

**PRESENT STATUS OF  
FISHERY STATISTICS IN MYANMAR**

by  
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**1. INTRODUCTION**

Before the year 1983, the Ministry of Agriculture and Forest and the Ministry of Cooperatives were responsible for the development of fisheries in Myanmar. In 1983 the Ministry of Livestock Breeding and Fisheries (MLBF) was formed and took the responsibilities for the development of fisheries in Myanmar. The Department of Fisheries (DOF), under the MLBF is responsible for the management of fisheries, conservation of resources, providing extension services, conducting researches, and compilation of the national statistics in fisheries. The Planning and Statistics Section under the Department of Fisheries is responsible for the compilation of the fish production from the state and division levels and township levels. The fish production (Table 1) was estimated based on the 1991-1992 production.

**2. TYPE OF FISHERIES**

Fisheries in Myanmar are divided into freshwater fisheries and marine fisheries. Freshwater fisheries is mainly fish culture fisheries, leasable fisheries, open fisheries and flood fisheries, while marine fisheries is classified into on-shore, in-shore, and off-shore fisheries.

Freshwater fisheries is dependent on the riverine system of the country. There are four main rivers, namely the Ayeyarwady river which is about 2150 km long, the Chindwin River about 844 km long, the Sittaung River about 563 km long and the Than Iwin River about 2400 km-long, all enriched with natural resources and are very important for the open and flood fisheries of the country.

The inundated flood plains are estimated to form water surface of about 6.0 million hectares for a period of 4-5 months a year. The total number of leasable fisheries in Myanmar is about 3743 of which 3374 are exploitable to date. On the other hand, the total area of fish ponds in 1996-1997 was about 40193.93 ha.

The coast line of Myanmar is about 2831 km long. The continental shelf covers about 33000 km<sup>2</sup> in Yakhine coast, 105000 km<sup>2</sup> in Delta region, and 84000 km<sup>2</sup> in Taninthayi coast.

### 3. FISH PRODUCTION

The status of fish production for the Union of Myanmar from 1992-1993 to 1996-1997 is shown in Table 1.

### 4. LICENSED OFF-SHORE FISHERIES (1996-1997)

<u>No.</u>	<u>Particulars</u>	<u>No. of Vessels</u>
1	trawls	621
2	purse seines	21
3	surrounding gill nets	38
4	trammel gill nets	421
5	long line	4
6	squid	13
	<b>TOTAL</b>	<b>1118</b>

### 5. LICENSED IN-SHORE FISHERIES (1996-1997)

1	Number of Mechanized boat	16605
2	Number of non-mechanized boat	6745
3	Number of Gears	23640

### 6. EXPORT DATA

Data on fishery export are collected by the Department of Customs, while the Planning and Statistics Section compile and process such data. The export data (1996-1997) are as follows:

<u>No.</u>	<u>Particulars</u>	<u>Metric tons (mt)</u>	<u>Value (US \$)</u>
1	Fish	41068.32	45971127
2	Prawn	12827.80	95607067
3	Others	10504.70	21474628
	<b>TOTAL</b>	<b>67400.82</b>	<b>163052822</b>

### 7. TCP/MYA/4553 PROJECT

The current fishery statistics system in the Union of Myanmar does not conform with the concept as it was designed. It lacks systematic, consistent procedure and methodology as far as information acquisition is concerned. Therefore the reliability of the interpreted information could also be questioned. The available data are thus unsuitable for fishery management purposes.

The Technical Cooperation Program of FAO has been requested to assist the Government by providing technical assistance to renew and revamp the present fishery statistical system to conform with international practices and to create a reliable data base to facilitate decision - making in fishery management. The objectives of the project are:

- a) To reformulate and strengthen the current fishery statistical system by improving a reliable coverage of biological, technological and socio-economic activities of the country's marine and inland fisheries and aquaculture; and
- b) To introduce a computerized fishery information data base.

The work plan of the project includes: Marine Fisheries (Yangon Division, Sittwe, Myeik), Inland Fisheries (Mandalay Division), Aquaculture Fisheries (Tonetay).

## 8. PROJECT ACTIVITIES (NOVEMBER 1995 TO AUGUST 1997)

- a) Computer Training

Training of ten staff at MCC Computer Centre is listed as follows:

<u>No.</u>	<u>Name</u>	<u>Section</u>
1	Daw Ma Ma Lay	Planning and Statistics
2	U Saw Thaug Khine	"
3	U San Win	"
4	Daw Myint Myint Soe	"
5	Daw Aye Aye Moe	"
6	Daw San San Yee	"
7	Daw Poe Poe Kyi	DG Office
8	Daw Hla Hla Kyu	Quality Control
9	Daw Su Su Lwin	Planning and Statistics
10	U Myint Pe	National Taxonomist

- b) Marine Fisheries in Yangon Division

Data from industrial fisheries is collected using landing forms from Ahlone jetty, Nyaung Dan jetty and Kyi Myint Daine jetty. The 1996-1997 fish production is shown in Table 2. On the other hand, the list of industrial fisheries vessels in Yangon Division is shown in Table 3.

- c) Artisanal Fisheries in Yangon Division

The first survey of artisanal fisheries in Yangon Division was conducted in November 1996. Results indicated that forty fishing villages use fish gear and long line, trammel gill net for fish, trammel gill net for prawn, tiger mouth, drift net and set net (same design as the tiger mouth). The average catch/month was 407.99 mt. The data was processed using the GRANK program of FAO.

d) **Marine Fisheries in Sittwe Township**

NPD recommended to start the survey in Sittwe township. This was conducted by the head office staff namely Daw Ma Ma Lay, Daw Thidar Aye, and U San Win. The survey period was from 26 July to 1 August 1997 (bad weather).

e) **Industrial Fisheries in Sittwe Township**

Data from industrial fisheries is collected from the landing forms of the Marine Product Comity. The data collected from industrial fisheries are shown in Table 4.

f) **Artisanal Fisheries in Sittwe Township**

A reconnaissance survey was started at Sittwe township in order to collect the data on artisanal fisheries. There are 37 fishing villages in the township. From the list of licensed boat and gear, fishermen were interviewed by the staff of the DOF from Sittwe township. The data were processed and analyzed using the GRANK software, the program presented and all detail data attached. Two criteria for GRANK are used such as total number of boat and fishermen. Number of gears was not suitable for analysis because the units of gear used were not the same.

g) **Future Work Programme (August-November 1997)**

- i) Frame survey in Yangon Division for artisanal fisheries in August or September;
- ii) Sample survey for catch and effort in Yangon division in September-November;
- iii) Reconnaissance survey in Mandalay for inland artisanal fisheries for both capture and culture in September;
- iv) Frame survey for aquaculture in Mandalay division in September/October; and
- v) Inputting of industrial landings data in the computer for one whole year.

## **9. CONCLUSION**

The fishery sector is considerably important in Myanmar's economy as fish constitutes a major source of animal protein in the diet of the people and is the fifth largest source of foreign exchange earning after timber, rice, industrial and minerals. Fishery statistics is important in fishery management, thus, the formulation and strengthening of fishery statistics survey, is very useful for the fishery management of Myanmar.

**Table 1. Status of fish production for Myanmar**

Thousand of (M.T.)				
No.	Year	Fresh water fisheries	Marine fisheries	Total
1	1992-93	193.7	597.6	791.3
2	1993-94	210.9	599.90	810.8
3	1994-95	220.12	602.88	823.00
4	1995-96	217.99	455.43	673.42
5	1996-97	237.42	635.54	872.96

**Table 2. Industrial fisheries data in 1996-1997**

(M.T.)				
Month	Ahlone	Nyaung dan	Kyi myint daine	TOTAL
April	1619.869	2676.376	1121.825	5418.07
May	1373.296	2862.531	302.0925	4537.92
June	760.9466	576.4252	186.155543	1523.526
July	1017.317	105.814	336.2208	1459.352
August	1690.085	1258.011	233.0195	3181.116
September	1301.447	2139.142	280.8644	3721.453
October	2021.57	3923.937	209.0154	6154.523
November	1722.744	3231.41	196.7684	5150.922
December	1830.517	4227.662	578.0581	6636.238
January	1647.73	3855.354	924.2398	6422.324
March	1887.67	4374.626	1273.687	7535.984
<b>TOTAL</b>	<b>18237.82</b>	<b>33049.08</b>	<b>5062.284</b>	<b>56369.16</b>

**Table 3. Industrial fisheries vessels in Yangon Division**

No.	Name of vessel	Owner	GRT	HP	Length of boat	Type of gear	Fisher men	Catch/m (mt)
1	HS 4	MFE	6.7	240	60 ft	Trawl	10	1.331
2	HS 6	MFE	6.7	240	60 ft	Trawl	11	1.051
3	HS 7	MFE	6.7	240	60 ft	Trawl	10	0.674
4	HS 8	MFE	6.7	240	60 ft	Trawl	10	0.542
5	Aungya danarmoe	U Kyaw Min	9	45	54 ft	Trawl	8	0.085
6	Koung myataung	Trawl co	31.4	280	50.25 ft	Trawl	11	bad condition
7	T 22	Trawl co	9	180	33	Trawl	5	"
8	T 17	Trawl co	9	85	33	Trawl	4	"
9	T 21	Trawl co	9	85	33	Trawl	4	"
10	T 27	Trawl co	9	85	33	Trawl	5	"
11	T 25	Trawl co	9	85	33	Trawl	5	"
12	T 31	Trawl co	9	85	33	Trawl	5	"

**Table 4. Industrial fisheries of the Marine Product Comity**

No.	Particulars	Number of Vessels
1	trawls	290
2	trammel gill nets	2
3	surrounding gill nets	2
4	purse seine	5
5	long line	1
	<b>TOTAL</b>	<b>300</b>

**Gear tonnage groups**

0-40	14
41-80	93
42-120	144
121-160	42
160 above	7
<b>TOTAL</b>	<b>300</b>