

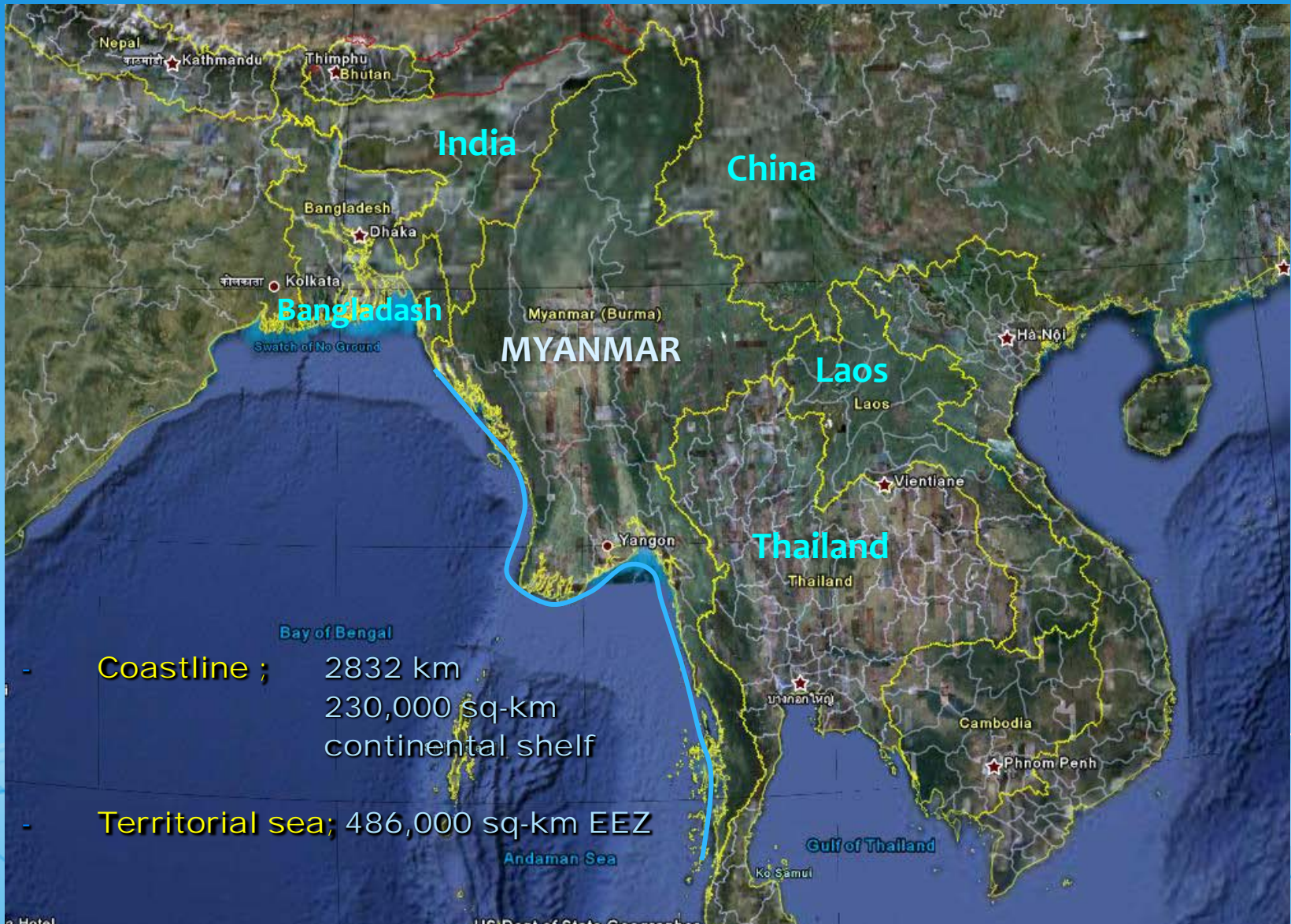


Special Meeting on Improvement of Tuna Information and Data Collection in the Southeast Asia
7-9 September, 2011. Songkhla Province, Thailand.

Present Status of Off-shore Fishery Resources and Information on Tuna Fishery in MYANMAR.

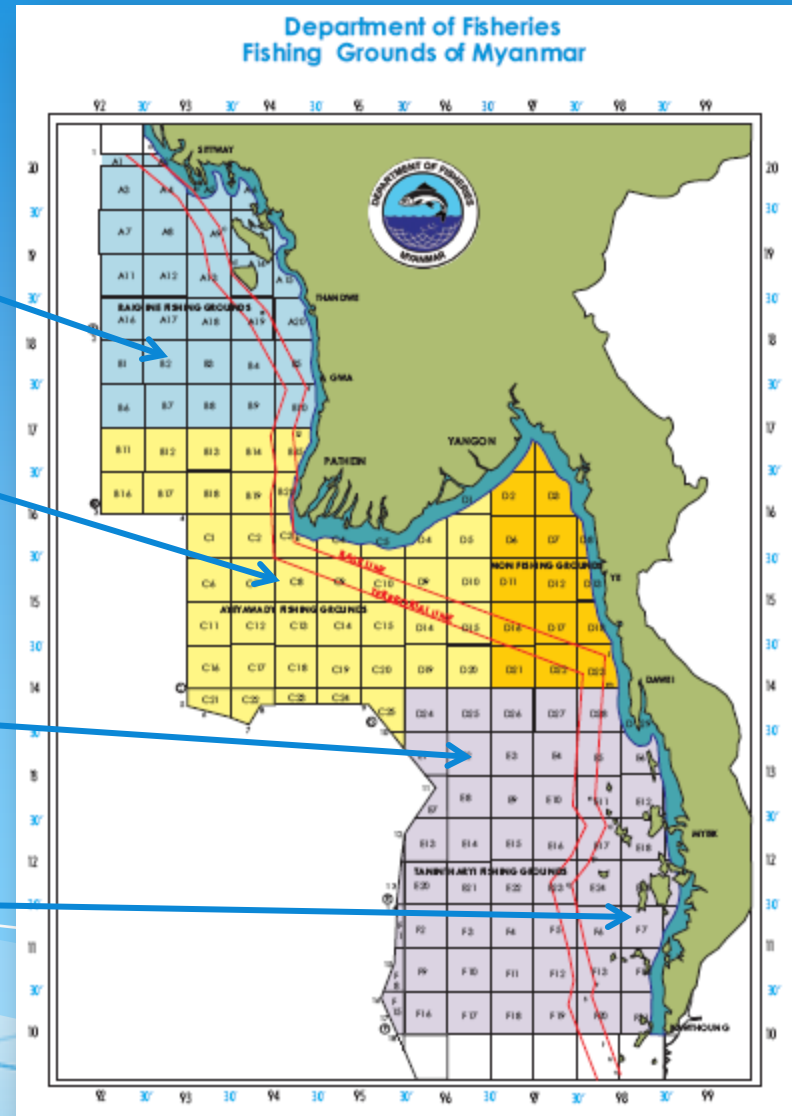
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Introduction



Marine fisheries water & environment

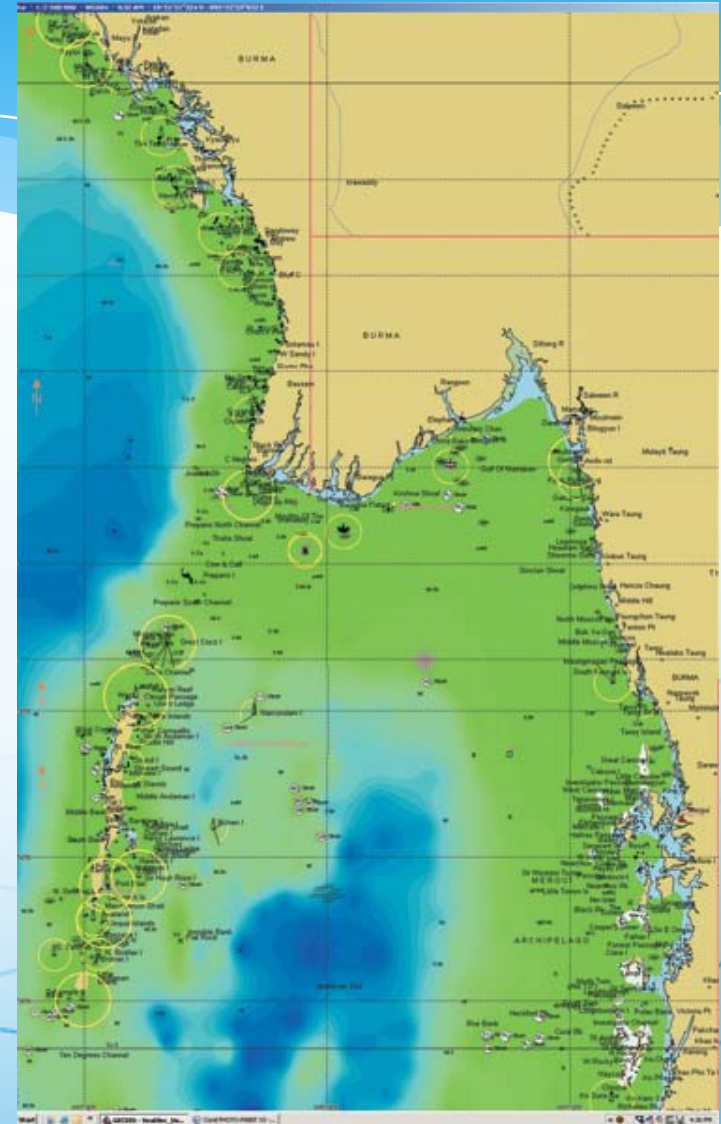
- **Rakhine coastal region;**
(740 km; 36,780sq-km)
- **Ayeyarwady delta zone;**
(105,138 sq-km)
- **Taninthayi coastal region ;**
1200 km mainland coast,
84,344 sq-km
- **Myeik Archipelago;**
(800 islands- 34,340)



Status of marine fisheries resources

Estimate of Biomass within 200-meter depth

- Based on marine resource surveys undertaken, biomass of pelagic fish is 1.0 mmt while demersal fish is 0.8 mmt.
- Standing stock is assumed as 1.8 mmt.
- Out of this, 0.5 mmt of pelagic fish and 0.55 mmt of demersal fish totalling **1.05** mmt has been recognized as MSY.



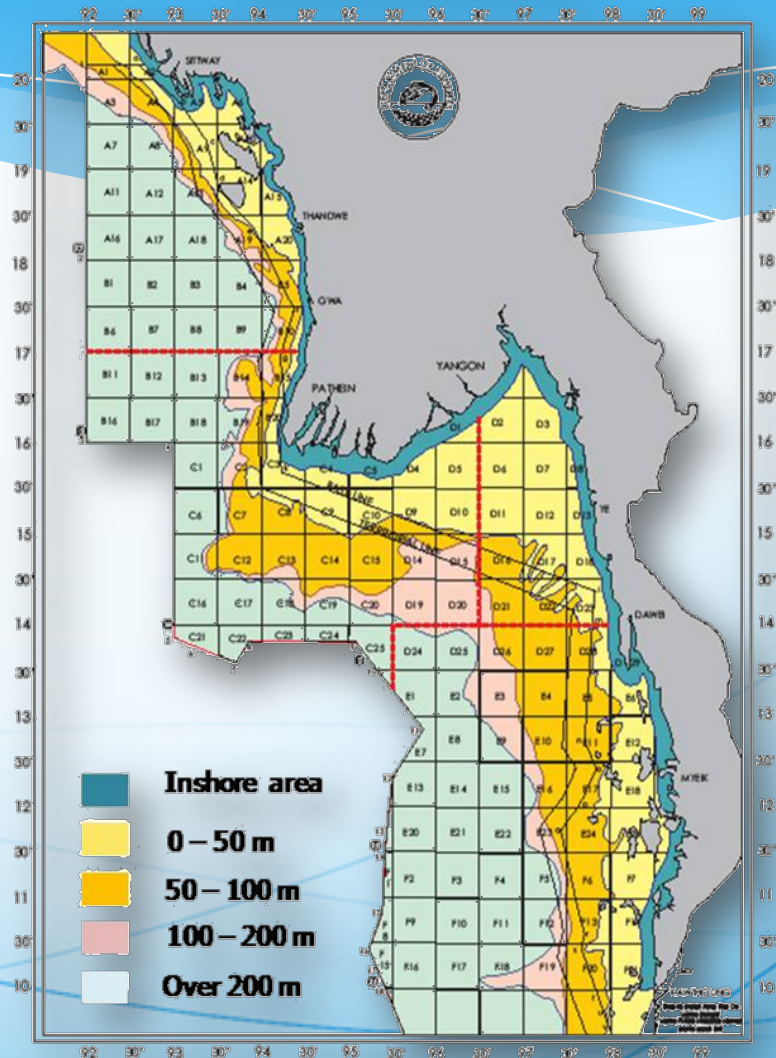
Management arrangements of the offshore area

- * Marine capture fisheries can be categorized into two main types
- * “Inshore fisheries (vessels smaller than thirty-feet in overall length and engine power less than 12 H.P)
- * “Offshore fisheries” (vessels more than thirty-feet in overall length and engine power more than 12 H.P)
- * Inshore fisheries areas (Five nautical – mile away from Rakhine coast and ten nautical-mile away from Ayeyarwady and Tanintharyi coast)
- * Offshore fisheries areas (From outer area of demarcated inshore fisheries area to end of EEZ)

Management arrangements of the offshore area

- ❑ Local Offshore fishing vessels
 - allowed to operate outer area of inshore to the territorial sea.
- ❑ Foreign fishing vessels
 - allowed to fish from the territorial line to EEZ.

Department of Fisheries
Fishing Grounds off Myanmar



Number of off-shore fishing vessels in Myanmar (2009-10)

No	Type of Gear	Number
1	Trawl	895
2	Purse seine	163
3	Stow net (Set Bag Net)	458
4	Drift net (Gill net)	148
5	Long line	3
6	Squid cast net	35
7	Fish Trap	112
Total		1814



Research surveys and experimental fishing

- * Since the right of ownership of Andaman Sea belongs to 4 countries namely Indonesia, Malaysia, Myanmar and Thailand, the joint survey was conducted by scientists from these countries except Malaysia.
- * This survey aims to investigate potential of large pelagic fish by using pelagic long line gear together with proper fishing technique and oceanographic parameters consideration.
- * Determine the relative abundance and size composition of the commercially important species.

Research surveys and experimental fishing

- * The results from this survey indicated that some commercially important species, such as **Swordfish** (*Xiphias gladius*), **Yellowfin Tuna** (*Thunnus albacares*), **Striped marlin** (*Tetrapturus audax*) and **Sailfish** (*Istiophorus platypus*) are inhabiting in Myanmar offshore waters.
- * **Bigeye** Thresher (*Alopias pelagicus*), **Whit-tipped shark** (*Carcharhinus longimanus*), **Escolar**, Pelagic stingray (*Dasyatis* sp:), **Common dolphin** (*Coryphaena bipinnulata*) and **Snake mackerel** (*Gympylus surpens*) were also found as by-catch in this survey.

Research surveys and experimental fishing

- * The similar survey results were also found in 2007 when “ The Collaborative Marine Fishery Resources Survey in Myanmar Water “ was jointly conducted by scientists from SEAFDEC and Myanmar.
- * From these two survey results, Swordfish is the most dominant species in Myanmar Offshore waters and it can be considered as one of the commercial fishes for offshore fisheries in future.

Potential of Under-Exploited Resources

Tuna Fisheries

- * Potential of some Tuna fish already recorded.
(Yellow fin tuna)
- * But Tuna fisheries is not develop yet.

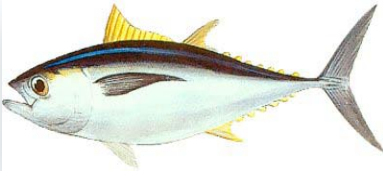
Deep sea Lobster

- * Experimental Fishing for Deep Sea Lobster was conducted in 200 meter depth line in Southern Myanmar waters in last 10 years ago.
- * *Metanephrops andamanicus* species was identified as commercially important species.
- * Deep sea lobster fisheries are also under exploited

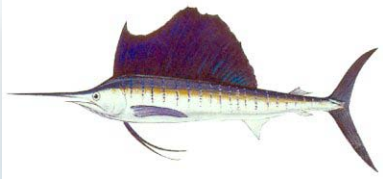
Deep sea squid

- * *Ancistrocheirus lesueuri* species was identified.
- * No fisheries on deep sea is develop yet.
- * At present, due to lack of technology, lack of human resources, above mentioned species are still in under exploited.

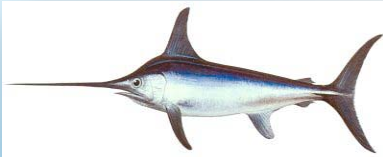
TUNA Fishing Ground of Myanmar



Yellowfin Tuna



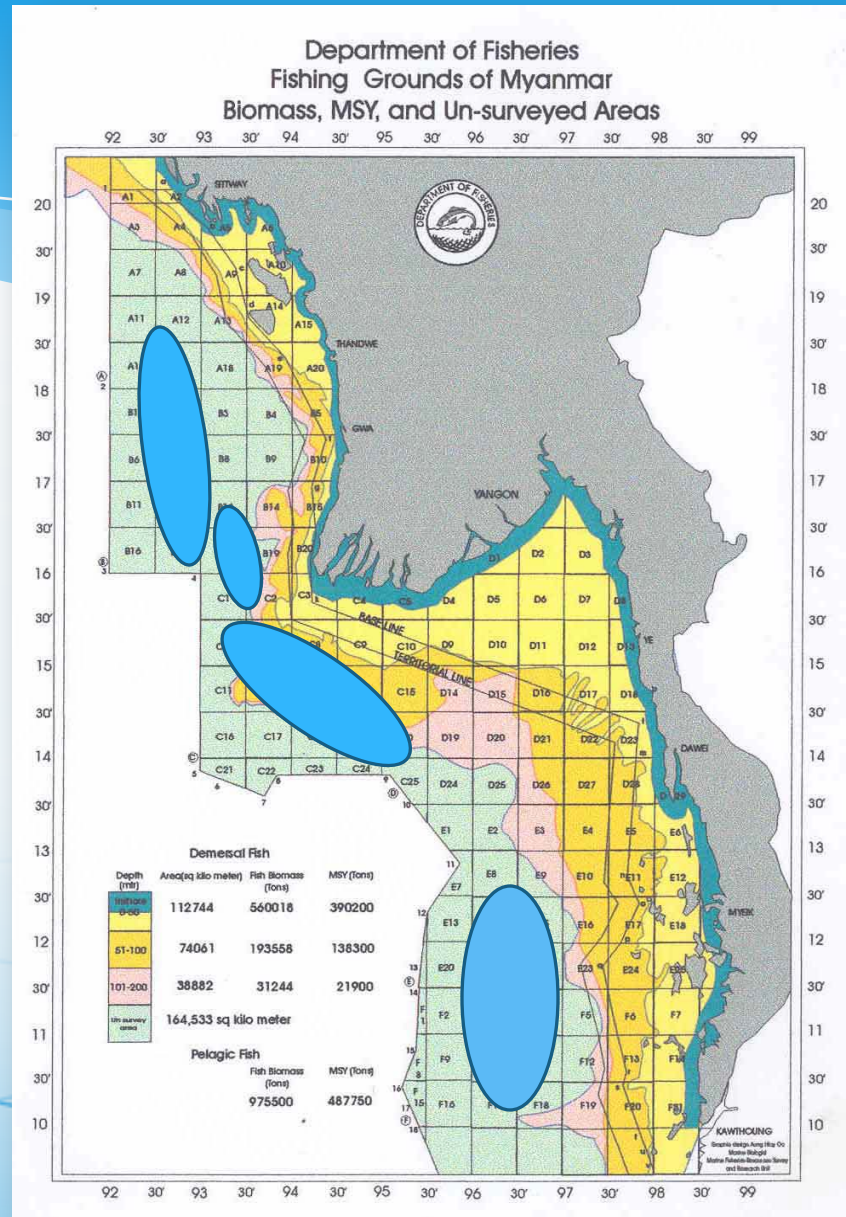
Striped marlin



Swordfish



Whit-tipped shark



Commercial Tuna Fishing

The offshore fishery for large pelagic in Myanmar has initiated and developed gradually during the last decade, and is currently producing nearly 200 tons of fish per annum.

- * Long lining in the Myanmar EEZ started with the issuing of experimental licenses to 12 foreign fishing vessels in 1999-2000.
- * Initially the catch rates were good and in 2010-2011 the number of licensed vessels rise to 109.



Commercial Tuna fishing

- * The license fee collected for this fisheries is 30 US \$ / GRT / Month.
- * According to “ Law Relating to Fishing Rights for Foreign Fishing Vessels” tuna long-ling fishing operation is permitted only in the outside of the territorial sea in Myanmar EEZ to all fishing vessels.
- * The target species for this fishery is Yellowfin tuna, even sword fish, marlin and sharks are caught as by catch.



Number of Foreign Tuna Long-line Fishing Vessel Engage in Myanmar Water and production (2000 – 2011)

Sr.No	Year	Number of Vessels	Production		
			Tuna(YF)	Other	Total
1.	2003-2004	4	39.50	16.5	56.00
2.	2004-2005	15	87.50	30.50	118.00
3.	2005-2006	34	310.15	103.00	413.15
4.	2006-2007	47	195.78	65.26	261.04
5.	2007-2008	11	47.48	15.80	63.28
6.	2008-2009	36	91.60	25.50	117.10
7.	2009-2010	49	561.75	150.00	711.75
8.	2010-2011	109	1123.50	648.50	1772.00

Tuna Landing Site

- All of the Tuna catch by foreign long line fishing vessel, they are not landing at Myanmar ports.
- * According to the size of Tuna, they are landed/ sale at as follow;

Size of Tuna	Exported Country
15 – 20 Kg	Phuket, Thailand.
	Penang, Malaysia
21 – 28 Kg	Phuket, Thailand.
	Penang, Malaysia
28 – 30 Kg	Phuket, Thailand.
	Penang, Malaysia
Over 30 Kg	Japan

There are no market in Myanmar

IUU Vessels are seized by Coast Guard in Myanmar Water (2010-2011)

Sr. No	Vessel name	Remark
1.	PANUTAN-1	
2.	HUNG FA NO-128	
3.	SURYA TERBIT-02	
4.	SURYA TERBIT-98	
5.	HER YIFA CT-3-4779	
6.	MING JING YIH CT-3-4738	
7.	KM FAVORIT	
8.	LESTARE WIJA YA-28	
9.	KM REHAN-105	
10.	KARYA WIJ YA-20	

Current resource status

- * ***Pelagic resources***
- * Since there is no appropriate data on offshore fisheries (Deep-sea fisheries) of pelagic fisheries in Myanmar, the requested information are not available.

- * ***Demersal resources.***
- * Since there is no Offshore fisheries (Deep-sea fisheries) for demersal fish in Myanmar, the requested information are not available.

- * There are no tuna processing units in Myanmar.

Technological feasibility

- * Since only foreign fishing vessels is operating in the offshore zones of Myanmar, there is no fishing vessels and fishing gears which are suitable for offshore or deep-sea fishing in Myanmar yet.
- * Currently, most of the fishing vessels are operating in the waters less than 100-meter depth, due to lack of technology, lack of suitable fishing gear, and lack of fisheries resources information.
- * In this regards, appropriate fishing technology, fishing gear and fishing vessels are the major constraints for the development of offshore fisheries or deep-sea fisheries in Myanmar.

Conclusion

- * Since coastal fisheries is facing with over-fishing and over-capacity, offshore or deep-sea is the only promising area for sustainable fisheries development and food security for the people in future.
- * Even offshore fisheries/deep-sea fisheries is not developed yet, results from series of fishery resources survey and experimental fishing indicated that Myanmar is rich in some commercially important big pelagic species such as sword fish and deep-sea lobster and deep-sea shrimp.
- * Since offshore / deep-sea fisheries areas are away from the shore, more advanced fishing technologies, modernized fishing gears, latest post harvest technologies, skillful fishers and more investments are needed.
- * All these requirements are great challenges to all developing countries like Myanmar.
- * To exploit underutilized fishery resources from offshore / deep-sea for sustainable fisheries development and food security for the people in this region, Myanmar would like to make good coordination and cooperation with international / regional organizations, such as ASEAN, BIMSTEC, FAO, SEAFDEC, etc., to obtain technologies, knowledge and experiences.
- * Foreign investment and joint venture program with foreign fishing vessels will be also invited according to our fisheries laws and foreign investment law to develop this fisheries.

Thank you