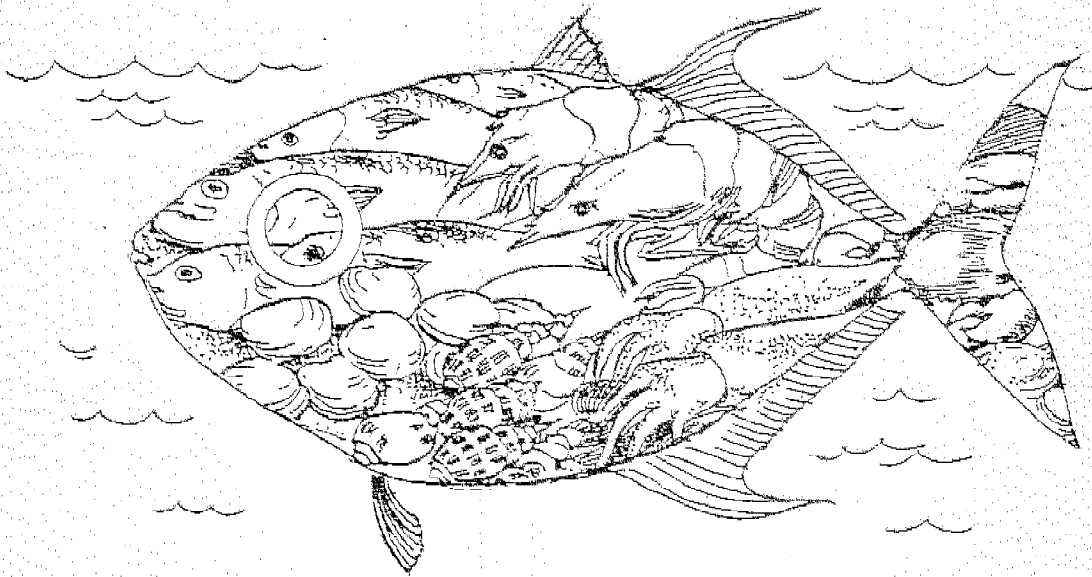


1987 PHILIPPINE FISHERIES PROFILE



DEPARTMENT OF AGRICULTURE
Bureau of Fisheries and Aquatic Resources
860 Quezon Ave., Quezon City, Metro Manila

BUREAU OF FISHERIES AND AQUATIC RESOURCES

Historical Background - The Bureau of Fisheries and Aquatic Resources (BFAR) started as a Division of Fisheries in the Bureau of Science in 1907. On January 1, 1953, it was made a part of the Fish and Game Administration under the Ministry of Agriculture and Commerce. It was organized as the Bureau of Fisheries on July 1, 1947 under Republic Act No. 177. On March 20, 1963, R.A. 3512 reorganized it into the Philippine Fisheries Commission. On September 30, 1972, under the Integrated Reorganization Plan, the Philippine Fisheries Commission was reverted to the Bureau of Fisheries. By virtue of Presidential Decree No. 461 signed on May 17, 1974, which reorganized the Department of Agriculture and Natural Resources into the Department of Agriculture, and the Department of Natural Resources, the Philippine Fisheries Commission was renamed Bureau of Fisheries and Aquatic Resources and placed under the Ministry of Natural Resources.

On June 30, 1984, BFAR was transferred from the Ministry of Natural Resources to the Ministry of Agriculture and Food, in compliance with Executive Order 967 mandating the conversion of BFAR as a staff bureau and integrating its Regional Offices with the Regional Offices of the Department of Agriculture. The staff function of the Central Office and the integration of BFAR's Regional Offices into the Regional Offices of the Department of Agriculture was fully implemented with the issuance of Executive Order 116 signed by President Corazon C. Aquino on January 30, 1987.

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PHILIPPINE FISHERIES PROFILE
As of December 1987

I. FISHERY RESOURCES

1. Marine Resources

a. Total Territorial Water Area (including EEZ)	-	220,000,000 ha.
b. Coastal	-	26,600,000 ha. (12%)
c. Oceanic	-	193,400,000 ha. (88%)
d. Shelf Area (depth 200 m)	-	18,460,000 ha. (8%)
e. Coastline (length)	-	17,460 sq.km.
f. Coral Reef Area	-	27,000 sq.km. (within the 10-20 fathoms where reef fisheries occur)

2. Inland Resources

a. <u>Swamplands</u> ^{1/}	-	<u>338,393 ha.</u>
- Freshwater	-	106,328 ha.
- Brackishwater	-	232,065 ha.
b. <u>Existing Fishpond</u> ^{2/}	-	<u>224,263 ha.</u>
- Freshwater	-	13,806 ha.
- Brackishwater	-	210,457 ha.

3. Other Inland Resources

a. Lakes	-	200,000 ha.
b. Rivers	-	31,000 ha.
c. Reservoirs	-	19,000 ha.

^{1/} Source of Data: 1984 Philippine Forestry Statistics.

^{2/} Source of Data: Fisheries Statistics Section, this refers to productive fishponds only as of 1987.

4. Other Supporting Facilities

a. No. of existing municipal fishing bancas	-	464,395 ^{5/}
b. No. of commercial fishing vessels	-	5,456 ^{5/}

II. FISHERIES CONTRIBUTION TO ECONOMY

1. Contribution to Total GNP^{4/}

- Current prices	-	5.1%
- Constant prices	-	4.9%

TOTAL FISH PRODUCTION FOR 1987^{5/}

	QUANTITY (000 MT)	%	VALUE (B P)	%
a. Aquaculture	561	25.3	11.3	30.4
b. Municipal Fisheries	1,061	48.0	16.1	43.5
c. Commercial Fisheries	<u>591</u>	<u>26.7</u>	<u>9.8</u>	<u>26.3</u>
Total -----	<u>2,215</u>	<u>100.0</u>	<u>37.2</u>	<u>100.0</u>

^{3/} Source of Data: Regional Expanded Fish Production Program and Provincial Fisheries Data.

^{4/} Source of Data: Revised data as of March 1988 of the National Income Accounts of the Philippines Economics and Social Statistics Office, National Statistical Coordination Board

^{5/} Preliminary Data as of June 1988, BFAR, Fisheries Statistics Section

FIVE-YEAR FISH PRODUCTION TREND (1982-1987)

<u>YEAR</u>	<u>QUANTITY (MT)</u>	<u>% INCREASE/ (DECREASE)</u>	<u>VALUE (000 ₱)</u>	<u>% INCREASE (DECREASE)</u>
1987	2,213,040	5.91	37,241,893	(0.24)
1986	2,089,484	1.82	37,331,483	19.28
1985	2,052,111	(1.36)	31,297,268	22.0
1984	2,080,439	(1.41)	25,649,933	35.13
1983	2,110,230	11.24	18,981,459	26.00
1982	1,896,983	7.00	15,063,966	7.96

EMPLOYMENT

a. Aquaculture	250,000 persons ^{6/}
b. Municipal Fisheries	675,677 persons ^{7/}
c. Commercial Fisheries	56,715 persons ^{6/}
Total	<u>982,392 persons</u>

^{6/} Preliminary Data - Source of Data: Fisheries
Statistics Section.

^{7/} Census of Fisheries, CY 1980.

III. EXTERNAL TRADE

	1985		1986		1987	
	QUAN- TITY (MT)	VALUE (P M)	QUAN- TITY (MT)	VALUE (M P)	QUAN- TITY (MT)	VALUE (P M)
Fishery Exports ^{8/}	95,077	3,496.0	101,453	4,863.0	111,830	6,441.8
Fishery Imports ^{8/}	28,755	118.1	69,084	385.6	104,936	637.3
Balance of Trade	<u>66,322</u>	<u>3,377.9</u>	<u>32,369</u>	<u>4,477.4</u>	<u>6,894</u>	<u>5,804.5</u>

MAJOR FISHERIES EXPORT IN TERMS OF VALUE, 1987

	QUANTITY (MT)	VALUE (000 P)
1. SHRIMP /PRAWN -----	15,550	3,187,354
Frozen/Chilled	14,935	3,158,144
Salted dried/cooked	455	21,946
Prepared whether or not in airtight containers	160	7,264
2. TUNA -----	37,311	1,427,225
Frozen/chilled	11,250	371,687
Prepared or preserved in airtight containers	26,061	1,055,538

^{8/} Source of Data: National Statistics Office (NSO)

MAJOR FISHERIES EXPORT IN TERMS OF VALUE, 1987

	QUANTITY (MT)	VALUE (000 P/)
3. SEaweEDS -----	30,752	487,969
Dried/Treated	25,511	458,622
Fresh	599	14,905
Salted	454	4,635
Kelp Meal Powder	4,188	9,807
4. SHELLCRAFT ARTICLES -----	3,747	302,449
5. CUTTLEFISH/SQUID -----	2,886	214,398
Fresh/Frozen/Chilled	2,646	197,497
Salted/Dried/Smoked	230	15,889
Prepared whether or not in airtight containers	10	1,012
6. FISH KEPT ALIVE FOR TRANSPORT -----	4,148	107,206
7. CLAMSHELL (MEAT) -----	1,457	97,260
Prepared or Preserved in airtight container	1,457	97,260
8. BANGUS (milkfish) -----	1,795	80,223
Frozen/chilled	1,690	73,995
Smoked	31	1,743
Prepared or preserved in airtight containers	74	4,485
9. CAPIZ SHELLS -----	4,066	63,556
10. SEA CUCUMBER (Trepang) -----	2,195	51,648
11. OTHERS -----	7,923	422,517
Total -----	<u>111,830</u>	<u>6,441,805</u>

MAJOR COUNTRY OF DESTINATION OF PHILIPPINE
EXPORT OF FISH AND FISHERY PRODUCTS
IN TERMS OF VALUE

<u>COUNTRY</u>	<u>QUANTITY (MT)</u>	<u>% TO TOTAL EXPORTS</u>	<u>VALUE (000 P)</u>	<u>% TO TOTAL EXPORTS</u>
1. Japan	31,520	28.19	3,328,988	51.68
2. U.S.A.	20,455	18.29	1,224,518	19.01
3. West Germany	10,434	9.33	363,225	5.64
4. United Kingdom	5,331	4.77	252,188	3.91
5. Hongkong	4,605	4.12	121,548	1.89
6. Canada	1,921	1.72	96,367	1.50
7. Hawaii	1,097	0.98	92,080	1.43
8. Denmark	9,208	8.23	88,926	1.38
9. France	5,157	4.61	81,426	1.26
10. Italy	1,411	1.26	51,421	0.80
11. Other Countries	20,691	18.50	741,118	11.50
TOTAL -----	<u>111,850</u>	<u>100.00</u>	<u>6,441,805</u>	<u>100.00</u>

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MAJOR IMPORTS FOR 1987

	QUANTITY (MT)	VALUE (000 P/)
A. <u>Frozen Sardines/Mackerels and Others</u> -----	65,208	257,122
Hongkong	0.22	18
Japan	62,738	250,234
Trust Territory of the Pacific Islands	470	6,870
B. <u>Tuna (Frozen)</u> -----	3,297	38,489
U.S.A.	1,250	16,964
Indonesia	420	1,457
New Guinea	1,502	17,093
New Zealand	125	2,975
C. <u>Fish Meal</u> -----	57,473	315,120
Japan	5,967	104,251
Peru	29,545	193,965
Taiwan	1,505	13,840
Thailand	101	569
U.S.A.	200	696
Canada	50	458
Norway	90	1,030
Belgium	.02	18
West Germany	17	289
Hongkong	.07	4

MAJOR SOURCES OF FISHERY IMPORTS
IN TERMS OF VALUE, 1987

<u>COUNTRY</u>	<u>QUANTITY (MT)</u>	<u>PERCENT TO TOTAL IMPORTS</u>	<u>VALUE (000 ₪)</u>	<u>PERCENT TO TOTAL IMPORTS</u>
1. Japan	68,706	65.47	354,486	55.62
2. Peru	29,545	28.16	193,965	30.45
3. U.S.A.	2,109	2.01	35,776	5.30
4. New Guinea	1,502	1.43	17,093	2.68
5. Taiwan	1,506	1.44	15,863	2.17
6. Trust Territory of Pacific Island	470	0.45	6,870	1.08
7. New Zealand	126	0.12	2,984	0.47
8. Thailand	201	0.19	2,851	0.45
9. Canada	121	0.11	2,482	0.39
10. Singapore	38	0.04	2,155	0.34
11. Other Countries	612	0.58	6,857	1.07
Total	<u>104,936</u>	<u>100.00</u>	<u>637,582</u>	<u>100.00</u>

B. FISH PRODUCTION, BY SECTOR, BY REGION, 1987

1. AQUACULTURE FISH PRODUCTION

a) FRESHWATER FISHPONDS

<u>REGION</u>	<u>TOTAL AREA (HA)</u>	<u>PRODUCTION (MT)</u>
NCR	-	-
I	1,471	2,103
II	949	1,348
III	9,114	24,743
IV	378	491
V	207	102
VI	554	493
VII	-	-
VIII	257	91
IX-A	-	-
IX-B	137	159
X	385	396
XI	240	126
XII	<u>114</u>	<u>113</u>
Total-----	<u>13,806</u>	<u>30,165</u>

IV. FISH PRODUCTION

A. FISH PRODUCTION, BY SECTOR (1974-1987)^{9/}
(In Metric Tons)

<u>YEAR</u>	<u>AQUACULTURE</u> ^{10/}	<u>MUNICIPAL</u> ^{11/}	<u>COMMERCIAL</u>	<u>TOTAL</u>
1987 ^{12/}	560,970	1,060,878	591,192	2,213,040
1986	470,893	1,072,361	546,230	2,089,484
1985	494,742	1,045,382	511,987	2,052,111
1984	477,887	1,089,046	513,335	2,080,268
1983	445,073	1,145,841	519,316	2,110,230
1982	392,348	978,362	526,273	1,896,983
1981	339,501	938,628	494,768	1,772,897
1980	289,166	894,610	488,478	1,672,254
1979	241,198	839,358	500,747	1,581,303
1978	216,655	857,909	505,840	1,580,404
1977	163,590	827,100	518,165	1,508,855
1976	159,292	725,994	508,197	1,393,483
1975	106,461	751,725	498,617	1,356,803
1974	113,195	684,498	470,675	1,268,368

^{9/} Source: Fisheries Statistics Section, Information Division, Adjustments/revisions were made from 1976-1987 based on the new classification of Fisheries Sector.

^{10/} Aquaculture includes its three sub-sectors namely mariculture for oyster, mussel and seaweeds; brackish-water culture for fishpond; and freshwater culture for fishpen, fish cage and fishpond.

^{11/} Municipal includes fishing done in coastal and inland waters with or without boat of 3 gross tonnage or less.

^{12/} Preliminary data as of June 1988.

B. FISH PRODUCTION, BY SECTOR, BY REGION 1987...

1. AQUACULTURE FISH PRODUCTION...

b) BRACKISHWATER FISHPONDS

<u>REGION</u>	<u>TOTAL AREA (HA)</u>	<u>PRODUCTION^{15/} (MT)</u>
NCR	703	633
I	16,659	24,576
II	1,469	911
III	53,465	71,122
IV	23,281	17,514
V	11,077	7,392
VI	59,074	78,663
VII	7,110	6,721
VIII	5,766	2,525
IX-A	1,540	1,063
IX-B	14,799	10,491
X	4,326	2,782
XI	7,248	6,617
XII	<u>5,940</u>	<u>3,574</u>
Total-----	<u>210,457</u>	<u>254,584</u>

^{15/} National Average Yield - 1.115 MT/ha/yr.

B. FISH PRODUCTION, BY SECTOR, BY REGION, 1987 ...

1. AQUACULTURE FISH PRODUCTION ...

d) PRODUCTION OF OYSTERS, MUSSELS AND SEAWEEDS

<u>REGION</u>	<u>OYSTERS</u>	<u>MUSSELS</u>	<u>SEAWEEDS</u>
NCR	-	3,622	-
I	6,580	-	-
II	4	-	8
III	487	95	-
IV	1,139	3,501	1,920
V	83	27	6
VI	2,058	447	-
VII	-	-	11,508
VIII	-	3,942	2,643
IX-A	-	-	166,717
IX-B	-	10	37,755
X	-	-	-
XI	10	-	282
XII	-	-	-
Total -----	<u>10,361</u>	<u>11,644</u>	<u>220,839</u>

B. FISH PRODUCTION, BY SECTOR, BY REGION, 1987 ...

1. AQUACULTURE FISH PRODUCTION ...

c) PRODUCTION OF FISHPEN AND FISH CAGES

<u>REGION</u>	<u>FISHPEN</u>	<u>FISH CAGES</u>
NCR	7,001	539
I	8	2
II	-	193
III	30	306
IV	28,235	11,069
V	-	5,521
VI	-	-
VII	-	-
VIII	52	58
IX-A	5	-
IX-B	250	16
X	-	-
XI	29	280
XII	-	5
Total	<u>35,588</u>	<u>17,789</u>

B. FISH PRODUCTION, BY SECTOR, BY REGION, 1987 ...

2. MUNICIPAL FISHERIES PRODUCTION, BY REGION, 1987
(In Metric Tons)

<u>REGION</u>	<u>MARINE</u>	<u>INLAND</u>	<u>TOTAL</u>
NCR	9,569	6	9,575
I	19,118	627	19,745
II	5,854	2,825	8,679
III	19,852	5,714	25,546
IV	135,931	208,486	344,417
V	78,478	3,161	81,639
VI	147,824	2,270	150,094
VII	23,721	21	23,742
VIII	36,396	558	36,954
IX-A	47,100	113	47,213
IX-B	142,068	1,054	143,122
X	75,271	2,550	77,821
XI	55,596	722	54,518
XII	21,489	16,524	38,013
Total -----	<u>816,247</u>	<u>244,631</u>	<u>1,060,878</u>

B. FISH PRODUCTION, BY SECTOR, BY REGION, 1987 . . .

3. NUMBER OF MUNICIPAL FISHING BANCAS, BY REGION

REGION	1980 ^{14/}			1985 ^{15/}		
	TOTAL	MOTO- RIZED	NON-MOTO- RIZED	TOTAL	MOTO- RIZED	NON-MOTO- RIZED
NCR	3,223	2,463	760	3,553	3,046	507
I	10,894	5,258	5,636	12,720	7,519	5,201
II	6,479	999	5,480	3,085	1,138	1,947
III	16,365	9,378	6,987	21,433	13,685	7,748
IV	55,323	22,290	31,033	54,617	32,232	22,385
V	39,739	10,727	29,012	49,303	18,563	30,740
VI	27,524	8,788	18,736	28,327	12,882	15,445
VII	48,263	9,203	39,060	64,740	21,286	43,454
VIII	43,416	7,598	35,818	40,702	10,782	29,920
IX-A)	44,489	10,088	34,401	113,459	37,208	76,251
IX-B)						
X	26,775	7,028	19,747	20,370	9,288	11,082
XI	24,387	7,868	16,519	35,174	18,883	16,291
XII	22,961	3,402	19,559	16,912	7,464	9,448
GRAND TOTAL--	<u>367,838</u>	<u>105,090</u>	<u>262,748</u>	<u>464,395</u>	<u>193,976</u>	<u>270,419</u>
% TO TOTAL--	100%	29%	71%	100%	42%	58%

^{14/} Source of Data: 1980 Census of Fisheries.

^{15/} Sources of Data: Regional Expanded Fish Production Program and Provincial Fisheries Data.

C. MARINE FISHERY PRODUCTION BY STATISTICAL
FISHING AREA, 1987 (in MT)

<u>STATISTICAL FISHING AREA</u>	<u>TOTAL</u>	<u>COMMERCIAL</u>	<u>MUNICIPAL</u>
1. Babuyan Channel	12,884	7,266	5,618
2. Batangas Coast	24,338	3,765	20,573
3. Bohol Sea	65,851	10,514	55,337
4. Camotes Sea	18,228	6,110	12,118
5. Casiguran Sound	5,006	-	5,006
6. Cuyo Pass	49,423	22,841	26,582
7. Davao Gulf	18,990	1,755	17,235
8. Guimaras Strait	69,117	6,588	62,529
9. Lagonoy Gulf	14,406	283	14,123
10. Lamon Bay	72,745	31,800	40,945
11. Leyte Gulf	39,036	1,385	37,651
12. Lingayen Gulf	24,015	4,894	19,121
13. Manila Bay	50,118	17,729	32,389
14. Moro Gulf	142,893	65,447	77,446
15. Ragay Gulf	24,963	11,771	13,192
16. Samar Sea	48,720	4,157	44,583
17. Sibuyan Sea	42,722	12,575	30,147
18. Sulu Sea, East	141,485	44,574	96,911
19. Sulu Sea, South	93,430	36,605	56,825
20. Sulu Sea, West	182,610	151,568	31,042
21. Tayabas Bay	35,675	11,172	24,503
22. Visayan Sea	191,003	135,137	55,866
23. West Palawan Waters	11,485	3,276	8,209
24. Northeastern Mindanao Waters	24,697	-	24,697
25. Southeastern Mindanao Waters	3,368	-	3,368
26. Palanan Bay	233	-	233
Total-----	<u>1,407,439</u>	<u>591,192</u>	<u>816,247</u>

B. TEN MAJOR SPECIES OF MARINE FISH CAUGHT IN
PHILIPPINE WATERS, CY 1987

	<u>QUANTITY</u> <u>(MT)</u>	<u>% TO TOTAL</u> <u>CATCH</u>
1. Tuna and tuna like species	<u>270,526</u>	<u>19.22</u>
Frigate tunas (tulingan)	98,052	
Yellowfin and big-eyed tuna (tambacol)	51,809	
Skipjack (guliasan)	73,751	
Eastern little tuna (oceanic bonito katchorita)	46,934	
2. Roundscad (galonggong)	184,411	13.10
3. Anchovies (dilis)	108,373	7.70
4. Sardines (tunsoy, tamban)	98,694	7.01
5. Slipmouth (sapsap)	61,738	4.59
6. Thread fin bream (busugo)	46,448	3.30
7. Indian mackerel (alumahan)	42,726	3.04
8. Big-eyed scad (matangbaka)	35,461	2.52
9. Goatfish (Saramulyete)	27,049	1.92
10. Squid (Pusit)	26,431	1.88

B. PER CAPITA CONSUMPTION OF OTHER FOOD
AS OF 1982

	<u>NATIONAL</u>	<u>LUZON</u>	<u>VISAYAS</u>	<u>MINDANAO</u>
1. Dairy	16	20	11	7
2. Poultry Meat	4	5	3	2
3. Eggs	3	4	2	2
4. Pork	7	9	4	8
5. Beef	1	2	1	n*
6. Carabeef	n*	n*	n*	n*
7. Fruits	30	30	33	27
8. Vegetables	27	33	16	24

VI. OTHER INFORMATION

A. TEN MAJOR LAKES OF THE PHILIPPINES ^{18/}

<u>NAME OF LAKES</u>	<u>LOCATION</u>	<u>AREA (HA)</u>
1. Laguna de Bay	Laguna and Rizal	90,000
2. Lake Lanao	Lanao del Sur	34,000
3. Taal Lake	Batangas	33,432
4. Naujan Lake	Oriental Mindoro	8,000
5. Lake Mainit	Surigao del Sur & Agusan del Norte	7,340
6. Lake Buluan	Maguindanao and Sultan Kudarat	6,500
7. Lake Bato	Camarines Sur and Albay Provinces	5,800
8. Lake Buhi	Camarines Sur	1,800
9. Lake Wood	Zamboanga del Sur	720
10. Lake Danao	Camotes Island, Cebu	480

* Negligible

^{18/} Source of Data: Lakes and Reservoirs, State of the
Art Series, Report #1, (PCARRD)

D. PRODUCTION OF COMMERCIAL FISHING VESSELS
BY GEAR, 1987

<u>TYPE OF GEAR</u>	<u>QUANTITY (MT)</u>	<u>PERCENTAGE OF COMMER- CIAL CATCH ACCOUNTED FOR</u>
Purse Seine	239,663	40.54
Otter Trawl	147,317	24.92
Bagnet	92,413	15.63
Others	111,799	18.91
Total-----	<u>591,192</u>	<u>100.00</u>

V. CONSUMPTION ^{17/}

A. PER CAPITA CONSUMPTION OF FISH AS OF 1982
(kg/year)

	<u>NATIONAL</u>	<u>LUZON</u>	<u>VISAYAS</u>	<u>MINDANAO</u>
1. Fish-----	<u>40</u>	<u>36</u>	<u>49</u>	<u>46</u>
<u>Fresh</u>	<u>25</u>	<u>22</u>	<u>31</u>	<u>28</u>
<u>Dried</u>	<u>4</u>	<u>3</u>	<u>6</u>	<u>4</u>
<u>Processed Fish</u>	<u>4</u>	<u>5</u>	<u>3</u>	<u>6</u>
Bagoong	2	2	2	4
Patis	n*	1	n*	n*
Others	2	2	1	2
<u>Crustaceans and Mollusks</u>	<u>7</u>	<u>6</u>	<u>9</u>	<u>8</u>

* Negligible

^{17/} Source of data: Food and Nutrition Research
Institute.

C. COMMERCIAL FISHING VESSELS BY REGION, 1987

<u>REGION</u>	<u>NUMBER</u>	<u>TOTAL GROSS TONNAGE</u>
NCR	1,216	88,192.70
I	36	754.05
II	132	791.55
III	74	1,550.66
IV	437	8,593.02
V	152	4,656.55
VI	324	18,156.84
VII	215	4,587.07
VIII	165	2,431.27
IX	292	11,264.92
X	48	1,249.54
XI	355	7,799.11
XII	<u>10</u>	<u>267.82</u>
Total-----	<u>3,436</u>	<u>150,055.10</u>

^{16/} Source of Data: BFAR, Fisheries Statistics Section.

B. FISH PRODUCTION, BY SECTOR, BY REGION, 1987...

4. COMMERCIAL FISHERIES PRODUCTION, BY REGION
1987
(In Metric Tons)

<u>REGION</u>	<u>MARINE COMMERCIAL</u>
NCR	187,185
I	5,407
II	7,266
III	9,077
IV	52,787
V	40,162
VI	119,249
VII	32,113
VIII	14,629
IX-A	12,186
IX-B	67,566
X	6,397
XI	38,819
XII	<u>551</u>
Total-----	<u>591,192</u>

Prepared by: Planning and Management Division, BFAR

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