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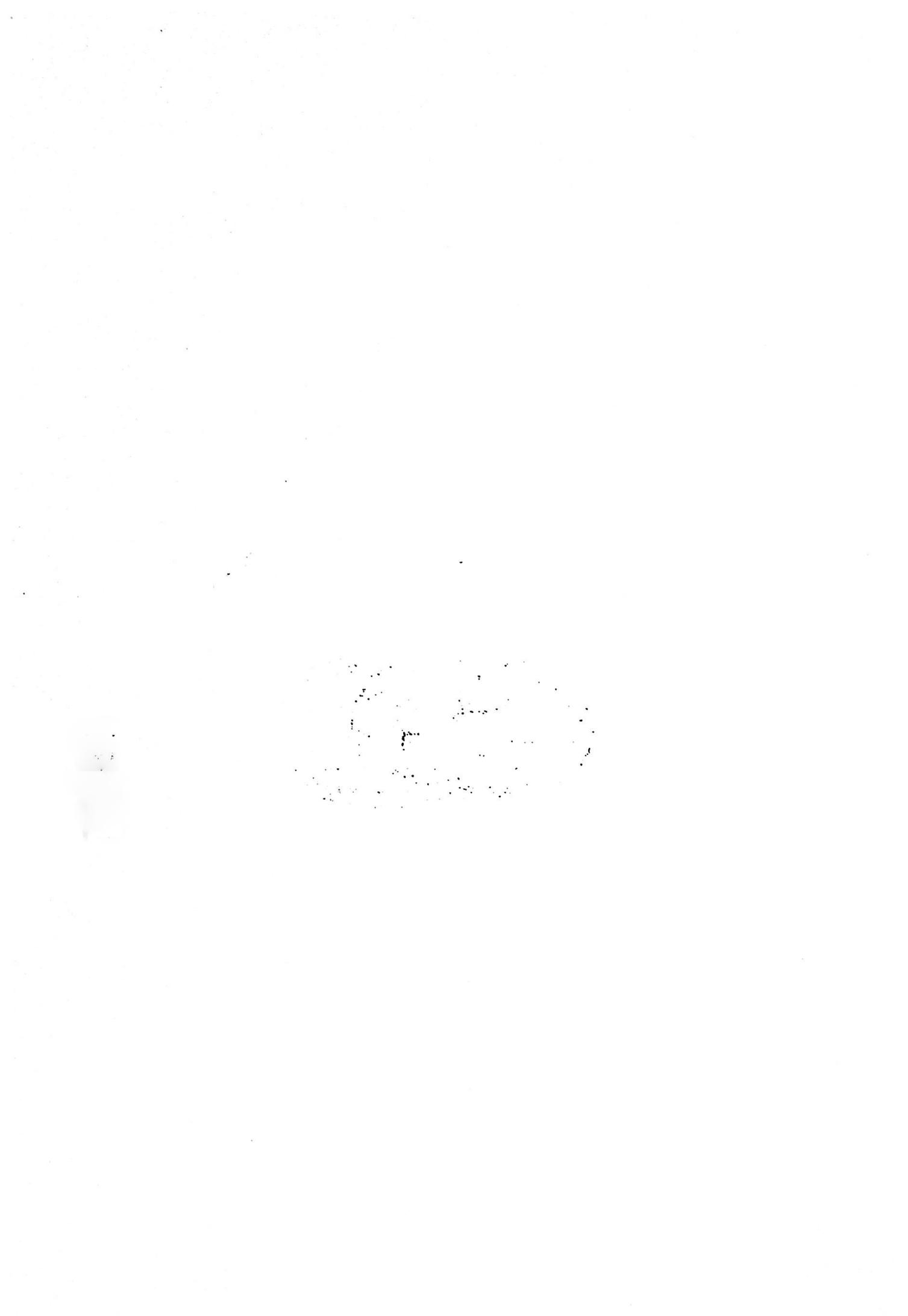
**THE CATCH-EFFORT STATISTICS
FOR THE SOUTH CHINA SEA AREA**

1993

Marine Fishery Resources Development and Management Department

Southeast Asian Fisheries Development Center

1998



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Southeast Asian Fisheries Development Center

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REPORT OF STATISTICAL BULLETIN
ISSN 1511-1709

FOREWORD

The SEAFDEC programs of statistics can be divided into two components i.e., the general production statistics and the catch-effort statistics. The catch-effort statistics for the South China Sea area was first produced in November 1981 as a supplement to the Fishery Statistical Bulletin which was first issued in 1978. The catch-effort statistics was later incorporated as part of the Statistical Bulletin from 1981 till 1983 and continued to be published independently by the Secretariat. The last publication was the catch-effort statistics for 1991.

At the Technical Working Group Meeting, held in Bangkok in January 1990, it was agreed that MFRDMD could embark on the compilation of the catch-effort statistics. The recommendation of the Technical Working Group Meeting was then included in MFRDMD'S three year Operation Plan (1992 - 1994) which was approved by the Council at its twenty-fourth annual meeting held in Manila in 1991. Hence with the establishment of MFRDMD as the fourth Department of SEAFDEC the responsibility of producing the catch-effort statistics for the South China Sea area was eventually taken over by the Department in 1993.

MFRDMD has revised the format for the collection and compilation of the catch-effort statistics, and discussed this matter with the Secretariat, TD and other people concerned. The revised format was submitted to the Regional Workshop on Fishery Information and Statistics in Asia, held in January 1994, Bangkok. The workshop accepted the revised format for the catch-effort statistics for the region.

The first issue for 1992 was published by MFRDMD in August 1997. This second issue for 1993, like the first issue is also based on the original returns of the questionnaire. The compilation does not follow exactly the revised format as mentioned above mainly due to the availability of data received.

On behalf of SEAFDEC, we would like to express our sincere appreciation to Department of Fisheries of Taiwan, Brunei Darussalam, Malaysia and Indonesia for the cooperation given in enabling us to compile and produce the catch-effort statistics for the region.


Ismail Taufid Md. Yusoff
Chief, SEAFDEC/MFRDMD
Kuala Terengganu

CONTENTS

Page

EXPLANATORY NOTES

1. General Notes	i
1-1 Data Collection	i
1-2 Time Reference	i
1-3 Unit of Catch	i
2. Notes on Statistics	i
2-1 Category of Statistics	i
2-2 Classification and Coverage of Fishing Gears	ii
2-3 Classification of Fishing Boats	iii
2-4 Coverage of Fishing Efforts	iii
2-5 Others	iii

DATA AVAILABILITY

1. Annual Catch-effort Statistics	iv
2. Monthly Catch-effort Statistics	iv
3. Specific Data on Catch-effort	iv

ANNEX

1. Countries and Sub-areas for the Statistics	v
2. Classification and Code Number of Species	vi
3. List of Marine Species with Codes of SEAFDEC and ISSCAAP (FAO) ...	vii

STATISTICAL TABLES FOR 1993

1. Annual Catch-effort Statistics 1993	2
1-1 Catch and Fishing Effort by Type of Fishing Gear	2
1-1-1 One Boat Purse Seine	
(1) Brunei Darussalam	2
1-1-2 Otter Trawl	
(1) Brunei Darussalam	3
1-1-3 Pair Trawl	
(1) Taiwan	4
1-1-4 Drift Gill Net	
(1) Malaysia (Peninsular)	5
1-1-5 Longline	
(1) Malaysia (Peninsular)	6

1-2	Catch and Fishing Effort by Type of Fishing Gear and Size of Management	7
1-2-1	One Boat Purse Seine	
	(1) Taiwan (Unit only)	7
	(2) Malaysia (Peninsular)	8
1-2-2	Otter Trawl	
	(1) Taiwan	9
	(2) Malaysia (Peninsular)	10
1-2-3	Longline	
	(1) Taiwan (Unit only)	11
2.	Monthly Catch-effort Statistics 1993	12
2-1	Catch and Fishing Effort by Type of Fishing Gear and by Month	12
2-1-1	One Boat Purse Seine	
	(1) Taiwan (Catch only)	12
	(2) Brunei Darussalam	14
2-1-2	Otter Trawl	
	(1) Taiwan (Catch only)	16
	(2) Brunei Darussalam	18
2-1-3	Pair Trawl	
	(1) Taiwan (Catch only)	20
2-1-4	Longline	
	(1) Taiwan (Catch only)	22
3.	Specific Data on Catch-effort 1993	24
3-1	Indonesia	24
3-1-1	Annual Catch and Effort (Unit only) by Type of Fishing Gear and by Area	24

BED Equipped Shrimp Net, Seine Net (Payang includes Lampara), Seine Net (Danish Seine), Seine Net (Beach Seine), Purse Seine, Gill Net (Drift Gill Net), Gill Net (Encircling Gill Net), Gill Net (Shrimp Gill Net), Gill Net (Set Gill Net), Gill Net (Trammel Net), Lift Net (Boat/Raft Net), Lift Net (Bagan includes Kelong), Lift Net (Scoop Net), Lift Net (Other Lift Net), Hook-and-Line (Tuna Longline), Hook-and-Line (Drift Longline other than Tuna Longline), Hook-and-Line (Set Longline), Hook-and-Line (Skipjack Pole and Line), Hook-and-Line (Other Pole and Line), Hook-and-Line (Troll Line), Trap (Guiding Barrier), Trap (Stow Net), Trap (Portable Trap), Trap (Other Traps), Shellfish Collection, Seaweed Collection, Muro Ami included Mallugis and Others (Harpon, Cast Net etc.).

EXPLANATORY NOTES

1. General Notes

1-1 Data Collection

The data compiled in this Bulletin are, in principle, based upon the returns from the authority concerned in each country to a questionnaire prepared by the Marine Fishery Resources Development and Management Department, Southeast Asian Fisheries Development Center (SEAFDEC/MFRDMD).

1-2 Time Reference

Data in this Bulletin refer to the year 1993

1-3 Unit of Catch

Catch quantity is shown in metric ton. However, there are some exceptions in the section of "III. Specific Data on catch-effort".

2. Notes on Statistics

2-1 Category of Statistics

- 1) Annual Catch-effort Statistics --- Annual catch and effort data broken down into fishing gear and boat size category are described (whole country and sub-areas).
- 2) Monthly Catch-effort Statistics --- Monthly catch and effort data broken down into fishing gear and boat size category are described (whole country and sub-areas).
- 3) Specific Data on Catch-effort --- Data which cannot be applied for above two categories are described.

2-2 Classification and Coverage of Fishing Gears

Catch-effort data of five types of fishing gear {(1)-(5)} as shown in the following table are compiled in this issue. # , Names of fishing gear recorded in the previous issue.

Major Group	Particular Name
1. Surrounding Net	(1) One boat purse seine ----- # Anchovy purse seine # Thai purse seine # Fish purse seine
2. Seine Net	-
3. Trawl	(2) Otter trawl (3) Pair trawl ----- # Beam trawl
4. Gill Net	(4) Drift gill net ----- # Spanish mackerel drift gill net # Mackerel encircling gill net
5. Lift Net	-
6. Trap	# Bamboo stake trap
7. Hook-and-line	(5) Longline
8. Push Net	# Engine boat push net
9. Shellfish and Seaweed Collecting Gear	-
10 Others	-

2-3 Classification of Fishing Boats

In Taiwan, fishing boats are classified into classes by their tonnage (GRT class), which comprise five categories i.e., (1) less than 10 tons, (2) from 10 to 20 tons, (3) from 20 to 50 tons, (4) from 50 to 100 tons, and (5) over 100 tons.

In Malaysia, fishing boats are classified into classes by their tonnage (GRT class), which comprise five categories i.e., (1) less than 10 tons, (2) from 10 to 25 tons, (3) from 25 to 40 tons, (4) from 40 to 70 tons, and (5) over 70 tons.

2-4 Coverage of Fishing Efforts

The units of fishing effort are classified for each class boat size.

- 1) Number of fishing units
- 2) Number of trips
- 3) Number of days
- 4) Number of hauls
- 5) Number of hours (operating hours are from start shooting until start hauling in trawling, and excluding searching hours for fish schools in purse seining)
- 6) Number of hooks (Longline only)

2-5 Others

Countries and sub-areas for the statistics, classification and code number of species, and list of marine species with codes of SEAFDEC and ISSCAAP (FAO) are shown in ANNEX.

DATA AVAILABILITY

1. Annual Catch-effort Statistics 1993

Catch and Fishing Effort by Type of Fishing Gear

One Boat Purse Seine: *Taiwan, Brunei and Malaysia (Peninsular)*
Otter Trawl: *Taiwan, Brunei and Malaysia (Peninsular)*
Pair Trawl: *Taiwan*
Drift Gill Net: *Malaysia (Peninsular)*
Longline: *Taiwan and Malaysia (Peninsular)*

Catch and Fishing Effort by Type of Fishing Gear and Size of Management

One Boat Purse Seine: *Taiwan (Unit only) and Malaysia (Peninsular)*
Otter Trawl: *Taiwan (Unit only) and Malaysia (Peninsular)*
Longline: *Taiwan (Unit only)*

2. Monthly Catch-effort Statistics 1993

Catch and Fishing Effort by Type of Fishing Gear and by Month

One Boat Purse Seine: *Taiwan (Catch only) and Brunei*
Otter Trawl: *Taiwan (Catch only) and Brunei*
Pair Trawl: *Taiwan (Catch only)*
Longline: *Taiwan (Catch only)*

3. Specific Data on Catch-effort 1993

Indonesia

Annual Catch and Effort (Unit only) by Type of Fishing Gear and by Area:

BED Equipped Shrimp Net, Seine Net (Payang includes Lampara), Seine Net (Danish Seine), Seine Net (Beach Seine), Purse Seine, Gill Net (Drift Gill Net), Gill Net (Encircling Gill Net), Gill Net (Shrimp Gill Net), Gill Net (Set Gill Net), Gill Net (Trammel Net), Lift Net (Boat/Raft Net), Lift Net (Bagan includes Kelong), Lift Net (Scoop Net), Lift Net (Other Lift Net), Hook-and-Line (Tuna Longline), Hook-and-Line (Drift Longline other than Tuna Longline), Hook-and-Line (Set Longline), Hook-and-Line (Skipjack Pole and Line), Hook-and-Line (Other Pole and Line), Hook-and-Line (Troll Line), Trap (Guiding Barrier), Trap (Stow Net), Trap (Portable Trap), Trap (Other Traps), Shellfish Collection, Seaweed Collection, Muro Ami included Mallugis and Others (Harpon, Cast Net etc.).

ANNEX

1. Countries and Sub-areas for the Statistics

Countries and sub-areas to be used in catch-effort statistics are as follows:

- 1) Brunei
- 2) Taiwan
- 3) Hong Kong
- 4) Indonesia
 - 4) - 1 West coast of Sumatra
 - 4) - 2 South coast of Java
 - 4) - 3 Malacca Straits
 - 4) - 4 East coast of Sumatra
 - 4) - 5 North coast of Java
 - 4) - 6 Bali and Nusa Tenggara
 - 4) - 7 Kalimantan
 - 4) - 8 Sulawesi
 - 4) - 9 Maluku and Irian Jaya
- 5) Kampuchea
- 6) Malaysia
 - 6) - 1 West coast of Peninsular Malaysia
 - 6) - 2 East coast of Peninsular Malaysia
 - 6) - 3 Sabah
 - 6) - 4 Sarawak
 - 6) - 5 Labuan
- 7) Philippines
 - 7) - 1 Luzon
 - 7) - 2 Visayas
 - 7) - 3 Mindanao
- 8) Singapore
- 9) Thailand
 - 9) - 1 Gulf of Thailand
 - 9) - 2 Indian Ocean
- 10) Viet Nam

In Specific Data on Catch-effort, some particular areas which are defined in the remarks are applied.

2. Classification and Code Number of Species

1) Catch by Species

The catch should be broken down by species (group). The standard statistical classification of marine species was amended based on proposal made during the Seventh Regional Workshop on Fishery Statistics (1989) which were revised by taking comments into account from the countries after the Workshop.

2) Species Code Number

The species code number previously assigned by SEAFDEC Bulletin was changed from a "three-digit number" to "four-digit number". The four-digit number will be added to the list to allow for further sub-division of the species groups when required.

3) Definition of Species Code Number

The first two digits show the group number taken from ISSCAAP (FAO Yearbook). This group number should not be changed, even if the ISSCAAP grouping has changed. The last two digits show the particular species within a group, starting from 01.

4) Names of Family

In all cases the family names of fish species have been taken from a single reference (Greenwood, P. H., D. E. Rosen, S. H. Weitzman and G. S. Myers. 1966. Phyletic studies of teleostean fishes, with a provisional classification of living forms. Bull. Amer. Mus. Nat. Hist., 131 (4): 339-456) to allow clear selection, without taxonomical confusion, of teleostean fishes.

5) English and Scientific Name

As the English names for species vary quite considerably, the species codes have been based on the scientific name of the species.

3. List of Marine Species with Species Codes of SEAFDEC and ISSCAAP (FAO)

ISSCAAP			SEAFDEC		
Div.	Group	Code	Name	Code No.	Family / Scientific name
2.	24. Shad, milkfish, etc.	CHG	1. Shads	2401	Clupeidae - <i>Anodontostoma chacunda</i>
		PEO			<i>Pellona ditchela</i>
	MIL	2. Milkfish	2402	Chanidae - <i>Chanos chanos</i>	
	25. Miscellaneous	GIP	1. Barramundi	2501	Centropomidae - <i>Lates calcalifer</i>
3.	31. Flounders, halibut, soles	LEF	1. Flounders	3101	Bothidae
		HPX	2. Indian halibuts	3102	Psettodidae
		TOX	3. Tongue soles	3103	Cynoglossidae
		SOX	4. Soles	3104	Soleidae
	33. Red fishes, bass, congers, etc.	CAX	1. Marine catfishes	3301	Ariidae
		CAE	2. Catfish eels	3302	Plotosidae - <i>Plotosus</i> spp.
		LSS	3. Lizard fishes	3303	Synodontidae - <i>Saurida</i> spp.
		PCX	4. Sharp-toothed pike eels and conger eels	3304	Muraenesocidae - <i>Muraenesox</i> spp. (including Congridae, Muraenidae and Synbranchidae)
		GPX	5. Groupers	3305	Serranidae - <i>Epinephelus</i> spp.
		WHS	6. Sillago whittings	3306	Sillaginidae
		SNA	7. Red snappers	3307	Lutjanidae - <i>Lutjanus</i> spp. (<i>L. argentimaculatus</i> , <i>L. Sabae</i> , <i>L. malabaricus</i> , <i>L. sanguineus</i> , <i>L. altifrontalis</i>)
		SNX	8. Other snappers	3308	Lutjanidae - <i>Lutjanus</i> spp. (<i>L. johni</i> , <i>L. vitta</i> , <i>L. russelli</i> , <i>L. lineolatus</i> , <i>L. lutjanus</i> , <i>L. fulviflamma</i> , <i>L. monostigma</i>) <i>Pristipomoides</i> spp.
		FUS	9. Fusiliers	3309	Lutjanidae - <i>Caesio</i> spp.
		THB	10. Threadfin breams	3310	Nemipteridae - <i>Nemipterus</i> spp. (including <i>Scolopsis</i> spp.)
		PON	11. Pony fishes	3311	Leiognathidae
		GRX	12. Grunters and sweetlips	3312	Pomadasyidae
		CDX	13. Drums and croakers	3313	Sciaenidae
		GOX	14. Goatfishes	3314	Mullidae - <i>Upeneus</i> spp. (including <i>Parupeneus</i> spp.)
		ELL	15. Emperor breams	3315	Lethrinidae - <i>Lethrinus</i> spp. (including <i>Gymnocranius</i> spp.)
		BIG	16. Big-eye snappers	3316	Priacanthidae - <i>Priacanthus</i> spp.
SBX	17. Breams	3317	Sparidae		
TIS	18. Horseheads	3318	Branchiostegidae		
SPI	19. Rabbitfishes	3319	Siganidae - <i>Siganus</i> spp.		
DPX	20. Other species	3320	Main groups to be identified, if possible.		

ISSCAAP			SEAFDEC		
Div.	Group	Code	Name	Code No.	Family / Scientific name
3.	34. Jacks, mullets, sauries, etc.	HAX	1. Half beaks and needlefishes	3401	Exocoetidae - <i>Hemirhamphus</i> spp.
		NED			Belonidae - <i>Tylosurus</i> spp.
		BAR	2. Barracudas	3402	Sphyraenidae - <i>Sphyraena</i> spp.
		MUL	3. Mulletts	3403	Mugilidae
		THF	4. Threadfins	3404	Polynemidae
		SDX	5. Round scads	3405	Carangidae - <i>Decapterus</i> spp.
		TRE	6. Jacks, cavalla and trevallies	3406	Carangidae - <i>Caranx</i> spp.
		GLT			<i>Gnathanodon speciosus</i> (including <i>Alectis</i> spp. <i>Atropus atropus</i> , <i>Caranx chrysophrys</i> , <i>C. malabaricus</i> , <i>C. ignobilis</i>)
		BIS	7. Selar scads	3407	Carangidae - <i>Selar crumenophthalmus</i>
		TRY			<i>Selaroides leptolepis</i> (including <i>Alepes</i> spp., <i>Selar</i> spp.)
		HAS	8. Hardtail scad	3408	Carangidae - <i>Megalaspis cordyla</i>
		QUE	9. Queenfishes	3409	Carangidae - <i>Scomberoides</i> (= <i>Chorinemus</i>) spp.
	POB	10. Black pomfret	3410	Formionidae - <i>Formio niger</i>	
	SIP	11. White pomfrets	3411	Stromateidae - <i>Pampus argenteus</i> (including <i>Pampus chinensis</i>)	
	PPX	12. Other species	3412	Main groups to be identified, if possible.	
	35. Herrings, sardines, anchovies	SIX	1. Sardines	3501	Clupeidae - <i>Sardinella</i> spp.
		RAS	2. Round herring	3502	Clupeidae - <i>Dussumieria acute</i>
		STO	3. Anchovies	3503	Engraulidae - <i>Stolephorus</i> spp.
		CLU	4. Clupeoids	3504	Clupeoidei
		DOB	5. Wolf herring	3505	Chirocentridae - <i>Chirocentrus dorab</i>
	36. Tunas	SKJ	1. Skipjack tuna	3601	Scombridae - <i>Katsuwonus pelamis</i>
		YFT	2. Yellowfin tuna	3602	Scombridae - <i>Thunnus albacares</i>
		BET	3. Big-eye tuna	3603	Scombridae - <i>Thunnus obesus</i>
		LOT	4. Longtail tuna	3604	Scombridae - <i>Thunnus tonggol</i>
		ALB	5. Albacore	3605	Scombridae - <i>Thunnus alalunga</i>
		KAW	6. Eastern little tuna	3606	Scombridae - <i>Euthynnus affinis</i>
		FRZ	7. Frigate tuna and bullet tuna	3607	Scombridae - <i>Auxis thazard</i> <i>Auxis rochei</i>
		BIL	8. Indo-Pacific swordfish, sailfishes and marlins	3608	Istiophoridae - <i>Istiophorus</i> spp. <i>Makaira</i> spp.
		XIP			Xiphiidae - <i>Xiphias</i> spp.
		COM	9. Narrow-barred king mackerel	3609	Scombridae - <i>Scomberomorus commerson</i>
	37. Mackerels	GUT	10. King mackerels	3610	Scombridae - <i>Scomberomorus guttatus</i>
		STS			<i>Scomberomorus lineolatus</i>
	37. Mackerels	RAG	1. Indian mackerels	3701	Scombridae - <i>Rastrelliger kanagurta</i> (including <i>Rastrelliger faughni</i>)
RAB		2. Indo-Pacific mackerel	3702	Scombridae - <i>Rastrelliger brachysoma</i>	
CUT		3. Hairtails	3703	Trichiuridae	

ISSCAAP			SEAFDEC		
Div.	Group	Code	Name	Code No.	Family / Scientific name
3.	38. Sharks and rays	SKH	1. Sharks	3801	Carcharhinidae, Sphyrnidae, Orectolobidae, etc.
		BAI	2. Rays	3802	Trygonidae, Sphyrnidae, Myliobatidae, etc.
	39. Miscellaneous	MZZ	1. Miscellaneous	3901	Mixed species
		MZZ	2. Trash fishes	3902	Mixed species
4.	42. Crabs	CRS	1. Swimming crabs	4201	Portunidae - <i>Portunus</i> spp.
		MUD	2. Mangrove crab	4202	Portunidae - <i>Scylla serrata</i>
	43. Lobsters	SLV	1. Spiny lobsters	4301	Palinuridae - <i>Pamulirus</i> spp.
		SST	2. Slipper lobster	4302	Scyllaridae - <i>Themus orientalis</i>
	45. Shrimps, prawns, etc.	GIT	1. Tiger prawn	4501	Penaenidae - <i>Penaeus monodon</i>
		PEN MET	2. Penaeid prawns	4502	Penaenidae - <i>Penaeus</i> spp. <i>Metapenaeus</i> spp.
		-	3. Other prawns	4503	Penaenidae - <i>Parapenaeopsis</i> spp. Other family (genus) names will be added.
47. Miscellaneous marine crustaceans	CRU	1. Miscellaneous	4701	Mixed species	
5.	55. Scallops, pectens, etc.	SCX	1. Scallops	5501	Pectinidae
	56. Cockles, clams	BLS	1. Blood cockle	5601	Arcidae - <i>Anadara</i> spp. <i>Anadara granosa</i>
		BLC			
		MAT	2. Clams and cone shell	5602	Mactridae Other family names will be added.
	57. Cuttlefish, squid and octopus	CTL	1. Cuttlefishes	5701	Sepiidae, Sepiolidae
		SQC	2. Squids	5702	Loliginidae - <i>Loligo</i> spp.
		OCZ	3. Octopuses	5703	Octopodidae - <i>Octopus</i> spp.
58. Miscellaneous marine molluscs	MOL	1. Miscellaneous	5801	Other molluscs	
7.	76. Miscellaneous aquatic animals	JEL	1. Jellyfishes	7601	<i>Rhopilema</i> spp.

STATISTICAL TABLES FOR 1993

1 ANNUAL CATCH-EFFORT STATISTICS 1993

1-1 Catch and Fishing Effort by Type of Fishing Gear

1-1-1 One Boat Purse Seine

(1) Brunei Darussalam

Sub-area : Zones 2 - 3

Unit of fishing effort		Total
No. of fishing units		5
No. of trips		719
No. of days		719
No. of hauls		1,438
No. of trawling hours		8,628
Total catch		375.47
Species (group)	Code No.	Total
Shads	2401	
Barramundi	2501	
Flounders	3101	
Indian halibuts	3102	
Tongue soles	3103	
Marine catfishes	3301	
Catfish eels	3302	
Lizard fishes	3303	
Sharp-toothed p. & c. eels	3304	
Groupers	3305	
Sillago whiting	3306	
Red Snappers	3307	
Other Snappers	3308	
Fusiliers	3309	
Threadfin breams	3310	
Pony fishes	3311	0.08
Grunters and sweetlips	3312	
Drums and croakers	3313	
Goatfishes	3314	
Emperor breams	3315	
Big-eye Snappers	3316	
Breams	3317	
Horseheads	3318	
Rabbitfishes	3319	
Other species	3320	
Barracudas	3402	
Mulletts	3403	
Threadfins	3404	
Round scads	3405	12.23
Jack, cavalla, trevallies	3406	
Selar scads	3407	124.07
Hardtail Scad	3408	0.33
Queenfishes	3409	
Black pomfret	3410	4.06
White pomfret	3411	
Other species	3412	1.19
Sardines	3501	7.66
Round herring	3502	0.73
Anchovies	3503	
Clupeoids	3504	
Wolf herring	3505	1.29
Skipjack tuna	3601	
Yellowfin tuna	3602	3.96
Big-eye tuna	3603	
Longtail tuna	3604	
Albacore	3605	
Eastern little tuna	3606	1.58
Frigate and bullet tuna	3607	2.95
Swordfishes, sail. & marl.	3608	
Narrow-barred king mackerel	3609	
King mackerels	3610	1.08
Indian mackerels	3701	213.47
Indo-Pacific mackerel	3702	
Hairtails	3703	0.12
Sharks	3801	
Rays	3802	
Miscellaneous fishes	3901	
Trash fishes	3902	
Swimming crabs	4201	
Mangrove crab	4202	
Spiny lobsters	4301	
Slipper lobster	4302	
Tiger prawn	4501	
Penaeid prawns	4502	
Other prawns	4503	
Miscellaneous	4701	
Clams and cone shell	5602	
Cuttlefishes	5701	
Squids	5702	
Octopuses	5703	0.04
Miscellaneous m. molluscs	5801	
OTHERS		
TOTAL		0.63
		375.47

1 ANNUAL CATCH-EFFORT STATISTICS 1993

1-1 Catch and Fishing Effort by Type of Fishing Gear

1-1-2 Otter Trawl

(1) Brunei Darussalam

Sub-area : Zones 2 - 3

Unit of fishing effort		Total
No. of fishing units		15
No. of trips		2,300
No. of days		2,300
No. of hauls		6,900
No. of trawling hours		13,800
Total catch		848.25
Species (group)	Code No.	Total
Shads	2401	4.83
Barramundi	2501	
Flounders	3101	
Indian halibuts	3102	6.65
Tongue soles	3103	
Marine catfishes	3301	1.93
Catfish eels	3302	
Lizard fishes	3303	
Sharp-toothed p. & c. eels	3304	
Groupers	3305	7.15
Sillago whiting	3306	
Red Snappers	3307	18.24
Other Snappers	3308	11.83
Fusiliers	3309	
Threadfin breams	3310	1.97
Pony fishes	3311	39.39
Grunters and sweetlips	3312	65.51
Drums and croakers	3313	15.71
Goatfishes	3314	39.74
Emperor breams	3315	11.85
Big-eye Snappers	3316	
Breams	3317	0.63
Horseheads	3318	0.03
Rabbitfishes	3319	
Other species	3320	0.24
Barracudas	3402	114.47
Mulletts	3403	0.98
Threadfins	3404	0.08
Round scads	3405	0.09
Jack, cavalla, trevallies	3406	25.95
Selar scads	3407	36.43
Hardtail Scad	3408	2.85
Queenfishes	3409	10.24
Black pomfret	3410	14.92
White pomfret	3411	1.33
Other species	3412	3.05
Sardines	3501	74.26
Round herring	3502	0.53
Anchovies	3503	
Clupeoids	3504	1.67
Wolf herring	3505	
Skipjack tuna	3601	
Yellowfin tuna	3602	0.03
Big-eye tuna	3603	
Longtail tuna	3604	
Albacore	3605	
Eastern little tuna	3606	0.12
Frigate and bullet tuna	3607	
Swordfishes, sail. & marl.	3608	
Narrow-barred king mackerel	3609	17.42
King mackerels	3610	
Indian mackerels	3701	59.96
Indo-Pacific mackerel	3702	
Hairtails	3703	8.78
Sharks	3801	30.41
Rays	3802	60.43
Miscellaneous fishes	3901	
Trash fishes	3902	
Swimming crabs	4201	0.48
Mangrove crab	4202	
Spiny lobsters	4301	0.02
Slipper lobster	4302	0.53
Tiger prawn	4501	
Penaeid prawns	4502	14.08
Other prawns	4503	
Miscellaneous	4701	
Clams and cone shell	5602	
Cuttlefishes	5701	1.18
Squids	5702	35.89
Octopuses	5703	
Miscellaneous m. molluscs	5801	106.37
OTHERS		
TOTAL		848.25

1 ANNUAL CATCH-EFFORT STATISTICS 1993

1-1 Catch and Fishing Effort by Type of Fishing Gear

1-1-3 Pair Trawl

(1) Taiwan

Unit of fishing effort		Total
No. of units		126
No. of trips		
No. of days		
No. of hauls		
No. of trawling hours		79,099
Total catch		
Species (group)	Code No.	Total
Shads	2401	
Barramundi	2501	
Flounders	3101	6
Indian halibuts	3102	
Tongue soles	3103	
Marine catfishes	3301	
Catfish eels	3302	
Lizard fishes	3303	2,984
Sharp-toothed p. & c. eels	3304	281
Groupers	3305	1,760
Sillago whiting	3306	333
Red Snappers	3307	2,441
Other Snappers	3308	
Fusiliers	3309	
Threadfin breams	3310	3,748
Pony fishes	3311	
Grunters and sweetlips	3312	
Drums and croakers	3313	1,144
Goatfishes	3314	102
Emperor breams	3315	336
Big-eye Snappers	3316	2,003
Breams	3317	269
Horseheads	3318	30
Rabbitfishes	3319	
Other species	3320	
Barracudas	3402	348
Mullet	3403	
Threadfins	3404	6,675
Round scads	3405	
Jack, cavalla, trevallies	3406	
Selar scads	3407	
Hardtail Scad	3408	
Queenfishes	3409	
Black pomfret	3410	2,722
White pomfret	3411	15
Other species	3412	
Sardines	3501	
Round herring	3502	
Anchovies	3503	
Clupeoids	3504	
Wolf herring	3505	
Skipjack tuna	3601	
Yellowfin tuna	3602	
Big-eye tuna	3603	
Longtail tuna	3604	
Albacore	3605	
Eastern little tuna	3606	
Frigate and bullet tuna	3607	
Swordfishes, sail. & marl.	3608	
Narrow-barred king mackerel	3609	
King mackerels	3610	
Indian mackerels	3701	
Indo-Pacific mackerel	3702	
Hairtails	3703	3,353
Sharks	3801	7,027
Rays	3802	205
Miscellaneous fishes	3901	31,717
Trash fishes	3902	
Swimming crabs	4201	
Mangrove crab	4202	
Spiny lobsters	4301	
Slipper lobster	4302	240
Tiger prawn	4501	
Penaeid prawns	4502	
Other prawns	4503	
Miscellaneous	4701	229
Clams and cone shell	5602	13
Cuttlefishes	5701	3,857
Squids	5702	7,122
Octopuses	5703	132
Miscellaneous m. molluscs	5801	7
OTHERS		
TOTAL		79,099

1 ANNUAL CATCH-EFFORT STATISTICS 1993

1-1 Catch and Fishing Effort by Type of Fishing Gear

1-1-4 Drift Gill Net

(1) Malaysia

Sub-area : Peninsular Malaysia

Unit of fishing effort		Total
No. of fishing units		136,063
No. of trips		
No. of days		
No. of hauls		
Total catch		60,668
Species (group)	Code No.	Total
Shads	2401	
Barramundi	2501	
Flounders	3101	
Tongue soles	3103	
Marine catfishes	3301	
Catfish eels	3302	
Lizard fishes	3303	
Sharp-toothed p. & c. eels	3304	
Groupers	3305	
Sillago whiting	3306	
Red Snappers	3307	
Other Snappers	3308	
Fusiliers	3309	
Threadfin breams	3310	
Pony fishes	3311	
Grunters and sweetlips	3312	
Drums and croakers	3313	
Goatfishes	3314	
Rabbitfishes	3319	
Other species	3320	
Barracudas	3402	
Mulletts	3403	
Threadfins	3404	
Round scads	3405	
Jack, cavalla, trevallies	3406	131
Selar scads	3407	934
Hardtail Scad	3408	438
Queenfishes	3409	
Black pomfret	3410	1,400
Other species	3412	
Sardines	3501	
Anchovies	3503	
Clupeoids	3504	
Wolf herring	3505	1,818
Longtail tuna	3604	1,724
Eastern little tuna	3606	
Swordfishes, sail. & marl.	3608	
King mackerels	3610	
Indian mackerels	3701	16,007
Hairtails	3703	
Sharks	3801	
Rays	3802	
Miscellaneous fishes	3901	
Trash fishes	3902	
Mangrove crab	4202	
Spiny lobsters	4301	
Tiger prawn	4501	
Penaeid prawns	4502	
Other prawns	4503	
Clams and cone shell	5602	
Cuttlefishes	5701	
Squids	5702	
Octopuses	5703	
Miscellaneous m. molluscs	5801	
OTHERS		38,216
TOTAL		60,668

1 ANNUAL CATCH-EFFORT STATISTICS 1993

1-1 Catch and Fishing Effort by Type of Fishing Gear

1-1-5 Longline

(1) Malaysia

Sub-area : Peninsular Malaysia

Unit of fishing effort		Total
No. of fishing units		21,946
No. of trips		
No. of days		
No. of hauls		
Total catch		19,322
Species (group)	Code No.	Total
Shads	2401	
Barramundi	2501	
Flounders	3101	
Tongue soles	3103	
Marine catfishes	3301	758
Catfish eels	3302	
Lizard fishes	3303	
Sharp-toothed p. & c. eels	3304	
Groupers	3305	561
Sillago whiting	3306	
Red Snappers	3307	681
Other Snappers	3308	
Fusiliers	3309	
Threadfin breams	3310	1,230
Pony fishes	3311	
Grunters and sweetlips	3312	
Drums and croakers	3313	
Goatfishes	3314	
Rabbitfishes	3319	
Other species	3320	
Barracudas	3402	
Mullets	3403	
Threadfins	3404	
Round scads	3405	
Jack, cavalla, trevallies	3406	
Selar scads	3407	1,591
Hardtail Scad	3408	728
Queenfishes	3409	
Black pomfret	3410	
Other species	3412	
Sardines	3501	
Anchovies	3503	
Clupeoids	3504	
Wolf herring	3505	
Longtail tuna	3604	
Eastern little tuna	3606	3,764
Swordfishes, sail. & marl.	3608	
King mackerels	3610	
Indian mackerels	3701	
Hairtails	3703	
Sharks	3801	
Rays	3802	
Miscellaneous fishes	3901	
Trash fishes	3902	
Mangrove crab	4202	
Spiny lobsters	4301	
Tiger prawn	4501	
Penaeid prawns	4502	
Other prawns	4503	
Clams and cone shell	5602	
Cuttlefishes	5701	
Squids	5702	
Octopuses	5703	
Miscellaneous m. molluscs	5801	
OTHERS		10,009
TOTAL		19,322

1 ANNUAL CATCH-EFFORT STATISTICS 1993

1-2 Catch and Fishing Effort by Type of Fishing Gear and Size of Management

1-2-1 One Boat Purse Seine (Purse Seine for Tuna + Purse Seine for Mackerel)

(1) Taiwan

Unit of fishing effort		Size of boat					
		Total	Less than 10 tons	10-20 tons	20-50 tons	50-100 tons	More than 100 tons
No. of units		240	110	42		17	71
No. of trips							
No. of days							
No. of hauls							
No. of trawling hours							
Total catch		240,518					
Species (group)	Code No.	Total	Less than 10 tons	10-20 tons	20-50 tons	50-100 tons	More than 100 tons
Shads	2401						
Barramundi	2501						
Flounders	3101						
Indian halibuts	3102						
Tongue soles	3103						
Marine catfishes	3301						
Catfish eels	3302						
Lizard fishes	3303						
Sharp-toothed p. & c. eels	3304						
Groupers	3305						
Sillago whiting	3306						
Red Snappers	3307						
Other Snappers	3308						
Fusiliers	3309						
Threadfin breams	3310						
Pony fishes	3311						
Grunters and sweetlips	3312						
Drums and croakers	3313						
Goatfishes	3314						
Emperor breams	3315						
Big-eye Snappers	3316						
Breams	3317						
Horseheads	3318						
Rabbitfishes	3319						
Other species	3320						
Barracudas	3402						
Mullets	3403						
Threadfins	3404						
Round scads	3405						
Jack, cavalla, trevallies	3406	23,520					
Selar scads	3407						
Hardtail Scad	3408						
Queenfishes	3409						
Black pomfret	3410						
White pomfret	3411						
Other species	3412						
Sardines	3501						
Round herring	3502						
Anchovies	3503						
Clupeoids	3504						
Wolf herring	3505						
Skipjack tuna	3601	111,605					
Yellowfin tuna	3602	63,757					
Big-eye tuna	3603	896					
Longtail tuna	3604						
Albacore	3605						
Eastern little tuna	3606						
Frigate and bullet tuna	3607	11					
Swordfishes, sail. & marl.	3608						
Narrow-barred king mackerel	3609						
King mackerels	3610						
Indian mackerels	3701	40,330					
Indo-Pacific mackerel	3702						
Hairtails	3703						
Sharks	3801						
Rays	3802						
Miscellaneous fishes	3901	399					
Trash fishes	3902						
Swimming crabs	4201						
Mangrove crab	4202						
Spiny lobsters	4301						
Slipper lobster	4302						
Tiger prawn	4501						
Penaeid prawns	4502						
Other prawns	4503						
Miscellaneous	4701						
Clams and cone shell	5602						
Cuttlefishes	5701						
Squids	5702						
Octopuses	5703						
Miscellaneous m. molluscs	5801						
OTHERS							
TOTAL		240,518					

1 ANNUAL CATCH-EFFORT STATISTICS 1993

1-2 Catch and Fishing Effort by Type of Fishing Gear and Size of Management

1-2-1 One Boat Purse Seine

(2) Malaysia

Sub-area : Peninsular Malaysia

Size of boat		Total	Less than 10 tons	10 - 25 tons	25 - 40 tons	40 - 70 tons	More than 70 tons
No. of units		6,266	55	1,201	1,302	2,640	1,068
No. of trips		67,191	1,030	18,502	18,108	25,988	3,563
No. of days		100,298	1,030	18,885	20,501	42,558	17,324
No. of hauls		230,467	7,615	64,784	59,270	75,263	23,535
Total catch		133,388	2,089	21,279	23,438	49,514	37,068
Species (group)	Code No.	Total	Less than 10 tons	10 - 25 tons	25 - 40 tons	40 - 70 tons	More than 70 tons
Shads	2401						
Barramundi	2501						
Flounders	3101						
Tongue soles	3103						
Marine catfishes	3301						
Catfish eels	3302						
Lizard fishes	3303						
Sharp-toothed p. & c. eels	3304						
Groupers	3305						
Sillago whiting	3306						
Red Snappers	3307						
Other Snappers	3308						
Fusiliers	3309						
Threadfin breams	3310						
Pony fishes	3311						
Grunters and sweetlips	3312						
Drums and croakers	3313						
Goatfishes	3314						
Rabbitfishes	3319						
Other species	3320						
Barracudas	3402						
Mullet	3403						
Threadfins	3404						
Round scads	3405	48,754		4,636	6,157	15,211	22,750
Jack, cavalla, trevallies	3406	490		84	66	155	185
Selar scads	3407	22,645		5,829	4,631	8,548	3,637
Hardtail Scad	3408	5,016		1,045	651	1,891	1,429
Queenfishes	3409						
Black pomfret	3410	897	14	94	172	301	316
Other species	3412						
Sardines	3501	14,814		4,605	2,855	6,481	873
Anchovies	3503	55		4	51		
Clupeoids	3504						
Wolf herring	3505						
Longtail tuna	3604	10,236		631	786	5,235	3,584
Eastern little tuna	3606						
Swordfishes, sail. & marl.	3608						
King mackerels	3610						
Indian mackerels	3701	20,729	13	3,242	5,976	9,277	2,221
Hairtails	3703						
Sharks	3801						
Rays	3802						
Miscellaneous fishes	3901						
Trash fishes	3902						
Mangrove crab	4202						
Spiny lobsters	4301						
Tiger prawn	4501						
Penaeid prawns	4502						
Other prawns	4503						
Clams and cone shell	5602						
Cuttlefishes	5701						
Squids	5702						
Octopuses	5703						
Miscellaneous m. molluscs	5801						
OTHERS		9,752	2,062	1,109	2,093	2,415	2,073
TOTAL		133,388	2,089	21,279	23,438	49,514	37,068

1 ANNUAL CATCH-EFFORT STATISTICS 1993

1-2 Catch and Fishing Effort by Type of Fishing Gear and Size of Management

1-2-2 Otter Trawl

(1) Taiwan

Size of boat		Total	Less than 10 tons	10-20 tons	20-50 tons	50-100 tons	More than 100 tons
Unit of fishing effort							
No. of fishing units		2,397	315	420	531	642	489
No. of trips							
No. of days							
No. of hauls							
No. of trawling hours							
Total catch		147,751					
Species (group)	Code No.	Total	Less than 10 tons	10-20 tons	20-50 tons	50-100 tons	More than 100 tons
Shads	2401						
Barramundi	2501						
Flounders	3101	75					
Indian halibuts	3102						
Tongue soles	3103						
Marine catfishes	3301	235					
Catfish eels	3302						
Lizard fishes	3303	3,381					
Sharp-toothed p. & c. eels	3304	4,124					
Groupers	3305	775					
Sillago whiting	3306	928					
Red Snappers	3307	962					
Other Snappers	3308						
Fusiliers	3309						
Threadfin breams	3310	4,945					
Pony fishes	3311						
Grunters and sweetlips	3312						
Drums and croakers	3313	7,572					
Goatfishes	3314	352					
Emperor breams	3315	133					
Big-eye snappers	3316	2,815					
Breams	3317	1,807					
Horseheads	3318	1,713					
Rabbitfishes	3319						
Other species	3320						
Barracudas	3402	340					
Mulletts	3403	754					
Threadfins	3404	3,343					
Round scads	3405						
Jack, cavalla, trevallies	3406	1,768					
Selar scads	3407						
Hardtail Scad	3408						
Queenfishes	3409						
Black pomfret	3410	1,618					
White pomfret	3411	3,791					
Other species	3412	97					
Sardines	3501	519					
Round herring	3502	332					
Anchovies	3503	33					
Clupeoids	3504						
Wolf herring	3505						
Skipjack tuna	3601						
Yellowfin tuna	3602						
Big-eye tuna	3603						
Longtail tuna	3604						
Albacore	3605						
Eastern little tuna	3606						
Frigate and bullet tuna	3607	66					
Swordfishes, sail. & marl.	3608						
Narrow-barred king mackerel	3609	265					
King mackerels	3610	134					
Indian mackerels	3701						
Indo-Pacific mackerel	3702	238					
Hairtails	3703	9,321					
Sharks	3801	3,863					
Rays	3802	168					
Miscellaneous fishes	3901	55,017					
Trash fishes	3902						
Swimming crab	4201	1,487					
Mangrove crab	4202						
Spiny lobsters	4301						
Slipper lobster	4302	209					
Tiger prawn	4501	24					
Penaeid prawns	4502	2,377					
Other prawns	4503	19,329					
Miscellaneous	4701	1,681					
Clams and cone shell	5602						
Cuttlefishes	5701	4,511					
Squids	5702	5,591					
Octopuses	5703	661					
Miscellaneous m. molluscs	5801	397					
OTHERS							
TOTAL		147,751					

1 ANNUAL CATCH-EFFORT STATISTICS 1993

1-2 Catch and Fishing Effort by Type of Fishing Gear and Size of Management

1-2-2 Otter Trawl

(2) Malaysia

Sub-area : Peninsular Malaysia

Size of boat		Total	Less than 10 tons	10 - 25 tons	25 - 40 tons	40 - 70 tons	More than 70 tons
Unit of fishing effort							
No. of fishing units		62,103	10,956	30,889	10,336	302	2,620
No. of trips		923,535	185,202	575,333	108,796	47,285	6,919
No. of days		1,173,591	185,434	594,828	194,937	147,408	50,984
No. of hauls		3,624,877	494,745	1,790,416	669,241	506,490	163,985
Total catch		465,253	21,433	115,332	129,193	129,206	70,089
Species (group)	Code No.	Total	Less than 10 tons	10 - 25 tons	25 - 40 tons	40 - 70 tons	More than 70 tons
Shads	2401						
Barramundi	2501						
Flounders	3101						
Tongue soles	3103						
Marine catfishes	3301						
Catfish eels	3302						
Lizard fishes	3303	6,207	37	603	1,366	2,616	1,585
Sharp-toothed p. & c. eels	3304						
Groupers	3305	2,343	43	386	563	876	475
Sillago whiting	3306						
Red Snappers	3307	1,358	2	135	239	442	540
Other Snappers	3308						
Fusiliers	3309						
Threadfin breams	3310	20,877	152	3,094	4,577	8,194	4,860
Pony fishes	3311	676	9	310	296	35	26
Grunters and sweetlips	3312						
Drums and croakers	3313	8,924	382	2,813	3,493	1,972	264
Goatfishes	3314	4,923	18	1,766	1,375	1,244	520
Rabbitfishes	3319						
Other species	3320						
Barracudas	3402						
Mullets	3403						
Threadfins	3404						
Round scads	3405						
Jack, cavalla, trevallies	3406	1,908	17	255	556	633	447
Selar scads	3407	11,132	56	877	3,624	4,057	2,518
Hardtail Scad	3408						
Queenfishes	3409						
Black pomfret	3410						
Other species	3412						
Sardines	3501	1,655	20	815	556	243	21
Anchovies	3503						
Clupeoids	3504						
Wolf herring	3505						
Longtail tuna	3604						
Eastern little tuna	3606						
Swordfishes, sail. & marl.	3608						
King mackerels	3610						
Indian mackerels	3701	12,381	98	1,209	5,615	4,272	1,187
Hairtails	3703	4,994	46	621	1,449	2,056	822
Sharks	3801						
Rays	3802						
Miscellaneous fishes	3901						
Trash fishes	3902						
Mangrove crab	4202						
Spiny lobsters	4301						
Tiger prawn	4501	271	49	92	72	49	9
Penaeid prawns	4502	19,200	3,385	14,666	879	239	31
Other prawns	4503	14,620	2,488	10,557	951	552	72
Clams and cone shell	5602						
Cuttlefishes	5701	13,403	350	2,450	3,982	4,503	2,118
Squids	5702	23,257	324	3,667	7,600	8,450	3,216
Octopuses	5703						
Miscellaneous m. molluscs	5801	317,124	13,957	71,016	92,000	88,773	51,378
OTHERS							
TOTAL		465,253	21,433	115,332	129,193	129,206	70,089

1 ANNUAL CATCH-EFFORT STATISTICS 1993

1-2 Catch and Fishing Effort by Type of Fishing Gear and Size of Management

1-2-3 Longline (Tuna Longline, Longline, Misc Fish Longline)

(1) Taiwan

Unit of fishing effort		Size of boat					
		Total	Less than 10 tons	10-20 tons	20-50 tons	50-100 tons	More than 100 tons
No. of units		4,680	1,976	1,003	1,147	543	335
No. of trips							
No. of days							
No. of hauls							
No. of trawling hours							
Total catch		81,583					
Species (group)	Code No.	Total	Less than 10 tons	10-20 tons	20-50 tons	50-100 tons	More than 100 tons
Shads	2401						
Barramundi	2501						
Flounders	3101	2					
Indian halibuts	3102						
Tongue soles	3103						
Marine catfishes	3301	4					
Catfish eels	3302						
Lizard fishes	3303	334					
Sharp-toothed p. & c. eels	3304	56					
Groupers	3305	135					
Sillago whiting	3306	2					
Red Snappers	3307	1					
Other Snappers	3308						
Fusiliers	3309						
Threadfin breams	3310	444					
Pony fishes	3311						
Grunters and sweetlips	3312						
Drums and croakers	3313	912					
Goatfishes	3314	1					
Emperor breams	3315	2					
Big-eye Snappers	3316	40					
Breams	3317	3,899					
Horseheads	3318	83					
Rabbitfishes	3319						
Other species	3320						
Barracudas	3402	8					
Mulletts	3403						
Threadfins	3404	22					
Round scads	3405						
Jack, cavalla, trevallies	3406	180					
Selar scads	3407						
Hardtail Scad	3408						
Queenfishes	3409						
Black pomfret	3410	19					
White pomfret	3411	108					
Other species	3412						
Sardines	3501						
Round herring	3502						
Anchovies	3503						
Clupeoids	3504						
Wolf herring	3505						
Skipjack tuna	3601	1,131					
Yellowfin tuna	3602	15,567					
Big-eye tuna	3603	3,432					
Longtail tuna	3604	4,115					
Albacore	3605	21,216					
Eastern little tuna	3606						
Frigate and bullet tuna	3607	138					
Swordfishes, sail. & marl.	3608	9,715					
Narrow-barred king mackerel	3609	132					
King mackerels	3610	20					
Indian mackerels	3701						
Indo-Pacific mackerel	3702	134					
Hairtails	3703	529					
Sharks	3801	5,139					
Rays	3802	55					
Miscellaneous fishes	3901	14,007					
Trash fishes	3902						
Swimming crabs	4201						
Mangrove crab	4202						
Spiny lobsters	4301						
Slipper lobster	4302						
Tiger prawn	4501						
Penaeid prawns	4502						
Other prawns	4503						
Miscellaneous	4701						
Clams and cone shell	5602						
Cuttlefishes	5701						
Squids	5702	1					
Octopuses	5703						
Miscellaneous m. molluscs	5801						
OTHERS							
TOTAL		81,583					

2 MONTHLY CATCH-EFFORT STATISTICS 1993

2-1 Catch and Fishing Effort by Type of Fishing Gear and by Month

2-1-1 One Boat Purse Seine

(1) Taiwan

Unit of fishing effort		Month					
		January	February	March	April	Mei	June
No. of units							
No. of trips							
No. of days							
No. of hauls							
No. of trawling hours							
Total catch		16,833	16,259	21,595	18,210	19,060	21,915
Species (group)	Code No.	January	February	March	April	Mei	June
Shads	2401	-	-	-	-	-	-
Barramundi	2501	-	-	-	-	-	-
Flounders	3101	-	-	-	-	-	-
Indian halibuts	3102	-	-	-	-	-	-
Tongue soles	3103	-	-	-	-	-	-
Marine catfishes	3301	-	-	-	-	-	-
Catfish eels	3302	-	-	-	-	-	-
Lizard fishes	3303	-	-	-	-	-	-
Sharp-toothed p. & c. eels	3304	-	-	-	-	-	-
Groupers	3305	-	-	-	-	-	-
Sillago whiting	3306	-	-	-	-	-	-
Red Snappers	3307	-	-	-	-	-	-
Other Snappers	3308	-	-	-	-	-	-
Fusiliers	3309	-	-	-	-	-	-
Threadfin breams	3310	-	-	-	-	-	-
Pony fishes	3311	-	-	-	-	-	-
Grunters and sweetlips	3312	-	-	-	-	-	-
Drums and croakers	3313	-	-	-	-	-	-
Goatfishes	3314	-	-	-	-	-	-
Emperor breams	3315	-	-	-	-	-	-
Big-eye Snappers	3316	-	-	-	-	-	-
Breams	3317	-	-	-	-	-	-
Horseheads	3318	-	-	-	-	-	-
Rabbitfishes	3319	-	-	-	-	-	-
Other species	3320	-	-	-	-	-	-
Barracudas	3402	-	-	-	-	-	-
Mullets	3403	-	-	-	-	-	-
Threadfins	3404	-	-	-	-	-	-
Round scads	3405	-	-	-	-	-	-
Jack, cavalla, trevallies	3406	440	1,327	4,370	3,331	3,412	2,302
Selar scads	3407	-	-	-	-	-	-
Hardtail Scad	3408	-	-	-	-	-	-
Queenfishes	3409	-	-	-	-	-	-
Black pomfret	3410	-	-	-	-	-	-
White pomfret	3411	-	-	-	-	-	-
Other species	3412	-	-	-	-	-	-
Sardines	3501	-	-	-	-	-	-
Round herring	3502	-	-	-	-	-	-
Anchovies	3503	-	-	-	-	-	-
Clupeoids	3504	-	-	-	-	-	-
Wolf herring	3505	-	-	-	-	-	-
Skipjack tuna	3601	9,686	9,091	10,903	8,640	8,653	8,170
Yellowfin tuna	3602	1,603	4,415	4,022	4,897	5,547	8,692
Big-eye tuna	3603	23	56	19	56	39	73
Longtail tuna	3604	-	-	-	-	-	-
Albacore	3605	-	-	-	-	-	-
Eastern little tuna	3606	-	-	-	-	-	-
Frigate and bullet tuna	3607	8	-	3	-	-	-
Swordfishes, sail. & marl.	3608	-	-	-	-	-	-
Narrow-barred king mackerel	3609	-	-	-	-	-	-
King mackerels	3610	-	-	-	-	-	-
Indian mackerels	3701	-	-	-	-	-	-
Indo-Pacific mackerel	3702	5,056	1,314	2,256	1,251	1,397	2,669
Hairtails	3703	-	-	-	-	-	-
Sharks	3801	-	-	-	-	-	-
Rays	3802	-	-	-	-	-	-
Miscellaneous fishes	3901	17	56	22	35	12	9
Trash fishes	3902	-	-	-	-	-	-
Swimming crabs	4201	-	-	-	-	-	-
Mangrove crab	4202	-	-	-	-	-	-
Spiny lobsters	4301	-	-	-	-	-	-
Slipper lobster	4302	-	-	-	-	-	-
Tiger prawn	4501	-	-	-	-	-	-
Penaeid prawns	4502	-	-	-	-	-	-
Other prawns	4503	-	-	-	-	-	-
Miscellaneous	4701	-	-	-	-	-	-
Ciams and cone shell	5602	-	-	-	-	-	-
Cuttlefishes	5701	-	-	-	-	-	-
Squids	5702	-	-	-	-	-	-
Octopuses	5703	-	-	-	-	-	-
Miscellaneous m. molluscs	5801	-	-	-	-	-	-
OTHERS							
TOTAL		16,833	16,259	21,595	18,210	19,060	21,915

2 MONTHLY CATCH-EFFORT STATISTICS 1993

2-1 Catch and Fishing Effort by Type of Fishing Gear and by Month

2-1-1 One Boat Purse Seine

(1) Taiwan

Unit of fishing effort		Month					
		July	August	September	October	November	December
No. of units							
No. of trips							
No. of days							
No. of hauls							
No. of trawling hours							
Total catch		19,126	19,633	25,716	20,333	20,769	21,073
Species (group)	Code No.	July	August	September	October	November	December
Shads	2401	-	-	-	-	-	-
Barramundi	2501	-	-	-	-	-	-
Flounders	3101	-	-	-	-	-	-
Indian halibuts	3102	-	-	-	-	-	-
Tongue soles	3103	-	-	-	-	-	-
Marine catfishes	3301	-	-	-	-	-	-
Catfish eels	3302	-	-	-	-	-	-
Lizard fishes	3303	-	-	-	-	-	-
Sharp-toothed p. & c. eels	3304	-	-	-	-	-	-
Groupers	3305	-	-	-	-	-	-
Sillago whiting	3306	-	-	-	-	-	-
Red Snappers	3307	-	-	-	-	-	-
Other Snappers	3308	-	-	-	-	-	-
Fusiliers	3309	-	-	-	-	-	-
Threadfin breams	3310	-	-	-	-	-	-
Pony fishes	3311	-	-	-	-	-	-
Grunters and sweetlips	3312	-	-	-	-	-	-
Drums and croakers	3313	-	-	-	-	-	-
Goatfishes	3314	-	-	-	-	-	-
Emperor breams	3315	-	-	-	-	-	-
Big-eye Snappers	3316	-	-	-	-	-	-
Breams	3317	-	-	-	-	-	-
Horseheads	3318	-	-	-	-	-	-
Rabbitfishes	3319	-	-	-	-	-	-
Other species	3320	-	-	-	-	-	-
Barracudas	3402	-	-	-	-	-	-
Mullets	3403	-	-	-	-	-	-
Threadfins	3404	-	-	-	-	-	-
Round scads	3405	-	-	-	-	-	-
Jack, cavalla, trevallies	3406	1,441	967	834	2,276	2,302	519
Selar scads	3407	-	-	-	-	-	-
Hardtail Scad	3408	-	-	-	-	-	-
Queenfishes	3409	-	-	-	-	-	-
Black pomfret	3410	-	-	-	-	-	-
White pomfret	3411	-	-	-	-	-	-
Other species	3412	-	-	-	-	-	-
Sardines	3501	-	-	-	-	-	-
Round herring	3502	-	-	-	-	-	-
Anchovies	3503	-	-	-	-	-	-
Clupeoids	3504	-	-	-	-	-	-
Wolf herring	3505	-	-	-	-	-	-
Skipjack tuna	3601	8,299	9,041	10,330	8,481	9,568	10,743
Yellowfin tuna	3602	5,834	5,136	8,325	5,492	5,381	4,412
Big-eye tuna	3603	37	49	61	60	223	202
Longtail tuna	3604	-	-	-	-	-	-
Albacore	3605	-	-	-	-	-	-
Eastern little tuna	3606	-	-	-	-	-	-
Frigate and bullet tuna	3607	-	-	-	-	-	-
Swordfishes, sail. & marl.	3608	-	-	-	-	-	-
Narrow-barred king mackerel	3609	-	-	-	-	-	-
King mackerels	3610	-	-	-	-	-	-
Indian mackerels	3701	-	-	-	-	-	-
Indo-Pacific mackerel	3702	3,497	4,384	6,122	3,968	3,267	5,149
Hairtails	3703	-	-	-	-	-	-
Sharks	3801	-	-	-	-	-	-
Rays	3802	-	-	-	-	-	-
Miscellaneous fishes	3901	18	56	44	56	28	48
Trash fishes	3902	-	-	-	-	-	-
Swimming crabs	4201	-	-	-	-	-	-
Mangrove crab	4202	-	-	-	-	-	-
Spiny lobsters	4301	-	-	-	-	-	-
Slipper lobster	4302	-	-	-	-	-	-
Tiger prawn	4501	-	-	-	-	-	-
Penaeid prawns	4502	-	-	-	-	-	-
Other prawns	4503	-	-	-	-	-	-
Miscellaneous	4701	-	-	-	-	-	-
Clams and cone shell	5602	-	-	-	-	-	-
Cuttlefishes	5701	-	-	-	-	-	-
Squids	5702	-	-	-	-	-	-
Octopuses	5703	-	-	-	-	-	-
Miscellaneous m. molluscs	5801	-	-	-	-	-	-
OTHERS							
TOTAL		19,126	19,633	25,716	20,333	20,769	21,073

2 MONTHLY CATCH-EFFORT STATISTICS 1993

2-1 Catch and Fishing Effort by Type of Fishing Gear and by Month

2-1-1 One Boat Purse Seine (Purse Seine)

(2) Brunei Darussalam

Sub-area : Zones 2-3

Unit of fishing effort		Month					
		January	February	March	April	May	June
No. of units		-	3	3	3	3	3
No. of trips		-	44	73	78	81	71
No. of days		-	44	73	78	81	71
No. of hauls		-	88	146	156	162	142
No. of trawling hours		-	528	876	936	972	852
Total catch		-	31.91	75.39	43.66	47.55	44.47
Species (group)	Code No.	January	February	March	April	May	June
Shads	2401	-	-	-	-	-	-
Barramundi	2501	-	-	-	-	-	-
Flounders	3101	-	-	-	-	-	-
Indian halibuts	3102	-	-	-	-	-	-
Tongue soles	3103	-	-	-	-	-	-
Marine catfishes	3301	-	-	-	-	-	-
Catfish eels	3302	-	-	-	-	-	-
Lizard fishes	3303	-	-	-	-	-	-
Sharp-toothed p. & c. eels	3304	-	-	-	-	-	-
Groupers	3305	-	-	-	-	-	-
Sillago whiting	3306	-	-	-	-	-	-
Red Snappers	3307	-	-	-	-	-	-
Other Snappers	3308	-	-	-	-	-	-
Fusiliers	3309	-	-	-	-	-	-
Threadfin breams	3310	-	-	-	-	-	-
Pony fishes	3311	-	-	-	-	-	-
Grunters and sweetlips	3312	-	-	-	-	-	-
Drums and croakers	3313	-	-	-	-	-	-
Goatfishes	3314	-	-	-	-	-	-
Emperor breams	3315	-	-	-	-	-	-
Big-eye Snappers	3316	-	-	-	-	-	-
Breams	3317	-	-	-	-	-	-
Horseheads	3318	-	-	-	-	-	-
Rabbitfishes	3319	-	-	-	-	-	-
Other species	3320	-	-	-	-	-	-
Barracudas	3402	-	-	-	-	-	-
Mullets	3403	-	-	-	-	-	-
Threadfins	3404	-	-	-	-	-	-
Round scads	3405	-	3.84	4.14	0.38	2.97	-
Jack, cavalla, trevallies	3406	-	-	-	-	-	-
Selar scads	3407	-	12.67	31.9	14.43	14.91	10.3
Hardtail Scad	3408	-	-	-	0.28	0.05	-
Queenfishes	3409	-	-	-	-	-	-
Black pomfret	3410	-	0.94	2.2	0.4	0.05	0.47
White pomfret	3411	-	-	-	-	-	-
Other species	3412	-	-	-	-	-	-
Sardines	3501	-	1.98	0.1	1.62	0.36	0.2
Round herring	3502	-	-	-	-	-	-
Anchovies	3503	-	-	-	-	-	-
Clupeoids	3504	-	-	-	-	-	-
Wolf herring	3505	-	-	-	-	-	-
Skipjack tuna	3601	-	-	-	-	-	-
Yellowfin tuna	3602	-	-	-	-	-	-
Big-eye tuna	3603	-	-	3.69	0.27	-	-
Longtail tuna	3604	-	-	-	-	-	-
Albacore	3605	-	-	-	-	-	-
Eastern little tuna	3606	-	0.11	-	0.85	-	0.15
Frigate and bullet tuna	3607	-	-	-	-	-	-
Swordfishes, sail. & marl.	3608	-	-	-	-	-	-
Narrow-barred king mackerel	3609	-	-	-	-	0.02	-
King mackerels	3610	-	-	-	-	-	-
Indian mackerels	3701	-	12.37	33.36	24.73	28.86	33.03
Indo-Pacific mackerel	3702	-	-	-	-	-	-
Hairtails	3703	-	-	-	-	-	-
Sharks	3801	-	-	-	-	-	0.12
Rays	3802	-	-	-	-	-	-
Miscellaneous fishes	3901	-	-	-	-	-	-
Trash fishes	3902	-	-	-	-	-	-
Swimming crabs	4201	-	-	-	-	-	-
Mangrove crab	4202	-	-	-	-	-	-
Spiny lobsters	4301	-	-	-	-	-	-
Slipper lobster	4302	-	-	-	-	-	-
Tiger prawn	4501	-	-	-	-	-	-
Penaeid prawns	4502	-	-	-	-	-	-
Other prawns	4503	-	-	-	-	-	-
Miscellaneous	4701	-	-	-	-	-	-
Clams and cone shell	5602	-	-	-	-	-	-
Cuttlefishes	5701	-	-	-	-	-	-
Squids	5702	-	-	-	-	-	-
Octopuses	5703	-	-	-	-	-	0.04
Miscellaneous m. molluscs	5801	-	-	-	-	-	-
OTHERS		-	-	-	-	-	-
TOTAL		-	31.91	75.39	43.66	47.55	44.47

2 MONTHLY CATCH-EFFORT STATISTICS 1993

2-1 Catch and Fishing Effort by Type of Fishing Gear and by Month

2-1-1 One Boat Purse Seine (Purse Seine)

(2) Brunei Darussalam

Sub-area : Zones 2-3

Unit of fishing effort		Month					
		July	August	September	October	November	December
No. of units		4	3	3	3	2	3
No. of trips		61	59	65	81	49	57
No. of days		61	59	65	81	49	57
No. of hauls		122	118	130	162	98	114
No. of trawling hours		732	708	780	972	588	684
Total catch		28.18	23.17	24.59	17.16	27.81	11.59
Species (group)	Code No.	July	August	September	October	November	December
Shads	2401	-	-	-	-	-	-
Barramundi	2501	-	-	-	-	-	-
Flounders	3101	-	-	-	-	-	-
Indian halibuts	3102	-	-	-	-	-	-
Tongue soles	3103	-	-	-	-	-	-
Marine catfishes	3301	-	-	-	-	-	-
Catfish eels	3302	-	-	-	-	-	-
Lizard fishes	3303	-	-	-	-	-	-
Sharp-toothed p. & c. eels	3304	-	-	-	-	-	-
Groupers	3305	-	-	-	-	-	-
Sillago whiting	3306	-	-	-	-	-	-
Red Snappers	3307	-	-	-	-	-	-
Other Snappers	3308	-	-	-	-	-	-
Fusiliers	3309	-	-	-	-	-	-
Threadfin breams	3310	-	-	-	-	-	-
Pony fishes	3311	-	-	-	-	-	-
Grunters and sweetlips	3312	-	-	-	-	-	0.08
Drums and croakers	3313	-	-	-	-	-	-
Goatfishes	3314	-	-	-	-	-	-
Emperor breams	3315	-	-	-	-	-	-
Big-eye Snappers	3316	-	-	-	-	-	-
Breams	3317	-	-	-	-	-	-
Horseheads	3318	-	-	-	-	-	-
Rabbitfishes	3319	-	-	-	-	-	-
Other species	3320	-	-	-	-	-	-
Barracudas	3402	-	-	-	-	-	-
Mulletts	3403	-	-	-	-	-	-
Threadfins	3404	-	-	-	-	-	-
Round scads	3405	-	-	0.9	-	-	-
Jack, cavalla, trevallies	3406	-	-	-	-	-	-
Selar scads	3407	7.67	7.33	7	4.61	8.05	5.2
Hardtail Scad	3408	-	-	-	-	-	-
Queenfishes	3409	-	-	-	-	-	-
Black pomfret	3410	-	-	-	-	-	-
White pomfret	3411	-	-	-	-	-	-
Other species	3412	-	-	0.13	0.28	0.23	-
Sardines	3501	0.75	-	2.02	0.28	-	0.36
Round herring	3502	-	-	-	0.12	0.26	0.35
Anchovies	3503	-	-	-	-	-	-
Clupeoids	3504	-	-	-	-	-	-
Wolf herring	3505	-	-	-	-	-	-
Skipjack tuna	3601	0.25	0.02	0.19	0.39	0.44	-
Yellowfin tuna	3602	-	-	-	-	-	-
Big-eye tuna	3603	-	-	-	-	-	-
Longtail tuna	3604	-	-	-	-	-	-
Albacore	3605	-	-	-	-	-	-
Eastern little tuna	3606	-	-	0.08	0.14	0.2	0.06
Frigate and bullet tuna	3607	-	-	-	-	2.45	0.5
Swordfishes, sail. & marl.	3608	-	-	-	-	-	-
Narrow-barred king mackerel	3609	-	-	1.06	-	-	-
King mackerels	3610	-	-	-	-	-	-
Indian mackerels	3701	19.51	15.82	13.21	11.34	16.18	5.04
Indo-Pacific mackerel	3702	-	-	-	-	-	-
Hairtails	3703	-	-	-	-	-	-
Sharks	3801	-	-	-	-	-	-
Rays	3802	-	-	-	-	-	-
Miscellaneous fishes	3901	-	-	-	-	-	-
Trash fishes	3902	-	-	-	-	-	-
Swimming crabs	4201	-	-	-	-	-	-
Mangrove crab	4202	-	-	-	-	-	-
Spiny lobsters	4301	-	-	-	-	-	-
Slipper lobster	4302	-	-	-	-	-	-
Tiger prawn	4501	-	-	-	-	-	-
Penaeid prawns	4502	-	-	-	-	-	-
Other prawns	4503	-	-	-	-	-	-
Miscellaneous	4701	-	-	-	-	-	-
Clams and cone shell	5602	-	-	-	-	-	-
Cuttlefishes	5701	-	-	-	-	-	-
Squids	5702	-	-	-	-	-	-
Octopuses	5703	-	-	-	-	-	-
Miscellaneous m. molluscs	5801	-	-	-	-	-	-
OTHERS		-	-	-	-	-	-
TOTAL		28.18	23.17	24.59	17.16	27.81	11.59

2 MONTHLY CATCH-EFFORT STATISTICS 1993

2-1 Catch and Fishing Effort by Type of Fishing Gear and by Month

2-1-2 Otter Trawl

(1) Taiwan

Month		January	February	March	April	Mei	June
Unit of fishing effort							
No. of units							
No. of trips							
No. of days							
No. of hauls							
No. of trawling hours							
Total catch		13,327	11,414	11,465	15,933	16,118	11,496
Species (group)	Code No.	January	February	March	April	Mei	June
Shads	2401	-	-	-	-	-	-
Barramundi	2501	-	-	-	-	-	-
Flounders	3101	8	5	5	4	7	5
Indian halibuts	3102	-	-	-	-	-	-
Tongue soles	3103	-	-	-	-	-	-
Marine catfishes	3301	10	1	11	9	174	4
Catfish eels	3302	-	-	-	-	-	-
Lizard fishes	3303	429	379	347	493	512	241
Sharp-toothed p. & c. eels	3304	391	401	215	195	222	483
Groupers	3305	30	41	52	141	140	39
Sillago whiting	3306	39	240	318	192	19	9
Red Snappers	3307	3	17	38	300	338	214
Other Snappers	3308	-	-	-	-	-	-
Fusiliers	3309	-	-	-	-	-	-
Threadfin breams	3310	295	912	463	455	511	754
Pony fishes	3311	-	-	-	-	-	-
Grunters and sweetlips	3312	-	-	-	-	-	-
Drums and croakers	3313	563	395	513	564	455	678
Goatfishes	3314	26	32	35	42	35	17
Emperor breams	3315	3	7	7	24	23	12
Big-eye Snappers	3316	218	244	148	434	497	149
Breams	3317	97	100	65	79	112	47
Horseheads	3318	7	8	7	14	13	5
Rabbitfishes	3319	-	-	-	-	-	-
Other species	3320	-	-	-	-	-	-
Barracudas	3402	28	15	30	58	53	22
Mullets	3403	205	281	2	2	1	1
Threadfins	3404	274	232	136	259	340	564
Round scads	3405	-	-	-	-	-	-
Jack, cavalla, trevallies	3406	95	91	124	210	471	101
Selar scads	3407	-	-	-	-	-	-
Hardtail Scad	3408	-	-	-	-	-	-
Queenfishes	3409	-	-	-	-	-	-
Black pomfret	3410	187	183	124	172	103	89
White pomfret	3411	275	262	152	1,451	108	81
Other species	3412	-	-	-	-	-	-
Sardines	3501	1	2	3	106	88	13
Round herring	3502	-	-	-	-	-	-
Anchovies	3503	-	-	-	22	-	-
Clupeoids	3504	-	-	-	-	-	-
Wolf herring	3505	-	-	-	-	-	-
Skipjack tuna	3601	-	-	-	-	-	-
Yellowfin tuna	3602	-	-	-	-	-	-
Big-eye tuna	3603	-	-	-	-	-	-
Longtail tuna	3604	-	-	-	-	-	-
Albacore	3605	-	-	-	-	-	-
Eastern little tuna	3606	-	-	-	-	-	-
Frigate and bullet tuna	3607	3	4	5	6	7	4
Swordfishes, sail. & marl.	3608	-	-	-	-	-	-
Narrow-barred king mackerel	3609	18	31	23	33	29	18
King mackerels	3610	17	9	11	9	8	6
Indian mackerels	3701	-	-	-	-	-	-
Indo-Pacific mackerel	3702	12	19	14	30	31	15
Hairtails	3703	990	1,241	1,157	833	860	520
Sharks	3801	165	229	202	582	774	511
Rays	3802	13	27	3	7	41	19
Miscellaneous fishes	3901	4,223	3,251	4,085	6,549	7,677	5,221
Trash fishes	3902	-	-	-	-	-	-
Swimming crabs	4201	258	93	50	70	37	80
Mangrove crab	4202	-	-	-	-	-	-
Spiny lobsters	4301	-	-	-	-	-	-
Slipper lobster	4302	3	3	16	26	66	39
Tiger prawn	4501	2	1	2	1	1	1
Penaeid prawns	4502	378	281	247	268	125	122
Other prawns	4503	2,572	1,321	1,421	1,757	1,654	925
Miscellaneous	4701	107	565	451	57	29	50
Clams and cone shell	5602	-	-	-	-	-	-
Cuttlefishes	5701	709	316	693	205	271	230
Squids	5702	622	113	208	196	193	176
Octopuses	5703	33	24	23	34	37	20
Miscellaneous m. molluscs	5801	18	38	59	44	56	11
OTHERS		-	-	-	-	-	-
TOTAL		13,327	11,414	11,465	15,933	16,118	11,496

2 MONTHLY CATCH-EFFORT STATISTICS 1993

2-1 Catch and Fishing Effort by Type of Fishing Gear and by Month

2-1-2 Otter Trawl

(1) Taiwan

Month		July	August	September	October	November	December
Unit of fishing effort							
No. of units							
No. of trips							
No. of days							
No. of hauls							
No. of trawling hours							
Total catch		10,589	11,778	9,487	10,794	11,051	14,323
Species (group)	Code No.	July	August	September	October	November	December
Shads	2401	-	-	-	-	-	-
Barramundi	2501	-	-	-	-	-	-
Flounders	3101	10	11	10	3	4	5
Indian halibuts	3102	-	-	-	-	-	-
Tongue soles	3103	-	-	-	-	-	-
Marine catfishes	3301	4	3	5	2	9	3
Catfish eels	3302	-	-	-	-	-	-
Lizard fishes	3303	113	110	226	284	127	121
Sharp-toothed p. & c. eels	3304	582	307	255	203	399	473
Groupers	3305	40	23	39	62	61	108
Sillago whiting	3306	3	35	11	34	13	17
Red Snappers	3307	6	17	3	17	5	4
Other Snappers	3308	-	-	-	-	-	-
Fusiliers	3309	-	-	-	-	-	-
Threadfin breams	3310	350	312	170	124	309	290
Pony fishes	3311	-	-	-	-	-	-
Grunters and sweetlips	3312	-	-	-	-	-	-
Drums and croakers	3313	327	426	743	643	645	1,620
Goatfishes	3314	31	38	37	24	17	19
Emperor breams	3315	1	1	4	41	4	5
Big-eye Snappers	3316	122	175	189	219	272	148
Breams	3317	72	279	72	63	58	764
Horseheads	3318	805	316	216	150	156	15
Rabbitfishes	3319	-	-	-	-	-	-
Other species	3320	-	-	-	-	-	-
Barracudas	3402	11	22	25	24	22	32
Mulletts	3403	-	-	-	1	5	255
Threadfins	3404	332	319	186	295	222	186
Round scads	3405	-	-	-	-	-	-
Jack, cavalla, trevallies	3406	109	128	126	105	108	102
Selar scads	3407	-	-	-	-	-	-
Hardtail Scad	3408	-	-	-	-	-	-
Queenfishes	3409	-	-	-	-	-	-
Black pomfret	3410	145	89	72	93	183	177
White pomfret	3411	158	297	225	210	231	343
Other species	3412	1	32	20	15	24	5
Sardines	3501	7	72	66	38	22	102
Round herring	3502	-	1	-	-	-	331
Anchovies	3503	-	-	-	10	-	-
Clupeoids	3504	-	-	-	-	-	-
Wolf herring	3505	-	-	-	-	-	-
Skipjack tuna	3601	-	-	-	-	-	-
Yellowfin tuna	3602	-	-	-	-	-	-
Big-eye tuna	3603	-	-	-	-	-	-
Longtail tuna	3604	-	-	-	-	-	-
Albacore	3605	-	-	-	-	-	-
Eastern little tuna	3606	-	-	-	-	-	-
Frigate and bullet tuna	3607	3	9	8	4	9	6
Swordfishes, sail. & marl.	3608	-	-	-	-	-	-
Narrow-barred king mackerel	3609	15	15	12	25	25	21
King mackerels	3610	13	9	11	10	21	11
Indian mackerels	3701	-	-	-	-	-	-
Indo-Pacific mackerel	3702	16	14	15	19	15	39
Hairtails	3703	270	651	375	509	708	1,209
Sharks	3801	266	241	237	254	201	202
Rays	3802	13	7	4	4	12	19
Miscellaneous fishes	3901	3,895	4,620	3,680	3,743	4,027	4,046
Trash fishes	3902	-	-	-	-	-	-
Swimming crabs	4201	36	32	59	319	342	111
Mangrove crab	4202	-	-	-	-	-	-
Spiny lobsters	4301	-	-	-	-	-	-
Slipper lobster	4302	17	1	6	19	6	8
Tiger prawn	4501	1	2	5	5	1	2
Penaeid prawns	4502	115	136	145	169	198	194
Other prawns	4503	1,617	1,786	1,353	1,279	1,537	2,109
Miscellaneous	4701	76	48	62	81	79	76
Clams and cone shell	5602	-	-	-	-	-	-
Cuttlefishes	5701	414	192	270	354	316	540
Squids	5702	559	980	475	1,262	259	549
Octopuses	5703	20	21	44	51	305	48
Miscellaneous m. molluscs	5801	14	1	26	27	94	8
OTHERS		-	-	-	-	-	-
TOTAL		10,589	11,778	9,487	10,794	11,051	14,323

2 MONTHLY CATCH-EFFORT STATISTICS 1993

2-1 Catch and Fishing Effort by Type of Fishing Gear and by Month

2-1-2 Otter Trawl (Demersal Trawl)

Size of boat : 64 ton (GRT class)

(2) Brunei Darussalam

Sub-area : Zones 2-3

Unit of fishing effort		Month					
		January	February	March	April	May	June
No. of units		11	11	10	10	12	12
No. of trips		143	151	161	190	183	200
No. of days		143	151	161	190	183	200
No. of hauls		429	453	483	570	549	600
No. of trawling hours		858	906	966	1,140	1,098	1,200
Total catch		27.74	82.37	80.94	67.58	76.3	67.05
Species (group)	Code No.	January	February	March	April	May	June
Shads	2401	0.03	-	-	-	2.01	0.92
Barramundi	2501	-	-	-	-	-	-
Flounders	3101	-	-	-	-	-	-
Indian halibuts	3102	0.12	0.36	0.13	0.08	0.37	1.11
Tongue soles	3103	-	-	-	-	-	-
Marine catfishes	3301	0.22	-	-	-	-	0.12
Catfish eels	3302	-	-	-	-	-	-
Lizard fishes	3303	-	-	-	-	-	-
Sharp-toothed p. & c. eels	3304	-	-	-	-	-	-
Groupers	3305	0.42	0.68	0.35	0.06	0.56	1
Sillago whiting	3306	-	-	-	-	-	-
Red Snappers	3307	1	1.29	0.4	0.08	0.83	2.48
Other Snappers	3308	0.34	0.32	0.04	0.09	0.35	0.95
Fusiliers	3309	-	1.36	-	-	0.66	0.1
Threadfin breams	3310	2.4	6.26	1.18	1.76	0.4	5.42
Pony fishes	3311	3.5	9.57	5.9	1.66	3.49	3.77
Grunters and sweetlips	3312	0.14	-	0.14	0.07	1.44	1.72
Drums and croakers	3313	1.65	7.63	2.08	1.88	3.43	6.95
Goatfishes	3314	0.57	3.43	-	0.06	-	3.83
Emperor breams	3315	-	-	-	-	-	-
Big-eye Snappers	3316	-	0.02	-	0.2	0.28	-
Breams	3317	0.02	0.01	-	-	-	-
Horseheads	3318	-	-	-	-	-	-
Rabbitfishes	3319	-	-	0.16	-	-	-
Other species	3320	2.23	3.24	-	16.71	21.43	1.33
Barracudas	3402	0.01	0.13	-	-	-	-
Mullet	3403	-	-	-	-	-	-
Threadfins	3404	-	-	-	-	-	0.06
Round scads	3405	1.06	6.51	0.2	0.51	0.69	5.86
Jack, cavalla, trevallies	3406	2.12	4.55	3.3	1.5	1.5	3.33
Selar scads	3407	0.17	0.97	0.27	0.05	-	-
Hardtail Scad	3408	1.71	1.52	1	0.06	0.24	0.29
Queenfishes	3409	0.23	1.48	0.18	0.19	0.39	2.74
Jack pomfret	3410	0.11	0.03	-	0.19	0.14	0.01
White pomfret	3411	0.04	0.74	0.32	0.1	0.14	0.22
Other species	3412	0.98	2.76	16.65	10.3	-	3.71
Sardines	3501	-	0.53	-	-	-	-
Round herring	3502	-	-	-	-	-	-
Anchovies	3503	-	-	-	-	-	-
Clupeoids	3504	-	-	-	-	-	-
Wolf herring	3505	-	-	-	-	-	-
Skipjack tuna	3601	-	-	-	-	-	-
Yellowfin tuna	3602	-	-	-	-	-	-
Big-eye tuna	3603	-	-	-	-	-	-
Longtail tuna	3604	-	-	-	-	-	-
Albacore	3605	-	-	-	-	-	-
Eastern little tuna	3606	-	-	-	-	-	-
Frigate and bullet tuna	3607	-	-	-	-	-	-
Swordfishes, sail. & mart.	3608	-	-	-	-	-	-
Narrow-barred king mackerel	3609	1.78	2.99	1.18	0.5	0.53	1.15
King mackerels	3610	-	-	-	-	-	-
Indian mackerels	3701	0.7	1.57	11.63	0.36	0.91	9.89
Indo-Pacific mackerel	3702	-	-	-	-	-	-
Hairtails	3703	0.57	1.32	0.47	0.88	2.77	0.25
Sharks	3801	2.09	4.45	0.47	2.84	2.14	2.63
Rays	3802	2.09	4.77	4.38	2.84	2.96	4.94
Miscellaneous fishes	3901	-	-	-	-	-	-
Trash fishes	3902	-	-	-	-	-	-
Swimming crabs	4201	-	-	-	-	-	-
Mangrove crab	4202	-	-	-	-	0.01	0.16
Spiny lobsters	4301	-	-	-	-	-	0.01
Slipper lobster	4302	-	-	-	-	-	0.04
Tiger prawn	4501	-	-	-	-	-	-
Penaeid prawns	4502	0.04	0.18	0.45	1.09	1.65	1.16
Other prawns	4503	-	-	-	-	-	-
Miscellaneous	4701	-	-	-	-	-	-
Clams and cone shell	5602	-	-	-	-	-	-
Cuttlefishes	5701	-	0.08	0.13	-	-	-
Squids	5702	1.32	13.05	8.89	-	-	-
Octopuses	5703	-	-	-	2.55	2.24	0.62
Miscellaneous m. molluscs	5801	-	-	-	-	-	-
OTHERS		0.08	0.57	21.04	20.97	25.34	0.28
TOTAL		27.74	82.37	80.94	67.58	76.3	67.05

2 MONTHLY CATCH-EFFORT STATISTICS 1993

2-1 Catch and Fishing Effort by Type of Fishing Gear and by Month

2-1-2 Otter Trawl (Demersal Trawl)

Size of boat : 64 ton (GRT class)

(2) Brunei Draussalam

Sub-area : Zones 2-3

Unit of fishing effort		Month					
		July	August	September	October	November	December
No. of units		11	12	11	13	13	14
No. of trips		177	192	183	225	224	271
No. of days		177	192	183	225	224	271
No. of hauls		531	576	549	675	672	813
No. of trawling hours		1,062	1,152	1,098	1,350	1,344	1,626
Total catch		57.42	67.00	69.29	82.06	64.1	106.42
Species (group)	Code No.	July	August	September	October	November	December
Shads	2401	0.36	0.77	0.1	-	0.1	0.54
Barramundi	2501	-	-	-	-	-	-
Flounders	3101	-	-	-	-	-	-
Indian halibuts	3102	0.49	1.89	0.47	0.85	0.27	0.53
Tongue soles	3103	-	-	-	-	-	-
Marine catfishes	3301	0.53	-	-	0.35	0.43	0.29
Catfish eels	3302	-	-	-	-	-	-
Lizard fishes	3303	-	-	-	-	-	-
Sharp-toothed p. & c. eels	3304	-	-	-	-	-	-
Groupers	3305	0.32	0.29	0.87	1.11	0.33	1.17
Sillago whiting	3306	-	-	-	-	-	-
Red Snappers	3307	0.95	1.11	1.56	2.56	1.47	4.5
Other Snappers	3308	1.27	1.52	1.73	3.49	0.59	1.13
Fusiliers	3309	0.06	-	0.04	0.29	-	0.07
Threodlin breans	3310	3.64	1.53	3.4	3.02	3.86	6.53
Pony fishes	3311	5.68	4.45	4.55	6.86	5.38	10.7
Grunters and sweetlips	3312	1.6	1.3	2.54	2.99	1.59	2.17
Drums and croakers	3313	3.77	1.97	2.62	2.24	2.86	2.66
Goatfishes	3314	0.77	0.05	1.37	0.07	0.29	1.42
Emperor breans	3315	-	-	-	-	-	-
Big-eye Snappers	3316	-	-	-	-	-	0.13
Breans	3317	-	-	-	-	-	-
Horseheads	3318	-	-	-	-	-	-
Rabbitfishes	3319	-	-	-	0.08	-	-
Other species	3320	6.88	22.63	3.99	12.54	8.65	14.85
Barracudas	3402	0.04	0.1	0.1	0.21	0.18	0.21
Mulletts	3403	-	-	-	-	-	0.08
Threadfins	3404	-	-	-	-	-	0.02
Round scads	3405	0.46	0.72	1.31	1.56	2.3	4.77
Jack, cavalla, trevallies	3406	2.05	2.53	3.7	3.82	2.45	5.58
Selar scads	3407	0.03	0.04	0.29	0.3	0.14	0.58
Hardtail Scad	3408	0.5	0.65	0.78	1.16	0.69	1.64
Queenfishes	3409	1.02	1.42	1.83	1.2	2.1	2.14
Black pomfret	3410	0.07	0.03	0.07	0.15	0.13	0.39
White pomfret	3411	0.25	0.19	0.13	0.27	0.26	0.4
Other species	3412	3.51	2.68	11.19	-	14.22	8.27
Sardines	3501	-	-	-	-	-	-
Round herring	3502	-	-	-	-	-	-
Anchovies	3503	-	-	-	-	-	-
Clupeoids	3504	0.26	-	1.41	-	-	-
Wolf herring	3505	-	-	-	-	-	-
Skipjack tuna	3601	-	-	-	-	-	-
Yellowfin tuna	3602	-	-	-	-	-	-
Big-eye tuna	3603	-	-	-	-	-	0.03
Longtail tuna	3604	-	-	-	-	-	-
Albacore	3605	-	-	-	-	-	-
Eastern little tuna	3606	-	-	-	-	-	0.12
Frigate and bullet tuna	3607	-	-	-	-	-	-
Swordfishes, sail. & mart.	3608	-	-	-	-	-	-
Narrow-barred king mackerel	3609	0.91	1.7	1.68	1.81	1.28	1.91
King mackerels	3610	-	-	-	-	-	-
Indian mackerels	3701	0.81	4.68	10.37	6.88	2.29	9.86
Indo-Pacific mackerel	3702	-	-	-	-	-	-
Hairtails	3703	0.15	0.3	0.26	0.84	0.76	0.22
Sharks	3801	2.08	3.28	1.76	3.68	1.3	3.7
Rays	3802	6.27	6.04	8.4	5.74	6.18	5.82
Miscellaneous fishes	3901	-	-	-	-	-	-
Trash fishes	3902	-	-	-	-	-	-
Swimming crabs	4201	0.12	0.08	0.02	-	0.02	0.06
Mangrove crab	4202	-	-	-	-	-	-
Spiny lobsters	4301	-	-	0.01	-	-	-
Slipper lobster	4302	-	-	0.14	0.1	0.03	0.21
Tiger prawn	4501	-	-	-	-	-	-
Penaeid prawns	4502	1.11	1.1	1.21	2.05	1.23	2.81
Other prawns	4503	-	-	-	-	-	-
Miscellaneous	4701	-	-	-	-	-	-
Clams and cone shell	5602	-	-	-	-	-	-
Cuttlefishes	5701	0.2	0.27	0.09	0.06	0.02	0.34
Squids	5702	0.24	0.35	0.25	0.51	1.39	4.48
Octopuses	5703	-	-	-	-	-	-
Miscellaneous m. molluscs	5801	-	-	-	-	-	-
OTHERS		11.02	3.33	1.05	15.27	1.31	6.09
TOTAL		57.42	67.00	69.29	82.06	64.1	106.42

2 MONTHLY CATCH-EFFORT STATISTICS 1993

2-1 Catch and Fishing Effort by Type of Fishing Gear and by Month

2-1-3 Pair Trawl

(1) Taiwan

Unit of fishing effort		Month					
		January	February	March	April	Mei	June
No. of units							
No. of trips							
No. of days							
No. of hauls							
No. of trawling hours							
Total catch		5,762	3,637	4,124	11,282	12,567	7,311
Species (group)	Code No.	January	February	March	April	Mei	June
Shads	2401	-	-	-	-	-	-
Barramundi	2501	-	-	-	-	-	-
Flounders	3101	-	-	-	1	-	1
Indian halibuts	3102	-	-	-	-	-	-
Tongue soles	3103	-	-	-	-	-	-
Marine catfishes	3301	-	-	-	-	-	-
Catfish eels	3302	-	-	-	-	-	-
Lizard fishes	3303	474	142	58	306	934	220
Sharp-toothed p. & c. eels	3304	147	2	2	1	1	1
Groupers	3305	69	90	102	316	315	94
Sillago whiting	3306	4	3	1	34	10	10
Red Snappers	3307	9	43	98	770	870	525
Other Snappers	3308	-	-	-	-	-	-
Fusiliers	3309	-	-	-	-	-	-
Threadfin breams	3310	318	251	268	756	1,143	280
Pony fishes	3311	-	-	-	-	-	-
Grunters and sweetlips	3312	-	-	-	-	-	-
Drums and croakers	3313	126	176	62	43	142	86
Goatfishes	3314	3	6	6	6	20	7
Emperor breams	3315	7	18	18	63	60	30
Big-eye Snappers	3316	108	278	80	623	832	57
Breams	3317	40	10	13	13	89	18
Horseheads	3318	-	2	3	4	5	7
Rabbitfishes	3319	-	-	-	-	-	-
Other species	3320	-	-	-	-	-	-
Barracudas	3402	12	17	18	40	66	19
Mullets	3403	-	-	-	-	-	-
Threadfins	3404	618	520	218	587	479	1,125
Round scads	3405	-	-	-	-	-	-
Jack, cavalla, trevallies	3406	-	-	-	-	-	-
Selar scads	3407	-	-	-	-	-	-
Hardtail Scad	3408	-	-	-	-	-	-
Queenfishes	3409	-	-	-	-	-	-
Black pomfret	3410	322	230	137	336	128	156
White pomfret	3411	1	1	1	1	3	4
Other species	3412	-	-	-	-	-	-
Sardines	3501	-	-	-	-	-	-
Round herring	3502	-	-	-	-	-	-
Anchovies	3503	-	-	-	-	-	-
Clupeoids	3504	-	-	-	-	-	-
Wolf herring	3505	-	-	-	-	-	-
Skipjack tuna	3601	-	-	-	-	-	-
Yellowfin tuna	3602	-	-	-	-	-	-
Big-eye tuna	3603	-	-	-	-	-	-
Longtail tuna	3604	-	-	-	-	-	-
Albacore	3605	-	-	-	-	-	-
Eastern little tuna	3606	-	-	-	-	-	-
Frigate and bullet tuna	3607	-	-	-	-	-	-
Swordfishes, sail. & marl.	3608	-	-	-	-	-	-
Narrow-barred king mackerel	3609	-	-	-	-	-	-
King mackerels	3610	-	-	-	-	-	-
Indian mackerels	3701	-	-	-	-	-	-
Indo-Pacific mackerel	3702	-	-	-	-	-	-
Hairtails	3703	78	119	135	146	181	22
Sharks	3801	262	436	341	1,135	1,205	1,073
Rays	3802	1	14	4	12	62	33
Miscellaneous fishes	3901	1,616	1,099	1,377	5,599	5,846	3,494
Trash fishes	3902	-	-	-	-	-	-
Swimming crabs	4201	-	-	-	-	-	-
Mangrove crab	4202	-	-	-	-	-	-
Spiny lobsters	4301	-	-	-	-	-	-
Slipper lobster	4302	5	5	14	41	75	9
Tiger prawn	4501	-	-	-	-	-	-
Penaeid prawns	4502	-	-	-	-	-	-
Other prawns	4503	27	3	2	9	13	32
Miscellaneous	4701	2	3	2	-	-	-
Clams and cone shell	5602	-	-	-	-	-	-
Cuttlefishes	5701	702	41	1,008	101	16	1
Squids	5702	798	119	153	336	71	4
Octopuses	5703	9	8	2	2	1	3
Miscellaneous m. molluscs	5801	4	1	1	1	-	-
OTHERS		-	-	-	-	-	-
TOTAL		5,762	3,637	4,124	11,282	12,567	7,311

2 MONTHLY CATCH-EFFORT STATISTICS 1993

2-1 Catch and Fishing Effort by Type of Fishing Gear and by Month

2-1-3 Pair Trawl

(1) Taiwan

Month		July	August	September	October	November	December
Unit of fishing effort							
No. of units							
No. of trips							
No. of days							
No. of hauls							
No. of trawling hours							
Total catch		6,455	4,632	3,269	8,135	5,067	6,873
Species (group)	Code No.	July	August	September	October	November	December
Shads	2401	-	-	-	-	-	-
Barramundi	2501	-	-	-	-	-	-
Flounders	3101	2	1	1	-	-	-
Indian halibuts	3102	-	-	-	-	-	-
Tongus soles	3103	-	-	-	-	-	-
Marine catfishes	3301	-	-	-	-	-	-
Catfish eels	3302	-	-	-	-	-	-
Lizard fishes	3303	6	8	11	460	182	184
Sharp-toothed p. & c. eels	3304	-	-	114	-	-	14
Groupers	3305	77	54	93	157	132	262
Sillago whiting	3306	7	90	23	84	30	39
Red Snappers	3307	14	41	8	43	11	10
Other Snappers	3308	-	-	-	-	-	-
Fusiliers	3309	-	-	-	-	-	-
Threadfin breams	3310	27	289	15	148	120	134
Pony fishes	3311	-	-	-	-	-	-
Grunters and sweetlips	3312	-	-	-	-	-	-
Drums and croakers	3313	104	182	32	82	24	85
Goatfishes	3314	6	8	29	4	4	4
Emperor breams	3315	3	2	8	105	10	12
Big-eye Snappers	3316	4	15	2	3	1	1
Breams	3317	12	18	32	11	9	6
Horseheads	3318	3	2	2	1	1	1
Rabbitfishes	3319	-	-	-	-	-	-
Other species	3320	-	-	-	-	-	-
Barracudas	3402	7	36	42	10	20	60
Mullets	3403	-	-	-	-	-	-
Threadfins	3404	668	662	394	659	424	321
Round scads	3405	-	-	-	-	-	-
Jack, cavalla, trevallies	3406	-	-	-	-	-	-
Selar scads	3407	-	-	-	-	-	-
Hardtail Scad	3408	-	-	-	-	-	-
Queenfishes	3409	-	-	-	-	-	-
Black pomfret	3410	285	111	81	170	372	394
White pomfret	3411	-	1	1	1	1	-
Other species	3412	-	-	-	-	-	-
Sardines	3501	-	-	-	-	-	-
Round herring	3502	-	-	-	-	-	-
Anchovies	3503	-	-	-	-	-	-
Clupeoids	3504	-	-	-	-	-	-
Wolf herring	3505	-	-	-	-	-	-
Skipjack tuna	3601	-	-	-	-	-	-
Yellowfin tuna	3602	-	-	-	-	-	-
Big-eye tuna	3603	-	-	-	-	-	-
Longtail tuna	3604	-	-	-	-	-	-
Albacore	3605	-	-	-	-	-	-
Eastern little tuna	3606	-	-	-	-	-	-
Frigate and bullet tuna	3607	-	-	-	-	-	-
Swordfishes, sail. & marl.	3608	-	-	-	-	-	-
Narrow-barred king mackerel	3609	-	-	-	-	-	-
King mackerels	3610	-	-	-	-	-	-
Indian mackerels	3701	-	-	-	-	-	-
Indo-Pacific mackerel	3702	-	-	-	-	-	-
Hairtails	3703	25	806	97	348	382	1,015
Sharks	3801	593	461	449	442	337	293
Rays	3802	2	9	3	1	22	43
Miscellaneous fishes	3901	3,292	1,346	942	2,186	2,329	2,592
Trash fishes	3902	-	-	-	-	-	-
Swimming crabs	4201	-	-	-	-	-	-
Mangrove crab	4202	-	-	-	-	-	-
Spiny lobsters	4301	-	-	-	-	-	-
Slipper lobster	4302	-	2	7	49	15	18
Tiger prawn	4501	-	-	-	-	-	-
Penaeid prawns	4502	-	-	-	-	-	-
Other prawns	4503	2	2	28	79	29	3
Miscellaneous	4701	-	1	2	1	1	1
Clams and cone shell	5602	-	-	-	-	-	-
Cuttlefishes	5701	670	82	182	272	147	634
Squids	5702	643	396	668	2,806	455	676
Octopuses	5703	3	7	3	13	9	72
Miscellaneous m. molluscs	5801	-	-	-	-	-	-
OTHERS							
TOTAL		6,455	4,632	3,269	8,135	5,067	6,873

2 MONTHLY CATCH-EFFORT STATISTICS 1993

2-1 Catch and Fishing Effort by Type of Fishing Gear and by Month

2-1-4 Longline

(1) Taiwan

Unit of fishing effort		Month					
		January	February	March	April	Mei	June
No. of units							
No. of trips							
No. of days							
No. of hauls							
No. of trawling hours							
Total catch		6,554	5,850	6,740	7,474	8,696	7,134
Species (group)	Code No.	January	February	March	April	Mei	June
Shads	2401	-	-	-	-	-	-
Barramundi	2501	-	-	-	-	-	-
Flounders	3101	1	-	-	-	-	-
Indian halibuts	3102	-	-	-	-	-	-
Tongue soles	3103	-	-	-	-	-	-
Marine catfishes	3301	1	1	-	1	-	-
Catfish eels	3302	-	-	-	-	-	-
Lizard fishes	3303	37	50	51	57	22	23
Sharp-toothed p. & c. eels	3304	2	5	-	1	-	-
Groupers	3305	3	1	26	26	5	20
Sillago whiting	3306	-	-	-	-	-	-
Red Snappers	3307	-	-	-	-	-	-
Other Snappers	3308	-	-	-	-	-	-
Fusiliers	3309	-	-	-	-	-	-
Threadfin breams	3310	24	31	26	39	43	12
Pony fishes	3311	-	-	-	-	-	-
Grunters and sweetlips	3312	-	-	-	-	-	-
Drums and croakers	3313	81	79	72	73	64	31
Goatfishes	3314	1	1	-	-	-	-
Emperor breams	3315	-	-	-	-	-	-
Big-eye Snappers	3316	5	2	3	8	3	1
Breams	3317	82	78	291	271	283	264
Horseheads	3318	3	8	15	15	17	5
Rabbitfishes	3319	-	-	-	-	-	-
Other species	3320	-	-	-	-	-	-
Barracudas	3402	-	-	1	6	1	-
Mullets	3403	-	-	-	-	-	-
Threadfins	3404	2	3	2	1	3	2
Round scads	3405	-	-	-	-	-	-
Jack, cavalla, trevallies	3406	6	7	31	45	33	7
Selar scads	3407	-	-	-	-	-	-
Hardtail Scad	3408	-	-	-	-	-	-
Queenfishes	3409	-	-	-	-	-	-
Black pomfret	3410	1	1	1	2	2	1
White pomfret	3411	10	15	15	24	16	3
Other species	3412	-	-	-	-	-	-
Sardines	3501	-	-	-	-	-	-
Round herring	3502	-	-	-	-	-	-
Anchovies	3503	-	-	-	-	-	-
Clupeoids	3504	-	-	-	-	-	-
Wolf herring	3505	-	-	-	-	-	-
Skipjack tuna	3601	55	9	6	10	4	3
Yellowfin tuna	3602	1,181	1,434	1,691	1,802	1,188	1,233
Big-eye tuna	3603	195	223	272	366	382	345
Longtail tuna	3604	283	461	708	563	446	275
Albacore	3605	2,744	1,723	1,474	824	1,570	1,627
Eastern little tuna	3606	-	-	-	-	-	-
Frigate and bullet tuna	3607	15	6	37	15	6	5
Swordfishes, sail. & marl.	3608	471	431	411	618	1,409	780
Narrow-barred king mackerel	3609	13	4	6	6	21	13
King mackerels	3610	1	2	2	3	3	1
Indian mackerels	3701	-	-	-	-	-	-
Indo-Pacific mackerel	3702	14	10	75	7	10	1
Hairtails	3703	39	45	46	29	24	19
Sharks	3801	608	613	619	268	300	243
Rays	3802	4	6	2	2	1	2
Miscellaneous fishes	3901	671	601	857	2,392	2,840	2,218
Trash fishes	3902	-	-	-	-	-	-
Swimming crabs	4201	-	-	-	-	-	-
Mangrove crab	4202	-	-	-	-	-	-
Spiny lobsters	4301	-	-	-	-	-	-
Slipper lobster	4302	-	-	-	-	-	-
Tiger prawn	4501	-	-	-	-	-	-
Penaeid prawns	4502	-	-	-	-	-	-
Other prawns	4503	-	-	-	-	-	-
Miscellaneous	4701	-	-	-	-	-	-
Clams and cone shell	5602	-	-	-	-	-	-
Cuttlefishes	5701	-	-	-	-	-	-
Squids	5702	1	-	-	-	-	-
Octopuses	5703	-	-	-	-	-	-
Miscellaneous m. molluscs	5801	-	-	-	-	-	-
OTHERS		-	-	-	-	-	-
TOTAL		6,554	5,850	6,740	7,474	8,696	7,134

2 MONTHLY CATCH-EFFORT STATISTICS 1993

2-1 Catch and Fishing Effort by Type of Fishing Gear and by Month

2-1-4 Longline

(1) Taiwan

Month		July	August	September	October	November	December
Unit of fishing effort							
No. of units							
No. of trips							
No. of days							
No. of hauls							
No. of trawling hours							
Total catch		6,937	7,129	7,619	5,618	5,271	6,581
Species (group)	Code No.	July	August	September	October	November	December
Shads	2401	-	-	-	-	-	-
Barramundi	2501	-	-	-	-	-	-
Flounders	3101	-	-	-	-	-	-
Indian halibuts	3102	-	-	-	-	-	-
Tongue soles	3103	-	-	-	-	-	-
Marine catfishes	3301	-	-	1	-	-	-
Catfish eels	3302	-	-	-	-	-	-
Lizard fishes	3303	17	15	35	15	6	7
Sharp-toothed p. & c. eels	3304	47	-	-	-	-	1
Groopery	3305	2	4	22	17	4	7
Silago whiting	3306	-	2	-	-	-	-
Red Snappers	3307	-	-	-	-	-	-
Other Snappers	3308	-	-	-	-	-	-
Fusiliers	3309	-	-	-	-	-	-
Threadfin breams	3310	48	53	64	51	31	23
Pony fishes	3311	-	-	-	-	-	-
Grunters and sweetlips	3312	-	-	-	-	-	-
Drums and croakers	3313	76	29	28	108	112	160
Goatfishes	3314	-	-	-	-	-	-
Emperor breams	3315	-	1	-	-	-	-
Big-eye Snappers	3316	1	1	1	1	5	10
Breams	3317	439	184	330	319	276	1,083
Horseheads	3318	5	4	3	2	3	3
Rabbitfishes	3319	-	-	-	-	-	-
Other species	3320	-	-	-	-	-	-
Barracudas	3402	-	-	-	1	-	-
Mullets	3403	-	-	-	-	-	-
Threadfins	3404	2	2	1	2	2	2
Round scads	3405	-	-	-	-	-	-
Jack, cavalla, trevallies	3406	7	8	8	8	11	11
Selar scads	3407	-	-	-	-	-	-
Hardtail Scad	3408	-	-	-	-	-	-
Queenfishes	3409	-	-	-	-	-	-
Black pomfret	3410	1	1	2	2	3	3
White pomfret	3411	2	3	3	5	6	6
Other species	3412	-	-	-	-	-	-
Sardines	3501	-	-	-	-	-	-
Round herring	3502	-	-	-	-	-	-
Anchovies	3503	-	-	-	-	-	-
Clupeoids	3504	-	-	-	-	-	-
Wolf herring	3505	-	-	-	-	-	-
Skipjack tuna	3601	22	46	45	19	19	894
Yellowfin tuna	3602	1,182	1,241	1,339	1,156	979	1,141
Big-eye tuna	3603	296	325	361	262	188	216
Longtail tuna	3604	188	199	280	230	261	221
Albacore	3605	2,206	2,709	2,756	793	1,310	1,481
Eastern little tuna	3606	-	-	-	-	-	-
Frigate and bullet tuna	3607	7	10	4	11	18	6
Swordfishes, sail. & marl.	3608	889	963	1,215	1,356	839	334
Narrow-barred king mackerel	3609	19	17	9	5	7	11
King mackerels	3610	1	1	1	2	2	2
Indian mackerels	3701	-	-	-	-	-	-
Indo-Pacific mackerel	3702	2	2	2	4	2	6
Hairtails	3703	60	51	54	88	42	34
Sharks	3801	489	305	385	364	498	448
Rays	3802	-	1	5	16	9	7
Miscellaneous fishes	3901	929	952	665	781	638	464
Trash fishes	3902	-	-	-	-	-	-
Swimming crabs	4201	-	-	-	-	-	-
Mangrove crab	4202	-	-	-	-	-	-
Spiny lobsters	4301	-	-	-	-	-	-
Slipper lobster	4302	-	-	-	-	-	-
Tiger prawn	4501	-	-	-	-	-	-
Penaeid prawns	4502	-	-	-	-	-	-
Other prawns	4503	-	-	-	-	-	-
Miscellaneous	4701	-	-	-	-	-	-
Clams and cone shell	5602	-	-	-	-	-	-
Cuttlefishes	5701	-	-	-	-	-	-
Squids	5702	-	-	-	-	-	-
Octopuses	5703	-	-	-	-	-	-
Miscellaneous m. molluscs	5801	-	-	-	-	-	-
OTHERS							
TOTAL		6,937	7,129	7,619	5,618	5,271	6,581

3. SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(1) BED Equipped Shrimp Net

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort										
No. of units	359	-	-	-	-	-	-	-	-	359
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	56,652	-	-	-	-	-	-	-	-	56,652

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(2) Seine Nets (Payang Included Lampara)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort										
No. of units	23,053	2,600	2,100	1,977	1,955	9,110	1,633	1,457	2,221	
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	267,449	16,044	14,984	10,743	29,809	92,107	13,672	27,358	62,280	452

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(3) Seine Nets (Danish Seine)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	4,521	1,312	1,427	115	240	826	-	364	215	22
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	40,981	4,158	3,146	8,514	2,432	21,874	-	-	692	165

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(4) Seine Nets (Beach Seine)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa- Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort										
No. of units	10,990	905	462	2,790	351	324	1,115	801	3,316	926
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	103,119	8,768	5,503	20,497	10,223	9,258	2,945	8,740	29,292	7,893

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(5) Purse Seine

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa- Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	8,599	492	2,200	1,310	1,118	1,826	403	365	1,527	476
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	515,291	36,725	41,895	63,870	1,118	221,804	41,316	17,572	63,980	27,011

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(6) Gill Nets (Drift Gill Net)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	70,361	3,219	8,195	8,879	2,838	12,170	14,982	4,990	10,910	4,178
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	332,139	12,942	14,261	35,698	38,998	72,006	24,222	83,714	41,268	9,130

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(7) Gill Nets (Encircling Gill Net)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa- Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	10,925	1,073	101	628	300	205	686	3,302	1,852	2,778
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	59,216	3,467	132	19,180	2,612	1,599	728	10,869	14,078	6,551

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(8) Gill Nets (Shrimp Gill Net)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort										
No. of units	25,292	1,606	3,590	2,707	2,554	8,100	3,514	1,672	1,348	201
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	55,468	3,406	686	10,342	11,982	19,928	4,114	671	4,196	143

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(9) Gill Nets (Set Gill Net)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	53,628	6,139	5,052	3,529	532	4,373	10,841	3,098	12,225	7,839
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	134,138	10,189	7,788	13,814	7,649	14,006	9,806	14,569	43,535	12,782

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(10) Gill Nets (Trammel Net)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	23,778	3,194	9,230	3,592	-	4,074	478	2,852	339	19
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	55,861	8,128	2,870	10,796	3,551	13,568	680	14,326	1,934	8

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(11) Lift Nets (Boat/Raft Net)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort										
No. of units	12,829	1,661	380	762	1,908	38	1,112	942	4,195	1,831
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	149,358	26,916	4,617	663	28,881	790	23,194		47,528	16,769

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(12) Lift Nets (Bagan Include Kelong)

Fishing effort	Sub-area		Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
No. of units			12,619	794	917	1,737	2,448	2,278	179	1,582	2,513	171
No. of trips												
No. of days												
No. of hauls												
No. of hours												
Total catch			96,865	2,221	7,020	4,433	20,292	15,952	2,773	4,428	38,143	1,603

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(13) Lift Nets (Scoop Net)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa- Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	7,811	1,103	814	1,304	862	-	682	2,133	721	192
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	39,345	673	330	3,765	902	496	34	29,088	4,047	10

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(14) Lift Nets (Other Lift Net)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort										
No. of units	12,643	3,885	400	2,481	465	928	488	2,120	644	1,232
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	21,321	78	160	7,964	3,746	1,681	51	5,954	971	716

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(15) Hook and Lines (Tuna Long Line)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort										
No. of units	2,171	761	-	127	-	212	535	228	51	257
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	29,469	621	210	-	-	5,557	7,841	-	9,091	6,149

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(16) Hook and Lines (Drift Long Lines Other Than Tuna Long Lines)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa- Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort										
No. of units	5,755	742	660	894	493	625	209	179	545	1,408
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	26,299	2,749	2,408	2,560	3,541	2,145	4,716	586	2,292	5,302

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(17) Hook and Lines (Set Long Line)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	13,502	694	1,279	2,351	1,002	189	173	1,490	3,120	3,204
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	56,463	4,584	882	23,673	3,873	5,810	100	7,977	7,444	2,120

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(18) Hook and Lines (Skipjack Pole and Line)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa- Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort										
No. of units	1,200	-	-	-	-	-	-	-	454	746
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	82,991	91	2	33	-	113	-	98	26,216	56,438

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(19) Hook and Lines (Other Pole and Lines)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	169,952	28,221	5,606	9,663	5,909	18,442	31,982	2,404	42,706	25,019
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	223,017	39,181	5,951	28,974	20,919	21,110	21,016	892	67,464	17,510

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(20) Hook and Lines (Troll Line)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	58,355	1,953	943	1,471	80	11,465	9,834	1,027	14,231	17,351
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	92,774	15,318	74	14,907	609	6,615	8,379	7,544	25,093	14,235

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(21) Traps (Guiding Barrier)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	7,375	-	-	1,570	1,272	572	187	1,073	1,787	914
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	48,688	' 10	-	10,319	13,772	4,324	359	5,104	8,270	6,530

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(22) Traps (Stow Net)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort										
No. of units	5,551	-	-	2,237	143	752	-	2,220	199	-
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	97,043	-	-	87,079	1,296	-	-	8,184	470	14

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(23) Traps (Portable Traps)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort										
No. of units	8,778	-	250	906	259	1,016	1,578	670	2,687	1,412
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	25,119	90	7	9,873	469	1,723	725	344	9,488	2,400

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(24) Traps (Other Traps)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa- Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort										
No. of units	26,053	9,525	55	2,997	1,246	6,559	984	3,703	436	548
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	46,240	759	59	6,935	5,848	7,085	958	17,506	6,424	666

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(25) Shell Fish Collection

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa- Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	10,488	650	211	5,231	54	2,368	455	439	491	589
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	41,904	19	973	32,296	660	5,365	263	944	410	974

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(26) Shell and Sea Weed Collection

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	7,066	427	2,739	-	-	-	1,814	-	1,052	1,034
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	115,391	63	355	-	-	-	107,006	-	5,907	2,060

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(27) Muro Ami Included Mallugis

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort	298	-	-	-	-	112	15	-	159	12
No. of units										
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	4,430	17	-	-	-	1,793	394	-	1,107	1,119

3 SPECIFIC DATA ON CATCH-EFFORT 1993

3-1 Indonesia

3-1-1 Annual Catch and Effort by Type of Fishing Gear and by Area

(28) Others (Harpon, CastNet, etc)

Sub-area	Total	West coast of Sumatera	South coast of Java	Malacca Straits	East coast of Sumatera	North coast of Java	Bali, Nusa-Tenggara, Timor	Kalimantan	Sulawesi	Maluku and Irian Jaya
Fishing effort										
No. of units	41,895	410	9,590	532	199	4,843	12,786	1,107	3,420	9,008
No. of trips										
No. of days										
No. of hauls										
No. of hours										
Total catch	69,285	880	514	10,716	2,542	7,338	1,133	7,187	4,606	34,369

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