

STATUS OF FISHING CONDITIONS IN CAMBODIA

by

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Abstract

I- Introduction:

Fisheries in plays a very important role in Cambodia's national economic development. Total fish catch production in 1996 was 104 310 tones, about which 60% was contributed by inland capture fisheries, 30% by marine capture fisheries and 10% by both inland and marine aquaculture (Fish catch in Cambodia 1980-1996). Even inland capture fisheries has contributed high production we also always pay attention to our marine capture fisheries which has provided its enormous production to our country.

II- Present situation of marine fishing:

Our coastal line extents 435 Km from Thai border in the Northwest to Vietnamese border in the Southeast with Exclusive Economic Zone area of 69, 900 square miles. (Map of marine fishing ground).

The main living animal aquatic species : fish (mackerels , sardine, anchovies, bonito, flatfish, snapper, threadfin, etc.,(main marine aquatic catch in 1996).

1. Fishing gears: There are two types of marine fishing gear in our country small scale family fishing gear and commercial fishing gear. For the commercial fishing gear, the most popular ones are purse seine and bottom trawl. (Marine fishing gears in 1996).
2. Fishing boats: In 1996 fishing boat increases until 4914 units, which 1602 units are motorized boats and 3312 units are unmotorized ones. However, they are not modern and they do not have any modern equipment such as, radar, echo-sounder (fish finder), sonar sounder, power block, net hauler and refrigeration system. (marine fishing boat in 1996).
3. Marine fishers: Total marine fishers in four provinces in 1996 are 68745 persons (24 464 families) slightly increases from 1995. Most of them are poor, they get their small income from their fishing activity. (marine fishers in 1995 and 1996).
4. Marine fishing policy: Department of Fisheries has its own fisheries law and policy to deal with all kinds of fisheries activities in our country in sustainable way. It contains many articles that all fishers have to respect, as following,
5. Fishing constraint: Even we have strict fisheries law, but we still face many problems because of illegal fishing are carrying out in the whole country and damaging our natural aquatic resources. The constraints are following.

6. Fisheries planning: Facing difficulty and problems with the aims of fisheries development and management the Department of Fisheries has its five-year planning and projects , in the following.

III- Conclusion

The Department of Fisheries has achieved its advancement during the last 16 years and faced many problems to be solved in the future. Due to 20 years civil war , our government has limited budget for spending on fisheries sector including insufficient of its human resource. So we would like to take this opportunity to have some suggestions, if possible, to the workshop, to other organizations to provide us short and long course training on fisheries sector and resources development and management in a sustainable way , and one more is a cooperation in oceanographic scientific research . The last assist us by providing technology document.

1. INTRODUCTION

Fisheries sector in Cambodia plays a very important role in national economic development and its products have provided everyday food to our people in the whole country and exported to Asian countries and international market. Due to high production that has been contributed by wild fisheries' resources and aquacultural production. Total fish catch production in 1996 was 104 310 tones, which about 60% was contributed by freshwater capture fisheries, about 30% by marine capture fisheries and about 10% by fish culture of both freshwater and marine aquaculture.

Fish catch in Cambodia (1980-1996)

Year	Freshwater fish capture (tones)	Marine fish capture (tones)	Freshwater aquaculture (tones)	Coastal aquaculture (tones)	Total production (tones)
1980	18,400	1,200	N/A	N/A	19,600
1981	50,780	814	N/A	N/A	51,594
1982	65,700	3,015	N/A	N/A	68,715
1983	58,717	9,444	N/A	N/A	68,161
1984	55,093	7,721	1,610	N/A	64,424
1985	56,400	11,178	3,000	N/A	70,578
1986	64,184	7,247	2,200	N/A	73,628
1987	62,154	17,417	2,500	N/A	82,001
1988	61,200	21,000	4,600	N/A	86,800
1989	50,500	26,050	5,538	N/A	82,088
1990	65,100	39,900	6,400	N/A	111,400
1991	74,700	36,400	6,700	N/A	117,800
1992	68,900	33,700	8,550	N/A	111,150
1993	67,900	33,100	7,400	500	108,900
1994	65,000	30,000	7,640	560	103,200
1995	72,500	30,500	8,779	731	112,510
1996	63,510	31,200	9,000	600	104,310

(Source: Department of Fisheries)

Even freshwater capture fisheries has provided highly production, we never forget about the marine capture fisheries in our country. And due to inland capture fisheries was banned on all kinds of gear that push or dragged by machine, that means all freshwater fishing gears and fishing boats are unmotorized.

So in this report I would like to deal with only marine capture fisheries.

2. PRESENT SITUATION OF MARINE FISHING

In our country, the coastline extents 435 km from Thai border in the Northwest to Vietnamese border in the Southeast that formed geographical maritime zone in the Gulf of Thailand. Cambodia had declared its Exclusive Economic Zone (EEZ) in January 1988 with an area of 69,900 square miles. There are four marine fisheries' divisions namely Keb Town, Kompot, Sihanoukville, and Koh Kong that have divided enormous of marine product to the city and all provinces and also for export abroad.

(THE MAP OF MARINE FISHING GROUND)

The main species of marine aquatic resources in Cambodia are,

- Pelagic fish species: mackerels, sardine, anchovies, bonito, skipjack., etc.,
- Demersal fish species: threadfin, croaker, lizard fish, hard-tail, flatfish, snapper, etc.,
- Other species: shrimps, lobster, crab, shellfishes, squid.

Total marine aquatic production of the four divisions in 1996 is 31 200 tons including 360 tons miscellaneous species. If we compare to the 1995 production of 30 500 tons, that means it decreases thoroughly. This is due to lack of security for our fishers to do fishing in the fishing ground, some of the fishing boats are not landed on the authorized ports and some are landed directly to neighboring countries such as, Thailand and Vietnam. On the other hand the fishers do not provide accurate data of their catch.

The main marine aquatics catch in 1996 (Ton)

Location (province)	Fish	By - catch	Shrimp	Ray	Squid	Lobster	Shellfish	Cucumber	Crab
Keb Town	20	-	5	-	5	-	-	-	70
Kompot	3020	2125	538	181	284	26	283	51	992
Sihanouk Ville	5780	1920	1100	-	290	-	60	-	590
Koh Kong	5185	4997	2064	110	390	-	110	-	644
Total	14005	9042	3707	291	969	26	453	51	2296

(Source: Department of Fisheries)

2.1 Fishing Gears:

Depend on fishery law of our country, fishing gears allowed to fish in Cambodia's marine fishing ground are divided into two types:

- Small scale family fishing gears, which are allowed to fish at any time and any where without paying tax to the fishery's authority (They were written in the Fisheries Law).
- Fishing gears allowed to fish by paying tax to the fishery's authority and they have limited fishing grounds and fishing seasons (They were written in the Fisheries Law).

Our fishers usually use many kinds of fishing gear to fish inshore or offshore of our marine fisheries domain, but most of them are traditional and use for small scale. We also have commercial fishing gears such as, purse seine, trawl net, drag net, gillnet, longline and trap. The most popular commercial fishing gears are **purse seine** and **bottom trawls**, which are operated by local and foreign fishers. Purse seine use for harvest pelagic fish species such as mackerel, sardine, bonito, anchovy, etc., but trawl net is used for catch demersal species such as shrimp, squid, and some other fish species. This kind of trawl net is harmfully environmental impact by destroying coral reef on the sea bed. The below table shows the main kinds' marine fishing gears that use in Cambodia's marine fishing ground.

Marine Fishing Gears in 1996

Location (province)	Trawl net (set)	Drag Net (set)	Purse seine (set)	Gillnets (m)	Longline (hook)	Traps (set)
Keb Town	-	-	-	1000	-	100
Kompot	186	-	13	71798	-	151
Sihanoukville	244	1	17	300700	1650	1450
Koh Kong	130	-	1500	1055895	12970	25060
Total	560	1	1530	1429393	14620	26761

(Source: Department of Fisheries)

2.2 Fishing Boats

During civil war 1975-1979, there were neither fishing activities nor fisheries research science. These activities restarted in 1979 with very few fishing boats and a little bit of fisheries science research by cooperating with former Soviet Union and Vietnam. Our fishers started using motorized fishing boats and went to offshore fishing ground. The fishing boats that operate with the pay-tax fishing gears, need license from the fishery's authority.

Fishing boats in 1996 increases until 4914 units, which 1602 units are motorized boats and 3312 units is unmotorized boats. Most of the boats are not modern , they do not have modern facilities such as, communication equipment like radio receiver and radar, hydro-acoustic equipment like echo-sounder (fish finder) sonar-sounder and net sounder, and hydraulic equipment like net hauler power block , etc., that cause low efficiency of catching fish, and due to lack of refrigeration system, fish product can not be kept in good quality that can not be sold in good price. On the other hand, our fishers are poor and uneducated, so they do not have enough money to buy this modern equipment and if they had this modern equipment they could not operate them.

The below table shows about marine fishing boats in 1996, which in the four divisions (provinces), Keb Town, Kompot, SihanoukVille, and Koh Kong,

Marine fishing boats in 1996

Fishing boat type	Keb Town	Kompot	SihanoukVille	Koh Kong	Total
No engine type					
< 5 ton	100	100	180	2932	3312
> 5 ton	-	-	-	-	-
Subtotal	100	100	180	2932	3312
With engine type					
< 10 HP	60	50	-	282	392
10 HP-29 HP	-	30	692	132	854
30 HP- 49 HP	-	25	167	8	200
> 50 HP	-	-	-	156	156
Subtotal	60	105	859	578	1602
Total	160	205	1039	3510	4914

(Source: Department of Fisheries)

2.3 Marine Fishers

Total marine fishers in the four provinces in 1996 are 68745 persons (24 464 families) slightly increase from 1995, this does not include fish farmer and fish processor. Most of the fishers and their families are poor, they get their small income by their fishing activities. Their fishing boats are small and old and they do not have much money to buy or repair their boats. This because of more than two decades of civil war in Cambodia. The below table is the statistic of marine fishers in 1995 and 1996 of the four divisions (provinces).

Marine fishers in 1995 and 1996

Location (province)	1995		1996	
	Fishermen	Family	Fishermen	Family
Keb Town	-	-	110	55
Kompot	1900	583	1900	583
SihanoukVille	2635	755	2636	794
Koh Kong	3953	1671	7338	3478
Total	8488	3009	11984	4910

(Source: Department of Fisheries)

2.4 Marine Fishing Policy

In Cambodia, Department of Fisheries has its own Fisheries Law and Policy to deal with all kind fisheries' activities in our country in sustainable way, including aquaculture, fish processing, fish transportation and fish export. All fishers, fish farmer and fish dealers have to respect to the Fisheries Law of the Fisheries Department.

For marine fishing policy, it has some article of regulation in order to sustainable manage and develop our natural living aquatic resources for long uses, as follow,

- All kinds of fishing can be taken place must have permission except small scale fishing.
- For commercial fishing boats must have license from fishery's authority and traffic police institution.
- Foreign fishing boats need permission and approving by the Council of Ministers.
- Fishers have to respect the Law and record their catch into the log book
- Prohibition on all kinds of illegal fishing gears, such as : electrocuted gear, explosive dynamite, poisoning, etc.,
- Prohibition on all kinds of modern fishing gears that have not been defined in the Fisheries Law.
- Banning on spawning season from 15 January to 31 March.

- Prohibition on trawling in the shallow water between the shore and the of 20 m dept.
- Transportation of the marine products more than 200 kg (alive, fresh or processed condition), has to be permitted.
- Mangrove forest on the coastal areas, are protected for aquatic animal spawning ground.

2.5 Fishing constraint

Even we have strict Fisheries Law for the fishers to respect, but we still have many illegal fishing activities that are carrying out in the whole country and destroying our natural living aquatic resources. So this cause Department of Fisheries to face many of constraints as, follow,

- Fishermen use illegal fishing gears, such as electrocuted gear, explosive dynamite, poisoning, etc.,
- Fishers fish and transport fisheries products illegally by supporting from high rank military officers.
- Foreign fishing boats go to fish in our marine water illegally.
- There are many pirates who rob our fishers in offshore fishing ground that causes them not to go far to fish.
- People destroy inundated forest (mangrove forest) for shrimp farm, for charcoal.
- Anarchy on fish landing, especially marine fisheries, the fishermen land their catch in every place and some of them land in foreign countries.
- Waste of catch, fishers do not have experience and skill for storage their products. They do not use refrigeration system, so they waste their catch and most of them are spoiled.
- Department of Fisheries lacks of fishing control facilities, such as patrol boats, radio equipment, acoustic equipment, etc.,
- Department of Fisheries lacks of human resource, especially fishing technological skillful person.
- Department of Fisheries lacks of law enforcement.

2.6 Fisheries Planning

Facing difficulties and problems and to develop and manage fisheries sector, especially fishing the Department of Fisheries has its five-year planning and projects, as follow,

- Increase natural living aquatic resources management and development in sustainable way.
- Increase aquaculture to decrease fishing effort.
- Increase cooperation with national and international organizations to deal with fisheries sector.
- Increase fisheries and oceanography science research and laboratory.
- Strengthen law enforcement of the Fisheries Law.
- Improve fishing lots and fishing ground.
- Establishment marine fishing port in Sihanouk Ville.
- Strengthen human resources development by participating training courses, workshops and meeting.
- Establishment coastal aquaculture research station.

3. CONCLUSION

Even though, the fisheries sector has achieved some advancement during the last 16 years and faced to many problems to be dissolved in the future, the Department of Fisheries has attempted to develop and manage its fisheries sector step by step. On the other hand, due to 20 years civil war, our government has limited budget for spending on this fisheries sector including insufficient of fisheries resource person, it has been rehabilitated rather lately.

Consequently, we would like to take this opportunity to have some suggestions, if possible, to the workshop, to other organizations, as follow,

- Provide short and long training courses on fisheries, especially marine fisheries technology and natural resources conservation and management.
- Cooperation assistance in oceanographic scientific research.
- Provide us technologies and methodologies to deal with fisheries development and management in both marine and freshwater areas.

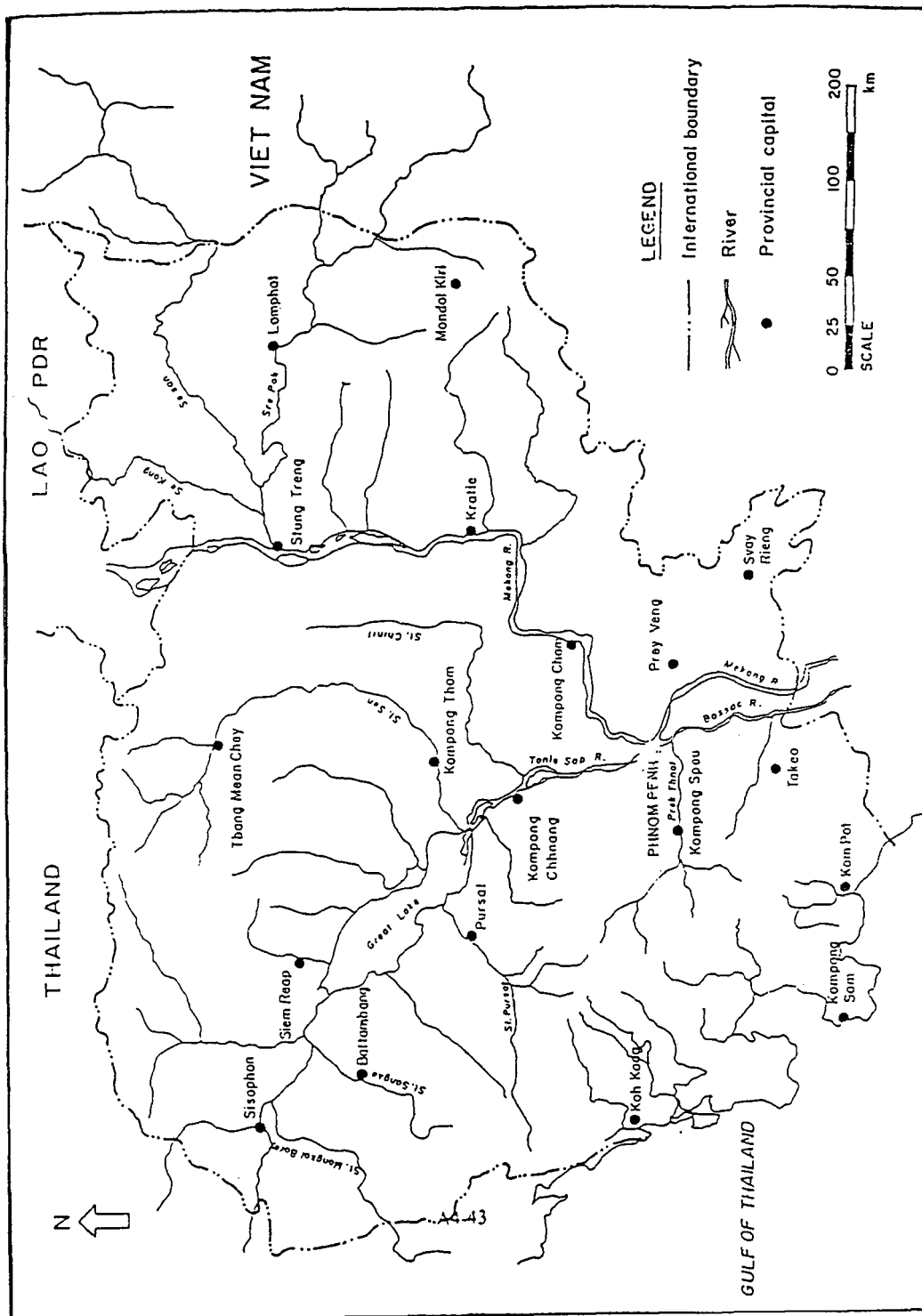


Figure 1. Map of Cambodia