



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

REPORT

THE NATIONAL FISHERIES REFUGIA COMMITTEE MEETING

PUTRAJAYA, MALAYSIA 22 SEPTEMBER 2020

Prepared by **DEPARTMENT OF FISHERIES MALAYSIA**

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER

TRAINING DEPARTMENT







Southeast Asian Fisheries Development Center

United Nations Environment

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I. OPENING OF THE MEETING

- 1. The National Fisheries Refugia Committee Meetings for the SEAFDEC/UNEP/GEF Project on Establishment and Operation of a Regional System of Fisheries Refugia in the South China Sea and the Gulf of Thailand was held on 22nd September 2020. The list of participants is in ANNEX 1.
- 2. Mr. Raja Bidin bin Raja Hassan, the Deputy Director of Fisheries Malaysia (Development) welcomed and thanked all the members of the meeting who were attended physically and virtually.
- 3. The Chairman informed that the purpose of the meeting are as follows:
 - i. To take a note on the progress of the implementation of Fisheries Refugia Project in Malaysia at 2 sites namely Tanjung Leman and Kuala Baram.
 - ii. To discuss the way forward and intervention measures for a consolidated study; and
 - iii. To endorse the Quarterly Work Plan for First Quarter (Q1), Second (Q2), Third (Q3) and Fourth (Q4) of year 2020.
- 4. Mr. Hj. Mohd Sufian bin Sulaiman, the Senior Director of Marine Park and Resource Management Division also expressed his gratitude to the members of meeting. He informed the project implementation and expenditure of the GEF allocation will be carried out according to the schedule. Besides that, he mentioned that each finding by the researchers should be presented and discussed together for improvement as needed.

II. MEETING BACKGROUND AND INTRODUCTION

- 5. Madam Shamila binti Zainol, performed as a secretariat of the meeting has introduced the background and meeting objectives to the Committee.
- 6. She informed the project has been started since 2017 and is scheduled to be end as of 31st December 2020. However, all participating countries has agreed for an extension of time until 2021 in the Second Project Steering Committee Meeting which was held on 4th and 5th November 2020 in Miri, Malaysia. In addition, all countries also agreed to extend until 2022 by taking into account the Covid-19 pandemic that hits globally during the Ad-hoc meeting organized by Project Coordinating Unit in June 2020. In this regard, the approval for time extension till 2022 from UNEP is still pending.
- 7. Overall, the research progress at both sites have achieved more than 70% as of 22nd September 2020. The progress status has been presented in the National Scientific and Technical Committee (NSTC) Meeting which was held on the first week of September of 2020. Recommendations and comments for improvement have been highlighted further actions by the researchers. Simultaneously, the NSTC has agreed to complete the research by end of December 2020.

III. PROJECT PROGRESS REPORT

A. THE STUDY OF LOBSTER REFUGIA TANJUNG LEMAN, JOHOR

- 8. The meeting was informed that the data collection of lobster landing has been completed and site monitoring session will be implemented in October 2002 to verify the location that has been identified as a lobster spawning area.
- 9. The meeting has agreed to conduct the relevant proposed improvements at both sites as suggested by the appointed panels. The recommendations are as per listed in the **ANNEX 2**

B. STUDY OF TIGER SHRIMP REFUGIA IN KUALA BARAM, SARAWAK

- 10. The meeting was informed that the research will be completed in November 2020.
- 11. The meeting agreed with the proposed improvements for the Tiger Shrimp Refugia Study in Kuala Baram, Sarawak considering the following recommendations by the appointed panels. The recommendations are as per listed in the **ANNEX 2**

C. PROJECT IMPACT STUDY

- 12. Reference to the Project Impact Study on Pre -Establishment of Lobster Refugia Area on Socio-economic of Fishermen in South Pahang-East Johor 2018-2019, the meeting agreed with the proposed improvements for the Pre-Project Impact Study of Establishment of Reef Refugia Area on Socio-economic of Fishermen in South Pahang-East Johor 2018-2019 as suggested by the appointed panels refer **ANNEX 3.**
- 13. Reference to the Project Impact Study on Pre-Establishment of Tiger Shrimp Refugia Area on Socio-Economic of Fishermen in Kuala Baram, Miri, Sarawak 2020, the meeting agreed with the proposed improvements for the Pre-Project Impact Study on the Establishment of Tiger Shrimp Refugia Area on Socio-Economic of Fishermen in Kuala Baram, Miri, Sarawak 2020 as suggested by the appointed panels refer **ANNEX 3.**

IV. EXPENDITURES REPORT

14. As of 9th Sept 2020, the Department of Fisheries Malaysia has received an allocation of RM520,151.73 (USD125,646.58) since 2018. Based on the updated record of expenditure as per the same date; recorded a cumulative expenditure of RM343,615.83 (USD83,003.36). This makes unspent balance at SEADFEC / MFRDMD is RM 176,535.90 (USD 42,638.22) and will be used for Q4/2020. Currency exchange rate is equivalent to 1 USD to MYR = 4.14157 as of 14 Sept 2020.

V. ENDORSEMENT 2020 WORKPLAN BY QUARTER

- 15. The meeting endorsed the quarterly Costed Workplan for Q1-Q4/2020 and requested the secretariat send it to the PCU refer **Annex 4.**
- 16. Adjournment of the Meeting, The Chairman conveyed thanks and adjourned the meeting at 4:30pm

Annex 1: List of Participants

	NAME	Remarks	
1.	YM Raja Bidin bin Raja Hassan	Department of Fisheries, Putrajaya	Chairman
2	Mr. Hj. Mohd Sufian bin Sulaiman	Department of Fisheries, Putrajaya	
3	Commander (M) Yousry bin Yaali	Malaysian Maritime Enforcement Agency	
4	Mr. Haron bin Mahidi	Sarawak Economic Planning Unit	
5	Mr. Zakaria bin Ali	Terengganu Malaysian Fisheries	
		Development Authority	
6	Mr. Sallehudin bin Jamon	FRI Kg. Acheh, Lumut,Perak	
7	Mdm. Shamila binti Zainol	Department of Fisheries, Putrajaya	
8	Mr. Abdullah bin Jaafar	Pahang State Fiheries Office	
9	Mdm. Noraishah binti Hashim	Director, Johor State Fisheries Office	
10			
11	Mdm. Aishah binti Hj. Yusoff	Department of Fisheries, Putrajaya	
12	Mr. Mohd Nizam bin Ismail	Department of Fisheries, Putrajaya	
13	Mdm. Vaani a/p Muniandy	Department of Fisheries, Putrajaya	
14	Mdm. Halina binti Hashim	Pahang State Fisheries Office	
15	Mr. Mohd. Ridzuwan bin Rahim	Southeast Asian Marine Resources Institute (ISMAT)	
16	Dr. Alias bin Man	Program Advisory Panel (Refugia Specialist)	
17	Lt. Col (M) Salih bin Samsudin	Malaysian Maritime Enforcement Agency	
18	Mr. Haron B. Mahidi	Sarawak State Economic Planning Unit	Visually present
19	Mdm. Noor Hasmayana binti Yahaya	Department of Fisheries, Putrajaya	
20	Mr. Azlan bin Md Nor	Department of Fisheries, Putrajaya	
21	Mdm. Norhanida binti Daud	FRI Batu Maung, Pulau Pinang	
		bsent with Apology	
22	Representative of the Policy and Stra		
23	Representative of the Plant, Livesto MAFI	ock and Fisheries Industry Division (ITTP),	
24	·	orestry Management Division, KETSA	
25	Representative of the Policy and Stra		
26	Representative of the Department o		
27	Representative of Sarawak State Eco		
28	Representative of Johor State Econo		
29	Representative of Resource Protection		
30	Representative of FRI Bintawa, Sarav	vak	
31	Deputy Legal Adviser, DoF	m Donartment of Eigheries Dutreious	
32	Mdm. Nurashiqin binti Sallih Udin	m Department of Fisheries, Putrajaya	
33	Ms. Nor Amnah binti Taib		
34	Mdm. Asma binti Mat Soh		
35	En. Muhammad Syahid bin Baharudo	din	

	NAME	Organization/Institutions	Remarks
1.	Mr. Sallehudin bin Jamon	Director, FRI Kg. Acheh, Perak	as
			Chairperson
2	Mr. Jamil bin Musel	FRI Bintawa, Sarawak	
3	Mdm. Shamila binti Zainol	Department of Fisheries	
4	Mdm. Liza binti Hj. Long	Sarawak Marine Fisheries Department	
5	Mr. Azlan bin Md Nor	Department of Fisheries	
6	Mdm. Norhanida binti Daud	FRI Batu Maung, Penang	
7	Mdm. Aishah binti Hj. Yusoff	Department of Fisheries	
8	Mdm. Nurridan binti Abdul Han	FRI Bintawa,Sarawak	
9	Mr. Ryon Siow	FRI Kg. Acheh,Perak	
10	Mr. Mohd Nizam bin Ismail	Department of Fisheries	
11	Mdm. Halina binti Hashim	Pahang State Fisheries Office	
12	Mr. Buniamin bin Kiprawi	Sarawak Marine Fisheries Department	Online
13	Mdm. Vaani Muniandy	Department of Fisheries	
14	Mdm. Nurashiqin binti Salih Udin	Department of Fisheries	
15	Ms. Bahrinah binti Bahrim	Johor State Fisheries Office	
16	Mr. Mohd. Ridzuwan bin Rahim	Southeast Asian Marine Resources Institute	
		(ISMAT), Terengganu	
17	Ms.Nor Amnah binti Taib	Department of Fisheries	
18	Mdm. Harwati binti Rukari	Department of Fisheries	
19	Ms. Anis binti Mohd Ariffin	Miri District Fisheries Office, Sarawak	Online
20	Mr. Hj. Hadil bin Rajali	Panel Pakar Refugia	
21	Dr. Mabel Manjaji Matsumoto	Senior Lecturer, University of Malaysia Sabah	Online
22	Dr. Audrey Daning Tuzan	Senior Lecturer, University of Malaysia	Online
		Sabah	
23	Dr. Annita Yong Seok Kian	Senior Lecturer, University of Malaysia	
		Sabah	
SE	ECRETARIAT		
24	Ms. Nur Hidayah binti Asgnari	Research Officer, FRI Kg. Acheh, Perak	
25	Mdm. Effarina binti Mohd Faizal	FRI Kg. Acheh,Perak	
	Abdullah		
26	Ms. Noorul Azliana binti Jamaludin	FRI Kg. Acheh,Perak	

Annex 2: Recommendations for Study at Both Sites

Study of Lobster Refugia Tanjung Leman, Johor

- Mark the proposed refugia area with coordinates (latitude and longitude) up to the coast and register
 in the map to ensure accurate marking of the area as well as the actual position in the ocean to
 determine the location of lobster during migration and breeding season (critical time). In addition, the
 area to be covered includes the migration corridor, breeding area as well as the juvenile phase of
 Puerulus and the closing period should be seen and scrutinized to ensure the effectiveness of the
 refugia.
- Take serious note and emphasize the enforcement aspect in the proposed area of refugee establishment.
- Identify other species found in refugia areas to reduce the impact and avoid conflicts with fishermen.
- Identify appropriate programs to support the livelihood of fishermen during the closed season implementation.
- Convert the quantity of berried female landings to the percentage of berried female landings.
- Complete lobster study data including the use of various fishing equipment for sample collection, monthly weight information until the end of 2020 and migration route data by Local Ecological Knowledge to support scientific data to aid accurate analysis. The lobster population in Pahang waters needs to be reviewed as there is data on lobsters using the islands as a refuge before going to the breeding area to facilitate the preparation and implementation of management plans.
- Identify the existing biomass of lobsters. This biomass will also be used in monitoring aspects to measure the effectiveness of refugia implementation.
- Collaborate with stakeholders such as working with fishermen for lobster tagging (tagging process is carried out from the juvenile stage).
- Identify biological information of lobster at each stage of growth.

Study of Tiger Shrimp Refugia in Kuala Baram, Sarawak

- Obtain the current tiger shrimp biomass index, for the purpose of measuring the effectiveness of the refugia to be developed.
- Obtain complete GSI data, landing data and proposed season / breeding period and improve the
 presentation by displaying all data collected during the monthly sampling period for each year because
 the data shown is found to be insufficient to be analyzed especially for low total number of parents.
- It is recommended that all the findings of the study be displayed to help policy makers to make the right decision regarding the establishment of tiger shrimp refugia.

Annex 3: Proposed Improvements on Project Impacts Study

Project Impact Study on Pre -Establishment of Lobster Refugia Area on Socio-economic of Fishermen in South Pahang-East Johor 2018-2019,

- Enhance consultation with stakeholders and target respondents especially fishermen according to the type of nets and fishing equipment that may be affected if refugia is created.
- Activate the Community-based management Site Committee for the implementation of the capacity increase and public awareness program the establishment of this refugia.
- Marking of lobster areas especially in the state of Pahang
- Poster placements announcing the establishment of refugia in the proposed area.
- Identify incentives and provide subsidies especially to fishermen during the closed season if refugia is introduced.

Project Impact Study on Pre-Establishment of Tiger Shrimp Refugia Area on Socio-Economic of Fishermen in Kuala Baram, Miri, Sarawak 2020

- Obtain data on tiger prawns of other species namely *Penaeus Semisulcatus* and the need to obtain data on tiger prawn catch in a season to measure the level of economic impact on fishermen.
- Conduct three-layer drift / shrimp trawler monthly survey through observer on board method to acquire more accurate data.
- The latest data shows a low tiger prawn population in the study area. There is a need to obtain data on the initial status of tiger prawns to observe the trend of tiger prawn population in the study area whether it is declining or increasing.
- Make amendments to the questionnaire to make it more open. This is because the input from this questionnaire will be used by policy makers in making the right decisions regarding the selection of refugia sites as well as the best management of the area.

ANNEX 4_ Q1-2020

			1	ı	Inputs/	1	
Key Result Area	Related Target	Planned Activities(s)	Anticipated Deliverable/ Timeline	Status	Support Required	Agreed Follow-up	Action/ Person in charge
				Component 1			
Component 1. Identification and management of fisheries and critical habitat linkages at 3 priority fisheries refugia		Conduct resource surveys at refugia site *In March trip, trip was conducted from 12 to 19 March 2020 due to Movement Control Order)	1 survey reports Tiger prawns –biological info such as Length Weight, juvenile and life cycle	Need to conduct tiger prawn resource sampling at K. Baram site.	<u>K. Baram:</u> <u>Travel Claim RM2,050</u> TOTAL: RM2,050 (USD 487.92)		Ms. Nurridan Abdul Han
and data collection programmes for (1) Tg. Leman, Johor		Daily collection of lobster and tiger prawns landing data from selected sites: Site 1: Sedili Site 2: Tanjung Leman Site 3: Endau	Lobster landing trend and basic biological information (species, length, weight, egg presence) Need to select and hire field workers (4 persons) R TI (1)		Tj. Leman: Enumarator: RM6,635 TOTAL: RM6,635 (USD 1579,71)		Mr. Ryon Siow
			1	Component 2	•		
	2.5.2 Compile information and data derived from surveys on size-frequency of priority species	Compilation of literature and past reports	2 reports compilation	Need to identify past survey report and literature		Use national fund	Ms. Vaani Muniandy
2.5 Enhancing access to information relating to status and trends in fish stocks and their habitats in Malaysia waters of the SCS	2.5.3 Compile information and data on landings of priority species (volume/value, fishing areas and gears)	Incorporate in 2.5.2					
	2.5.5 Revise national report on fish stocks and habitats in Malaysia waters of the South China	1 meeting	1 meeting report	Need to determine suitable date		Use national fund	Ms. Vaani Muniandy
3.2.1 Produce locally appropriate public awareness and outreach materials to promote local social, economic and environmental benefits of fisheries refugia		Wiring at Refugia Information Centre			Ti. Leman; Wiring RM3,754.80 TOTAL: RM3,754.80 (USD 894.00)		PPN Johor
		Component 4					
4.2 Harnessing national scientific and technical expertise and knowledge to inform policy, legal and institutional reforms for fisheries refugia	4.2.2 Provision of technical and scientific inputs to planning of activities in components 1, 2 and 3	1 NSTC Meeting Incorporate in 4.2.1 RSTC Meeting in Cambodia	Meeting report including participant list	NSTC Meeting on January 2020 RSTC Meeting on February 2020	F&B for NSTC Meeting: RM300 (USD 71.43) Travel claim RSTC for Mr. Jamil RM3,888.70 (USD925.87) TOTAL: RM4,188.70 (USD 997.31)		Ms. Vaani Muniandy
4.3 Catalyzing local community action via establishment and operation of site-based management boards at 2 priority refugia sites	4.3.3 Preparation of quarterly work plans and progress and financial reports on activities at each site	1 meeting	quarterly work plans and progress and financial reports	Meeting on workplan (February 2020)	TOTAL: RM 1000 (USD 238.10)		Ms. Vaani Muniandy
Turining and Councils Development				1			
Training and Capacity Development							
Planned Attendance at Workshops/ Meetings							
TOTAL (USD 84,197.26)							

Annex 4: Q2-2020

Key Result Area	Related Target	Planned Activities(s)	Anticipated Deliverable/ Timeline	Status	Inputs/ Support	Agreed Follow-up	Action/ Person in charge
				Component 1			
Component 1. Identification and management of fisheries and critical habitat linkages at 3 priority fisheries refugia	1.1.4 Design and conduct fisheries	Conduct resource surveys at refugia site Site 2: Kuala Baram	1 survey report	Need to conduct tiger prawn resource sampling at K. Baram	K. Baram: *1USD=4.2MYR		Ms. Nurridan Abdul Han
	surveys at the 2 sites and submit data to a national online database	Daily collection of lobster and tiger prawns landing data from selected sites: Site 1: Sedili Site 2: Tanjung Leman Site 3: Endau Site 4: Kuala Baram	1 survey report	- No activity has been conducted during Q2 2020 due to MCO. All the activities/ research was ended at Q1 2020.			Mr. Ryon Siow
1.2 Facilitating agreement among stakeholders on the boundaries of fisheries refugia at the (1) Tg. Leman,	1.2.2 Prepare maps for 2 refugia and elicit fisherfolk input to boundary delineation through consultation	- Draft Map on K.Baram Site.	1 map	Need to draft 1 map	-		Ms. Nurridan Abdul Han & JPL Sarawak
Johor and (2) Kuala Baram, Sarawak sites	Conduct assessment of environmental and social impacts of designation of sites as refugia	Conduct socio-economic survey at refugia Site 2: Kuala Baram	1 survey report	Need to conduct socio economic study	K. Baram -	Use national fund -RM50,000	Ms. Norhanida Daud
	0.500			Component 2	ı — — — — — — — — — — — — — — — — — — —	_	
Component 2. Improving the management of critical habitats for fish stocks of transboundary significance via national actions to strengthen the enabling environment and knowledge-base for fisheries refugia management in Malaysia	2.5.2 Compile information and data derived from surveys on size-frequency of priority species	Incorporate in 2.5.1					Ms. Vaani Muniandy
2.5 Enhancing access to information relating to status and trends in fish stocks and their habitats in Malaysia waters of the SCS	2.5.3 Compile information and data on landings of priority species (volume/value, fishing areas and gears)	Incorporate in 2.5.1					Ms. Vaani Muniandy
		Component 4					
	4.1.2 Establish and convene quarterly meetings of the National Fisheries Refugia Committee (NFRC)	1 Meeting	Meeting report including participant list	No Meeting of the NFRC has been conducted during Q2 2020 due to MCO.	-		Ms. Vaani Muniandy
Component 4. National coordination for integrated fish stock and critical habitat management in Malaysia	4.1.3 NFRC review and endorsement of quarterly work plans and progress and financial reports, including tracking of continuity of participation of stakeholders	Incorporate in 4.1.2					Ms. Vaani Muniandy
4.1 Strengthened cross-sectoral coordination in the establishment and operation of fisheries refugia in Malaysia	4.1.4 NFRC inputs to mid-term review and terminal evaluation of national and regional aspects of project						Ms. Vaani Muniandy
4.2 Harnessing national scientific and technical expertise and knowledge to inform policy, legal and institutional	4.2.1 Establish and convene 6 monthly meetings of the National Technical Working Group	1 Meeting	Meeting report including participant list	No Meeting of the NFRC has been conducted during Q2 2020 due to MCO.			Ms. Vaani Muniandy
reforms for fisheries refugia	4.2.2 Provision of technical and scientific inputs to planning of activities in components 1, 2 and 3	Incorporate in 4.2.1	-	-	-		Ms. Vaani Muniandy
4.3 Catalyzing local community action via establishment	4.3.2 Establish and convene quarterly meetings of site-based management boards	3 meetings Site 1: Tj. Leman (2 meetings) Site 2: K. Baram (1 meeting)	3 meeting report	- No activity has been conducted during Q2 2020 due to MCO.			HQ, PPN Johor, PPN Pahang & JPL Sarawak
detailed to the second section of the second section sect	4.3.3 Preparation of quarterly work plans and progress and financial reports on activities at each site	Appointment of a Project Manager	quarterly work plans and progress and financial reports	Project manager is not possible to appoint due to the rules listed by BKP. Planning forward to appoint Consultant.			Ms. Vaani Muniandy
Training and Capacity Development	1		1	1			
Training and dapacity Development							
Planned Attendance at Workshops/ Meetings							
	то	DTAL	•	•		•	

Annex 4: Q3-2020

Key Result Area	Related Target	Planned Activities(s)	Anticipated Deliverable/ Timeline Status		Inputs/ Support Required	Agreed Follow-up	Action/ Person in charge		
Component 1. Identification and management of fisheries and critical habitat linkages at 3 priority fisheries refugla in Malaysia 1.1 Developing fisheries and coastal habitat information and data collection programmes for (1) Tg. Leman, Johor	1.1.4 Design and conduct fisheries surveys	Conduct resource surveys at refugia site Site 2: Kuala Baram *Due to MCO, the research activites will be brought forward from July until October 2020	1 survey reports	Need to conduct tiger prawn resource sampling at K. Baram site.	Enumarator: RM2000/month X 1 month: RM2,000 TOTAL: RM28,000 (USD 6,666.67)		Ms. Nurridan Abdul Han		
		Component 4			*1USD=4.2MYR				
Component 4. National coordination for integrated fist stock and critical habitat management in Malaysia 4.2 Harnessing national scientific and technical expertise and knowledge to inform policy, legal and institutional reforms for fisheries refugia	4.2.2 Provision of technical and scientific	Incorporate in 4.2.1 Meeting NSTC National Scientific & Technical Working Group	1 meeting report	Conducted on 2-3 September 2020 in Melaka	Meeting Package: RM17,000 (USD 4,047.62)		HQ & FRI Kg. Acheh		
4.3 Catalyzing local community action via establishment and operation of site-based management boards at 2 priority refugia sites	4.3.3 Preparation of quarterly work plans and progress and financial reports on activities at each site	Appointment of a Project Manager		Project manager is not possible to appoint due to the rules listed by BKP. Planning forward to appoint Consultant 2021 onwards.			НQ		
Training and Capacity Development									
Training and Capacity Development									
Planned Attendance at Workshops/ Meetings									
TOTAL RM45,000 (USD 10,714.29)									

Annex 4: Q4-2020

Key Result Area	Related Target	Planned Activities(s)	Anticipated Deliverable/ Timeline	Status	Inputs/ Support Required	Agreed Follow-up	Action/ Person in charge
Component 1. Identification and management of fisheries and critical habitat linkages at 3 priority fisheries refugia in Malaysia	1.1.4 Design and conduct fisheries surveys at the 2 sites and submit data to a national crime database.	Conduct resource surveys at refugia site Site 2: Kual a Baram	1 survey reports	Component Need to conduct tiger prawn resource sampling at K. Baram site.	K. Baram: Tri:: RM10,000/morth: X.2 morth: RM20,000.00 (urfil November 2020) Errumarator: RM2000/morth: X.3 morth: RM6,000 (urfil December 2020)		Ms. Nurridan Abdul Han
1.1 Developing fisheries and coastal habitat information and data collection programmes for (1) Tg. Leman, Johor					TOTAL: RM26,000 (USD 6,257.79) Marine experts/panels RM 10,000.00 (USD 2,406.84)		
Facilitating agreement among stakeholders on the boundaries of fisheries refugia at the (1) Tg. Leman, Johor and (2) Kusla Baran, Sarawak sites	1.2.1 Conduct consultations (including at-sea) to draft maps of fisheries refugia for priority species	Conduct consultations at refugia site tentative date Nov-2020 Site 2 Kuala Baram			Consultations Package (KUALA BARAM RM25,000 (USD 6,016.89) Consultations Package TANJUNG LEMAN RM16,709.54 (USD 4,021.79) TOTAL RM 41,709.54 USD 10,039.02		HQ & JPL Sarawak
	1.2.2 Prepare maps for 2 refugia and elicit fisherfolk input to boundary delineation through	Incorporate 1.2.1 Site 2: Kuala Baram					Ms. Nurridan Abdul Han & JPL Sarawak
1.4 Establishing operational management for the (1) Tg. Leman, Johor and (2) Kuala Baram, Sarawak sites	1.4.2 Conduct practical capacity building programme for management volunteers at 2 sites	Incorporate in 1.3.2 Site 2 Kuala Baram			*Will be held 2021	Use national fund	HQ, , JPL Sarawak, FRI Bintawa
				Component	2		
2.6 Improving national-level management and sharing of information and data on fish early life history in	2.6.1 Prepare a national inventory of fish egg and larvae samples collected from Malaysia waters (both analysed and unanalysed)	sampling and field work				Use national fund	FRI Kg. Acheh & FR Bintawa
Malaysia waters of the SCS	2.6.2 Develop and maintain a national database of fish egg and larval fish distribution and abundance	data base					HQ, FRI Kg. Acheh & FRI Bintawa
2.8 Strengthening the information base for the	2.8.1 Based on 1.1.4, produce detailed site	1 meeting Site based committee	1 meeting report	K. Baram (End of Nov 2020)		Use national fund	HQ, JPL Sarawak, FRI Bintawa
planning, monitoring, and evaluation of management	characterizations for the 2 priority fisheries			Component	3		FRI Bintawa
Component 3: Information Management and Dissemination in support of national-level implementation of the fisheries refugia concept in Malaysia 3.2 Improving community acceptance of area based approaches to marine management	3.2.1 Produce locally appropriate public awareness and outreach materials to promote local social, economic and environmental benefits of fisheries refugia	Prepare Poster& pamplet			K. Baram: – Poster š. pampieš. upgrade gallery Refugia MilRI RM 20,000.00 USD 4,813.47		HQ, FRI Bintawa & JPL Sarawak
Nnowledge generated and experiences from establishing and operating fisheries refugia captured and shared nationally, regionally, and globally	3.3.1 Establish and operate national web portal for knowledge management on fisheries refugia	Website DOF				National fund	НQ
		Compo	nent 4				
Component 4. National coordination for integrated fish stock and critical habitat management in Malaysia	4.1.2 Establish and convene quarterly meetings of the National Fisheries Refugia Committee (NFRC)	1 Meeting NFRC	Meeting report including participant list		Meeting Package: RM10,000.00 (HQ) (USD 2,406.84)		HQ, Ms. Nurashiqin
4.1 Strengthened cross-sectoral coordination in the establishment and operation of fisheries refugia in Malaysia	4.1.3 NFRC review and endorsement of quarterly work plans and progress and financial reports, including tracking of continuity of participation of stakeholders	Incorporate in 4.1.2					на
	terminal evaluation of national and regional aspects of project	Translate reports and Meeting minutes			RM 2,500.00 (USD 601.72)		Ms. Nurashiqin
4.2 Harnessing national scientific and technical	4.2.1 Establish and convene quarterly (3 monthly) meetings of the National Technical Working Group	Meeting National Technical Working Group – Meeting preparation of the workplan	1 meeting report	Need to find suitable date on end of October/November 2020 in Perak for 2 days	Meeling Package: RM20,000 (FRIKA) (USD 4,832.67)		FRIKA,
expertise and knowledge to inform policy, legal and institutional reforms for fisheries refugia	4.2.2 Provision of technical and scientific inputs to planning of activities in components 1, 2 and 3	Meeting to revise the workplan before National Technical Working Group Meeting (4.2.1)	1 meeting report	Need to find suitable date on early October 2020 for 3 days	Few series Meeting Package: RM25,000 (HQ) (USD 6,016.95)		HQ, Ms. Nurashiqin
4.3 Catalyzing local community action via establishment and operation of site-based management boards at 2 priority refugia sites	4.3.2 Establish and convene quarterly meetings of site-based management boards 4.3.3 Preparation of quarterly work plans and	site-based management Comittee			Meeting package : RM6,000 (JPLS MIRI) (USD 1,444.07)		HQ, JPL Sarawak &FRI Bintawa
management boards at 2 priority relugia sites	4.3.3 Preparation of quarterly work plans and progress and financial reports on activities at	appointment of Project manager in 2021					ĺ
Total Inc. of Co. of Co.							
Training and Capacity Development							
Planned Attendance at Workshops/ Meetings							
	тоти	NL .				RM161,209.54 (USD 38,800.00)	