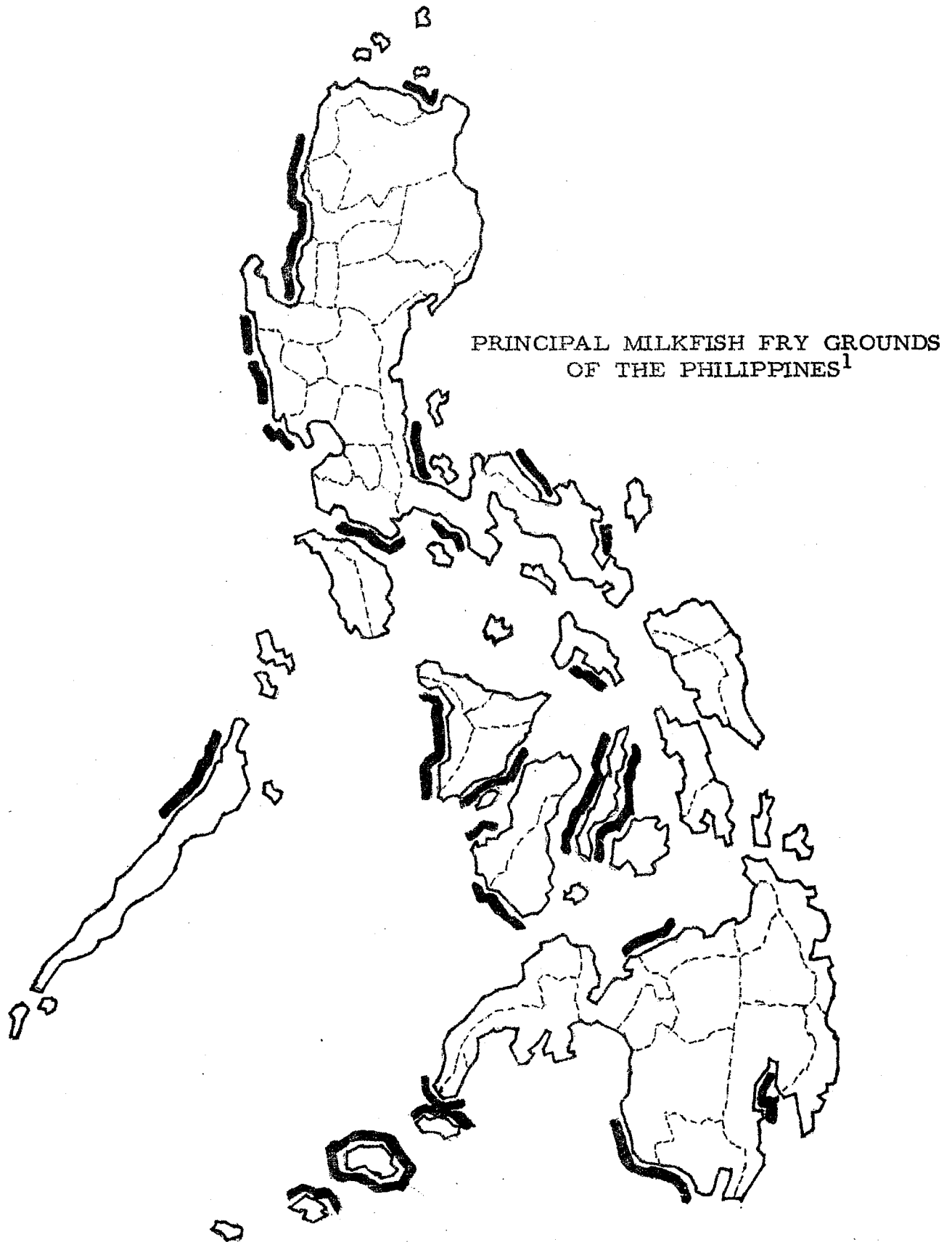


Statistical Data on Milkfish

SUMMARY OF MILKFISH PRODUCTION AND CONSUMPTION COMPARED TO
TOTAL FISH PRODUCTION AND CONSUMPTION IN THE PHILIPPINES

	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
Total Milkfish Production ¹ (In Thousand Metric Tons)	94.6	96.5	97.9	98.9	99.6
Total Milkfish Consumption ² (In Thousand Metric Tons)	93.1	95.9	94.8	97.8	96.5
Total Population ³ (In Millions)	35.8	36.9	37.9	39.1	40.2
Per Capita Intake of Milkfish (In Kilograms)	2.6	2.6	2.5	2.5	2.4
Total Fish Production ¹ (In Thousand Metric Tons)	940.8	988.9	1,023.1	1,122.4	1,204.8
Total Fish Consumption ¹ (In Thousand Metric Tons)	997.9	1,040.0	1,076.7	1,166.1	1,230.2
Per Capita Intake of Fish ¹ (In Kilograms)	27.3	28.4	28.4	29.6	30.1
% of Total Milkfish Production/ Total Fish Production	10.3	9.8	9.6	8.8	8.3
% of Total Milkfish Consumption/ Total Fish Consumption	9.3	9.2	8.8	8.4	7.8

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- ¹ Source: Fisheries Statistics of the Philippines 1973, Bureau of Fisheries and Aquatic Resources, Manila, Philippines, 1974.
 - ² Source: Dosayla, et. al., Summary of Four Economic Surveys of Food Consumption, National Food and Agriculture Council, September 1973.
 - ³ Source: Monthly Bulletin of Statistics, United Nations, Vol. XXVIII, No. 5, May 1974.



¹Source: T.G. Pillai, Fish Farming Methods in the Philippines, Indonesia and Hongkong, FAO, Rome, March 1962.

PROJECTED PRODUCTION OF MILKFISH IN THE PHILIPPINES¹

Fishponds:	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
Area ² (In Thousand Hectares)	182.4	185.6	188.8	192.1	195.4	198.9
Output Per Hectare ³ (In Kilograms)						
Low Estimate	600	610	620	630	640	650
High Estimate	900	1,100	1,350	1,650	1,950	2,000
Average of both estimates	750	855	985	1,140	1,295	1,325
Projected Total Production (In Thousand Metric Tons)						
Low Estimate	109.4	113.2	117.0	121.0	125.0	129.3
High Estimate	164.2	204.2	254.9	317.0	381.0	397.8
Average of both estimates	136.8	158.7	186.0	219.0	253.0	263.6
Fishpond Estates ⁴ :						
Area (In Thousand Hectares)	0.5	1.0	1.0	1.0	1.5	1.5
Output Per Hectare (In kgs.)	500	1,000	1,000	1,500	2,000	2,000
Projected Total Production (In Thousand Metric Tons)	0.3	1.0	1.0	1.5	3.0	3.0
Natural Production ⁵ from Lakes, dams, etc. (In Thousand Metric Tons)	18.2	18.2	18.2	18.2	18.2	18.2
Fishpens Production ⁶ (In Thousand Metric Tons)	<u>8.0</u>	<u>8.0</u>	<u>8.0</u>	<u>8.0</u>	<u>8.0</u>	<u>8.0</u>
Total Milkfish Production (In Thousand Metric Tons)						
Low Estimate	135.9	140.4	144.2	148.7	154.2	158.5
High Estimate	190.7	231.4	282.1	344.7	410.2	427.0
Average of both estimates	163.3	185.9	213.2	246.7	282.2	292.8

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- ¹ Source: C. V. Guerrero, *Bangus: A Look Ahead*, Marketing Research Unit, National Food and Agriculture Council, Quezon City, Philippines, February 1974.
 - ² The Total Area of fishponds farmed during the 1969-1973 period increased at the rate of 1.745% per year. This rate was used to establish the increase of fishponds farmed for the 1975-1980 period.
 - ³ The output of milkfish (bangos) per hectare of fishponds assumes three alternatives.
A low estimate of output per hectare which is provided by the Bureau of Fisheries and Aquatic Resources. This estimate assumes relatively slow adoption of the new production technology that has been developed.

A high estimate of output per hectare provided by the University of the Philippines, College of Fisheries. This estimate assumes relatively rapid adoption of the new production technology that has been developed.

The average of the low and high estimates reflects a moderate rate of adoption of the new production technology.
 - ⁴ The first fishpond estate of 500 hectares will be placed in operation in 1975. Additional units of 500 hectares in 1976 and increased by 500 hectares from 1977 to 1980. The production is only estimated.
 - ⁵ Data for natural production of lakes, dams, etc. were provided by the Bureau of Fisheries and Aquatic Resources based on the estimated landings from Laguna Lake in 1973.
 - ⁶ Data for the production from fishpens were estimated by the Bureau of Fisheries and Aquatic Resources and based on 2,000 hectares of fishpens at an average harvest of 4,000 kilograms per hectare annually.

MILKFISH FRY AND FINGERLING REQUIREMENTS
OF EXISTING FISHPONDS AND FISHPENS, PHILIPPINES¹
(As of December 31, 1974)

Requirement of Fishponds:

<u>Region</u>	<u>Areas (In Hectares)</u>	<u>Production (In Metric Tons)</u>	<u>Fingerling Requirement² (In Thousands)</u>	<u>Fingerling Requirement³ (In Thousands)</u>
I	10,483.8	8,026.0	314,517	629,034
II	881.3	176.3	26,439	52,878
III	30,620.4	26,481.7	913,612	1,837,224
IV	30,241.8	17,144.9	907,254	1,814,508
V	11,519.5	4,094.1	345,588	691,176
VI	43,600.0	37,132.6	1,308,000	2,616,000
VII	5,768.8	2,884.4	173,064	346,128
VIII	9,368.5	3,175.0	281,058	562,116
IX	17,612.1	6,911.5	528,363	1,056,726
X	9,081.9	3,959.4	272,457	544,914
XI	6,854.0	3,209.1	205,620	411,240
TOTAL	<u>176,032.1</u>	<u>113,195.0</u>	<u>5,280,972</u>	<u>10,561,944</u>

Requirement of Fishpens:

<u>Province/Town</u>	<u>No. of Operators</u>	<u>Total Area (In Hectares)</u>	<u>Fingerling Requirement² (In Thousands)</u>	<u>Fry Requirement² (In Thousands)</u>
Laguna de Bay ⁴	1,056	7,005.7	210,171	420,342
Total Requirement of Fishponds and Fishpens:		Fingerling Requirement (In Thousands)	Fry Requirement (In Thousands)	
		5,491,143	10,982,286	

¹Source: 1974 Fisheries Statistics of the Philippine Fishery Economics and Information Division, Bureau of Fisheries and Aquatic Resources, Manila, Philippines.

²At a minimum requirement of 30,000 fingerlings/ha, assuming 4 - 5 pieces/kg, 95% survival from fingerling to marketable size (or 4.7 fingerling/kg), at present productivity levels.

³Assuming survival rate of 50% from fry to fingerling.

⁴Data has been taken as of October, 1975.

1974 FRY PRODUCTION ESTIMATES
(In Thousand Pieces)

<u>Region</u>	<u>Total Production</u>
I	22,891
II	2,335
III	5,726
IV	33,332
V	40,781
VI	78,891
VII	51,346
VIII	8,681
IX	19,970
X	12,438
XI	<u>48,791</u>
TOTAL	<u>325,182</u>

¹ Source: Bureau of Fisheries and Aquatic Resources,
Manila, Philippines.

PHILIPPINE EXPORT OF MILKFISH¹

	<u>1 9 7 0</u>	<u>1 9 7 1</u>	<u>1 9 7 2</u>	<u>1 9 7 3</u>	<u>1 9 7 4</u>
	<u>Quantity</u>	<u>Value</u>	<u>Quantity</u>	<u>Value</u>	<u>Quantity</u>
	<u>(Metric</u>	<u>(Thousand</u>	<u>(Metric</u>	<u>(Thousand</u>	<u>(Metric</u>
	<u>Tons)</u>	<u>Pesos)</u>	<u>Tons)</u>	<u>Pesos)</u>	<u>Tons)</u>
	<u>Value</u>	<u>Value</u>	<u>Value</u>	<u>Value</u>	<u>Value</u>
	<u>(Thousand</u>	<u>(Thousand</u>	<u>(Thousand</u>	<u>(Thousand</u>	<u>(Thousand</u>
	<u>Pesos)</u>	<u>Pesos)</u>	<u>Pesos)</u>	<u>Pesos)</u>	<u>Pesos)</u>
Countries of Destination:					
Canada	0.0	0.0	0.6	1.8	0.0
Guam	0.0	0.0	2.5	1.2	0.0
Hongkong	0.0	0.0	0.0	0.0	0.0
Japan	0.0	0.0	0.0	0.0	0.0
U.S.A.	90.0	360.5	148.8	1,106.3	49.4
Other Countries	6.8	27.3	0.0	0.0	5.3
Total Milkfish Export	96.8	387.8	151.9	1,109.3	54.7
Total Fish Export	3,406.6	17,986.2	7,300.4	40,052.6	10,747.8
Total Milkfish Export/ Total Fish Export (%)	2.8	2.2	2.1	2.8	0.5
					0.6
					0.4
					0.4
					0.6
					0.9

¹Source: Fisheries Statistics of the Philippines 1973, Bureau of Fisheries and Aquatic Resources, Manila, Philippines, 1974.