

Project Update: February 2022

Socialisation workshops were conducted to engage three potential villages to be involved in the research project activities. Two of the three villages known to land mobulid rays agreed to support the research activities in the region. We successfully obtained a permit from related government stakeholders and the head of the village to do research in these villages. Up to 21 fishermen attended the workshop continuing with a small group discussion regarding mobulid rays' regulation in Indonesia and the handling and release method. We also invited stakeholders from regional governmental institutions and authorities including:

1. Marine and Fisheries Agency of East Nusa Tenggara.
2. Fisheries Agency of East Flores.
3. Head of East Solor Regency.
4. Head of Lemanu village.
5. Head of Lamawai village.
6. Head of Labelen village.



COVID-19 has become the challenge resulting in the delay of overall activities that engaged with local communities since there was regional lockdown and one of our team was infected by COVID-19 in July 2021. Despite the pandemic, we managed to interview 30 gillnet fishermen from February to September 2021 to provide baseline information on the value of mobulid rays to local gillnet fishermen communities and the socio-economic. Our current findings based on ongoing interview data analysis found that:

1. 77% of fishermen assume mobulid rays' bycatch is still providing a bigger profit.
2. 100% of the fishermen agree that rays caught to the gillnet result in damaging nets.
3. 93% of the East Flores fishermen only rely upon their income from fishing activities.

4. It is suspected that mobulid rays are retained bycatch that is still valuable to sold locally due to produce better income and could replace the loss to the damage nets.



These valuable insights will combine with survival tags data to assess the adequacy and feasibility of fisheries management scenarios.

We joined daily overnight fishing trips to deploy survival tags (sPATs) on rays that caught alive accidentally in gillnets. Currently, we managed to deploy one tag in East Flores waters with details below:

Date	31 st August 2021, 3:21 AM
Species	<i>Mobula mobular</i>
Sex	Male
Vitality	Good, strong movement, mild injury
Size	180 cm
Gillnet soaking time	565 minutes
Net length x depth	900 x 12 meter
Coordinate	-8.60133, 123.02036 (<i>maps below</i>)

During these regular fishing operations, the deployment time of gillnets ranged from 3 to 11 hours, and despite the variability in potential time in the net, the tagged rays were in good condition and swam away upon returning to the water. The tag data will be analysed, collating information on mortality rates and the socio-economic context of the fishery at the end of the project. Through observing the local fish market, joining daily fishing trips, and discussing with local NGOs in East Flores, we found that mobulid ray sighting and bycatch were lower in the 2021 season. We hope to tag more this year (May-October 2022) to complete all 20 tags or a minimum of 10 tags to result in a better data sample.

