Ray of Hope
Campaign to stop gill plate trade of Mobulid Rays
INTRODUCTION:

The group of elasmobranchs in the family *Mobulidae* (Mobulid rays) consists of two genera, *Manta* and *Mobula*. All mobulid rays have diamond shaped bodies, wing-like pectoral fins used for propulsion, and five pairs of gill slits. They usually inhabit pelagic zones. Mobulids are often called “devil rays” because of the cephalic fins on the front of their heads that resemble “horns”. The cephalic fins unfurl and help guide water into their mouths, and modified gill feat.

All nine devil ray species are listed in Appendix II of CITES, however none of them are listed in the IW(P)A, 1972.

Comparison between Manta and Mobula rays

Historically, subsistence fishing for manta and mobula rays occurred in isolated locations with simple gear, restricting the distance and time fishers could travel to hunt. In recent years, however, fishers have begun targeting manta and mobula rays with modern fishing gear while expanding fishing range and season.
RATIONALE

The emerging market for dried gill rakers is the primary driver of mobulid fisheries. Manta and mobula gill rakers are promoted as a cure for a wide array of ailments from chickenpox to cancer in some Chinese communities. However, shark population declines also have boosted *mobulids* fisheries: the rays provide a cheap substitute for shark cartilage used in nutritional supplements.

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**Dried gill rackers (prebranchial appendages) of Mobula and Manta rays**

*Peng Yu Sai*

*Peng Yu Sai*, is a Chinese soup made of the gill rakers of Manta Rays. *Peng Yu Sai* is in very high demand in East Asia, specifically China and Indonesia. *Peng Yu Sai* is sold widely claiming as a health supplement, reducing toxins, boosting immune system and cure to skin diseases. However, Traditional Chinese Medicine (TCM) does not recognize *Peng Yu Sai* as a beneficial remedy.
India and Sri Lanka are the major exporters of mobulid gill plates

TRADE FROM INDIA

India is one of the biggest suppliers of mobulid gill plates and most of the exports come via the sea-route from Chennai, before which it is sourced from ports and markets in places like Repalle, Nizampatnam, Kakinada, Kochi and Thootukudi.

Rays was always part of the Indian fishery. All kind of rays are landed all along the Indian coast and are consumed by coastal communities. However, other than the meat, gills were never used for any commercial/traditional purposes. Market demand for gill plates started only a decade ago.

During November 2017, Customs department seized 200 kg of mobulid gill plates in Moreh town, Manipur on the transit to Myanmar. This is the first seizure of large quantity gill plates from India. Prior to this seizure, along the North eastern border of Manipur, it was unknown that it is being smuggled through Indian borders.
Glimpses of the gill plate consignment seizure during November 2017, from Moreh town, Manipur.

THE CHINESE MARKET

Gill rakers are sold primarily in Chinese markets and directly marketed by importers from the hub of the trade in Guangzhou, Southern China. Guangzhou trade is as much as 99% of the global market. Market analysis yields total annual gill raker trade volume in excess of 61,000 kg with an estimated value of US$11.3 million per year (Heinrichs et al, 2011).
India is one of the major exporters of gill plates and China is the major importer of gill plates.

**India**

From one adult Manta/Mobula ray, fisher will get nearly 4-5 kilo of dried gill plates.

Domestic price for one Kilo of dried gill plate is nearly 2,500-3,500 INR.

So, from one adult Manta/Mobula ray fishers will fetch nearly 10,000-15,000 INR.

**China**

Manta Ray gill plates per kilo 25,000 - 35,000 INR.

Mobula Ray gill plates per kilo 19,000 - 30,000 INR.

Gill plates are procured largely from India as they are available in large quantities and at very low costs compared to Indonesia.

India is one of the major exporters of gill plates and China is the major importer of gill plates.

**IMPACT**
Protection ensured for Mobulid rays (Mantas and Mobulas) along the Indian coast.

OUTCOMES

1. Trade of mobulid gill plates stopped through awareness campaigns
2. Listing of Mobulid rays in IWPA ensured

OUTPUTS

1. Documentary Peng Yu Sai
2. Policy briefs
3. Survey Reports and distribution maps
4. Gill plate Identification manuals