	9,180	0	51,510	0	55,070	138,630	2,828,867
Jumlah/ Total	3,304,729	1,595,980	569,060	737,558	7,344,448	5,219,912	18,771,687	1,035,020	62,580	420,000	97,560	5,000	1,076,790	2,696,950	21,468,637

JADUAL(TABLE)31.4

MALAYSIA
PEMBAHAGIAN BENIH-BENIH IKAN AIRTAWAR KEPADA PENTERNAK
MENGIKUT NEGERI DAN SPESIS IKAN, 1999
DISTRIBUTION OF FRESHWATER FISH FRY TO CULTURISTS
BY STATE AND SPECIES, 1999
(KUANTITI DALAM EKOR/QUANTITY IN PIECES)

Negeri <i>State</i>	Lampam Jawa <i>Javanese Carp</i>	Lee Koh <i>Common Carp</i>	Sepat Siam <i>Snakeskin Gouramy</i>	Patin <i>River Catfish</i>	Udang Galah <i>Giant Fresh water Prawn</i>	Tilapia Merah <i>Red Tilapia</i>	Keli <i>River Catfish</i>	Kap Rumput <i>Grass Carp</i>	Pelbagai <i>Others</i>	Jumlah <i>Total</i>
Perlis	9,284	0	0	0	0	205,721	121,004	0	0	336,009
Kedah	165,066	4,500	15,700	400	585,300	651,411	361,704	0	16,250	1,800,331
Pulau Pinang	5,200	0	0	0	0	38,500	148,700	0	3,000	195,400
Perak	40,300	0	5,500	0	1,298,250	372,745	1,733,766	0	0	3,450,561
Selangor	47,150	0	0	0	109,000	10,450	0	0	0	166,600
Negeri Sembilan	86,800	0	0	0	532,000	63,200	111,944	0	10,200	804,144
Melaka	0	0	0	0	20,000	40	2,000	0	156,912	178,952
Johor	0	0	0	2,000	50,000	98,000	78,000	0	20,000	248,000
Pahang	156,720	22,470	0	64,700	70,400	268,400	31,500	500	99,000	713,690
Terengganu	22,200	0	0	0	0	263,200	231,200	0	0	516,600
Kelantan	8,700	750	0	0	0	3,440,000	366,585	0	313,395	4,129,430
Sarawak	2,959,515	1,225,476	0	68,134	175,000	1,760,712	92,840	180,002	3,587,711	10,049,390
Sabah	213,066	156,173	0	0	0	1,622,630	0	0	698,368	2,690,237
Jumlah/Total	3,714,001	1,409,369	21,200	135,234	2,839,950	8,795,009	3,279,243	180,502	4,904,836	25,279,344

**KLASIFIKASI PERANGKAAN PIAWAIAN IKAN-IKAN
AIRTAWAR MALAYSIA**

***STANDARD STATISTICAL CLASSIFICATION OF COMMON
MALAYSIAN FRESHWATER FISHES***

DAN (AND)

**KLASIFIKASI PERANGKAAN PIAWAIAN IKAN-IKAN
LAUT MALAYSIA**

***STANDARD STATISTICAL CLASSIFICATION OF MALAYSIAN
MARINE FISHES***

**KLASIFIKASI PERANGKAAAN PIAWAIAN IKAN-IKAN
AIRTAWAR MALAYSIA**

**STANDARD STATISTICAL CLASSIFICATION OF
COMMON MALAYSIAN FRESHWATER FISHES**

ISSCAAP Code	Division Group of Species	Local Name	English Name	Scientific Name
1	11 Carps, Barbels and Others	Tengas	Carp	<i>Acrossocheilus hexagonoiepis</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>Cirrhina molitorella</i>
		Kap Rumpit	Grass Carp	<i>Ctenopharyngodon idella cyprinids</i>
		Temperas	Carp	<i>Cyclocheilichthys apogon</i>
		Lee Koh	Common Carp	<i>Cyprinus Carpio</i>
		Semilang Batu	Carp	<i>Epbalzeorthynchus kalopterus</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>
		Kap Hitam	Black Carp	<i>Mylopharyngodon piceus</i>
		Sia	Carp	<i>Mystacoleucus marginatus</i>
		Terbol	Carp	<i>Osteochilus hasseltii</i>
		Lalang	Carp	<i>Oxygaster anomalura</i>
		Bulu Ayam	Moustached thryssa	<i>Thryssa mystax</i>
		Temoleh, Temelian	Malaysian Carp	<i>Probarbus jullieni</i>
		Putih, Tebal Sisek	Common Barb	<i>Puntius binotatus</i>
		Tengalan	Carp/Barb	<i>Puntius bulu</i>
		Kerai Kunyit	Carp/Barb	<i>Hypsibarbus sp</i>
		Lampam Jawa	Javanese Carp	<i>Puntius gonionotus</i>
		Bagoh	Spanner Barb	<i>Puntius lateristriga</i>
		Lampam Sungai	River Carp	<i>Puntius schwarzei</i>
		Susur Batang	Brilliant Rasbora	<i>Rasbora einthovenii</i>
		Seluang	Two-spot Rasbora	<i>Rasbora elegans</i>
		Kelah	River Carp	<i>Tor tambroides</i>

2	12	Tilapias and Cichlids	Tilapia	Tilapia	<i>Tilapia mossambica</i>
3	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>Aplocheilus panchax</i>
			Lali-lali	Loach	<i>Botia spp.</i>
			Kecil Kayu/Keli Bunga	Freshwater Catfish	<i>Clarias batrachus/C. macrocephalu</i>
			Limbati	Freshwater Catfish	<i>Clarias nieuhofi</i>
			Belut	Swamp Eel	<i>Fluta alba</i>
			Temakang	Kissing Gourami	<i>Helostoma temminckii</i>
			Susoh Batu	Loach	<i>Homaloptera spp.</i>
			Baung	River Catfish	<i>Mystus spp.</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>Pangasius micronemus</i>
			Patin	River Catfish	<i>Pangasius pangasius</i>
			Kepar, Patung	Perch	<i>Pristolepis fasciatus</i>
			Kelisa	Sclerapages	<i>Sclerapages formosus</i>
			Sepat Siam	Snakeskin Gouramy	<i>Trichogaster pectoralis</i>
			Sepat Ronggeng	Two-spot Gouramy	<i>Trichogaster trichopterus</i>
			Tapah	Giant Catfish	<i>Wallago spp.</i>
4	CRUSTACEANS				
	41	Freshwater Crustaceans	Udang Galah	Giant Freshwater Prawn	<i>Macrobrachium rosenbergii</i>

**KLASIFIKASI PERANGKAAAN PIAWAIAN IKAN-IKAN
LAUT MALAYSIA**

**STANDARD STATISTICAL CLASSIFICATION OF
MALAYSIAN MARINE FISHES**

ISSCAAP Code	Division Group of Species	Local Name	English Name	Scientific Name
2	DIADROMOUS FISHES			
24	Shads, Milk-fishes, etc.	Kebasi/Selangat	+ Chacunda shad (Gizzard shad)	<i>Anodontosoma chacunda</i>
		Puput	+ Shad	<i>Pellona spp.</i>
		Beliak mata	+ Slender shad	<i>Ilisha elongata</i>
		Terubok	0 Longtail shad	<i>Hilsa macrura</i>
25	Miscellaneous diadromous fishes	Siakap	+ Giant sea perch (Barramundi)	<i>Lates calcarifer</i>
3	MARINE FISHES			
31	Flounders, Halibuts, Soles, etc.	Lidah	+ Tonguefish (Tongue sole)	<i>Cynoglossus spp.</i>
		Sebelah	+ Deep Flounders	<i>Pseudorhombus spp.</i>
		Togok	Halibut	
33	Redfishes, Basses, Congers, etc.	Bayan	+ Parrotfish/ Moon wrasse	<i>Scarus sp./Thalassoma spp.</i>
		Biji nangka	+ Goatfish	<i>Upeneus spp.</i>
		Daun Baharu	+ Spotted sicklefish	<i>Drepane punctata</i>
		Delah	+ Fusilier	<i>Caesio erythrogaster/C. chrysona</i>
		Dengkis/Debam	+ Spinefeet (Rabbit fish) marbled spine-foot	<i>Siganus spp.</i>
		Duri/Pulutan/Utek	+ Marine catfish	<i>Tachysurus spp./Arius spp./</i>
		Gelama/Tengkerong	+ Jewfish/Carut Croaker Tiger-tootled Croaker/ Bronze Croaker	<i>Sciaena spp. /Johnius spp. Otolithus spp. /Otolithoides spp.</i>
		Gerut-gerut	+ Grunter	<i>Promadasys spp.</i>
		Jebong	+ Triggerfish	<i>Abalistes stellaris</i>
		Jenahak	+ Mangrove snapper	<i>Lutianus johni</i>
		Kaci	+ Sweetlip	<i>Spilotichthys picfus</i>

	Kapas laut	+Majorras (Silver biddies)	<i>Gerres filamentosus</i> /G. <i>abreviatus</i>	
	Kerapu	+ Grouper	<i>Epinephelus spp. /Plectropomus spp.</i>	
	Kerisi	+ Threadfin bream	<i>Nemipterus spp.</i>	
	Kerisi bali	+ Sharp toothed bass	<i>Pristipomoides typus</i>	
	Kikek	+ Ponyfish (Slipmouth)	<i>Leiognathus spp./Gazz spp./Secutor spp.</i>	
	Lumi-lumi	+Bombay-duck	<i>Harpodon nehereus</i>	
	Malong	+ Conger eel	<i>Muraenesox spp.</i>	
	Merah	+ Red snapper	<i>Lutianus argentimaculatus</i> / <i>L. malabaricus</i>	
	Mengkerong/Ubi/Conor	+ Lizard fish	<i>Sauride spp.</i>	
	Puntung Damar/ Bulus-Bulus	+ Sillago-whitings	<i>Sillago sihama</i> /S. <i>maculuta</i>	
	Pasir-Pasir/Timun-Timun/ Puyu Laut	+ Monocle bream	<i>Scolopsis spp.</i>	
	Pelandok	+ Emperors (Scavengers)	<i>Lethrinus spp.</i>	
	Pluru	+ Spadefish	<i>Ephippus orbis</i>	
	Remong/Kunyit-Kunyit	+ Snapper	<i>Lutianus vitta</i> /L. <i>lineolatus</i>	
	Semilang	+ Catfish eel	<i>Plotosus spp.</i>	
	Shrumbu/Lemah	+ False trevally	<i>Lactarius lactarius</i>	
	Tanda	+ Snapper	<i>Lutianus russelli</i>	
34	Jacks, Mulletts, Sauries, etc.	Aji-Aji	+ Amberjack	<i>Seriola nigrifasciata</i>
		Alu-alu/Kacang-kacang	+ Barracuda	<i>Sphyraena jello</i> /S. <i>optusa</i>
		Aruan Tasik	+ Black kingfish	<i>Rachycentron canadus</i>
		Bawal hitam	0 Black pomfret	<i>Formio niger</i>
		Bawal putih	0 Silver pomfret	<i>Pampus argenteus</i>
		Bawal tambak	0 Chinese pomfret	<i>Pampus chinensis</i>
		Bawal selatan	0 Small pomfret	<i>Pampus spp.</i>
		Belanak/Kedera	0 Mullet	<i>Liza spp/Valamugil spp.</i>
		Cermin/Cupak	+ Horse mackerel (Trevally	<i>Alectis indica</i> /Caranx spp.

		Cincaru	0 Hardtail scad	<i>Megaiaspis cordyla</i>
		Demudok/Rambai	+ Horse mackerel (Trevally	<i>Carangoides spp.</i>
		Gerong ⁴ gerong	+ Golden trevally	<i>Caranx speciosus</i>
		Kurau/Senangin/ Senohong	0 Threadfin	<i>Polynemus spp/Eleutheronema tetradactylum</i>
		Kerepoh	0 Horse mackerel (Trevally	<i>Caranx sexfasciatus</i>
		Lolong	0 Ox-eye scad	<i>Selar boops</i>
		Mata Besar/Selar	0 Big-eye scad	<i>Selar crymenophthalmus</i>
		Pisang-Pisang	0 Rainbow runner	<i>Elagatis bipinnulatus</i>
		Selar-Pelata	0 Selar scad	<i>Selar spp.</i>
		Selar Kuning	0 Yellow striped trevally	<i>Selaroides leptolepis</i>
		Selayang/Curut	0 Round scad	<i>Decapterus maruadis/D. macrosoma</i>
		Talang	0 Queenfish (Leatherskin)	<i>Scomberoides commersonianus</i>
35	Herrings, Sardines, Anchovies, etc.	Tamban sisek	0 Fringescale sardine	<i>Sardinella fimbriata</i>
		Tamban buluh/T.Bulat	0 Rainbow sardine	<i>Dussumieria acuta</i>
		Bilis	0 Achovy	<i>Stolephorus spp.</i>
		Parang-parang	0 Dorab wolf-herring	<i>Chirocentrus dorab</i>
		Bulan-bulan	+ Indo-Pacific tarpon	<i>Megalops cyprinoides</i>
36	Tunas,	Aya/Kayu/Tongkol hitam	0 Longtail tuna	<i>Thunnus tonggol</i>
		Aya/Kayu/Tongkol Kurik	0 Kawakawa (eastern little tuna)	<i>Euthynnus affinis</i>
		Aya/Kayu/Tongkol Selasi	0 Frigate tuna	<i>Auxis thazard</i>
	Billfishes, etc.	Layaran/Mersuji	0 Sailfish/Black & Blue marine	<i>Istiophorus spp./Makaira spp.</i>
		Tenggiri	0 Spanish mackerel	<i>Scomberomorus spp.</i>
37	Mackerels, Snoeks, Cutlass, fishes, etc.	Kembong/Temenong	0 Indian mackerel	<i>Rastrelliger kanagurta/R. brachysoma/ R. faughni</i>
		Timah/Layor/Selayor	+ Large-head hairtail (Ribbon fish)	<i>Trichiurus lepturus</i>
38	Sharks, Rays, Chimaeras, etc.	Yu	+ Shark	<i>Galeorhinidae</i>
		Pari	+ Ray	<i>Gymnura spp/Dasyatis spp.</i>

39	Miscellaneous marine fishes	Ikan Baja	+/0 Trash fish	<i>Mixed spp.</i>
		Ikan Campur	+/0 Mixed fishes	<i>Mixed spp.</i>

4

CRUSTACEANS

42	Sea spiders, Crabs, etc.	Ketam laut/Ketam renjong/ Ketam batu	Blue swimming crab Indo-pacific swamp-crab	<i>Portunus pelagicus</i> <i>Scylla serrata</i>
43	Lobsters, Spiny rock lobsters, etc.	Udang karang	Spiny lobster	<i>Panulirus polyhagus</i>
		Udang lobok	Slipper lobster	<i>Thenus orientalis</i>
45	Shrimps, Prawns, etc.	Udang/puteh/udang kaki merah/udang susu	Banana prawn/Western king prawn	<i>Penaeus merguensis/P. indicus/ P. latisulcatus</i>
		Udang harimau	Giant tiger prawn/ Green tiger prawn	<i>Penaeus monodon/P. semisulcatus</i>
		Udang pasir/Udang pasir kepala besar	Sand prawn	<i>Metapeneopsis stridulans & M. berbeensis/Trachypenaeus fulvus</i>
		Udang putih kecil	Bridshrimp Small white prawn	<i>Metapenaeus lysianassa</i>
		Udang kuning	Yellow prawn	<i>Metapenaeus brevicornis</i>
		Udang merah ros/ Udang ekor biru	Gingja shrimp/ Greasyback shrimp	<i>Metapenaeus affinis/M. ensis/ M. intermedius</i>
		Udang kulit keras	Rainbow prawn	<i>Parapenaeopsis sculptilis</i>
		Udang minyak/ Udang minyak jalur	Sharp-rostrum prawn	<i>Parapenaeopsis hardwickii/ P. coromandelica/P. hungerfordi/ P. gracilima</i>
		Udang merah	Red prawn	<i>Solenocera subnuda</i>

5

MOLLUSCS

53	Oysters	Tiram	Rock oysters/Flat oysters	<i>Ostrea folium/Crassostrea spp.</i>
54	Mussels	Kupang/Siput Sudu/ Siput cangkul	Green mussel Sea-Green mussel	<i>Perna viridis</i> <i>Glaucanome spp.</i>
56	Clams, Cockles, Arkshells, etc.	Kerang Retak seribu Lain-lain siput	Blood cockle Carpet clam Other clams/Snails	<i>Anadara granosa</i> <i>Paphia undulata</i> <i>Bivalves/Gastropods</i>
57	Squids, Cuttlefishes, Octopuses, etc.	Sotong biasa/Cumit-cumit	Common squid	<i>Loligo spp.</i>