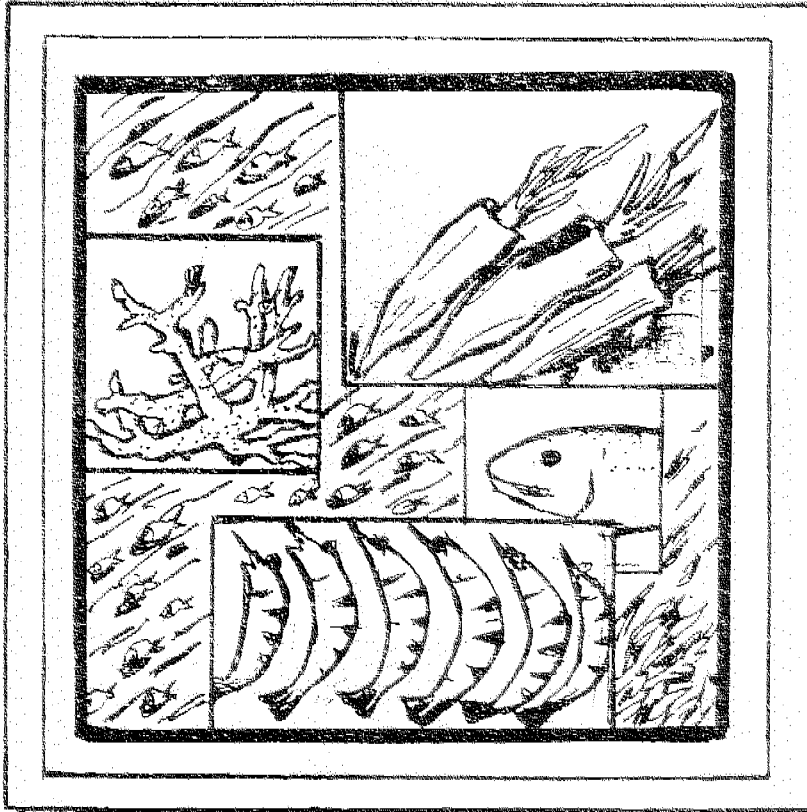
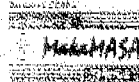


1998 PHILIPPINE FISHERIES PROFILE



Republic of the Philippines
Department of Agriculture
BUREAU OF FISHERIES AND AQUATIC RESOURCES



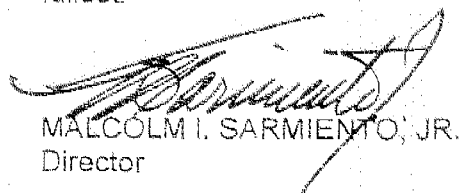
FOREWORD

The Bureau of Fisheries and Aquatic Resources (BFAR) publishes yearly the Philippine Fisheries Profile (PFP) based on the latest available data gathered from the different concerned agencies. This report aims to provide planners, decision-makers, researchers and other users with handy and concise information on Philippine fisheries.

The PFP focuses on the information/data on the Fisheries Contribution to the Philippine Economy, Employment, Fish Production (sector, sub-sector, region, major species), Export and Import Performance and Other Fishery Industry Information such as per capita food consumption, the Philippine contribution to total world production of fish and seaweeds, and the wholesale and retail prices of major commodities. Corresponding summary tables and graphs are also developed to further enhance the presentation of fisheries data and information.

We gratefully acknowledge the support and cooperation of the following agencies in making the data available to BFAR: Bureau of Agricultural Statistics (BAS), National Statistics Office (NSO), National Statistics and Coordination Board (NSCB), Food and Nutrition Research Institute (FNRI) and Food and Agricultural Organization (FAO).

It is hoped that this reference material will serve its purpose to the fullest.



MALCOLM I. SARMIENTO, JR.
Director

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H I G H L I G H T S

WORLD SCENARIO: Philippine Fisheries

Thirteenth (13th) among the fifty-one (51) top fish producing countries in 1996. Contributed 1.8 million metric tons of fish or 1.9 percent to the total world catch of 94.625 million metric tons (FAO Yearbook, 1996)

Ninth (9th) in the world aquaculture production of fish and shellfish in 1996. Contributed a total of 0.343 million metric tons of fish valued at 1.196 million dollars or 1.3 percent and 2.9 percent to the total world aquaculture production of fish and shellfish amounting to 26.385 million metric tons and 41.546 million dollars respectively (FAO Yearbook, 1996)

Second (2nd) biggest producer of seaweeds and other aquatic plants, contributing 8.2% or 0.631 million metric tons in the world seaweed production of 7.732 million metric tons in 1996. Leading was China, 5.420 million metric tons or 70% while Korea, Rep. ranked third (3rd) with a total production of 0.539 or 7% followed by Japan 6.7% 0.520 million metric tons (FAO Yearbook, 1996).

FISHERIES CONTRIBUTION TO THE PHILIPPINE ECONOMY (1998)

The fishing industry's contribution to the country's Gross Domestic Products (GDP) of P2,667.1 billion at current prices and P888.1 billion at constant price were 2.8% (P74.1 B) and 3.0% (P34.7B) at current and constant prices respectively.

The industry also accounted for 16.5% (P74.1 B) and 20.1% (34.7 B) of the Gross Value Added (GVA) of P450.0 B and P172.4 B in Agriculture, Fishery and Forestry Sector at current and constant prices respectively, the largest share next to agricultural crops.

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EMPLOYMENT IN THE FISHING INDUSTRY

1. The fishing industry provided employment to about one million or five percent of the country's labor force. In aquaculture, about 26% (258,480) fishfarmers are engaged in different culture methods; municipal contributes 68% (675,677) and commercial fisheries, 6% (56,715).

PERFORMANCE OF THE FISHING INDUSTRY

1. The average annual growth rate achieved by Philippine fisheries from 1989-1998 was 1.8% in quantity. Positive growths of 4.7% and 4.4% were experienced in aquaculture and commercial fisheries but municipal fisheries declined by 2.3%.
2. Based on the Bureau of Agricultural Statistics (BAS), total fish production for the year rose to 2.79 million metric tons valued at P 84.86 billion in 1998 compared to 2.77 million metric tons valued at P 80.7 billion attained in 1997. An increase of 0.71% and 5.1% was recorded in terms of quantity and value respectively.
3. Production was mainly contributed by aquaculture fisheries, 34.2% followed by commercial fisheries, 33.8% and municipal fisheries, 32.0%.
4. Of the P84.9 billion total value of production in 1998, the highest share of 35.0% went to commercial fisheries, followed by municipal fisheries, 34.1% and aquaculture fisheries, 30.9 percent.

FISHERIES EXPORT AND IMPORT PERFORMANCE

1. In 1998, both the quantity and peso value of fishery exports registered a positive growth of 6.8 percent and 25.8 percent respectively. However, dollar value declined by 3.6 percent in the same period from \$549.8 M in 1997 to \$530 M in 1998. Fishery exports for 1998 amounted to P20.553 billion (185,758 MT), as compared to 1997 of P16.337 billion (173,887 MT).

2. Shrimp export, managed to grow by 1.1% and 29.8% in volume and value for 1998 in contrast to a negative growth of 22% in volume and 2.4% in value attained in 1997. Shrimp exports, recorded a total of 10,532 MT (P3.894 B) in 1997 to 10,649 MT (5.053 B) in 1998.
3. The ten major fishery exports accounted for almost 90% of the total export value of P20.553 B in 1998. Major exports in terms of value in descending order were the following: Tuna, (P7.938 B); shrimp/prawn, (P5.083 B); seaweeds, (P2.516B). Other products that made it to the top ten were the following: octopus, cuttlefish/squid, crabs/crab fats, cultured pearls, ornamental fish, lapu-lapu replacing dried cucumber (trepang) and abalone.
4. Major buyers of the Philippine fish and fishery products in descending orders were the following: Japan, U.S.A, Hongkong; and the rest were: United Kingdom, Germany, Thailand, Canada, South Africa, France and Taiwan.
5. A drastic drop of 43.7% in the quantity of imports of fish and fishery products was experienced from 295,016 MT in 1997 to 165,989 MT in 1998. A decrease of 18.2% in value was recorded from P 4.020 B in 1997 to P3.288 B in 1998. Among the major imports, only frozen tuna (for canning and export) had a positive growth of 22.7% in value. Both sardines and mackerel which are for local consumption declined by more than fifty percent. Major suppliers of these commodities were Japan (14%) and Papua New Guinea (12%) for chilled /frozen tuna; Taiwan (23%), Mexico (4%) and Hongkong (2%) for sardines and mackerel or an overall total of 55% while the rest were supplied by other countries.
6. Major sources of fishery imports in descending orders were the following: Taiwan, Indonesia, Peru, Japan, and the rest were: U. S. A., Papua New Guinea, Singapore, Trust Territory of the Pacific Island, Australia and China.

I. FISHERY RESOURCES

**II. FISHERIES CONTRIBUTION
TO THE ECONOMY, 1998**

Philippine Marine Jurisdictional Boundaries

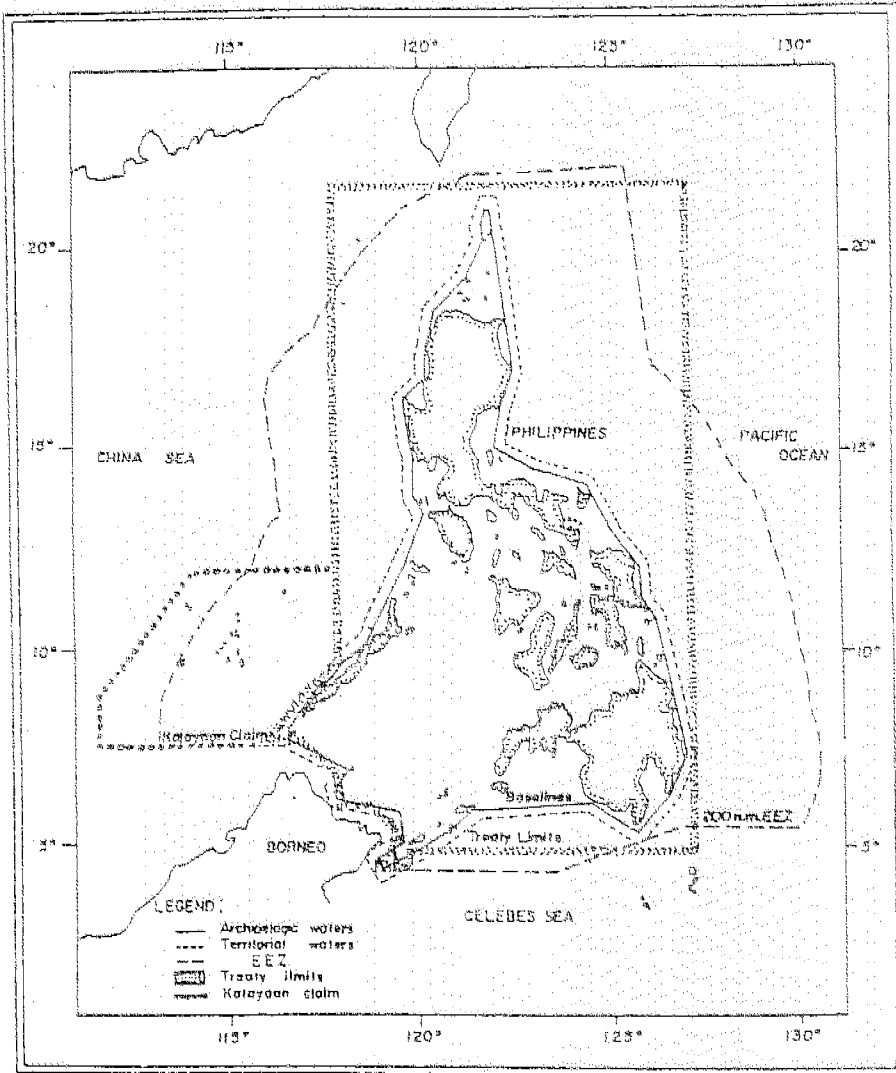


Figure 1

FISHERIES CONTRIBUTION TO THE ECONOMY, 1998

A. Fisheries Contribution to Total GDP ^{3/}

- 1. At Current Prices 2.8 %
- 2. At Constant Prices 3.9%

B. Fisheries Contribution to GVA in Agriculture, Fishery and Forestry by Industry Group ^{3/}

	At Current Prices (P M)	% to Agri- cultural Sector	At Constant Prices (P M)	% to Agri- cultural Sector
1. Agricultural crops (Palay, corn coconut, etc.)	251,240	55.8	87,118	50.5
2. Livestock	62,604	13.9	23,196	13.5
3. Poultry	39,088	8.7	19,023	11.0
4. Agricultural activities & services	20,660	4.6	7,521	4.4
5. Fishery	74,081	16.5	34,690	20.1
6. Forestry	2,215	0.5	897	0.5
TOTAL	449,888	100.0	172,445	100.0

1998 PHILIPPINE FISHERIES PROFILE

I. FISHERY RESOURCES

A. Marine Resources

1. Total Marine Territorial Water Area (including the EEZ)	2,200,000 sq. km.
a. Coastal	266,000 sq. km.
b. Oceanic	1,934,000 sq. km.
2. Shelf Area (to depth 200 m)	184,600 sq. km.
3. Coral Reef Area	27,000 sq. km. (Within the 10-20 fathoms where reef fisheries occur)
4. Coastline (length)	17,460 km

B. Inland Resources

1. Swamplands	246,063 ha
a. Freshwater	106,328 ha
b. Brackishwater ^{1/}	139,735 ha
2. Existing Fishpond	253,854 ha
a. Freshwater	14,531 ha
b. Brackishwater ^{2/}	239,323 ha
3. Other Inland Resources	250,000 ha
a. Lakes	200,000 ha
b. Rivers	31,000 ha
c. Reservoirs	19,000 ha

C. Employment

1. Aquaculture	258,480 persons	^{4/}
2. Municipal	675,677 persons	^{5/}
3. Commercial	56,715 persons	^{4/}
TOTAL	990,872 persons	

D. Balance of Trade ^{6/}

	1998			1997		
	Quantity (MT)	FOB Value (P M)	FOB Value (\$ M)	Quantity (MT)	FOB Value (P M)	FOB Value (\$ M)
Fishery Export	185,758	20,553	530.0	173,887	16,337	549.8
Fishery Import	165,989	3,288	83.3	295,016	4,020	138.1
Balance of Trade	19,769	17,265	446.7	(121,129)	12,317	411.7

E. Total Fish Production, by Sector, 1998

Sector	Quantity		Value	
	(000 MT)	%	(P B)	%
1. Aquaculture	954	34.2	26.2	30.9
2. Municipal Fisheries	891	32.0	29.0	34.1
3. Commercial Fisheries	941	33.8	29.7	35.0
TOTAL	2,786	100.0	84.9	100.0

Source: Bureau of Agricultural Statistics

F. Fish Production, by Sector and by Region, 1998
(in MT)

Region	Commercial	Municipal	Aquaculture	Total	% share to total
NCR	211,879	4,605	5,080	221,564	7.95
CAR	0	258	887	1,145	0.04
I	1,963	23,553	23,726	49,242	1.77
II	8,413	13,473	1,969	23,855	0.86
III	10,383	11,656	90,708	112,747	4.05
IV	118,526	257,486	214,348	590,360	21.19
V	23,883	73,058	16,376	113,317	4.07
VI	112,824	127,284	69,655	309,763	11.12
VII	62,446	41,273	18,076	121,795	4.37
VIII	28,763	36,026	4,299	69,058	2.48
IX	188,289	113,670	119,365	421,324	15.12
X	19,590	16,220	2,150	37,960	1.36
XI	104,581	47,101	15,500	167,182	6.00
XII	9,637	9,976	7,970	27,583	0.99
ARMM	4,669	61,359	3,171	69,199	2.48
CARAG	34,717	54,148	381,116	449,981	16.15
Total	940,533	891,146	954,396	2,786,075	100.00

G. Fish Production, by Sector 1989-1998 ⁷¹

1. Volume of Fish Production (in MT)

Year	Aquaculture	Municipal	Commercial	Total
1998	954,396	891,146	940,533	2,786,075
1997	957,390	924,466	884,651	2,766,507
1996	980,829 R	909,248	879,073	2,769,150 R
1995	919,810 R	972,043	893,232	2,785,085 R
1994	869,083 R	992,578	859,328	2,720,989 R
1993	793,620 R	1,013,969	824,356	2,631,945 R
1992	736,381	1,084,360	804,866	2,625,607
1991	692,401	1,146,765	759,815	2,598,981
1990	671,116	1,131,866	700,564	2,503,546
1989	629,345	1,104,626	637,138	2,371,109

**A. SUMMARY OF AQUACULTURE PRODUCTION
BY CULTURE SYSTEM AND REGION, 1998**

Region	Total Aqua- culture	Brackish- water Fishpond	Fresh- water Fishpond	Fresh and Marine water		
				Fishpen	Fishcage	Mariculture
NCR	5,080	4,680	0	243	157	0
CAR	887	0	182	0	705	0
I	23,726	12,540	1,520	4,598	2,017	3,051
II	1,969	559	907	0	497	6
III	90,708	57,796	30,306	20	108	2,478
IV	214,348	19,077	837	21,592	20,918	151,924
V	16,376	2,564	55	0	5,468	8,289
VI	69,655	46,479	100	a/	19	23,057
VII	18,076	9,157	1	a/	0	8,918
VIII	4,299	1,597	54	1	5	2,642
IX	119,365	9,185	66	19	8	110,087
X	2,150	1,972	161	2	1	14
XI	15,500	11,638	744	356	2,333	429
XII	7,970	7,505	381	10	53	21
XIII	3,171	2,525	11	6	25	604
ARMM	361,116	1,564	21	4	11	359,516
TOTAL	954,396	188,838	35,346	26,851	32,325	671,036

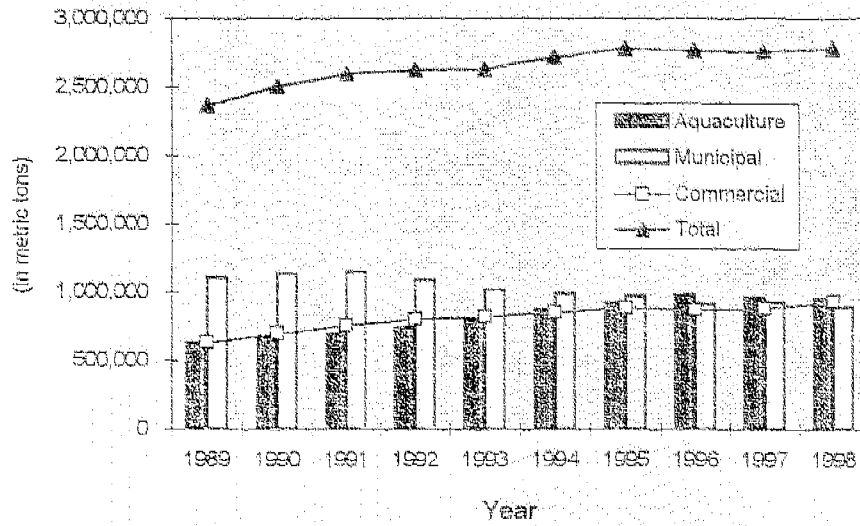
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III. AQUACULTURE PRODUCTION, 1998

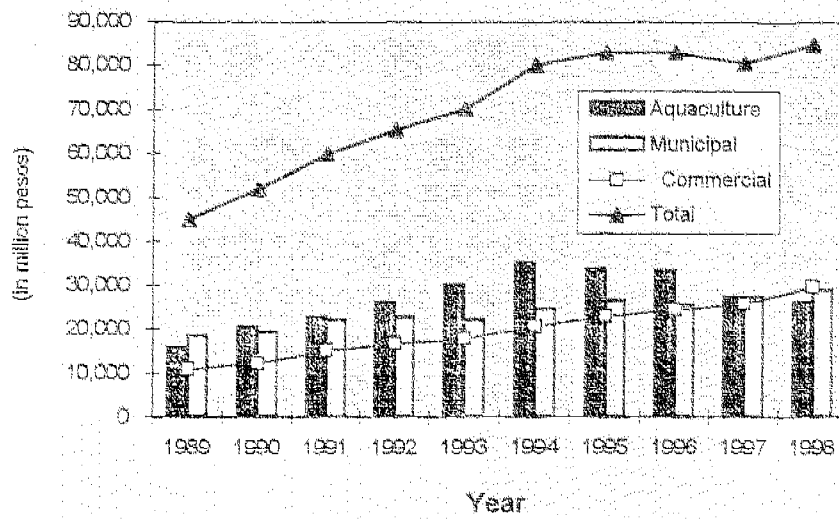
This includes production from the following:

- Brackishwater fishpond
- Freshwater fishpond
- Fishpen and fishcage in fresh and marine waters
- Mariculture of oyster, mussel and seaweeds

FISH PRODUCTION, BY SECTOR, 1989-1998



VALUE OF FISH PRODUCTION, BY SECTOR, 1989-1998



TOTAL FISH PRODUCTION, BY SECTOR, 1998

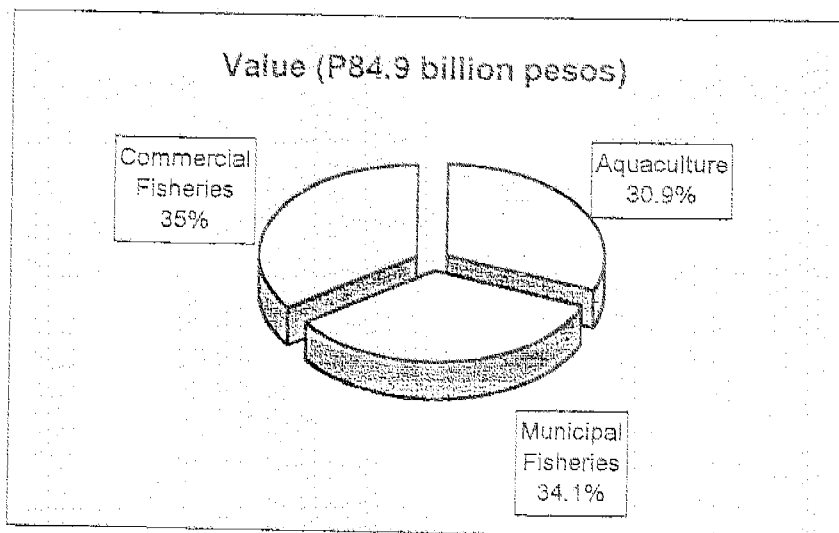
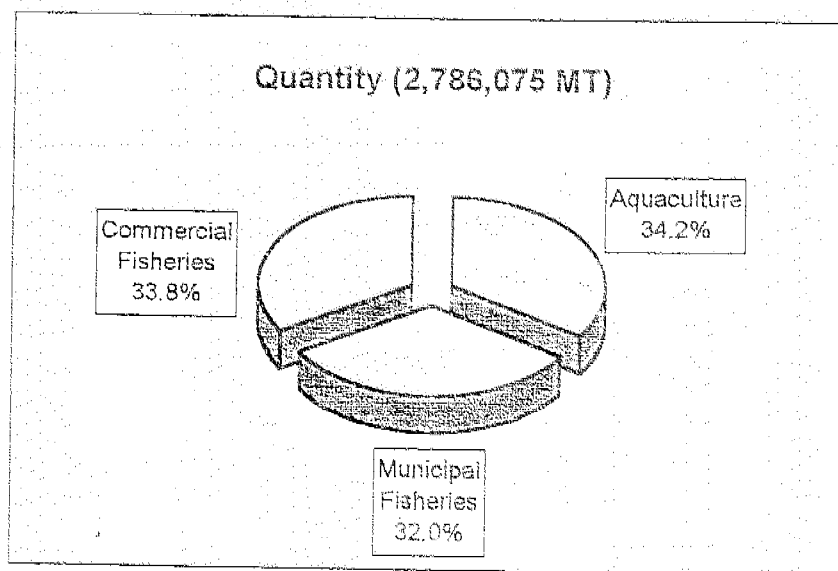


Figure 2

2. Value of Fish Production (in million pesos)

Year	Aquaculture	Municipal	Commercial	Total
1998	26,161	28,966	29,737	84,864
1997	27,383	27,393	25,935	80,711
1996	33,206	R 25,373	24,555	83,134 R
1995	33,555	R 26,464	23,065	83,084 R
1994	35,003	R 24,475	20,714	80,192 R
1993	30,163	R 22,031	18,021	70,215 R
1992	25,986	22,656	16,801	65,443
1991	22,656	22,133	15,245	60,034
1990	20,466	19,300	12,411	52,177
1989	15,673	18,388	11,033	45,094

H. Five Year Fish Production, Trend 1994-1998

Year	Quantity (M T)	% Increase/ (Decrease)	Value (000 P)	% Increase (Decrease)
1998	2,786,075	0.71	84,864,572	5.15
1997	2,766,507	-0.09	80,710,968	-2.91
1996	2,769,150	-0.57	83,134,756	0.06
1995	2,785,085	2.36	83,084,128	3.61
1994	2,720,989	3.38	80,192,118	14.21

**B. AQUACULTURE PRODUCTION, BY CULTURE SYSTEM,
SPECIES AND REGION, 1998**

1. Production from Brackishwater Fishpond (in MT)

Region	Total	Bangus	Endeavor		
			Sugpo	Prawn	Others *
NCR	4,680	4,655	12	0	13
CAR	0	0	0	0	0
I	12,540	11,143	209	2	1,186
II	559	170	130	4	255
III	57,796	32,103	19,467	1	6,225
IV	19,077	16,968	1,739	75	295
V	2,564	1,180	326	52	1,006
VI	46,479	44,488	1,579	90	322
VII	9,157	6,378	2,769	0	10
VIII	1,597	1,377	207	0	13
IX	9,185	5,061	3,368	0	756
X	1,972	1,273	666	0	33
XI	11,638	10,817	642	8	171
XII	7,505	3,064	4,414	26	1
XIII	2,525	1,143	1,086	0	296
ARM	1,564	1,253	184	0	127
TOTAL	188,838	141,073	36,798	258	10,709

Others :

Tilapia (5,949)

White Shrimp (741)

Grouper (20)

Mudcrab (3,996)

Siganid (3)

2. Production from Freshwater Fishpond, 1998
(in MT)

Region	Total	Tilapia	Carp	Others *
CAR	182	174	8	0
I	1,520	1,477	2	41
II	907	766	14	127
III	30,306	28,190	213	1,903
IV	837	799	17	21
V	55	44	7	4
VI	100	29	2	69
VII	1	1	0	0
VIII	54	52	0	2
IX	66	57	0	9
X	161	152	9	0
XI	744	699	13	32
XII	381	314	7	60
XIII	11	9	2	0
ARMM	21	17	1	3
TOTAL	35,346	32,780	295	2,271

* Others
 Catfish (743)
 Mudfish (1343)
 Gourami (43)
 Not Specified (142)

3. Production from Fishpen, in
Fresh and Marine Waters, 1998
(in MT)

Region	Total	Bangus	Tilapia	Others
NCR	243	230	13	0
CAR	0	0	0	0
I	4,598	4,595	0	3
II	0	0	0	0
III	20	3	6	11
IV	21,592	13,499	3,714	4,379
V	0	0	0	0
VI	a/	0	0	a/
VII	a/	0	0	a/
VIII	1	0	1	0
IX	19	0	0	19
X	2	2	0	0
XI	356	356	0	0
XII	10	0	10	0
XIII	6	1	0	5
ARMM	4	0	4	0
TOTAL	26,851	18,686	3,748	4,417

Others:

Carp (4,379) Grouper (2) Misc. Species (2)

Mudcrab (30) Siganid (2)

S. Lobster (1) Snapper (1)

a/ less than one metric ton

4. Production from Fish Cage in
Fresh and Marine Waters, 1998
(in MT)

Region	Total	Tilapia	Bangus	Others
NCR	157	142	0	15
CAR	705	705	0	0
I	2,017	4	2012	1
II	497	497	0	0
III	108	93	15	0
IV	20,918	20,852	0	66
V	5,468	5,468	0	0
VI	19	0	9	10
VII	0	0	0	0
VIII	5	0	0	5
IX	8	0	0	8
X	1	0	a/	1
XI	2,333	1,772	553	8
XII	53	0	53	0
XIII	25	0	0	25
ARMM	11	11	0	0
TOTAL	32,325	29,544	2,642	139

Others:

Carp (81)

Grouper (33)

Misc. Species (25)

a/ less than one metric ton

**5. Production from Mariculture, 1998
(in MT)**

Region	TOTAL	Oyster	Mussels	Seaweeds
NCR	0	0	0	0
CAR	0	0	0	0
I	3,051	3,051	0	0
II	6	6	0	0
III	2,478	2,478	0	0
IV	151,924	4,452	4,430	143,042
V	8,299	44	980	7,265
VI	23,057	2,830	7,510	12,717
VII	8,918	48	29	8,841
VIII	2,642	0	2,580	62
IX	110,087	192	4	109,891
X	14	0	0	14
XI	429	73	0	356
XII	21	0	0	21
XIII	604	10	0	594
ARMM	359,516	0	0	359,516
TOTAL	671,036	13,184	15,533	642,319

C. MAJOR SPECIES PRODUCED IN AQUACULTURE FISHERIES, 1998

Species	Quantity (MT)	Percent (%)
Seaweeds	642,319	67.3
Bangus (milkfish)	162,401	17.0
Tilapia (cichlid)	72,021	7.5
Shrimps/Prawns	37,797	4.0
Others	39,858	4.2
TOTAL	954,396	100.0

D. TEN MAJOR LAKES OF THE PHILIPPINES ^{8/}

Name of Lakes	Location	Area (ha)
1. Laguna de Bay	Laguna and Rizal	89,076
2. Lake Lanao	Lanao del Sur	34,000
3. Taal Lake	Batangas	24,356
4. Lake Mainit	Surigao del Norte- Agusan	17,430
5. Naujan Lake	Oriental Mindoro	7,899
6. Lake Buluan	Maguindanao	6,134
7. Lake Bato	Camarines Sur	3,792
8. Lake Pagusi	Agusan	2,532
9. Lake Labas	South Cotabato	2,141
10. Lake Lumao	Agusan	1,686
TOTAL		189,046

A. MUNICIPAL FISHERIES PRODUCTION, BY REGION, 1998
(in MT)

Region	Marine	Inland	Total
NCR	4,605	0	4,605
CAR	0	258	258
I	22,461	1,092	23,553
II	8,622	4,851	13,473
III	7,458	4,198	11,656
IV	145,775	111,711	257,486
V	72,622	436	73,058
VI	125,620	1,664	127,284
VII	41,217	56	41,273
VIII	36,022	4	36,026
IX	113,382	288	113,670
X	16,020	200	16,220
XI	46,097	1,004	47,101
XII	5,616	4,360	9,976
XIII	57,813	3,546	61,359
ARMM	41,345	12,803	54,148
Total	744,675	146,471	891,146

IV. MUNICIPAL FISHERIES PRODUCTION, 1998

This includes fishing done in coastal and inland waters with or without the use of boats of 3 gross tons or less.

**C. MARINE MUNICIPAL FISHERIES PRODUCTION,
BY MAJOR FISHING GROUNDS, 1995
(in MT)**

Fishing Ground	Total	% to Total
1. Visayan Sea	88,616	11.28
2. Moro Gulf	73,938	9.41
3. East Sulu Sea	71,486	9.10
4. Bohol Sea	70,756	9.01
5. Guimaras Strait	51,332	6.54
6. Leyte Gulf	49,901	6.35
7. West Palawan Waters	46,948	5.98
8. South Sulu Sea	42,019	5.35
9. Lamon Bay	41,862	5.33
10. Samar Sea	40,236	5.12
11. Davao Gulf	33,743	4.30
12. Cuyo Pass	25,587	3.26
13. Tayabas Bay	17,498	2.23
14. Others	131,447	16.74
Total	785,369	100.00

**B. MARINE MUNICIPAL FISH CATCH,
BY MAJOR FISH SPECIES, 1997**

Major Species	Total	% to Total
1. Frigate Tuna (Tulingan)	51,899	6.8
2. Fimbrated Sardines (Tunsoy)	45,978	6.0
3. Anchovies (Dilis)	43,160	5.6
4. Pusit (Squid)	41,207	5.4
5. Indian Sardines (Tamban)	38,639	5.1
6. Yellowfin Tuna (Tambakol)	36,387	4.8
7. Roundscad (Galunggong)	32,290	4.2
8. Blue Crabs (Alimasag)	28,786	3.8
9. Big-Eyed Scad (Matangbaka)	28,765	3.8
10. Indian Mackerel (Alumahan)	27,418	3.6
11. Others	390,198	51.0
Total	764,727	100.0

D. NUMBER OF MUNICIPAL FISHING BANCAS, BY REGION

Region	1980 ^{a/}			1985 ^{a/}		
	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	53,323	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	44,489	10,088	34,401	113,459	37,208	76,251
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
TOTAL	367,838	105,090	262,748	464,395	193,976	270,419
PERCENT						
%	100%	29%	71%	100%	42%	58%

**A. COMMERCIAL FISHERIES PRODUCTION,
BY REGION, 1998**

Region	Total (MT)
NCR	211,879
CAR	0
I	1,963
II	8,413
III	10,383
IV	110,526
V	23,883
VI	112,824
VII	62,446
VIII	28,733
IX	188,289
X	19,590
XI	104,581
XII	9,637
XIII	4,669
ARMM	34,717
TOTAL	940,533

V. COMMERCIAL FISHERIES PRODUCTION, 1998

Fishing with the use of fishing vessels
more than 3 gross tons.

**B. COMMERCIAL FISHERIES PRODUCTION,
BY MAJOR FISH SPECIES, 1997**

Major Species	Total (MT)	%
1. Roundscad (Galunggong)	196,588	22.2
2. Indian Sardines (Tamban)	153,523	17.4
3. Skipjack (Gulyasan)	85,359	9.6
4. Fimbrated Sardines (Tunsoy)	58,610	6.6
5. Frigate Tuna (Tulingan)	56,595	6.4
6. Anchovies (Dilis)	35,518	4.0
7. Slipmouth (Sapsap)	35,410	4.0
8. Yellowfin Tuna (Tambako)	30,955	3.5
9. Indian Mackerel (Alumahan)	25,765	2.9
10. Big-eyed scad (Matangbaka)	25,402	2.9
11. Other Species	180,926	20.5
Total	884,651	100.0

**C. COMMERCIAL FISHERIES PRODUCTION,
BY MAJOR FISHING GROUNDS, 1995**

Fishing Ground	Total (MT)	%
1. West Palawan Waters	187,728	21.02
2. South Sulu Sea	180,532	20.21
3. Visayan Sea	120,267	13.46
4. Moro Gulf	83,352	9.33
5. Lamon Bay	55,325	6.19
6. International Waters	44,140	4.94
7. Bohol Sea	36,161	4.05
8. Samar Sea	25,602	2.87
9. Manila Bay	25,046	2.80
10. Guimaras Strait	24,163	2.71
11. Sibuyan Sea	20,065	2.25
12. East Sulu Sea	18,994	2.13
13. Tayabas Bay	17,140	1.92
14. Others	54,717	6.13
Total	893,232	100.00

**D. NUMBER OF COMMERCIAL FISHING VESSEL
BY REGION, 1998* 10/**

Region	Number	Gross Tonnage
NCR	1,502	202,570.10
I	60	1,231.52
II	20	554.24
III	32	856.95
IV	120	2,458.23
V	159	5,113.02
VI	390	24,591.81
VII	98	2,486.54
VIII	102	1,377.78
IX	330	18,824.37
X	49	262.89
XI	482	38,674.32
XII	13	154.03
XIII	52	548.08
ARMM	7	181.94
Total	3,416	299,885.82

* Preliminary data

VI. EXTERNAL TRADE

L. EXPORTS

Export of Fish and Fishery Products By Kind, Quantity and Value, 1998

	Quantity (MT)	FOB Value	
		(000 P)	(000 \$)
1. Fish Crustaceans, Mollusks, Etc. and Preparation	148,047	17,287,928	445,795
a. Fish fresh (live or dead) chilled or frozen	62,374	4,059,091	104,670
b. Fish, dried, salted or in brine, smoked fish	592	117,284	3,024
c. Crustaceans, mollusks and aquatic invertebrates	28,289	7,682,142	198,095
d. Fish and other aquatic invertebrate, prepared/ preserved	56,792	5,429,411	140,006
2. Shells and By-Products	1,978	700,389	18,060
3. Miscellaneous and Other Fishery Products	35,733	2,565,061	66,144
GRAND TOTAL	185,758	20,553,378	529,999

2. Major Fishery Exports in Terms of Value, CY 1998

Commodity/Kind	Quantity (MT)	FOB Value (000 P)	FOB Value (000 \$)
1. Tuna	99,461	7,938,351	204,703
Fresh/chilled/frozen	46,154	2,829,926	72,974
Smoked	187	62,345	1,608
Canned	53,120	5,046,080	130,121
2. Shrimp/Prawn	10,649	5,052,988	130,299
Fresh/chilled/frozen	10,527	5,015,890	129,343
Other than frozen	122	36,935	952
Prepared/preserved	n	163	4
3. Seaweeds	35,960	2,515,914	64,577
Seaweeds & other Algae, nes	26,722	1,189,644	30,577
Seaweeds & algae for food	185	20,086	518
Carrageenan	7,555	1,299,589	33,512
Kelp powder	598	6,595	170
4. Octopus	5,349	965,624	24,900
Fresh/chilled	18	3,061	79
Frozen/dried/salted	8,331	962,563	24,821
5. Cuttlefish/squid	2,741	577,562	14,893
Fresh/chilled	22	2,912	75
Frozen/dried/salted	2,682	573,649	14,792
Prepared/preserved	7	1,001	26

Commodity/Kind	Quantity (MT)	FOB Value (000 P)	FOB Value (000 \$)
6. Crabs/crabs fat	2,848	470,521	12,133
Frozen	1,662	245,526	6,331
Other than frozen	1,099	170,502	4,397
Prepared/preserved	87	54,493	1,405
7. Cultured pearls, worked, (GK)	n	423,813	10,929
8. Ornamental fish, live	5,445	248,041	6,396
9. Lapu-lapu, live	3,299	168,131	4,335
10. Abalone	416	139,144	3,588
Frozen/dried/salted	333	117,459	3,029
Prepared/preserved	83	21,685	559
Total major commodities	168,238	18,500,089	477,053
Total of other commodities	17,520	2,053,289	52,946
Grand Total	185,758	20,553,378	529,999

Source of data: National Statistics office (NSO)

**3. Major Destinations of Top Three Fishery Exports
by Kind, Quantity and Value, 1998**

Commodity/Kind	Quantity (MT)	FOB Value (000 P)	FOB Value (000 \$)
1. Tuna	99,461	7,938,351	204,703
Fresh/chilled/frozen	46,154	2,329,926	72,974
Japan	16,621	1,402,379	36,162
Thailand	19,131	695,167	17,926
USA	1,299	234,530	6,048
Others	9,103	497,850	12,838
Smoked	187	62,345	1,606
USA	132	49,049	1,265
Japan	36	7,166	185
Hawaii	15	4,827	124
Others	4	1,303	34
Canned	53,120	5,048,080	130,121
USA	15,120	1,354,190	34,920
South Africa	5,306	539,163	13,603
Japan	1,801	203,423	5,246
Others	30,893	2,949,304	76,052
2. Shrimp/Prawn	10,649	5,052,988	130,299
Fresh/chilled/frozen	10,527	5,015,890	129,343
Japan	7,571	3,751,366	96,735
USA	1,581	785,868	20,265
Korea	125	58,586	1,511
Others	1,250	420,070	10,832
	9,277	4,595,820	118,511

Commodity/Kind	Quantity (MT)	FOB Value (000 P)	FOB Value (000 \$)
Other than frozen	122	35,935	952
Japan	120	35,823	924
Others	2	1,112	28
Prepared/Preserved	n	163	4
Canada	n	163	4
3. Seaweeds	35,060	2,515,914	64,877
Seaweeds & other Algae, nes	26,722	1,189,644	30,677
France	6,723	166,683	4,298
U S A	1,815	143,174	3,692
Denmark	1,859	142,294	3,669
Others	16,325	737,493	19,018
Seaweeds & algae for food	185	20,086	518
United Kingdom	63	6,623	171
Denmark	30	2,916	75
U S A	18	2,306	59
Others	74	8,241	213
Carrageenan	7,555	1,299,589	33,512
France	1,039	256,666	6,618
United Kingdom	1,993	225,508	5,815
U S A	1,098	220,049	5,674
Others	3,425	597,366	15,405
Kelp powder	598	6,595	170
Japan	598	6,595	170
Total (3) major commodities	145,170	15,507,253	399,879
Total other commodities	40,588	5,046,125	130,120
Grand Total	185,758	20,553,378	529,999

Source of basic data: National Statistics Office (NSO)

**4. Fishery Exports, by Major Country of Destination
in Terms of Value, 1998**

Country/Destination	Quantity (MT)	FOB Value (000 F)	FOB Value (000 \$)
Japan	33,972	6,836,892	176,299
U S A	32,532	3,986,780	102,805
Hongkong	12,998	1,404,353	36,213
United Kingdom	8,945	918,193	23,677
Germany	8,973	882,752	22,763
Thailand	20,091	818,943	21,118
Canada	7,662	798,979	20,602
South Africa	5,418	550,959	14,207
France	7,957	459,044	11,837
Taiwan	7,869	426,198	10,543
Total Major Countries	146,417	17,083,093	449,064
Other Countries	39,341	3,470,285	89,935
Grand Total	185,758	20,553,378	529,999

Source of data: National Statistics Office (NSO)

MAJOR FISHERIES EXPORT IN TERMS OF VALUE, 1998

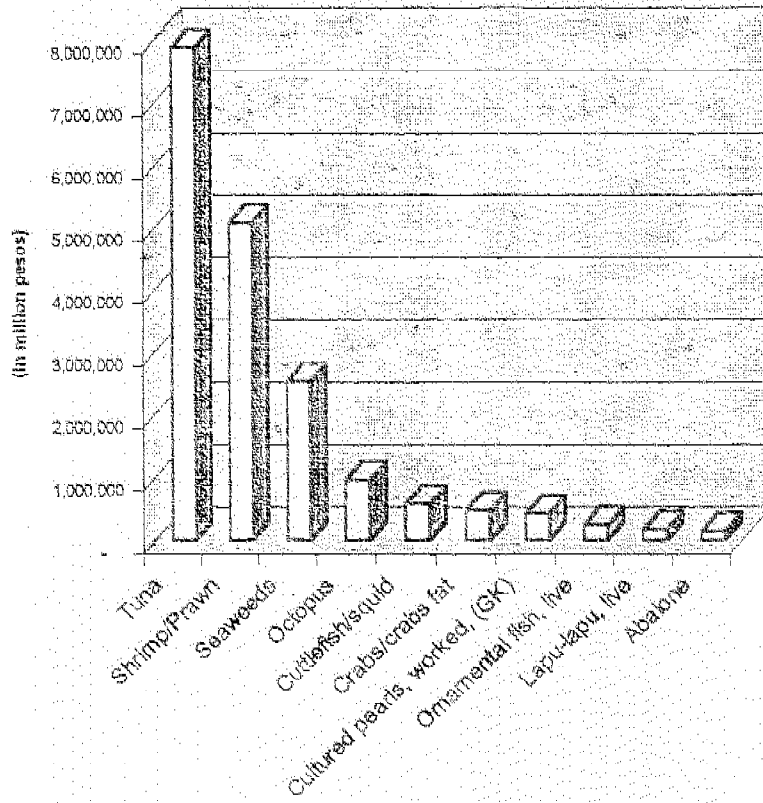


Figure 4

B. IMPORTS

1. Imports of Fish and Fishery Products By Kind, Quantity and Value, 1998

Commodity	Quantity (MT)	FOB Value	
		(000 P)	(000 \$)
Fresh/Frozen/Chilled	116,983	2,153,686	54,579
Flour, Meals & Pellets of Fish Crustaceans and Mollusks Unfit for Human Consumption	42,989	952,384	24,135
Canned	672	39,817	1,009
Salted, Dried, Smoked, etc.	3,580	57,525	1,458
Other Commodities	1,765	84,347	2,138
GRAND TOTAL	165,989	3,287,760	83,319

2. Major Fishery Imports in Terms of Value, 1998

COMMODITY/KIND	QUANTITY (MT)	FOB VALUE (000 P)	FOB VALUE (000 \$)
1. Chilled frozen fish	113,893	2,027,121	51,371
a) Tuna	69,343	1,525,628	38,663
Japan	16,228	376,275	9,536
Papua New Guinea	14,156	266,815	6,762
Others	38,959	882,538	22,365
b) Sardines	3,402	35,998	912
Hongkong	1,961	19,174	486
Mexico	732	8,040	204
Others	709	8,784	222
c) Mackerel	41,148	465,495	11,796
Taiwan	25,736	285,985	7,247
Mexico	3,983	51,394	1,302
Others	11,429	128,116	3,247
2. Flour, meals & pellets of fish crustaceans & mollusks unfit for human consumption	42,989	952,384	24,135
Peru	17,028	416,161	10,413
U S A	14,565	299,056	7,579
Others	11,396	237,167	6,143
Total major imports	156,882	2,979,505	75,506
Other Commodities	9,107	308,255	7,813
Grand Total	165,989	3,287,760	83,319

Source of Data: National Statistics Office

**3. Fishery Imports, By Major Country Of Origin
In Terms of Value, 1998**

Major Countries	QUANTITY (MT)	FOB VALUE (000 P)	FOB VALUE (000 \$)
1. Taiwan	33,244	500,895	12,694
2. Indonesia	17,098	418,784	10,584
3. Peru	17,243	417,236	10,574
4. Japan	18,489	414,987	10,516
5. U S A	19,476	388,907	9,856
6. Papua New Guinea	14,156	266,815	6,762
7. Singapore	5,568	105,667	2,678
8. Trust Territory	7,056	100,991	2,588
9. Australia	5,000	100,647	2,550
10. China	4,185	90,681	2,298
Total major countries	141,515	2,805,510	71,100
Other Countries	24,474	482,150	12,219
Grand Total	165,989	3,287,760	83,319

**VII. OTHER FISHERIES
INFORMATION**

**A. PER CAPITA FOOD CONSUMPTION, PHILIPPINES,
1993 ^{11/}**

Food Group/Subgroup	Consumption (Raw, As Purchased) *		% of Total Food Intake
	kg/yea	g/day	
<u>Cereals and Cereal Products</u>	<u>124</u>	<u>340</u>	<u>42.3</u>
Rice and Products	103	282	35.1
Corn and Products	13	36	4.5
Other Cereals and Products	8	22	2.7
<u>Starchy Roots and Tubers</u>	<u>6</u>	<u>17</u>	<u>2.1</u>
<u>Sugar and Syrups</u>	<u>7</u>	<u>19</u>	<u>2.4</u>
<u>Fats and Oils</u>	<u>4</u>	<u>12</u>	<u>1.5</u>
<u>Fish, Meat and Poultry</u>	<u>54</u>	<u>147</u>	<u>18.3</u>
Fish and Products	36	99	12.3
Meat and Products	12	34	4.2
Poultry	5	14	1.7
<u>Eggs</u>	<u>4</u>	<u>12</u>	<u>1.5</u>
<u>Milk and Milk Products</u>	<u>16</u>	<u>44</u>	<u>5.5</u>
Whole Milk	13	35	4.4
Milk Products	3	9	1.1
<u>Dried Beans, Nuts and Seeds</u>	<u>4</u>	<u>10</u>	<u>1.2</u>
<u>Vegetables</u>	<u>39</u>	<u>106</u>	<u>13.2</u>
Green Leafy and Yellow Vegetables	11	30	3.7
Other Vegetables	28	76	9.5
<u>Fruits</u>	<u>28</u>	<u>77</u>	<u>9.6</u>
Vitamin C-Rich Fruits	8	21	2.6
Other Fruits	20	56	7
<u>Miscellaneous</u>	<u>7</u>	<u>19</u>	<u>2.4</u>
Beverages	3	9	1.1
Condiments and Others	4	11	1.4

* As available in the kitchen including inedible and edible wastage.

B. PER CAPITA FOOD CONSUMPTION OF FISH AND FISHERY PRODUCTS, 1993 ^{1/}

Fish and Other Products		Total (Kg/Year)
1.	FISH	36
1.1	Fresh Fish	24
	Tulingan	4
	Bangus	1
	Galunggong	4
	Dilis, Buo	1
	Alumahan	1
	Tamban	2
	Dalagang Bukid	n
	Sapsap	1
	Bisugo	1
	Tilapia	1
	Albakora/Tambakol	1
	Ballia/Espada	n
	Hasa-hasa	n
	Lapu-lapu	n
	Matangbaka	1
	Maya-Maya	n
	Selay-salay	n
	Silinyasi/Tunsoy	n
	Tanigue	n
	Others (fresh fish & cooked fish recip)	4
1.2	Dried Fish (as fresh fish)	4
1.3	Processed Fish ^{2/}	4
	Bagoong (as fresh fish)	1
	Patis	n
	Canned Fish (sardines, mackerel, sa)	2
	Smoked Fish (all tinapa type)	1
1.4	Crustaceans and Mollusks	4
	Shrimp (all type)	n
	Crabs	1
	Squid/Octopus	1
	Tahong	1
	Others (as fresh)	1
	Dried and Processed (as fresh)	n
	Bagoong (as fresh)	n

Notes:

1. Raw as purchased weight or as available in the kitchen including inedible and edible wastage.
2. Breakdown don't add up to total due to roundings
3. N - negligible (less than 0.5 grams).

**C. PRODUCTIVE AREA IN AQUACULTURE FISHERIES,
BY CULTURE SYSTEM AND REGION, 1995*⁷⁷**
(in ha)

Region	Total Aquaculture	Fishpond		Fishpen in Fresh & Marine Water	Fishcage in Fresh & Marine Water	Mariculture		
		Brackish Water	Fresh Water			Oyster	Mussel	Seaweed
VCR	4,395.30	4182	0.00	196.88	3.53		12.89	
CAR	112.22	0	65.03		47.19			
	9,619.00	8726	797.46	1.35	2.00	92.19		
I	1,874.68	1367	490.32		12.87	4.49		
II	36,964.44	34368	4,427.44	5.06	32.28	51.66		
V	14,668.48	10168	73.39	3,992.38	365.23	8.13	24.81	36.54
/	6,312.59	5433	25.37		541.04	0.24	30.92	282.02
/I	29,862.23	29393	84.03		0.37	58.20	283.26	43.37
/II	6,083.15	5689	10.59			2.15	0.10	381.31
/III	2,469.42	2433	5.29				28.22	2.91
X	29,286.66	27304	15.04	5.86		9.84	0.78	1,951.15
Y	932.92	919	11.91		0.01			2.00
Z	6,002.04	5299	316.91	4.15	354.92	1.09		25.97
III	3,518.23	3338	176.23				0.25	3.75
III	3,524.56	3501	20.03		0.15			3.38
RMM	4,688.62	1077	3.67	0.15	9.36			3,598.44
TOTAL	162,234.54	143,197	6,522.71	4,205.83	1,368.95	227.98	381.22	6,330.84

This refers to the area being utilized during the reference period.

D. NOMINAL CATCHES OF FISH, CRUSTACEANS AND MOLLUSCS, BY MAJOR PRODUCERS, 1996

Country	Production (000 MT)	% Share to Total
1. China, Main	14,222	15.0
2. Peru	9,515	10.1
3. Chile	6,693	7.1
4. Japan	5,964	6.3
5. U S A	5,001	5.3
6. Russian fed.	4,676	4.9
7. Indonesia	3,730	3.9
8. India	3,492	3.7
9. Thailand	3,138	3.3
10. Norway	2,638	2.8
11. Korea D P Rp	2,414	2.6
12. Iceland	2,060	2.2
13. Philippines	1,790	1.9
15. Other Countries	29,292	31.0
World Total	94,625	100.0

Source of data: FAO Yearbook, 1996

**E. WORLD AQUACULTURE PRODUCTION (Fish and Shellfish)
BY PRINCIPAL PRODUCERS, 1996**

Country	Production (000 MT)	% Share to Total	Value (000 \$)	% Share to Total
1. China, Main	17,715	67.1	17,886	43.0
2. India	1,768	6.7	1,980	4.8
3. Japan	829	3.1	3,892	9.4
4. Indonesia	672	2.5	2,020	4.9
5. Thailand	510	1.9	1,837	4.4
6. U S A	393	1.5	736	1.8
7. Bangladesh	390	1.5	806	1.9
8. Korea Rep	358	1.4	686	1.6
9. Philippines	343	1.3	1,196	2.9
10. Norway	325	1.2	1,026	2.5
11. France	286	1.1	583	1.4
12. China (Taiwan)	262	1.0	1,177	2.8
13. Spain	234	0.9	287	0.7
14. Chile	218	0.8	787	1.9
15. Other Countries	2,082	7.9	6,647	16.0
World Total	26,385	100.0	41,546	100.0

Source of data: FAO Yearbook, 1996

**F. PRODUCTION OF SEaweEDS AND OTHER
AQUATIC PLANTS, BY PRINCIPAL PRODUCERS, 1996**

Country	Production (000 MT)	% Share to Total
1. China, Main	5,420	70.1
2. Philippines	631	8.2
3. Korea Rep	539	7.0
4. Japan	520	6.7
5. Korea D P Rp	381	4.9
6. Indonesia	108	1.4
7. Chile	105	1.4
8. Other Countries	28	0.4
World Total	7,732	100.0

Source of data: FAO Yearbook, 1996

**G. PRICES OF SELECTED FISH SPECIES,
PHILIPPINES, 1998 ^{7/}**

Species	Wholesale	Retail
1. Alimasag	58.35	77.35
2. Alumahan	49.34	61.68
3. Bangos	57.08	79.58
4. Bisugo	56.79	77.81
5. Dalagang-bukid (lapad)	53.24	78.63
6. Dilis	31.25	44.94
7. Galunggong	34.45	47.42
8. Hipon (Suahe)	192.46	-
9. Hipon (Sugpo)	305.58	-
10. Sapsap	30.46	59.92
11. Tambakol	49.46	-
12. Tilapia	42.98	59.71
13. Tulingan	36.36	48.97

FOOTNOTES

Sources of Data:

- 1/ NAMRIA, 1990
- 2/ 1992 Fishery Statistics, Bureau of Agricultural Statistics (BAS)
This refers to fishpond area acquired by the operator
whether utilized or not during the reference period.
This includes nursery and transition ponds and
undeveloped areas.
- 3/ National Accounts of the Philippines as of May, 1999
National Statistical Coordination Board (NSCB)
- 4/ 1987 Fisheries Statistics, Bureau of Fisheries and
Aquatic Resources (BFAR)
- 5/ 1980 Census of Fisheries
- 6/ National Statistics Office (NSO)
- 7/ Bureau of Agricultural Statistics (BAS)
- 8/ Lakes and Reservoirs, State of the Art Series,
report no. 1, PCARRD.
- 9/ Regional Fish Expanded Program and Provincial
Fisheries Data
- 10/ Regulatory and Quarantine Division
- 11/ Department of Science & Technology (DOST)
Fourth National Nutrition Survey, Phil. 1993

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