



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

REPORT

**STAKEHOLDER CONSULTATION MEETING
IN WEST KALIMANTAN**

**WEST KALIMANTAN, INDONESIA
22-27 SEPTEMBER 2021**

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INTRODUCTION:

The stakeholder consultation meeting for establishing fisheries refugia in West Kalimantan was organized by Research Institute for Fish resource Enhancement in Padang Tikar Village (Kubu Raya District), and Dusun Besar-Pulau Maya (Kayong Utara District), West Kalimantan on September 22- 24, 2021. The objectives of the meeting were (1) to gain information regarding fishing activities and fishing ground for shrimp especially banana (*Penaeus merguensis*) and white shrimp (*Penaeus indicus*) in Padang Tikar; (2) to identify key threats to shrimp stock and the critical habitat linkages in Padang Tikar area; (3) to identify key threats to fisheries refugia site; (4) to draft maps of fisheries refugia boundary in West Kalimantan.

1. COORDINATION AND CONSULTATION MEETING WITH THE MARINE AND FISHERIES AGENCY OF WEST KALIMANTAN PROVINCE

1.1 Location and date: Fisheries Agency of West Kalimantan September 22nd, 2021

1.2 Opening meeting

- Mrs. Krisna Tandererung, Secretary of The Marine dan Fishery Agency of West Kalimantan welcomed the team fisheries refugia from the Center of Research Fisheries (CRF) and Research Institute for Fish Resource Enhancement (RIFRE)
- Mrs. Iswari Ratna Astuti, The Head of the Research Institute for Fish Resource Enhancement and also the National Focal Point of Indonesia Fisheries Refugia Project thanked Mrs. Krisna in particular to the Head of Fishery Agency of West Kalimantan for taking time for a meeting. She informed the purposes of the meeting and briefly informed about the activities of the fisheries refugia project that will be implemented in West Kalimantan.
- Mr. Ngurah N Wiadnyana, the National Scientific and Technical Fisheries Refugia Focal Point, and also the senior scientist of Fisheries Research Center explained the concept of fisheries refugia as part of fisheries management for sustainable fisheries.

1.3 Meeting notes

- The Marine dan Fishery Agency of West Kalimantan welcomed and will support the project implementation. They will provide the required important data and participate in the process of establishing fisheries refugia in West Kalimantan.
- The research team from RIFRE and FRC will be conducted the site-based survey for data collection regarding the critical habitat of shrimp, the status of the shrimp stock, diversity of fishing gears, and profile of fishermen in Padang Tikar (Kubu Raya District) and Pulau Maya (Kayong District), West Kalimantan, started on October 11th, 2021.
- The provincial government has the authority to manage marine resources as far as 12 miles from the coastline, and there are 4 miles is under the local or district government

These authorities include (a) exploration, exploitation, conservation, and marine resources management within the authority water area, (b) administrative management, (c) zone management, (d) law enforcement of local regulation or central government regulations that are deconcentrated to local government.

1.4. Meeting participants

No.	Name	Organization
1.	Ms.Krisna Tandererung	Marine and Fisheries Agency of West Kalimantan Province
2.	Mr. Gandhi	Marine and Fisheries Agency of West Kalimantan Province
3.	Ms. Iswari Ratna Astuti	Research Institute for Fish Resource Enhancement (RIFRE)
4.	Mr. Ngurah Wiadnyana	Center of Research Fisheries

5.	Mrs. Adriani Sri Nastiti	RIFRE
6.	Mr. Heri Purwanto	The Marine and Fisheries Agency of West Kalimantan
7.	Mrs. Astri Suryandari	RIFRE
8.	Mr. Arip Rahman	RIFRE
9.	Mr. Hendra Saefullah	RIFRE
10.	Mr. Arie	Tanjung Pura University
11.	Mr. Reza	Pontianak Polytechnic
12.	Mrs. Aira Zatta Isma	Administration staff of Indonesia Fisheries Refugia Project

1.4 Documentations:



2. COORDINATION AND CONSULTATION MEETING WITH THE FISHERIES AGENCY OF KUBU RAYA DISTRICT

2.1 Location and date: Fisheries Agency of Kubu Raya District September 23, 2021

2.2 Meeting Notes

- The head of the Fisheries Agency of Kubu Raya District welcome and will support fisheries refugia project activities including research and collection data program.
- Small scale fisheries are the dominant fisheries activities in the Kubu Raya
- The zoning plan for fisheries management and conservation are developed based on research and will be managed with the community-based approach
- The periodic study required to assess the population dynamic and stock of the fish and shrimp in Kubu Raya District, particularly in Padang Tikar.
- The fisheries refugia, as the new concept in fisheries management, is expected to be friendly accepted and implemented by the fishermen in the Padang Tikar-Kubu Raya District.

2.3. Meeting participants

No.	Name	Organization
1.	Mr.Hefmi Riza	Fisheries Agency of Kubu Raya District
2.	Mr. Fahmiyuzar	Fisheries Agency of Kubu Raya District
3.	Ms. Iswari Ratna Astuti	Research Institute for Fish Resource Enhancement (RIFRE)
4.	Mr. Ngurah Wiadnyana	Center of Research Fisheries

5.	Mrs. Adriani Sri Nastiti	RIFRE
6.	Mr. Heri Purwanto	The Marine and Fisheries Agency of West Kalimantan
7.	Mrs. Astri Suryandari	RIFRE
8.	Mr. Arip Rahman	RIFRE
9.	Mr. Hendra Saefullah	RIFRE
10.	Mrs. Aira Zatta Isma	Administration staff of Indonesia Fisheries Refugia Project

2.4 Documentation:



3. STAKEHOLDER CONSULTATION IN PADANG TIKAR VILLAGE, KUBU RAYA DISTRICT

3.1 Location and date: Padang Tikar village, September 24th, 2021

- Mrs. Iswari Ratna Astuti, The Head of the Research Institute for Fish Resource Enhancement and also the National Focal Point of Indonesia Fisheries Refugia Project, welcomed all participants and expressed her gratitude for the participants' willingness to attend the meeting. She explained the purposes of the meeting and highlighted the fisheries management for sustainable fisheries.
- Mr. Ngurah N Wiadnyana, the National Scientific and Technical Fisheries Refugia Focal Point, and also the senior scientist of the Center for Research Fisheries, express thanks to all participants taking their opportunity to join that meeting. He conveyed the importance of fisheries management including fish stock and critical habitat linkage management for fisheries sustainability. He also informed the participants about the concept of fisheries refugia which is the integrated fish stock and critical habitat management for fisheries sustainability.
- Mrs. Adriani Sri Nastiti, the senior scientist who has researched the critical habitat of the shrimp in West Kalimantan, informed the participant that Padang Tikar coastal area is a potential nursery ground for penaeid shrimp. She highlighted the essential of mangrove ecosystems as nursery areas for shrimp and efforts that should be done to preserve the mangrove ecosystem.
- Mr. Fahmiyuzar from the Fisheries Agency of Kubu Raya District, express thanks to the participants and also the team of fisheries refugia. He informed the participants briefly about

the fisheries activities, dominant fishing gear operated in Padang Tikar, shrimp species caught by the fishermen, and the group of fishermen in Padang Tikar.

- Mr. Hendra Saefullah from RIFRE distribute a questionnaire to fishermen and guided them to fill it out. The questionnaire is one of the tools used to collect data and information on fishermen regarding the types and fishing gear used by fishermen, the type and composition of fisherman catches, the dominant type of shrimp caught, shrimp fishing areas, as well as several other questions related to shrimp catching activities in Padang Tikar

3.2 Meeting Notes

- The participants of the meeting consist of the officer from the Fisheries Agency of Kubu Raya District, fishermen from Padang Tikar District, and the research team of fisheries refugia from RIFRE and CFR.
- Most of the population in Padang Tikar is fishermen of small-scale fisheries, and the catches are dominantly by shrimp, which are *Penaeus spp* and *Metapenaeus spp*.
- The banana shrimp(*Penaeus merguensis*) is the dominant species caught by the fishermen in Padang Tikar
- The fishing ground of shrimp was identified 4 miles from the coast of Padang Tikar. The fishermen use trammel nets and stow nets for catching shrimp, and most of the fishermen use the boat with an engine power below 10 GT.
- The peak season of shrimp catches is around Mei - June, and September-October, while in December to January, the fishermen are not able to go fishing due to high waves and strong wind,



3.3 List of Participants

No.	Name	Organization
1.	Ms. Iswari Ratna Astuti	Research Institute for Fish Resource Enhancement (RIFRE)
2.	Mr. Ngurah Wiadnyana	Center of Research Fisheries
3.	Mrs. Adriani Sri Nastiti	RIFRE
6.	Mr. Fahmiyuzar	Fisheries Agency of Kubu Raya District
7.	Mrs. Astri Suryandari	RIFRE
8.	Mr. Arip Rahman	RIFRE
9.	Mr. Hendra Saefullah	RIFRE

10.	Mrs. Aira	Administration staff of Indonesia Fisheries Refugia Project
11.	Mr. Aryadi	Trammel net Fisher
12.	Mr. Salikkin	Trammel net Fisher
13.	Mr. Didin Bahari	Trammel net fisher
14.	Mr. Asrori	Trammel net fisher
15.	Mr. Beni	Stow net fisher
16.	Mr. Sunarto	Stow net fisher
17.	Mr. Darman	Stow net fisher
18.	Mr. Lie Ju Kia	Stow net fisher
19.	Mr. Andi	Stow net fisher
20.	Mr. Salise	Trammel net fisher
21.	Mr. Suhaji	Trammel net fisher
22.	Mr. Aseng	Trammel net fisher
23.	Mr. Aryanto	Stow net fisher
24.	Mr. Ariyasa	Fisheries Agency of Kubu Raya District
25.	M. Kusnadi	Fisheries Agency of Kubu Raya District

4. VISITING SHRIMP COLLECTOR IN DUSUN BESAR-PULAU MAYA (KAYONG DISTRICT)

The visit to the shrimp collector was carried out to gain information about the catch composition, the dominant species of shrimp caught by fishermen, the fishing gears used to catch the shrimp, and the daily production of shrimp that go to collectors.

4.1 Notes:

- The fishing gears operated in Dusun Besar consist of trammel nets, stow nets, and mini trawl.
- The composition of the catch consists of *Metapenaeus* shrimp, *Penaeus merguensis*, *Penaeus indicus*, and other pelagic fishes.
- The fishing ground of penaeid shrimp is identified along the coast with a maximum depth reach 10 m.
- The fishers go fishing in the morning until afternoon and they use the 20 PS (power speed) engine boat.
- The mature female of penaeid shrimps was caught by the trammel net with an average carapace length of 43 mm.

4.2. Documentation

