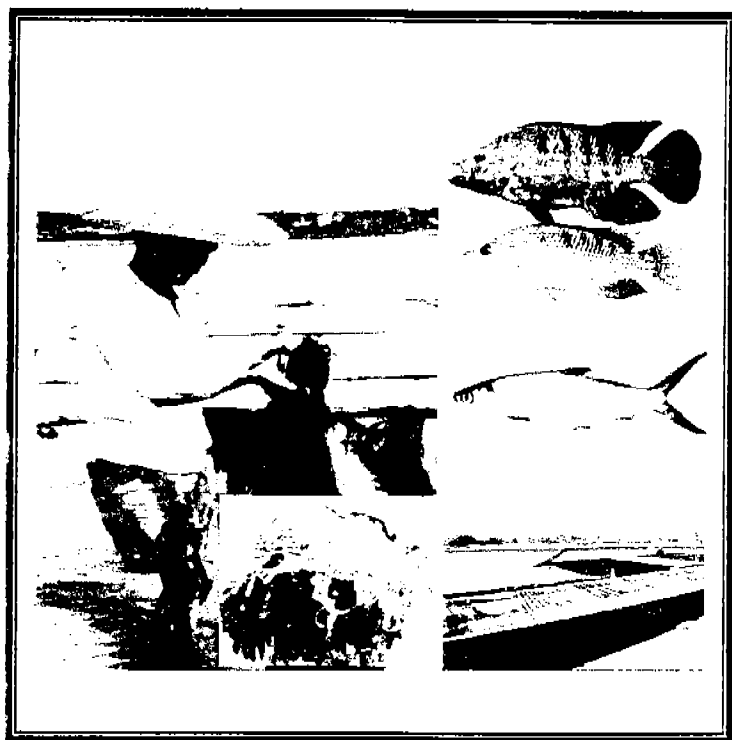


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PHILIPPINE FISHERIES PROFILE, 2003



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 Statistical 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

CONTENTS

FOREWORD

HIGHLIGHTS

I. FISHERY RESOURCES

- A. Marine Resources 13
- B. Inland Resources 13

II. FISHERIES CONTRIBUTION TO THE ECONOMY, 2003

- A. Fisheries Contribution to Total GDP 14
- B. Fisheries Contribution to GVA Agricultural Sector 14
- C. Employment 15
- D. Balance of Trade 15
- E. Total Fish Production, by Sector, 2003 16
- F. Fish Production, by Sector and Region, 2003 17
- F-a. Value of Fish Production, by Sector and Region, 2003 18
- G. Fish Production, by Sector, 1994 -2003 19
- H. Five Year Fish Production, Trend 1999 -2003 20

III. AQUACULTURE PRODUCTION, 2003

- A. Summary of Aquaculture Production by Culture Environment and Region, 2003 24
- B. Aquaculture Production by Culture Environment, Region and Species, 2003 25
- C. Aquaculture Production of Major Commodities by Culture Environment and by Region, 2003 31
- D. Major Species Produced in Aquaculture Fisheries, 2003 34
- E. Ten Major Lakes of the Philippines 34

IV. MUNICIPAL FISHERIES PRODUCTION, 2003		
A.	Municipal Fisheries Production, by Region, 2003	36
B.	Marine Municipal Fish Catch, by Major Fish Species, 2003	37
C.	Number of Municipal Fishing Bancas, by Region, 2000	38
V. COMMERCIAL FISHERIES PRODUCTION, 2003		
A.	Commercial Fisheries Production, by Region and by Type of Landing Centers, 2003	40
B.	Commercial Fisheries Production, by Major Fish Species, 2003	41
C.	Number of Commercial Fishing Vessels, by Region, 1999	42
VI. EXTERNAL TRADE		
A.	Exports	
1.	Exports of Fish and Fishery Products by Kind, Quantity and Value, 2003	44
2.	Major Fishery Exports in Terms of Value, 2003	45
3.	Major Destination of Top Three Fishery Exports by Kind, Quantity and Value, 2003	46
4.	Fishery Exports, by Major Country of Destination in Terms of Value, 2003	49
B.	Imports	
1.	Imports of Fish and Fishery Products by Kind, Quantity and Value, 2003	51
2.	Major Fishery Imports in Terms of Value, 2003	52
3.	Fishery Imports, By Major Country of Origin in Terms of Value, 2003	53

VII. OTHER FISHERIES INFORMATION

1. Comparison of Mean One-Day Per Capita Food Consumption: 1978, 1982, 1987 and 1993	56
2. Mean Per Capita Food Consumption, 1993	57
A. Per Capita Food Consumption of Fish and Fishery Products, 1993	58
B. World Fisheries Production of Fish, Crustaceans, Molluscs and Aquatic Plants (Includes seaweeds), by Capture and Aquaculture, by Major Producers, 2001	59
C. World Aquaculture Production of Fish, Crustaceans, Molluscs, etc. by Principal Producers, 2001	60
D. World Aquaculture Production of Aquatic Plants (Includes Seaweeds) by Principal Producers, 2001	61
E. Prices of Selected Fish Species, Philippines, 2003	62

LIST OF FIGURES

1 Philippine Marine Jurisdictional Boundaries	12
2 Total Fish Production, by Sector, 2003	21
3 Volume of Fish Production, by Sector, 1994-2003	22
3 Value of Fish Production, by Sector, 1994-2003	22
4 Major Fisheries Export in Terms of Value, 2003	50

ENDNOTES

HIGHLIGHTS

WORLD SCENARIO: Philippine Fisheries

- The Philippines ranked eleventh (11th) among the top fish producing countries in the world for the year 2001 with a notable production of 3.17 million metric tons of fish, crustaceans, molluscs and aquatic plants (including seaweeds) or 2.2 percent to the total world production of 142.06 million metric tons (*FAO Website*).
- Eleventh (11th) in the world aquaculture production of fish, crustaceans and mollusks by principal producers in 2001 which posted a total of 0.435 million metric tons valued at 1.718 million dollars or 1.1% and 3.1% to total world aquaculture production amounting to 37.851 million metric tons and 55.686 million dollars respectively (*FAO Website*).
- The world's second (2nd) largest producer of aquatic plants (including seaweeds) that contributed 7.4% or 0.786 million metric tons of the world total production of 10.562 million metric tons in 2001. Leading was China with 8.159 million metric tons or 77.3% followed by other principal producers: Japan with 4.9%; Korea D P Republic with 3.7%; Korea Rep. With 3.5%; and other countries with 3.2% (*FAO Website*).
- The fishing industry's contribution to the country's Gross Domestic Products (GDP) of P4,359 billion at current prices and P1,093 billion at constant prices were 2.2% (P95.487 B) and 4.1% (P44.857 B).
- The industry also accounted 15.1% (P95.5 billion) and 20.9% (P44.9 billion) of the Gross Value Added (GVA) in Agriculture, Fishery and Forestry Group of P632.0 billion and P214.3 billion at current and constant prices correspondingly, the largest share next to agricultural crops.

Employment in the Fishing Industry

- The fishing industry provided employment to around one million or 5% of the country's labor force. In aquaculture, 26% (258,480) fishfarmers are engaged in different culture methods, municipal employed 68% (675,677) and commercial fisheries 6% (56,715).

Performance of the Fishing Industry

- Fisheries production increased from 2.721 million metric tons at P80.2 billion in 1994 to 3.619 million metric tons at P119.9 billion in 2003. The annual growth rates attained during these periods were 3.2% (volume) and 4.6% (value).
- The performance of the fishery sector in 2003 grew by 7.4% compared to the previous year of 6.4%. Production grew from 3,369,524 metric tons in 2002 to 3,619,282 metric tons in 2003. Out of the total fish production for 2003, aquaculture fisheries demonstrated the highest share of 40.2% (1,454,503 MT) while commercial fisheries with 30.7% (1,109,636 MT) and municipal fisheries with 29.1% (1,055,143 MT).

In the same year, aquaculture registered the highest growth of 8.7% in terms of production followed by commercial fisheries with 6.5% and 6.7% increase for municipal fisheries. The remarkable increase in aquaculture signified its importance as source of fish supply.

In terms of value, a 5.8% growth was realized from a total of P113.2 billion attained in 2002 to P119.9 billion in 2003.

- Among the major regional contributors to the total fish production, Autonomous Region for Muslim Mindanao (ARMM) had the highest percentage share of 15% where seaweed was the major commodity cultured. Region IV-B (MIMAROPA) fell on the 2nd place with 13.1% and Region IX (Western Mindanao) ranked 3rd with 12.7%.

Fisheries Export and Import Performance

- The foreign trade performance of the fishery sector for 2003 recorded a trade surplus of 445 million dollars – a significant increase of 8.8% from 6.6% during the previous year. Total fishery exports amounted to 524 million dollars whereas fishery imports attained 79 million dollars only.
- In 2003, the total fishery exports posted a 3.6% growth in terms of value and 11% in volume. Combined earnings of the top three fishery exports (tuna, shrimp/prawn and seaweeds) contributed \$363.2 million or 69.3% to the total export of \$524.3 million – 3.6 % higher (\$506 million) compared to 2002

Tuna, the number one fishery export, gained 8% from total earnings of \$145.2 million in 2002 to \$156.9 million in 2003 – with canned tuna (71.2%) and fresh/chilled/frozen tuna (28.5%) as the major contributors. The biggest buyers were U S A, Japan and Germany with corresponding imports of 34%, 15% and 7% to the total tuna exports.

Shrimp/prawn export posted a negative growth of 10.4 percent in terms of value. However, it remained as the second largest export for the year. Most of the shrimps/prawns are exported in fresh/chilled/ frozen form that generated export revenue of \$124.6 million or 99% with Japan as the major buyer constituting 44% of the total export.

Although earnings from seaweed export grew less than 11.2%, a massive contribution to total fishery exports amounted to \$80.8 million or 15.4%. Carrageenan (58%) and seaweeds & other algae (41%) constituted the bulk number of this export to their main destinations –Denmark, U S A and France.

- Other major fishery exports amounted to \$106 or 20.2% to the overall total: crabs, crabs fat (\$32.7M), octopus (\$26.9 M), cuttlefish/squid (\$11.2 M), lapu-lapu live (\$11.6 M), pearls (\$10.4 M), ornamental fish (\$6.7 M), and roundscad (\$4.5 M). While other fishery products amounted to only \$66.6 million or 12.7%.
- Major destinations of the Philippine export of fish and fishery products: U S A (25.4%); Japan (18.9%); Korea (7.2%); Hongkong (6.5%); Taiwan (5.1%); Canada (3.6%); Spain (3.2%); Singapore (3.1%); Denmark (3.0%); Germany (2.8%) and other countries (21.2%).
- Out of the total \$78.8 M imports of fish and fishery products in 2003, 74.6% were accounted by two products: chilled frozen fish with \$38.3 M (48.6%) and fish meal with \$20.5 M (26%).

Chilled/frozen fish comprised of frozen tuna (81%) for canning and export; and sardines (5.7%) and mackerel (13.3%) for canning and domestic consumption. Major suppliers for chilled/frozen tuna: Indonesia (52%); and Taiwan (10.3%). While for sardines: Mauritania (50%); and U S A (32%). And for mackerel: China Peoples Republic of (31%), and Taiwan (27%).

Fishmeal, a vital component of animal feeds, was mainly supplied by Peru (43%); U S A (26%) and Chile (12%).

- In terms of total fishery import value, the major sources: Indonesia (24.8%); Peru (11.7%); U S A (9.5%); Taiwan (7.9%); Chile (5.2%); China, People's Rep. Of (4.7%); Singapore (4.1%); Denmark (3.7%); Papua New Guinea (3.0%) and Japan (2.8%). While the rest or 22.6% was supplied by other countries.

I. FISHERY RESOURCES

**II. FISHERIES CONTRIBUTION
TO THE ECONOMY, 2003**

Philippine Marine Jurisdictional Boundaries

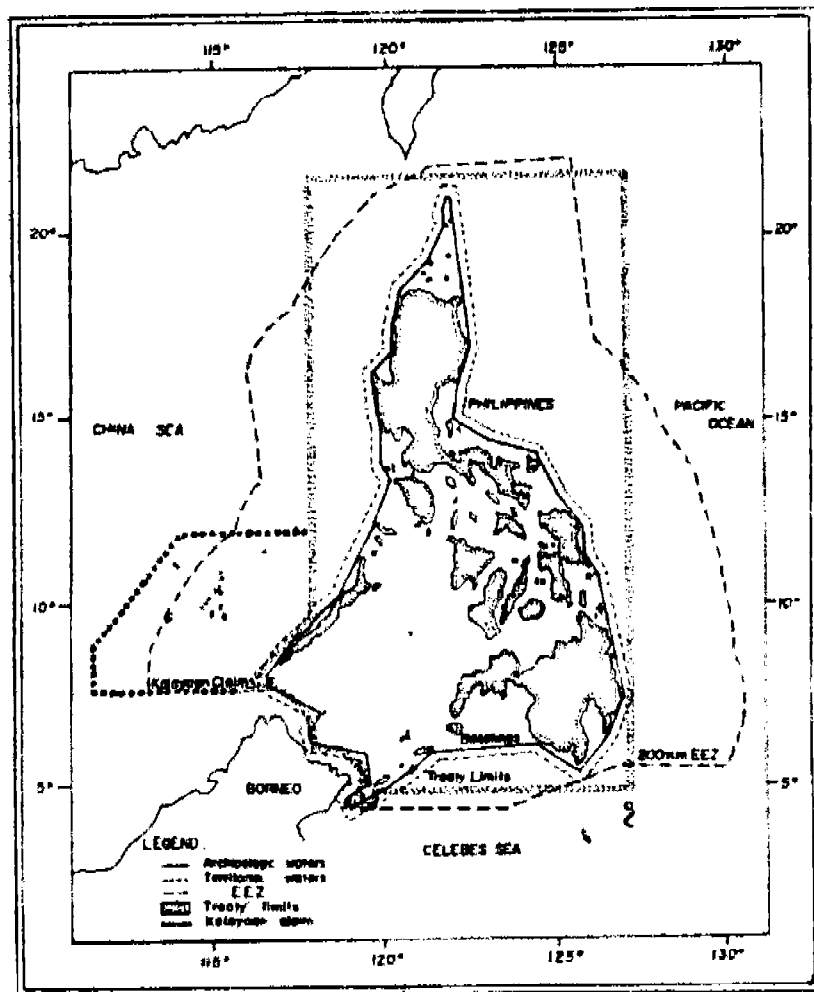


Figure 1. Map of the Philippines showing the limits of archipelagic, territorial waters, Treaty Limits, Exclusive Economic Zone (200 N.M. EEZ) and Katayunan claim.

Figure 1

2003 PHILIPPINE FISHERIES PROFILE

I. FISHERY RESOURCES

A. Marine Resources

1. Total 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 (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

II. FISHERIES CONTRIBUTION TO THE ECONOMY, 2003

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

1. At Current Prices	2.2%
2. At Constant Prices	4.1%

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

Industry Group	At Current Prices (P M)	% to Agricultural Sector	At Constant Prices (P M)	% to Agricultural Sector
1. Agricultural crops (Palay, corn coconut, etc.)	365,196	57.8	108,042	50.4
2. Livestock	84,042	13.3	27,385	12.8
3. Poultry	55,355	8.8	24,031	11.2
4. Agricultural activities	29,547	4.7	9,030	4.2
5. Fishery	95,487	15.1	44,857	20.9
6. Forestry	2,380	0.4	982	0.5
TOTAL	632,007	100.0	214,327	100.0

C. Employment ^{4/}

1. Aquaculture	258,480 persons
2. Municipal	675,677 persons
3. Commercial	56,715 persons
Total	990,872 persons

D. Balance of Trade ^{5/}

	2003			2002		
	Quantity (MT)	FOB Value (P M)	(\$ M)	Quantity (MT)	FOB Value (P M)	(\$ M)
Fishery Export	202,016	27,127	524	182,032	26,178	506
Fishery Import	150,533	4,151	79	218,585	5,073	97
Trade Balance	51,483	22,976	445	(36,553)	21,105	409

E. Total Fish Production, by Sector, 2003 ^{6/}

Sector	Quantity (000 MT)	%	Value (P B)	%
1. Aquaculture	1,454.5	40.2	37.2	31.0
2. Municipal Fisheries	1,055.1	29.1	40.7	34.0
3. Commercial Fisheries	1,109.6	30.7	42.0	35.0
Total	3,619.2	100.0	119.9	100.0

**F. Fish Production, by Sector and Region, 2003
(in MT)**

Region	Commercial	Municipal	Aquaculture	Total	% share to total
NCR	153,245	2,341	3,429	159,015	4.4
CAR	0	1,018	2,074	3,092	0.1
I	4,137	29,222	46,573	79,932	2.2
II	16,019	21,507	5,447	42,973	1.2
III	11,067	20,818	149,906	181,791	5.0
IV-A	88,783	116,585	112,725	318,093	8.8
IV-B	42,128	160,760	269,806	472,694	13.1
V	41,936	100,929	32,887	175,752	4.9
VI	120,728	129,672	118,209	368,609	10.2
VII	58,143	50,375	84,840	193,358	5.3
VIII	46,015	50,962	18,441	115,418	3.2
IX	211,953	125,818	120,999	458,770	12.7
X	39,528	30,354	31,401	101,283	2.8
XI	12,415	29,869	11,554	53,838	1.5
XII	179,001	39,820	23,017	241,838	6.7
XIII	4,676	66,171	22,615	93,462	2.6
ARMM	79,862	78,922	400,580	559,364	15.5
Total	1,109,636	1,055,143	1,454,503	3,619,282	100.0

**F-a. Value of Fish Production, by Sector and Region, 2003
(in 000 P)**

Region	Commercial	Municipal	Aquaculture	Total	% share to total
NCR	9,018,051	154,769	149,930	9,322,750	7.8
CAR		65,645	130,478	196,123	0.2
I	247,367	1,785,918	2,656,906	4,690,191	3.9
II	828,064	1,179,476	324,093	2,331,633	1.9
III	529,421	1,208,352	12,172,601	13,910,374	11.6
IV-A	4,887,360	3,486,858	3,931,963	12,306,181	10.3
IV-B	1,221,425	4,864,993	1,586,735	7,673,153	6.4
V	1,373,091	4,198,335	950,751	6,522,177	5.4
VI	4,543,010	5,711,721	3,198,398	13,453,129	11.2
VII	2,170,210	2,441,585	1,018,790	5,630,585	4.7
VIII	2,047,907	2,639,223	394,166	5,081,296	4.2
IX	4,565,203	3,465,065	3,571,982	11,602,250	9.7
X	1,379,585	1,196,207	2,415,434	4,991,226	4.2
XI	632,027	1,279,953	571,996	2,483,976	2.1
XII	6,339,160	1,408,285	1,301,568	9,049,013	7.5
XIII	166,610	2,615,940	963,780	3,746,330	3.1
ARMM	2,054,409	2,961,978	1,859,552	6,875,939	5.7
Total	42,002,900	40,664,303	37,199,123	119,866,326	100.0

G. Fish Production, by Sector 1994-2003

1. Volume of Fish Production (in MT)

Year	Aquaculture	Municipal	Commercial	Total
2003	1,454,503	1,055,143	1,109,636	3,619,282
2002	1,338,393	988,938	1,042,193	3,369,524
2001	1,220,456	969,535	976,539	3,166,530
2000	1,100,902	945,945	946,485	2,993,332
1999	1,048,679	926,339	948,754	2,923,772
1998	997,841	891,146	940,533	2,829,520
1997	984,439	924,466	884,651	2,793,556
1996	1,007,676	909,248	879,073	2,795,997
1995	940,589	972,043	893,232	2,805,864
1994	869,083	992,578	859,328	2,720,989

2. Value of Fish Production (in million pesos)

Year	Aquaculture	Municipal	Commercial	Total
2003	37,199	40,664	42,003	119,866
2002	35,418	38,159	39,681	113,258
2001	36,634	34,222	36,089	106,945
2000	32,148	32,595	33,879	98,622
1999	29,046	31,034	32,242	92,322
1998	26,430	28,966	29,737	85,133
1997	27,289	27,393	25,935	80,617
1996	33,347	25,373	24,555	83,275
1995	33,658	26,464	23,065	83,187
1994	35,003	24,475	20,714	80,192

H. Five Year Fish Production, Trend 1999-2003

Year	Quantity (M T)	% Increase/ (Decrease)	Value (000 P)	% Increase (Decrease)
2003	3,619,282	7.41	119,866,326	5.83
2002	3,369,524	6.41	113,258,218	5.90
2001	3,166,530	5.79	106,944,716	8.44
2000	2,993,332	2.38	98,622,134	6.82
1999	2,923,772	3.33	92,322,323	8.44

Total Fish Production, By Sector, 2003

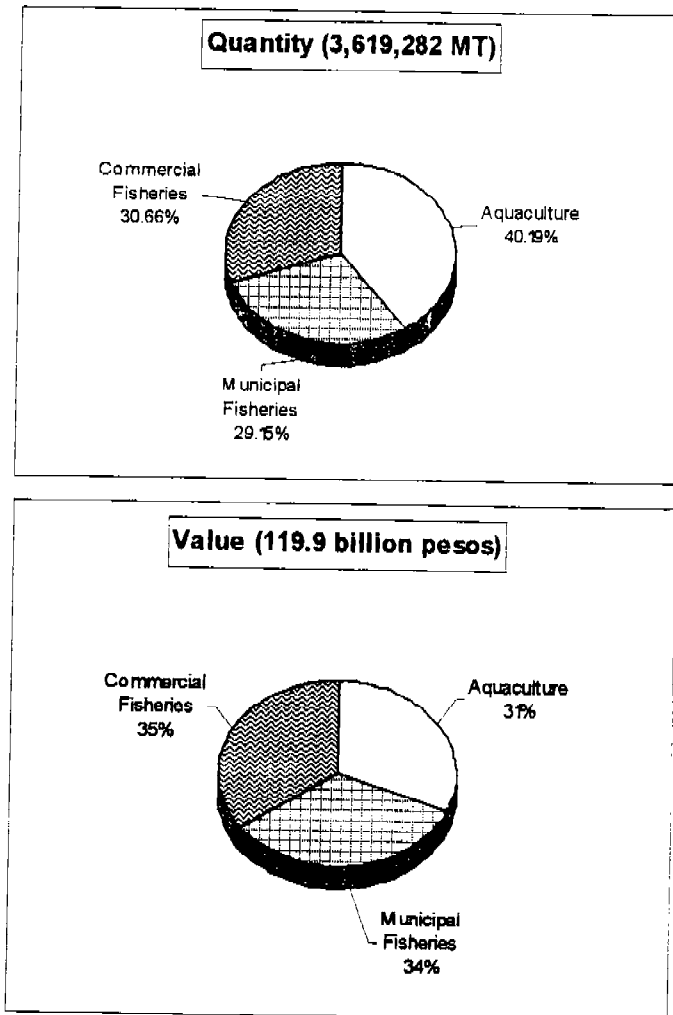
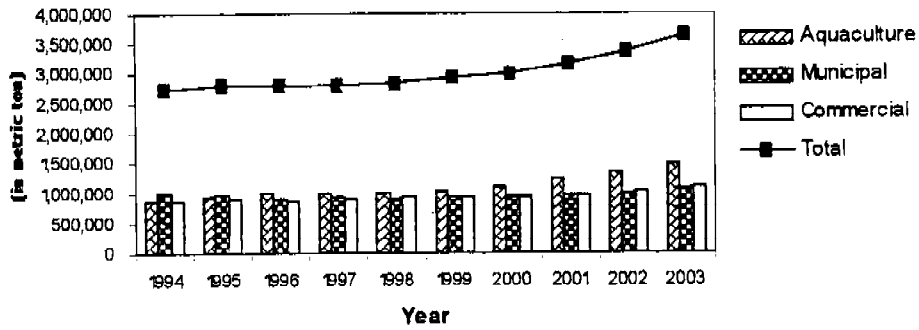


Figure 2

Volume of Fish Production, By Sector 1994-2003



Value of Fish Production, By Sector 1994-2003

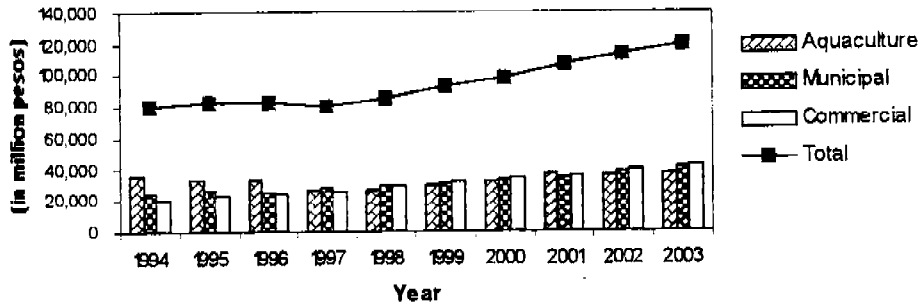


Figure 3

III. AQUACULTURE PRODUCTION, 2003

This includes production from the following:

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

**A. SUMMARY OF AQUACULTURE PRODUCTION BY
CULTURE ENVIRONMENT AND REGION, 2003**
(In Metric Tons)

Region	Brackishwater				Freshwater				Marine Waters			Mussel and Seaweeds	
	Aquaculture	Fishpond	Fishcage	Fishpen	Total	Fishpond	Fishcage	Fishpen	Total	Fishcage	Fishpen		Total
CAR	3,429	474			474								
I	2,074					463	1,611		2,074				
II	46,573	19,063	2,403	4,375	25,841	3,061	29		3,090	8,165	7,097	15,261	2,381
III	5,447	921	147		1,068	2,780	1,376		3,555	9		9	814
IV-A	149,906	80,913	74		80,987	61,262	69		61,330	1,368	3	1,371	6,217
IV-B	112,725	14,524			14,524	810	37,886	25,646	64,342	103	414	517	33,343
V	269,806	4,258	1,077	7	5,342	518			518				263,946
VI	32,887	3,863			3,863	314	5,454		5,768	76		76	23,180
VII	118,209	57,123			57,123	295			295	22	1,208	1,290	59,501
VIII	84,840	8,751			8,751	31	0	9	32	411	12	423	75,635
IX	18,441	2,529			2,529	128	12		148	53		53	15,710
X	120,999	19,180			19,180	94			94		19	19	101,706
XI	31,401	11,828			11,828	641			641	32	23	55	18,876
XII	11,554	7,479	4	0	7,483	602	3		604	1,200	1,202	2,402	1,065
XIII	23,017	7,793			7,793	1,255	5,647	7,688	14,590	635		635	
XIV	22,615	3,836			5,494	150	189		339	47	33	80	16,702
XV	400,580	2,464			2,464	165	104	33	302		3	3	397,811
Total	1,454,503	244,999	5,362	4,382	254,744	71,970	52,832	35,876	160,678	12,120	70,073	22,193	1,016,888

B. AQUACULTURE PRODUCTION BY CULTURE ENVIRONMENT, REGION AND SPECIES, 2003

1. Production from Brackishwater (in MT)

a) Fishpond

Region	Total	Tiger W. Shrimp				Others
		Milkfish	Prawn & Endeavor Prawn	Tilapia		
NCR	474	411			63	
I	19,063	18,014	202	78	715	54
II	921	296	62	66	459	38
III	80,913	58,200	14,807	76	5,169	2,661
IV-A	14,524	13,882	338	230	22	51
IV-B	4,259	3,392	864		1	2
V	3,863	1,674	569	215	21	1,384
VI	57,123	55,554	737	115	513	205
VII	8,751	6,993	1,652	6	100	1
VIII	2,530	2,178	272			79
IX	19,180	9,722	7,291	898	1,115	153
X	11,828	6,164	5,182	85	300	96
XI	7,480	7,083	123	15	244	15
XII	7,793	6,654	694		446	
XIII	3,836	1,607	1,977	123	16	114
ARMM	2,464	1,914	229	128	184	10
	244,999	193,738	34,997	2,035	9,367	4,863
Total	244,999	193,738	34,997	2,035	9,367	4,863

Others species:	4,863
Mudcrab	4,785
Grouper	54
Siganid	23
Not specified	2

b) Fishcage and Fishpen

Fishcage				
Region	Total	Milkfish	Tilapia	Others
I	2,403	2,403		
II	147	63	81	3
III	74	28	46	
IV-B	1,077	735	7	335
XI	4	4		
XIII	1,658	1,658		
Total	5,362	4,890	134	338

Fishpen				
Region	Total	Milkfish	Tilapia	Others
I	4,375	4,337	36	1
IV-B	7	7		
Total	4,382	4,344	36	1

**2. Production from Freshwater Fishpond, 2003
(in MT)**

a) Fishpond

Region	Total	Tilapia	Catfish	Mudfish	Carp	Others
CAR	463	453	4		6	
I	3,061	2,959	17	49	10	25
II	2,180	2,037	105	31	7.12	
III	61,262	58,886	1,221	1,068	41.34	45.9
IV-A	810	783		1	26.04	
IV-B	518	518				
V	314	250	65			
VI	295	103	192			
VII	31	31				
VIII	128	128				
IX	94	77		17		
X	641	331	24	132	154.5	
XI	601	425	152	14	7	4
XII	1,255	900	279	76		
XIII	151	116		1	7	28
ARMM	165	60	105			
Total	71,970	68,056	2,163	1,388	259	103

Other species	103
Gourami	49
Bangus	30
Not Specified	24

b) Freshwater Fishcage

Region	Total	Tilapia	Carp	Milkfish	Others
NCR	456	398	58		
CAR	1,611	1,611			
I	29	29			
II	1,376	1,376			
III	69	69			
IV-A	37,886	37,243	442	201	
V	5,454	5,446	7	1	
VIII	12	12			
XI	3	3			
XII	5,647	3,707		1,940	
XIII	189	187	3		
ARMM	104	102			2
Total	52,832	50,179	510	2,142	2

c) Freshwater Fishpen

Region	Total	Tilapia	Milkfish	Carp
NCR	2,499		2,499	
III	0			
IV-A	25,646	4,001	13,516	8,129
VIII	9	9		
XII	7,688	4,164	3,524	
ARMM	33	33		
Total	35,875	8,207	19,539	8,129

**B. AQUACULTURE PRODUCTION OF MAJOR COMMODITIES
BY CULTURE ENVIRONMENT AND BY REGION, 2003
(In Metric Tons)**

Milkfish

Region	Total	Brackishwater		Freshwater		Marine	
		Fishpond	Fishpen	Fishpond	Fishpen	Fishcage	Fishpen
NCR	2,917.60	411.30	7.00		2,499.30	8,145.44	7,096.60
I	39,995.74	18,013.80	2,402.50	4,337.40		0.90	
II	369.90	296.00	63.00			1,368.00	3.00
III	59,599.40	58,200.40	28.00			103.00	414.00
IV	32,243.00	17,274.00	735.00		201.00	13,516.00	
V	1,742.30	1,673.70			1.00	67.60	
VI	56,821.70	55,553.70				401.70	1,268.00
VII	7,406.10	6,992.80					11.60
VIII	2,178.40	2,178.40					
IX	9,722.40	9,722.40					
X	6,200.06	6,164.40					20.66
XI	9,445.45	7,083.10	3.70	0.30	3.05	1,164.68	1,190.62
XII	12,651.70	6,553.50				534.20	
XIII	3,306.90	1,607.00	1,658.00		27.00	2.70	6.10
ARMM	1,513.90	1,913.90					
Total	246,504.55	193,738.40	4,890.20	4,344.70	30.05	2,144.70	19,539.30
						11,814.28	10,002.92

2. Tilapia

Region	Total	Brackishwater			Freshwater			Manne Fishcage
		Fishpond	Fishcage	Fishpen	Fishpond	Fishcage	Fishpen	
NCR	460.90	62.60				398.30		
CAR	2,063.76				453.26	1,610.50		
I	3,743.40	715.30		36.30	2,959.20	28.50		4.10
II	3,959.90	459.00	81.00		2,037.00	1,375.50		7.40
III	64,168.90	5,169.00	46.00		58,885.40	68.50		
IV	42,574.80	22.50	7.00		1,301.20	37,243.10	4,001.00	
V	5,716.52	21.20			249.82	5,445.50		
VI	615.96	512.80			103.16			
VII	136.17	99.70			31.27	0.20		5.00
VIII	148.49				127.89	11.50	9.10	
IX	1,191.90	1,114.90			77.00			
X	631.30	300.00			331.20			0.10
XI	671.74	244.40			424.84	2.50		
XII	9,216.20	445.50			899.90	3,706.80	4,164.00	
XIII	317.77	15.70			115.57	186.50		
ARMM	378.10	183.50			59.80	101.50	33.30	
TOTAL	135,995.81	9,366.10	134.00	36.30	68,056.51	50,178.90	8,207.40	16.60

Seaweed

Region	Total
II	484.00
IV-A	29,977.50
IV-B	263,946.10
V	22,331.40
VI	48,270.90
VII	75,480.24
VIII	12,914.00
IX	101,458.50
X	18,876.14
XI	636.40
XIII	16,702.00
ARMM	397,811.00
Total	988,888.18

D. MAJOR SPECIES PRODUCED IN AQUACULTURE FISHERIES, 2003

Species	Quantity (MT)	Percent (%)
Seaweeds	988,888	68.0
Milkfish (Bangus)	246,505	16.9
Tilapia (cichlid)	135,996	9.3
Shrimps/Prawns	37,032	2.5
Others	46,083	3.2
Total	1,454,503	100.0

E. TEN MAJOR LAKES OF THE PHILIPPINES ⁷¹

Name of Lakes	Location	Area (ha)
1. Laguna de Bay	Laguna and Rizal	90,000
2. Lake Lanao	Lanao del Sur	34,700
3. Taal Lake	Batangas	23,400
4. Lake Mainit	Surigao del Norte- Agusan del Norte	14,000
5. Naujan Lake	Oriental Mindoro	10,900
6. Lake Buluan	Maguindanao Sultan Kudarat	6,500
7. Lake Bato	Camarines Sur	3,800
8. Lake Buhi	Camarines Sur	1,800
9. Lake Dapao	Lanao del Sur	1,000
10 Lake Sebu	South Cotabato	964
Total		187,064

IV. MUNICIPAL FISHERIES PRODUCTION, 2003

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

**A. MUNICIPAL FISHERIES PRODUCTION, BY REGION, 2003
(in MT)**

Region	Marine	Inland	Total
NCR	2,341		2,341
CAR		1,018	1,018
I	27,498	1,724	29,222
II	15,338	6,169	21,507
III	13,707	7,111	20,818
IV-A	43,321	73,264	116,585
IV-B	160,063	697	160,760
V	99,233	1,696	100,929
VI	127,562	2,110	129,672
VII	50,261	114	50,375
VIII	49,505	1,457	50,962
IX	125,378	440	125,818
X	29,042	1,312	30,354
XI	29,652	217	29,869
XII	25,608	14,212	39,820
XIII	62,395	3,776	66,171
ARMM	60,947	17,975	78,922
Total	921,851	133,292	1,055,143

**B. MARINE MUNICIPAL FISH CATCH,
BY MAJOR FISH SPECIES, 2003**

Major Species	Total	% to Total
1. Big-eyed scad (Matangbaka)	64,354	7.0
2. Frigate tuna (Tulingan)	64,326	7.0
3. Roundscad (Galunggong)	55,980	6.1
4. Indian mackerel (Alumahan)	45,083	4.9
5. Anchovies (Dilis)	42,447	4.6
6. Indian sardines (Tamban)	40,051	4.3
7. Yellowfin tuna (Tambakol)	39,767	4.3
8. Squid (Pusit)	37,735	4.1
9. Slipmouth (Sapsap)	33,528	3.6
10. Blue crab (Alimasag)	31,433	3.4
11. Others	467,147	50.7
Total	921,851	100.0

**C. NUMBER OF MUNICIPAL FISHING BANCAS,
BY REGION, 2000 ^{b/}**

Region	Total	Motorized	Non-Motorized
CAR	660	49	611
I	17,678	11,641	6,037
II	3,304	1,502	1,802
III	27,038	18,375	8,663
IV	69,927	26,569	43,358
V	54,715	19,453	35,262
VI	41,808	16,234	25,574
VII	56,142	19,100	37,042
VIII	58,068	16,255	41,813
IX	45,650	13,280	32,370
X	9,041	2,472	6,569
XI	24,099	11,382	12,717
XII	10,759	2,671	8,088
XIII	31,283	11,202	20,081
ARMM	19,635	7,442	12,193
Total	469,807	177,627	292,180
Percent			
%	100	38	62

**B. COMMERCIAL FISHERIES PRODUCTION,
BY MAJOR FISH SPECIES, 2003**

Major Species	Total (MT)	% to Total
1. Roundscad (Galunggong)	254,659	22.9
2. Indian Sardines (Tamban)	130,024	11.7
3. Frigate tuna (Tulingan)	114,760	10.3
4. Skipjack (Gulyasan)	114,077	10.3
5. Yellowfin tuna (Tambakol)	87,473	7.9
6. Big-eyed scad (Matangbaka)	39,621	3.6
7. Fimbrated sardine (Tunsoy)	36,358	3.3
8. Slipmouth (Sapsap)	36,313	3.3
9. Indian mackerel (Alumahan)	32,037	2.9
10. Anchovies (Dilis)	28,654	2.6
11. Other Species	235,660	21.2
Total	1,109,636	100.0

**C. NUMBER OF COMMERCIAL FISHING VESSEL
BY REGION, 1999 ^{9/} (Catcher and Accessory Boat)**

Region	Number	Gross Tonnage
NCR	1,351	158,509.59
I	113	1,832.99
II	64	717.94
III	40	1,080.67
IV	221	3,857.38
V	160	4,385.85
VI	404	25,674.39
VII	94	2,053.81
VIII	124	1,740.27
IX	392	22,758.66
X	43	1,215.10
XI	555	45,893.86
XII	7	85.09
XIII	26	293.86
ARMM	7	181.94
Total	3,601	270,281.40

VI. EXTERNAL TRADE

A. EXPORTS

1. Export of Fish and Fishery Products By Kind, Quantity and Value, 2003

Commodity/Kind	Quantity (MT)	FOB Value	
		(000 P)	(000 \$)
● Fish Crustaceans, Mollusks, etc. and Preparation	155,129	22,179,076	428,679
a. Fish fresh (live or dead) chilled or frozen	49,612	4,274,711	82,622
b. Fish, dried, salted or in brine, smoked fish	1,672	252,202	4,875
c. Crustaceans, mollusks and aquatic invertebrates	41,464	10,517,925	203,291
d. Fish and other aquatic invertebrate, prepared/ preserved	62,381	7,134,238	137,891
● Shells and By-Products	3,224	710,861	13,739
● Miscellaneous and Other Fishery Products	43,663	4,237,146	81,896
Grand Total	202,016	27,127,083	524,314

2. Major Fishery Exports in Terms of Value, 2003

Commodity/Kind	Quantity (MT)	FOB Value (P 000)	FOB Value (\$ 000)
1. Tuna	85,031	8,119,661	156,938
Fresh/chilled/frozen	27,949	2,312,788	44,702
Smoked/dried	228	25,016	484
Canned	56,854	5,781,857	111,752
2. Shrimp/Prawn	19,080	6,490,951	125,457
Fresh/chilled/frozen	18,937	6,445,029	124,570
Other than fresh/chilled or frozen	137	44,158	853
Prepared & preserved	6	1,764	34
3. Seaweeds	42,594	4,182,926	80,848
Seaweeds & other Algae, nes	31,324	1,716,504	33,177
Seaweeds & algae used for food	127	10,616	205
Carrageenan	10,108	2,440,228	47,165
Kelp powder	1,035	15,578	301
4. Crabs/crabs fat	5,206	1,695,005	32,761
Frozen	315	53,511	1,034
Other than frozen	3,674	722,002	13,955
Prepared/preserved	1,217	919,492	17,772
5. Octopus	11,806	1,430,478	28,886
Fresh/chilled	176	19,072	385
Frozen/dried/salted	11,630	1,411,406	28,501
6. Cuttlefish/squid	2,656	578,642	11,184
Frozen/dried/salted	2,631	573,716	11,089
Prepared/preserved	25	4,926	95
7. Lapu-lapu, live other than fry	4,905	574,978	11,611
8. Pearls	1,618	537,264	10,384
Cultured, worked	1,618	500,232	9,669
Natural	n	37,032	716
9. Ornamental fish, live	5,912	348,169	6,729
10. Roundscad	2,690	235,361	4,549
Fresh/chilled/frozen	2,552	215,086	4,157
Smoked/dried	138	20,275	392
Total major commodities	176,593	24,193,435	457,737
Total of other commodities	25,423	2,933,648	66,577
Grand Total	202,016	27,127,083	524,314

3. Major Destination of Top Three Fishery Exports by Kind, Quantity and Value, 2003

Commodity/Kind	Quantity (MT)	FOB Value (000 P)	FOB Value (000 \$)
1. Tuna	85,031	8,119,661	156,938
Fresh/chilled/frozen	27,949	2,312,788	44,702
U S A	3,615	844,315	16,320
Japan	14,448	809,604	15,648
Hongkong	850	175,949	3,401
Iran	4,062	149,366	2,887
Indonesia	2,003	106,981	2,068
Others	2,971	226,573	4,378
Smoked/dried	228	25,016	484
U S A	162	17,069	330
Japan	40	4,017	78
China, People's Rep.	17	3,592	69
Taiwan	9	338	7
Canned	56,854	5,781,857	111,752
U S A	18,766	1,893,529	36,598
Germany	3,602	598,441	11,567
Singapore	5,726	589,116	11,386
Canada		549,198	10,615
Japan	4280	434299	8,394
Others	18,842	1,717,274	33,192

Commodity/Kind	Quantity (MT)	FOB Value (000 P)	FOB Value (000 \$)
2. Shrimp/Prawn	19,080	6,490,951	125,457
Fresh/chilled/frozen	18,937	6,445,029	124,570
Japan	6,714	2,781,007	53,751
Korea	4,739	1,579,472	30,528
Spain	3,527	732,049	14,149
U S A	1,379	586,650	11,339
Guam	204	113,971	2,203
Belgium	202	113,248	2,189
Others	1,812	538,632	10,411
Other than fresh/chilled or frozen	137	44,158	853
Japan	82	32,171	622
Spain	49	10,218	197
Malaysia	2	969	19
Hawaii	1	283	5
Taiwan	2	239	5
Others	1	258	5
Prepared and Preserved	6	1,764	34
Japan	3	1,328	26
U S A	3	378	7
Others	0	58	1

Commodity/Kind	Quantity (MT)	FOB Value (000 P)	FOB Value (000 \$)
3. Seaweeds	42,594	4,182,926	80,848
Seaweeds & other Algae, nes	31,324	1,716,504	33,177
U S A	4,837	345,378	6,675
France	7,520	296,683	5,734
Denmark	1,383	159,745	3,088
Korea	4,557	156,501	3,025
China, People's Rep.	4,320	112,679	2,178
Others	8,707	645,518	12,477
Carrageenan	10,108	2,440,228	47,165
Denmark	2,074	632,069	12,217
U S A	1,192	308,744	5,967
France	1,023	247,343	4,781
Netherlands	644	156,217	3,019
United Kingdom	740	129,886	2,510
Canada	494	108,923	2,105
Australia	565	100,121	1,935
Others	3,376	758,925	14,631
Seaweeds and algae used for food	127	10,616	205
Japan	27	4,699	91
Okinawa	17	2,900	56
France	80	2,877	56
Others	3	140	2
Kelp powder	1,035	15,578	301
Japan	1,035	15,578	301
Total (3) major commodities	146,705	18,793,538	363,243
Total other commodities	55,311	8,333,545	161,071
Grand Total	202,016	27,127,083	524,314

**4. Fishery Exports, by Major Country of Destination
in Terms of Value, 2003**

Country/Destination	Quantity (MT)	FOB Value (000 P)	FOB Value (000 \$)
U S A	46,860	6,884,384	133,062
Japan	32,834	5,134,347	99,237
Korea	10,438	1,956,994	37,825
Hongkong	14,444	1,755,163	33,924
Taiwan	10,967	1,376,080	26,597
Canada	7,808	970,641	18,761
Spain	6,119	876,130	16,934
Singapore	7,130	852,130	16,470
Denmark	3,706	815,308	15,758
Germany	7,236	753,478	14,563
Total Major Countries	147,542	21,374,655	413,131
Other Countries	54,474	5,752,428	111,183
Grand Total	202,016	27,127,083	524,314

Major Fisheries Export in Terms of Value, 2003

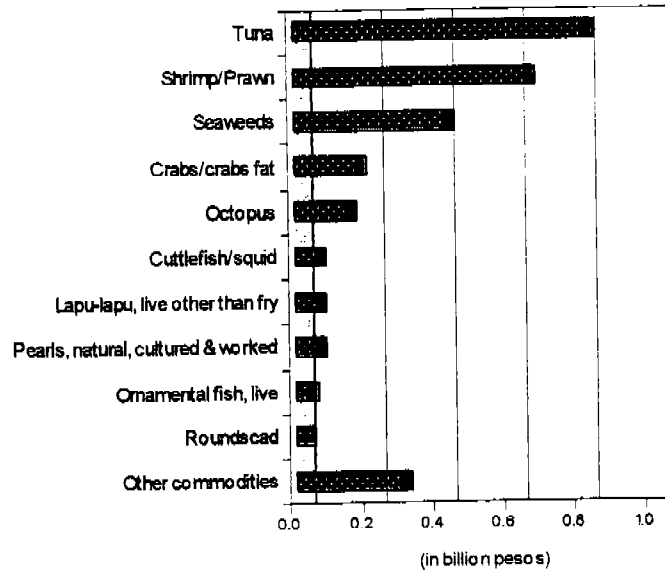


Figure 4

B. IMPORTS

1. Imports of Fish and Fishery Products By Kind, Quantity and Value, 2003

Commodity	Quantity (MT)	FOB Value (000 P) (000 \$)	
Fresh/Frozen/Chilled	86,774	2,283,394	43,369
Flour, Meals & Pellets of Fish Crustaceans and Mollusks Unfit for Human Consumption	44,566	1,077,004	20,456
Canned	731	56,759	1,078
Salted, Dried, Smoked, etc.	7,462	174,592	3,316
Other Commodities	10,999	559,116	10,619
Grand Total	150,533	4,150,865	78,838

2. Major Fishery Imports in Terms of Value, 2003

Commodity/Kind	Quantity (MT)	FOB Value (000 P)	FOB Value (000 \$)
1. Chilled Frozen Fish	77,750	2,018,773	38,342
a) Tuna	51,940	1,635,055	31,055
Indonesia	27,159	843,905	16,028
Taiwan	5,126	168,855	3,207
Papua New Guinea	4,000	126,361	2,400
Singapore	3,811	120,397	2,287
Marshall Island	3,000	94,770	1,800
Micronesia	2,990	94,455	1,794
Solomon Island	2,770	87,505	1,662
Japan	2,764	87,248	1,657
Others	320	11,559	220
b) Sardines	7,470	115,104	2,186
Mauritania	4,276	57,628	1,095
U S A	1,835	36,598	695
Mexico	1,336	18,228	346
Others	23	2,650	50
c) Mackerel	18,340	268,614	5,101
China, People's Rep.	6,176	81,988	1,557
Taiwan	5,022	71,195	1,352
Mexico	3,369	54,236	1,030
New Zealand	1,161	24,341	462
U S A	850	10,337	196
Australia	609	9,149	174
Others	1,153	17,368	330
2. Flour, meals & pellets of fish crustaceans & mollusks unfit for human consumption	44,566	1,077,004	20,456
Peru	18,505	462,086	8,776
U S A	13,948	285,606	5,425
Chile	3,930	126,025	2,394
Argentina	1,146	33,185	630
Taiwan	842	22,028	418
Vietnam	1,100	21,516	409
Others	5,095	128,558	2,404
Total major imports	122,316	3,095,777	58,798
Other Commodities	28,217	1,055,088	20,040
Grand Total	150,533	4,150,865	78,838

**3. Fishery Imports, By Major Country Of Origin
In Terms of Value, 2003**

Major Countries	Quantity (MT)	FOB Value (000 P)	FOB Value (000 \$)
1. Indonesia	33,194	1,030,799	19,578
2. Peru	19,756	484,584	9,204
3. U S A	17,509	393,883	7,481
4. Taiwan	13,694	329,718	6,262
5. Chile	7,274	215,394	4,091
6. China, People's Rep.	11,369	194,790	3,700
7. Singapore	4,665	171,609	3,259
8. Denmark	589	152,563	2,898
9. Papua New Guinea	4,000	126,361	2,400
10. Japan	3,535	115,558	2,195
Total major countries	115,585	3,215,259	61,068
Other Countries	34,948	935,606	17,770
Grand Total	150,533	4,150,865	78,838

**VII. OTHER FISHERY
INFORMATION**

A. FOOD CONSUMPTION ^{10/}

1. Comparison of Mean One-Day per Capita Food Consumption: 1978, 1982, 1987 and 1993

Food Group/Subgroup	Consumption, g			
	(Raw, "as purchased")			
	1978	1982	1987	1993
All Foods	897	915	869	803
Cereals and Cereal Products	367	356	345	340
Rice and Products	308	304	303	282
Corn and Products	38	34	24	36
Other Cereals & Products	21	18	18	22
Starchy Roots and Tubers	37	42	22	17
Sugars and Syrups	19	22	24	19
Fats and Oils	13	14	14	12
Fish, Meat and Poultry	133	154	157	147
Fish and Products	102	113	111	99
Meat and Products	23	32	37	34
Poultry and Products	7	10	9	14
Eggs and Egg Products	8	9	10	12
Milk and Milk Products	42	44	43	44
Dried Beans, Nuts and Seeds	8	10	10	10
Vegetables	145	130	111	106
Green Leafy and Yellow Veg	34	37	29	30
Other Vegetables	111	93	82	76
Fruits	104	102	107	77
Vitamins C-Rich Fruits	30	18	24	21
Other Fruits	74	84	83	56
Miscellaneous	21	32	26	19

2. Mean Per Capita Food Consumption, 1993 ^{a/}

Food Group/Subgroup	Consumption (Raw, "as purchased")		Percent of Total Food Intake*
	kg/yr	g/day	
	All Foods	293	
Cereals and Cereal Product	124	340	42.3
Rice and Products	103	282	35.1
Corn and Products	13	36	4.5
Other Cereals and Products	8	22	2.7
Starchy Roots and Tubers	6	17	2.1
Sugars and Syrups	7	19	2.4
Fats and Oils	4	12	1.5
Fish, Meat and Poultry	54	147	18.3
Fish and Products	36	99	12.3
Meat and Products	12	34	4.2
Poultry and Products	5	14	1.7
Eggs and Egg Products	4	12	1.5
Milk and Milk Products	16	44	5.5
Whole Milk	13	35	4.4
Milk Products	3	9	1.1
Dried Beans, Nuts and Seeds	4	10	1.2
Vegetables	39	106	13.2
Vegetable	11	30	3.7
Other Vegetables	28	76	9.5
Fruits	28	77	9.6
Vitamin C-Rich Fruits	8	21	2.6
Other Fruits	20	56	7
Miscellaneous	7	19	2.5
Beverages	3	9	1.1
Condiments and others	4	11	1.4

^{a/} available in the kitchen, including inedible and edible wastage

* Numbers may not add up to 100.00 due to rounding off

A. PER CAPITA FOOD CONSUMPTION OF FISH AND FISHERY PRODUCTS, 1993

Fish and Other Products		Total (Kg/Year)
1.	FISH	36
1.1	Fresh Fish	24
	Tulingan (Frigate Tuna)	4
	Bangus (Milkfish)	1
	Galunggong (Roundscad)	4
	Dilis, Buo (Anchovy)	1
	Alumahan (Indian Mackerel)	1
	Tamban (Sardines)	2
	Dalagang Bukid (Fusilier)	1
	Sapsap (Slipmouth)	1
	Bisugo (Threadfin Bream)	1
	Tilapia (Cichlid)	1
	Albakora/Tambakol	1
	Balila/Espada	n
	Hasa-hasa	n
	Lapu-lapu	n
	Matangbaka	1
	Maya-Maya	n
	Salay-salay	n
	Silinyasi/Tunsoy	n
	Tanigue	n
	Others (fresh fish & cooked fish recipe)	4
1.2	Dried Fish (as fresh fish)	4
1.3	Processed Fish *	4
	Bagoong (as fresh fish)	1
	Patis	n
	Canned Fish (sardines, mackerel, salmon,	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 (fresh)	1
	Dried and Processed (as fresh)	n
	Bagoong (as fresh)	n

Notes:

- a) Raw as purchased weight or as available in the kitchen including inedible and edible wastage.
- b) Breakdown do not add up to total due to roundings
- c) n - negligible (less than 0.5 grams)

**B. WORLD FISHERIES PRODUCTION OF FISH, CRUSTACEANS, MOLLUSCS AND AQUATIC PLANTS
(includes seaweeds), BY CAPTURE AND AQUACULTURE, BY MAJOR PRODUCERS, 2001 (in 000 MT)¹¹**

Major Countries	Total		Fish Crustaceans & Molluscs		Aquatic Plants (includes seaweeds)		
	(000 MT)	% Share	Capture	Aquaculture	Capture	Aquaculture	
1. China	51,005	35.9	16,529	26,050	267	8,159	
2. Peru	8,001	5.6	7,986	9	6	6	
3. Japan	6,155	4.3	4,719	802	122	512	
4. India	6,065	4.3	3,762	2,203	100	634	
5. U. S. A.	5,442	3.8	4,944	461	37	100	
6. Indonesia	5,323	3.7	4,204	864	43	37	
7. Chile	4,663	3.3	3,797	566	234	212	
8. Russian Fed	3,746	2.6	3,628	90	27	66	
9. Thailand	3,605	2.5	2,881	724	1	28	
10. Norway	3,374	2.4	2,687	512	175	175	
11. Philippines	3,166	2.2	1,945	435	11	786	
12. Korea Rep.	2,670	1.9	1,988	294	15	373	
13. Other Countries	38,850	27.3	33,286	4,841	270	453	
World Total	142,065	100.0	92,356	37,851	1,296	10,562	
							11,858

**C. WORLD AQUACULTURE PRODUCTION OF FISH,
CRUSTACEANS, MOLLUSCS, ETC. BY PRINCIPAL
PRODUCERS, 2001**

Country	Production (000 MT)	% Share to Total	Value (US\$' 000)	% Share to Total
1. China	26,050	68.8	26,246	47.1
2. India	2,203	5.8	2,538	4.6
3. Indonesia	864	2.3	2,397	4.3
4. Japan	802	2.1	3,383	6.1
5. Thailand	724	1.9	2,377	4.3
6. Bangladesh	687	1.8	1,220	2.2
7. Chile	566	1.5	1,725	3.1
8. Vietnam	519	1.4	1,136	2.0
9. Norway	512	1.4	1,023	1.8
10. U S A	481	1.3	780	1.4
11. Philippines	435	1.1	1,718	3.1
12. Egypt	343	0.9	757	1.4
13. Spain	313	0.8	398	0.7
14. China, Taiwan	297	0.8	895	1.6
15. Other Countries	3,056	8.1	9,094	16.3
World Total	37,851	100.0	55,686	100.0

**D. WORLD AQUACULTURE PRODUCTION OF
AQUATIC PLANTS (Includes Seaweeds)
BY PRINCIPAL PRODUCERS, 2001**

Country	Production (000 MT)	% Share to Total
1. China, Main	8,159	77.2
2. Philippines	786	7.4
3. Japan	511	4.8
4. Korea D P Rp.	391	3.7
5. Korea Rep	374	3.5
6. Indonesia	212	2.0
7. Chile	66	0.6
8. Other Countries	63	0.6
World Total	10,562	100.0

**E. PRICES OF SELECTED FISH SPECIES,
PHILIPPINES, 2003 ^{12/}**

Species	Wholesale	Retail
1. Indian mackerel (Alumahan)	60.52	72.90
2. Milkfish (Bangus)	59.87	75.24
3. Threadfin bream (Bisugo)	67.01	94.99
4. Caesio (Dalagang Bukid)	61.51	94.20
5. Anchovies (Dilis)	33.48	50.65
6. Roundscad (Galunggong)	43.87	59.81
7. Slipmouth (Sapsap)	39.43	75.04
8. Tiger prawn (Sugpo)	328.69	360.49
9. Tilapia	44.01	58.80
10. Frigate tuna (Tulingan)	46.55	60.05
11. Blue crab (Alimasag)	72.12	106.52

ENDNOTES

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 January 2003,
National Statistical Coordination Board (NSCB)
- 4/ 1980 Census of Fisheries
- 5/ Preliminary data of the Trade Division,
National Statistics Office (NSO)
- 6/ Preliminary data of the Fishery Statistics Division,
Bureau of Agricultural Statistics (BAS)
- 7/ Directory of Philippine Wetlands, Volume II, AWBPFI
- 8/ BFAR Regional Yearbook, 2000
- 9/ BFAR Regulatory and Quarantine Division
- 10/ Food and Nutrition Research Institute Website, (<http://www.fnri.dost.gov.ph>.)
- 11/ FAO Website (<http://www.fao.org>.)
- 12/ Agricultural Marketing Statistical Analysis Division (AMSAD, BAS)



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