



**The status and trend of total landing fishes
and important Surimi species
in Myanmar.**

**Department of Fisheries
Myanmar**

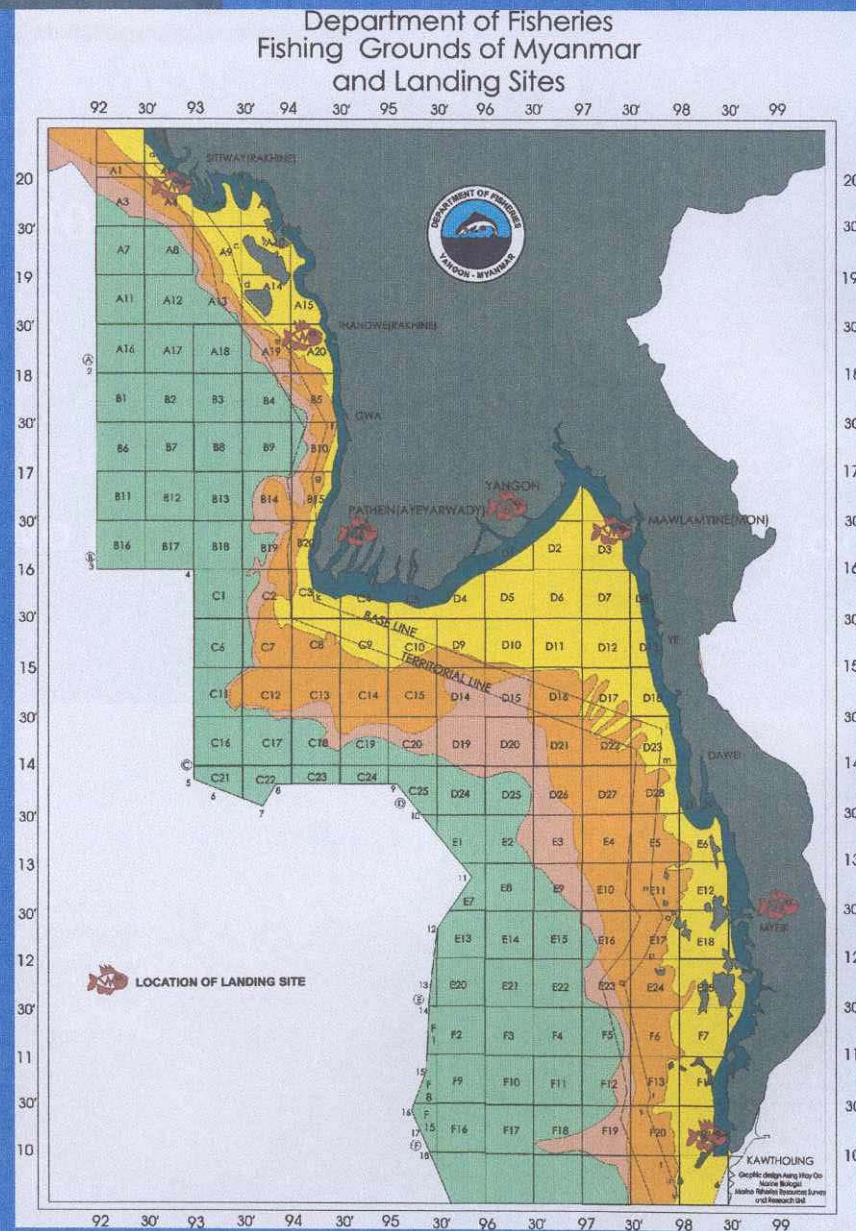
Introduction

Myanmar-

- Situated in the Southeast Asian Subcontinent
- Land area - 676553 square kilometer (261228 square miles)
- Three seasons namely,
 - Summer (from mid February to mid May) .
 - Monsoon or Rainy season (from mid May to mid September)
 - Winter (from mid September to mid February) .
- Bounded in the South by the Andaman sea and in the Southwest by the bay of Bengal.
- Long coast line - approximately 3000 kilometers long from North to South.
- The coastal wetlands mangroves are found along the coastal areas from latitude 20° North to 10° North and from longitude 92° East to 98° East.
- Wetland mangrove ecosystem - one of the most important productive ecosystem and in relation to marine living organism for shelter and food.

Introduction

- Continental shelf areas (0-200 meter depths) cover an area of approximately 230000 square kilometer for fishing operation according to the FAO Project's survey report within 200 meter depth.
- 36000 square kilometre in Rakhine coast (the Northern part of Myanmar),
- 105000 square kilometre in Delta area (called Ayeyarwady: the wider portion in Myanmar)
- 48000 square kilometre in Tanitharyi (including more than 800 islands at the southern part of Myanmar).
- Exclusive Economic Zone - about 486000 square kilometre.



Introduction

- Fishing activities
 - Trawling,
 - purse seine (operated for 10 months)
 - long line,
 - trapping
 - Artisanal fishing (gillnetting, trammel netting, drift netting, etc.)
- Most of the fishing vessels take two months (July and August) for repairing period.



Introduction

- Endowed with rich and varied marine and inland fisheries resources with a production potential.
- About 1.1 million Tons (2007-2008) for marine fish (including shrimp).
- Fish and its various kinds of products, which is the main source of animal protein in our country, can play a major role in helping to bridge the protein deficit.
- Average per capital consumption of fish protein is nearly 33 kilogram per person per annually for a population of 60 millions people (2007-2008).
- Besides, marine fisheries play an important role in the economic development of Myanmar.
- They provide employment to thousands people who live in along the coast as well as at the processing factory in the city.
- Fisheries products are also a valuable source of foreign exchange for country.

Fishing Activities



Marine Fisheries Production

- Provide over sixty percent of the national fish production.
- The marine fishery **includes inshore** and **offshore fishery**.
- Inshore fishing activities-
 - The area **five** nautical miles away from shore in Rakhine
 - **Ten** nautical miles in Ayeyawady and Thanintharyi coast respectively.
 - The fishing - set fishing gear without boat or fishing gear with non-mechanized boat.
 - If the boat is mechanized to assist moving fishing gear the engine should be not more than 12 horse power and the overall length of the boat should be not more than 30 feet.
 - The fishing season - from first of April to last day of March in successive year.
 - During monsoon season the actual fishing period is only seven months.
 - That is being operated by active fishing gears (e.g. gill net , long line, trap etc.)
- Offshore fishery –
 - capture fishery , active fishing gears (e.g. trawl , purse seine etc.)
 - fishing vessels over 30 feet in overall length and with engine power more than 12 HP.
 - fishing grounds are beyond the outer area of the demarcated inshore fishery areas.
 - The main fishing gears- bottom trawl, purse seine, drift net and long line.
 - The fishing season - from the first day of September to last day of August in the following year

Fisheries products



Marine Fisheries Production

Inshore and offshore fishing vessel and production (1994-2004)

No	Year	Total Landing (Mil MT)	Marine Fishery	
			Volume MT (Mil MT)	Sharing (%)
1	1997-1998	0.91	0.68	75%
2	2000-2001	1.31	0.95	73%
3	2003-2004	1.98	1.10	56%
4	2004-2005	2.22	1.23	55%
5	2006-2007	2.84	1.52	54%

Sources Fishery Statistic (2006-2007) Department of Fisheries

Commercial Fishes and Exportable species

▪ Marine fish collections

- Trawling surveys and commercial fishing vessel.
- Over 442 species under 153 families of fish, shrimp, prawn and lobster were collected in named systematically named from continental shelf and slope of deep sea areas of Myanmar Exclusive Economic Zone (EEZ).
- During 1980-81, trawl catches analysis was undertaken from fishing logs of commercial fishing vessel belonged to government fishing corporation.
- Out of 30 fishing vessel, fishing logs from 22 (73%) vessel were analyzed with fishing hours of 11,095 and a total catches of 2,375 metric tons.

Commercial Fishes and Exportable species

In this study, the fish were grouped as 21 sets mostly based on family except for prawn.

It was been found that -

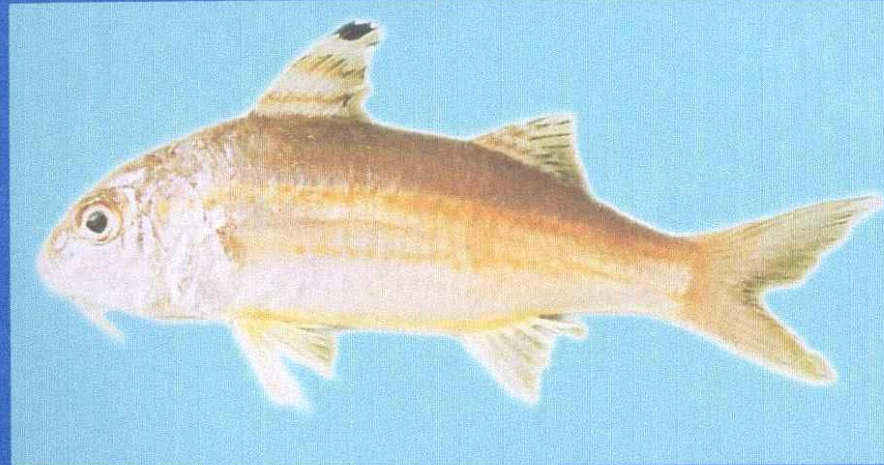
1. Sea catfish (Nga yang)	stood first with	19.0 %
2. Croakers (Poke thin, Thin wa)		18.0 %
3. Pony fish (Nga waing)		9.0 %
4. Sardines (Nga kone nyo), ilisha (Zinbya)		8.0 %
5. Hairtail/ Ribbon fish (Nga da gon)		7.0 %
6. Javenil/Grunters (Nga gon)		7.0 %
7. Pike congers/Sea eels (Nga shwe)		6.5 %
8. Horse mackerels (Waing phyu gyi, Zar gyan)		4.0 %
9. Threadfins (Shwe nga)		3.0 %
10. Snappers (Nga parr ni)		3.0 % respectively.

Commercial Fishes and Exportable species

Detailed compositions are shown in the following table.

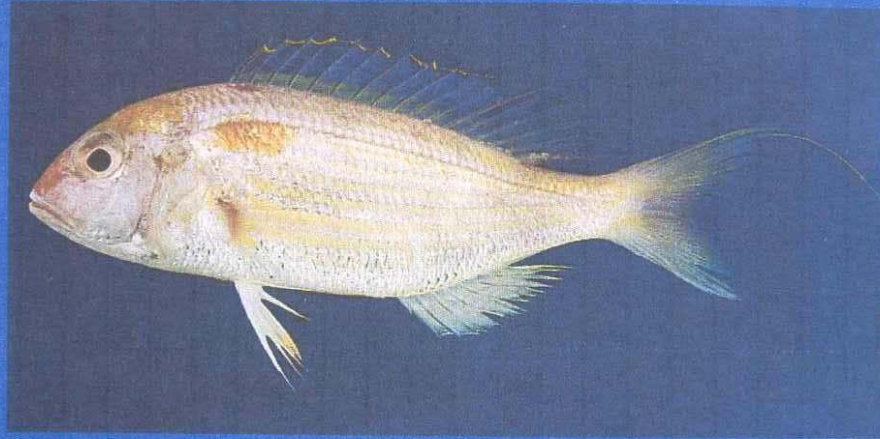
Sr No	Family/Group of Fish	English Common Name	Myanmar name	% (Weight)	Position of catch
1	Ariidae	Sea catfish	Nga yaung	18.5	1
2	Carangidae	Horse Mackerel	Waing phu gyi/Zar Gyan	3.7	7
3	Clupeidae	Llisha / Herring	Nga zinn bya, Nga da lar	7.9	4
4	Leiognathidae	Pony Fish	Nga waing	9.3	3
5	Lutjanitdae	Snapper	Nga par ni, Nga ba yin	2.7	10
6	Mullidae	Goat Fish	Kyo war	1.1	-
7	Muraenesocidae	Sea eel	Nga shwe / Nga hauk	6.5	6
8	Nemipteridae	Threadfin bream	Shwe nga	3.1	8
9	Polynemide	Indian Threadfin	Ka ku yan	2.8	9
10	Pomadasyidae	Grunder	Nga gon	6.9	-
11	Seianidae	Croaker	Poke thin, Thin war	18.4	2
12	Scrombridae	Mackerel	Nga kun shut, Pla tu	1.1	-
13	Synodontidae	Lizard Fish	Nga pa lawy	2.5	11
14	Stromateidae	Pomfret	Nga mote phyu	0.8	-
15	Trichiuridae	Hair tail / Ribbon Fish	Nga da gon	7.1	5
16	Carcharinidae	Shark (Plus ray)	Nga mann, Nga late kyauk	2.0	-
17	Penaeidae (1)	Tiger Shrimp	Pazun Kyarr	0.2	-
18	Penaeidae (2)	Banana/White shrimp	Pazun phu	0.1	-
19	Penaeidae (3)	Pink shrimp	Pazun pannyaung	0.3	-
20	Flat Fish	Flat fish(all species)	Shar lay	0.8	-
21	Miscellaneous	Assorted fishes	Yaw / Nga zone	3.9	-
Total				100 %	

Biography of Fish Species for Surimi Plant in Myanmar



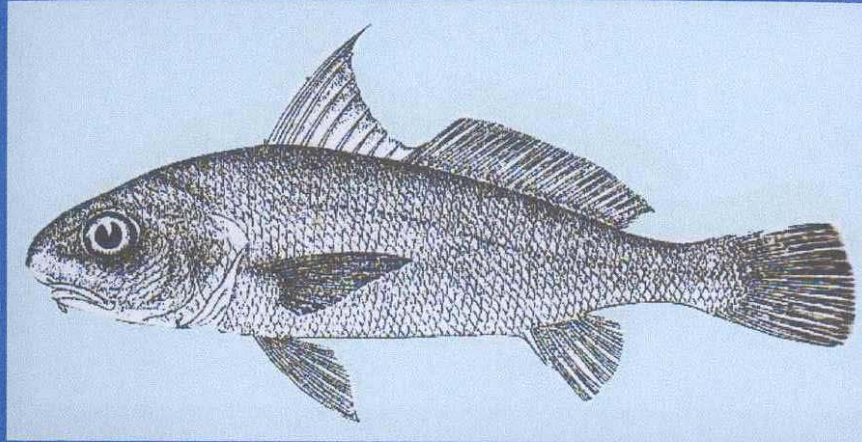
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| Species Name : | <i>Upeneus sulphureus</i> |
| Myanmar name: | Kyo war |
| Colour of the meat: | White meat |
| Size: | Maximum 23 cm, common 12 – 15 cm |
| Weight: | Maximum 0.07 kg |
| Location/Fishing ground | Main fishing ground of Da wei , trawl catch rate 6 kg/hroff Myeik 7kg/hr |
| Depth | 20 – 80 metres |
| Fishing season: | January, February, March, April, June and November |
| Fishing Gear | Bottom trawl and hand lines |

Biography of Fish Species for Surimi Plant in Myanmar



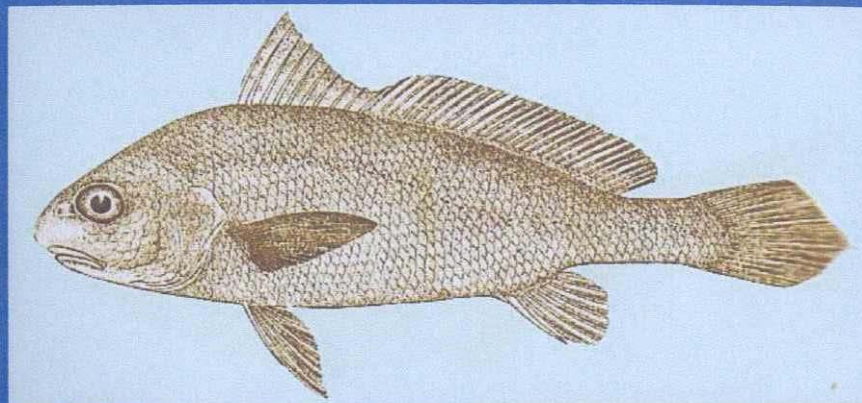
2. Species Name : *Nemipterus japonicus*
Myanmar name: Shwe Nga
Colour of the meat: White meat
Size: Maximum 35 cm, common 22 cm
Weight: Maximum 0.55 kg, common 0.2 kg
Location/Fishing ground: Main fishing ground of Pat their river mouth, trawl catch rate 13 kg/hr, off Da Wei 17 kg/hr, off Myeik 11 kg/hr
Depth: 60 metres
Fishing season: February, May, June, July, August and September
Fishing Gear: Bottom trawl

Biography of Fish Species for Surimi Plant in Myanmar



3. Species Name : *Johnius amblycephalus*
Myanmar name: Nga poke Thin
Colour of the meat: White meat
Size: Maximum 25 cm, common 15 cm
Weight: Maximum kg
Location/Fishing ground: Main fishing ground of Pat their river mouth trawl catch rate, 55-68 kg/hr, off Ye 17-50 kg/hr, off Myeik 54-61 kg/hr
Depth: 20 – 50 metres
Fishing season: January- April, June-August and December
Fishing Gear: Bottom trawl

Biography of Fish Species for Surimi Plant in Myanmar



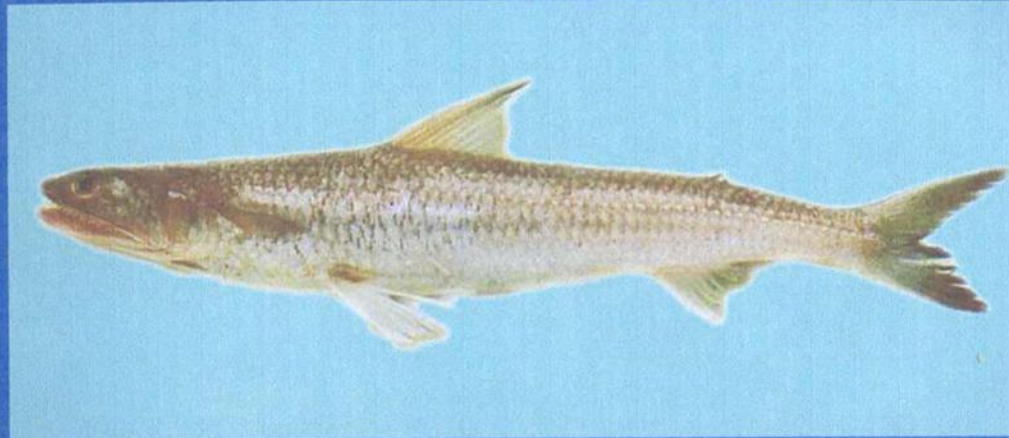
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| 4. Species Name : | <i>Pennahia anea</i> |
| Myanmar name: | Gaung pwa |
| Colour of the meat: | White meat |
| Size: | Maximum 17 cm, common 13-15 cm |
| Weight: | Maximum kg |
| Location/Fishing ground | Main fishing ground of Pat their river mouth trawl catch rate, 55-68 kg/hr, off Ye 50-245 kg/hr, off Myeik 54-61 kg/hr |
| Depth | 20 – 40 metres |
| Fishing season: | January- April, June-August and December |
| Fishing Gear | Bottom trawl |

Biography of Fish Species for Surimi Plant in Myanmar



5. Species Name :	<i>Illisha megaloptera</i>
Myanmar name:	Zin bya
Colour of the meat:	White meat with many small bones
Size:	Maximum 28 cm, common 20-22 cm
Weight:	Maximum 0.2 kg, 0.1 kg
Location/Fishing ground	Main fishing ground of Pat their river mouth trawl catch rate, 19-137 kg/hr, off Ye 25 kg/hr, off Da wei 20 kg/hr , off Myaeik 21 kg/hr
Depth	28 metres belt
Fishing season:	January, February, May, July and November
Fishing Gear	Bottom trawl

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6. Species Name :	<i>Saurida tumbil</i>
Myanmar name:	Nga pa lway
Colour of the meat:	White meat
Size:	Maximum 45 cm
Weight:	Maximum kg
Location/Fishing ground	Main fishing ground of, Da wei trawl catch rate 20 kg/hr off Myaeik 6-32 kg/hr
Depth	20-60 metres
Fishing season:	January, February, May, July and November
Fishing Gear	Bottom trawl