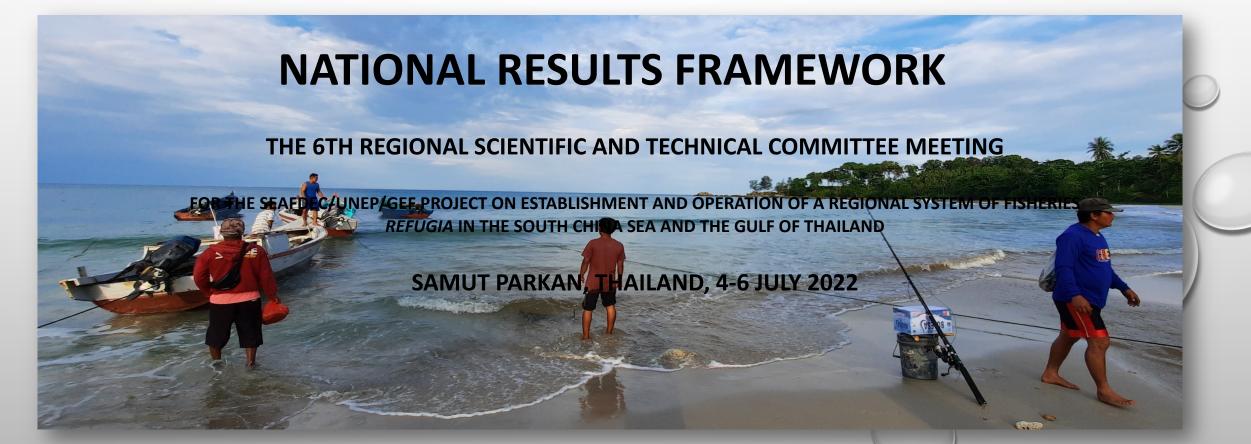






### **INDONESIA**

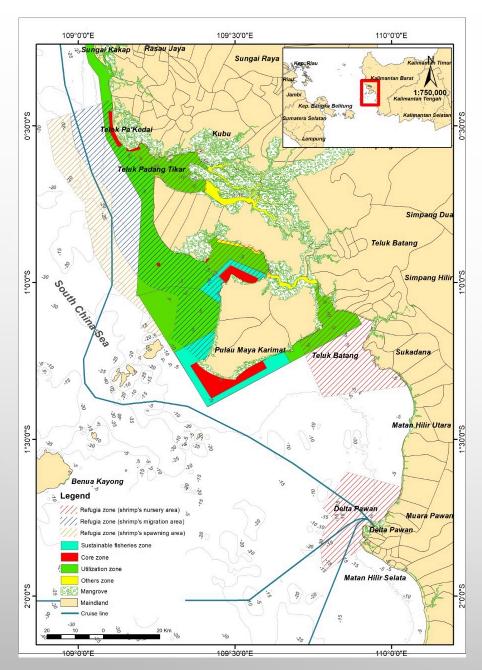


Objective/ Targets	Outcomes	Results	Code	Expected Outputs	Indonesia (2 Sites)
1) Effective management of key threats to 14 fisheries refugia sites [269,500 ha], including ~50 percent reduction in fishing pressure	Reduced stress on fish stocks and coastal habitats via improved national management of key	It is expected that by end of 2022, the effective management of		Fisheries refugia profile reports, including GIS maps & site characterisations, published	West Kalimantan& Bangka Belitung (completed)
	and critical habitat linkages	14 fisheries refugia about 660,236 ha, including effective management measures on reducing >50% fishing presusure that impact to refugia identified by stakeholders.	A02	Published management plans (Link to B02)	On process to be approved by Directorate General , Government Province
within sites at times critical to the life-cycles of fished species of transboundary significance			A03	Quarterly/Annual Technical reports of network meetings and activities (Number of reports)	39

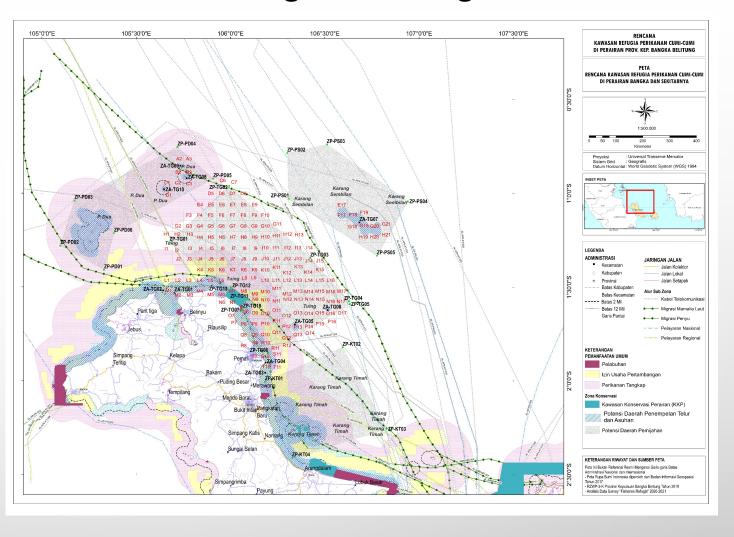
### A01. Fisheries Refugia Profile

Name/Location/Province	Target Species	Estimated Refugia size (Hectares	Marine Habitat Linkage
Kubu Raya (Padang Tikar), Ketapang (Delta Pawan) and North Kayong (Dusun Besar)/West Kalimantan	Penaeid shrimp ( <i>Penaeus</i> merguiensis)	414,807 ha	Mangrove
Bangka Regency/Tuing Village	Squid ( <i>Uroteuthis chinensis</i> )	468,828.32	Coral reef, sea grass

### **West Kalimantan Province**



### **Bangka Belitung Province**



# OBJECTIVE :1) EFFECTIVE MANAGEMENT OF KEY THREATS TO 14 FISHERIES REFUGIA SITES [269,500 HA], INCLUDING ~50 PERCENT REDUCTION IN FISHING PRESSURE WITHIN SITES AT TIMES CRITICAL TO THE LIFE-CYCLES OF FISHED SPECIES OF TRANSBOUNDARY SIGNIFICANCE

#### A02. PUBLISHED MANAGEMENT PLANS

#### On Process To Be Approved By Directorate General & Government Province

The fisheries refugia team under the Agency Of Research And Human Resources is responsible until the stage of producing policy paper which contain recommendation for developing fisheries refugia management plan. Furthermore, this policy paper will be basis for develop a management plan especially for shrimp and squid in FMA 711. The related agency in this stage will be as follow:

- ☐ Directorate General Of Marine Spatial Planning (Directorate Of Marine Spatial Planning) Related To The Use Of Marine Space For Particular Purposes.
- ☐ Directorate General Of Capture Fisheries (Directorate Fish Resource Management) Related To The Management Of Fish Resources And Regulation Of Fishing.
- ☐ The Government Of West Kalimantan Province & Bangka Belitung Province As The Authority For The Management Of Areas And The Management Of Fish Resources Under The Authority Of The Local Government.

Objective/ Targets	Outcomes	Results	Code	Expected Outputs	Indonesia (2 Sites)
legal and planning frameworks for	capacity in the 6 achieved, three of six countries completed, while the other three	BO1	Published national reviews and recommendations for reforms of national regulations/ordinances	on progress ; target : published during the third quarter	
resulting in, inter alia, a 20 percent increase in small-scale fishing vessels using fishing gear and practices designed to safeguard fish stock and critical habitat linkages at priority sites		BO2	Endorsed revised policies, Strategic Managment Plan, Fisheries Master Plan	On proces; Regulation of the Minister of Marine Affairs and Fisheries of the Republic of Indonesia No. 59 of 2020, concerning fishing lanes and fishing gear	
		fishing gears, but covering the medium and large scale fishing vessels that are >50% prohibited	воз	Published national guidelines on establishing and operating fisheries refugia	On proccess
	knowledge for planning		BO4	National reports on policy, legal and institutional aspects of refugia establishment and management published	On process to develop draft regulation

DEMARCATING BOUNDARIES AND MANAGING FISHERIES REFUGIA, RESULTING IN,
INTER ALIA, A 20 PERCENT INCREASE IN SMALL-SCALE FISHING VESSELS USING
FISHING GEAR AND PRACTICES DESIGNED

- B01. Published national reviews and recommendations for reforms of national regulations/ordinances.
- ☐ The national review and recommendations for reform of national regulations/regulations are still in progress and will be published during the third quarter of 2022.
- B02. Endorsed revised policies, strategic management plan, fisheries master plan,
- ☐ Revision of management regulations and policies at the national level (revised regulation of FMA 711)
- Recommendation for the revision of regional regulations regarding the zoning plan for coastal areas and small islands in both West Kalimantan and Bangka Belitung province
- The Quota-based Fishing Policy. Currently, Indonesia has formulated the Draft Regulation of The Quota Based Fishing Policy, which divide the FMA into some zones (commercial/industries fishing zones, local fishers, non commercial, and spawning and nursering zones). This policy is inline Fisheries Refugia concept that helps the rehabilitation of aquatic resources and critical habitat in certain area, in this stage we initiate to implement in FMA 711 for Squid and Shrimp. We are finalizing the draft of regulation regarding the quota-based fishing policy and we do hope will be endorsed within this year. Once it is endorsed, the policy will be applied in all Indonesia FMA. In this matter, the is Fisheries refugia concept in might be adopted in all Indonesian FMA. Each FMA will be managed be the FMA Management Institutions that has been stipulated in 2021.

# B03. Published National Guidelines On Establishing And Operating Fisheries Refugia

The preparation of a National guideline on establishing and operating fisheries refugia has been carried out and is in the process of being approved by an authorized institution at the directorate general level.

## B04. National reports on policy, legal and institutional aspects of refugia establishment and management.

After developing a policy brief the next stage is to develop the draft of the regulation. In the stages, the multi-stakeholder discussion will required longer to compile the substances/material regarding fisheries refugia establishment management into legal text.

### National Guidelines of Fisheries Refugia Outlines

#### THE OUTLINES **FOREWORD HEAD OF THE AGENCY CHAPTER 1. INTRODUCTION** A. Background **B. Purpose and Purpose** C. Scope D. General understanding **CHAPTER 2 CAPTURE FISHERIES IN INDONESIA** Status of fish resources Status of marine space fish resources Fish resource habitat **Socio-Economic Condition Governance and Institutions CHAPTER 3. FISHERIES REFUGIA Definition of Fisheries Refugia** Differences between Fisheries Refugia and Marine Protected Area Fisheries Refugia in fisheries management **CHAPTER 4. DEVELOPMENT STAGES OF FISHERIES REFUGIA** Formation of the team Determination of targeted species **Ecological studies of targeted species** Identification of potential fisheries refugia area The suitability of the Fisheries Refugia area recommendation with the zoning plan and spatial plan Preparation of Fisheries Refugia Management Plan (FRMP) and Institutional strengthening Agreement with stakeholders: coordination and consultation with stakeholders Implementation of Fisheries Refugia Management Monitoring and evaluation CHAPTER 5. CASE STUDY OF FISHERIES REFUGIA IN PROV. KALBAR AND BABEL **CHAPTER 6. CLOSING**

Objective :2) National and regional policy, legal and planning frameworks for demarcating boundaries and managing fisheries refugia, resulting in, inter alia, a 20 percent increase in small-scale fishing vessels using fishing gear and practices designed

B05. Endorsed policy and executive orders, provincial/local ordinances, and by-laws (proclamation, provincial orders for each site).

As reflected in point A02, the process of endorsing policy and regulation in national, as well as provincial and local level will require longer process and steps. However, the fisheries refugia team has completed policy paper as basis to develop national, and local/provincial policies and regulations.

B06. Endorsed national action plan for the management of priority fisheries refugia and associated biodiversity.

The national action plan is a part of the fisheries refugia management plan itself. As reflected also in point A02, the process of endorsing policy and regulation in national, as well as provincial and local level will require longer process and steps. Once the FR management plan is endorsed, subsequently the national action plan will be endorsed as well.

### B07. Databases online and populated with datasets included fish stock

We have already identified the basis data containing ecology, biology, eco-soc, from the FR research. In this stage, we still need more time to analyze and conduct data processing until its ready to be uploaded to the website.

Objective/ Targets	Outcomes	Results	Code	Expected Outputs	Indonesia
					(2 Sites)
boundaries and managing fisheries refugia, resulting in, inter alia, a 20 percent increase in small-scale fishing vessels using fishing gear and practices designed to safeguard	6 participating countries for the designation and operational management of fisheries refugia via the transformation of enabling	framwork are being achieved, three of six countries completed, while the other three	BO5	Endorsed policy and executive orders, provincial/local ordinances and by-laws (proclamation, Provincial Orders for each site)	
		scale fishing vessels that are >50% prohibited to operate in the refugia areas. The demercating boundaries refugia site are identified with the critical habitat linkages to ensure that the refugia designed to safeguard fish stock and critical habitat linkages. The Regional Action Plan for mannagement of fisheries	ВО6	Endorsed National Action Plan for the management of priority fisheries refugia and associated biodiversity	
		refugia was adopted by six participatinng countries and scale-up covering the Southeast Asian Regiona under the ASEAN policy framework.	B07	Databases online and populated with datasets included fish stock	

		D 11	6 1	Expected	Indonesia
Objective/ Targets	Outcomes	Results	Code	Outputs	(2 Sites)
2) National and regional policy, legal and planning frameworks for demarcating boundaries and managing	Increased institutional capacity in the 6 participating	National policy, legal and plannning framwork are being achieved, three of six countries completed, while	B08	Endorsed Regional Action Plan for fisheries refugia	cooperated
fisheries refugia, resulting in, inter alia, a 20 percent increase in small-scale fishing vessels using fishing gear and practices designed to	_	the other three are in process for adoption by government. The effective management of fisheries a refugia are not focused of only increasing of small-scale fishing vessels that hemust use to the best practices fishing gears, but covering the medium and large scale fishing vessels that are >50% prohibited to operate in the refugia areas. The demercating boundaries refugia site are identified with the critical habitat linkages to ensure that the refugia designed to safeguard fish stock and critical habitat linkages. The Regional Action Plan for mannagement of fisheries	ВО9	National and Regional Geographical Information System online	Being developed
itical habitat linkages at enabling riority sites environments and to generation of knowledge for	enabling environments and the generation of		B1O	Characterisations for 14 refugia sites accessible online	The data has been completed and on the process to be published online ( during third qurter)
	pidining		B11	Modelling system online	
	bo id ho the sa cri Th		B12	Best practice fishing methods and practices to address key threats to fish stock and critical habitat linkages	there is already an environmentally friendly fishing method regulated in a ministerial regulation.

OB	rective, rangers	Outcomes	1.030113	Code	Expected Outputs	(2 Sites)
systems manage	tional and regional for knowledge ement and sharing, g the development	knowledge management and	Six countries are in process for enhancing the national systems for	C01	Best practice approaches and measures for integrated fisheries and habitat management	being prepared for publised
standar guide tl scaling-	rator sets and rdized statistics to he replication, output and eaming of good	good practice in integrating fisheries	knowleadge management and sharing. Five Refugia Information Centres have been	C02	Public awareness and Outreach programmes including tracking of extent of community acceptance	
fisherie	es in the use of s refugia as a planning tool	biodiversity conservation in the design and	established in Malaysia and Philippines. Three	C03	Education and awareness centre on fisheries and criticle habitat established	Being prepared
	implementation of fisheries and environmental management systems including Marine Spatial Planning	national webportal are onlined, while other countries, underways. The Regional website and Repository	C04	Regional agreement/guidelines on indicators for managed refugia (including standardized data collection)		
			system are developed linking to the SEAFDEC network system. Regional Guidelines on Indicators is drafted for adoption by Project Steering Committee.	C05	Online national web portals on fisheries refugia	Created/onlined

Ohi	octivo / Targots	Outcomes	Results	Code	Expected Outputs	Indonesia
Obl	ective/ Targets	Outcomes	Results	Code	Expecied Outputs	(2 Sites)
intergove and joint	ernmental communication decision-making,	and regional level	cooperation and coordination for	D01	NFRC Terms of Reference and reports	Need updated
knowled ecologica	ge-base in planning	fisheries and environmental management	integrated fish stock and I critical habitat management in the South China Sea and Gulf of	D02	NSTC Terms of Reference and reports	Need updated
manager	nom denom	Thailand		D03	Management Board Terms of Reference and Reports	Need updated

# Dokumentasi/Foto2

























