



**Establishment and Operation of a Regional System of Fisheries Refugia in the
South China Sea and the Gulf of Thailand**

REPORT

**THE FOURTH NATIONAL SCIENTIFIC AND TECHNICAL
COMMITTEE MEETING**

WEST JAVA, INDONESIA

4 NOVEMBER 2021

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TRAINING DEPARTMENT**



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REPORT OF THE MEETING

The fourth meeting of Thailand's National Scientific and Technical Committee for the project entitled "Establishment and Operation of a Regional System of Fisheries Refugia in the South China Sea and Gulf of Thailand" was conducted by the Research Institute of Fish Resource Enhancement on 4th November 2021, at Bekasi.

1. Opening of the Meeting

The meeting was chaired by Iswari Ratna Astuti since Prof Ngurah Wiadnyana, The National Scientific and Technical Focal Point were unable to attend the meeting. Ibu Iswari on behalf of NSTFP welcomed all the committee members to the meeting and thanked all the participants for the cooperation during the implementation of the project activities. She noted that fisheries refugia is an approach that can strengthen the management of squid fisheries in Bangka. Therefore, the studies on squid resources and critical habitats and community participation in fisheries management are very important for the establishment and management of squid refugia. She expected inputs and recommendations to complete refugia profile of squid in Bangka through this meeting.

2. Discussion

- 2.1. Ms. Astri Suryandari, performed as a secretariat of the meeting has introduced background and meeting agenda to the members.
- 2.2. Dr. Amula Nurfiarini, as coordinator research of squid refugia in Bangka Belitung. She conveyed the progress of the team on the study of squid refugia in Bangka waters. She has presented the result of the ecological and biological survey of squid conducted in the 2020.
- 2.3. The survey on ecology, biology and socio-economic aspect in Bangka that has been scheduled in July-August 2021 was delayed due to the mobility restrictions imposed by the Indonesian government during the COVID-19 pandemic. The survey was being rescheduled in November – December 2021.
- 2.4. Several important points from the baseline survey in 2020 that need to be carried out to complete data and information for designation of squid refugia in Bangka Belitung Province were
 - Assessing pollutant sources that will impact critical squid habitats and also mapping water hydrodynamics to predict pollutant input patterns in these waters;
 - Identify critical habitat of squids in other areas around the waters of Bangka and its surroundings;
 - Assessing the stakeholder perception on establishing fisheries refugia of squid in Bangka.
 - Completing data on the distribution of mature squid around Bangka waters, especially in the waters around Tuing village which is an area reserved for conservation area by the local government.
- 2.5. The results of the study conducted by the AMFHR research team showed that the fishing ground of squid were spread almost all over the waters of Bangka Belitung, with fishing gear used are squid jigging, lift nets, handline and gillnets.

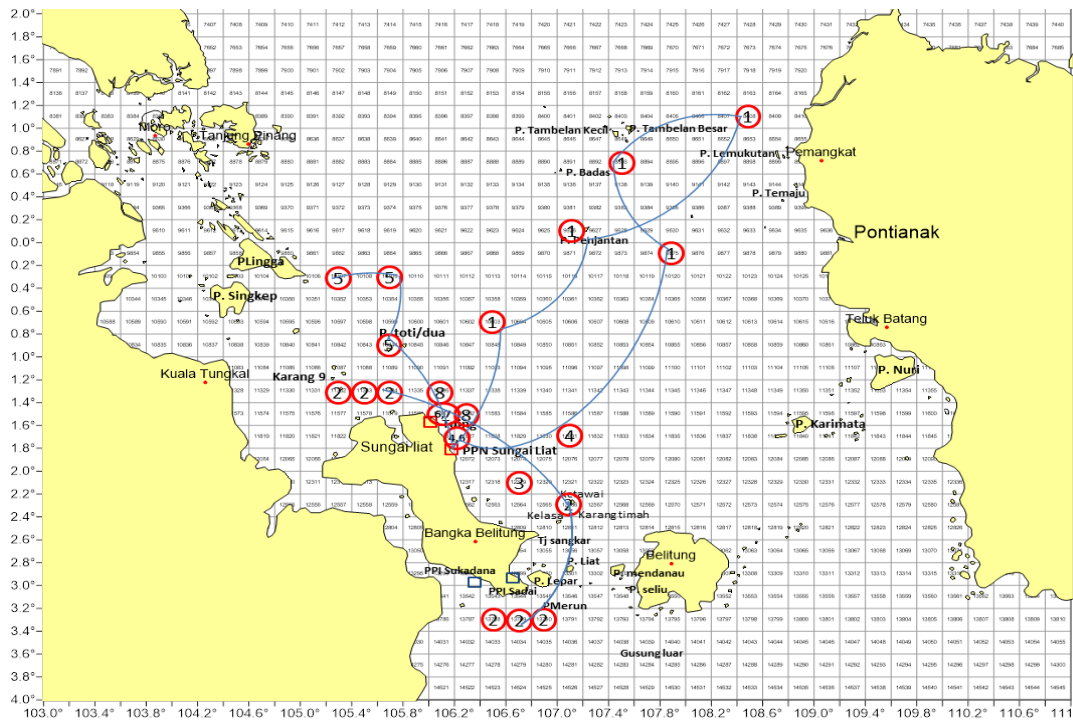


Figure 1. The fishing ground squid in Bangka Belitung

- 2.6.** Based on the observation, there were indication of juvenile squid exploitation by lift net in Bangka Belitung waters. This should be an important concern in management of fisheries refugia area.
- 2.7.** In 2018, the provincial government of Bangka Belitung has made efforts to manage squid resources by reserving the area of Tuing, Bangka Regency as a conservation area for the protection of squid spawning habitat. The coverage area that proposed for conservation area in 2018 was around 9.809,56 Ha. The study conducted through the Fisheries Refugia project in 2020-2021 was expected to encourage the establishment of the area as a protected area for the sustainability of squid fisheries in Bangka district. The results of the survey in 2020 have been submitted to the local government and they support the establishment of fisheries refugia for squid in Bangka, especially Tuing water.
- 2.8.** The spawning season for *U. chinensis* was predicted occurred in April, May, June, October, and November. This were based on the composition of mature female were caught during the study and information from the fishers.
- 2.9.** The results of the 2020 and 2021 studies for the determination of the fisheries refugia area must be discussed with the Directorate General of Marine Spatial Planning as the authorized agency in designation of the conservation area.

Annex 1. List of Participants

No.	Name of Participants	Gender	Institution
1.	Iswari Ratna Astuti	F	Research Institute for Fish Resource Enhancement-RIFRE
2.	Dr. Amula Nurfiarini	F	RIFRE
3.	Dr. Reny Puspasari	F	Center for Fisheries Research - CFR
4.	Dr. Khairul Amri	M	Center for Fisheries Research - CFR
5.	Dr. Rini	F	Center for Marine Research - CMR
6.	Dr. Didik Wahyu H	M	Research Institute for Fish Resource Enhancement-RIFRE
7.	Astri Suryandari	F	Research Institute for Fish Resource Enhancement-RIFRE
8.	Danu Wijaya	M	Research Institute for Fish Resource Enhancement-RIFRE
9.	Riswanto	M	Research Institute for Fish Resource Enhancement-RIFRE
10.	Dyah Ika Kusumaningtyas	F	Research Institute for Fish Resource Enhancement-RIFRE
11.	Aira Zatta I	F	Administration of the Fisheries Refugia Project
12.	Suwarso	M	Senior scientist

Annex 2. Documentation

