



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

**REPORT**

**PROVINCIAL STAKEHOLDER CONSULTATION MEETING REPORT FOR  
MARINE FISHERIES REFUGIA ESTABLISHMENT AND MANAGEMENT PLAN  
PREPARATION**

**PHNOM PENH, CAMBODIA  
8-9 SEPTEMBER 2022**

Prepared by  
**FISHERIES ADMINISTRATION  
CAMBODIA**

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**SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER  
TRAINING DEPARTMENT**



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## 1. Open a meeting

**1.1** The meeting of provincial stakeholder consultation for marine fisheries refugia establishment and management plan preparation was organized by Fisheries Administration (FiA) of Cambodia on 8-9 September 2022 at Pinic Resort, Preah Sihanouk province, funded by SEAFDEC/UNEP/GEF Fisheries *Refugia*. The meeting was attended by 15 participants from Fisheries Administration, Fisheries Administration Cantonment in coastal provinces, and non-government organization (see annex 1&5).

**1.2 Mr. Ouk Vibol** expressed thank very much for Mr. Chheng Phen, Deputy Director of FiA and Head of FiAC in Coast Area as well as representative of development partner organization (FACT and WEA, taking their opportunities to attend the meeting today. He informed that so far, Department of Fisheries Conservation prepared draft action plan for fisheries refugia establishment and management. The purpose of the meeting was to collect inputs from all participations to integrate this draft action plan.

**1.3 Mr. Chheng Phen** welcomed and thought Mr. Director of Department of Fisheries Conservation and the head of FiAC in coastal area as well as representative of development partners (FACT and WEA), taking their opportunity to join this meeting and then he declared to open the meeting from now.

## 2. Presentation of the Concept of Fisheries Refugia Establishment and Management

**2.1. Mr. Leng Syvann** presented about the concept of fisheries refugia establishment and management and his presentation focused on 1) fisheries refugia concept, 2) establishment process of fisheries refugia, 3) fisheries refugia management, and 4) next plan for fisheries refugia management.

**2.2** He informed the meeting that fisheries refugia should be no take zone, main home for the life cycle of fish with specific times, nursery, spawning, and migration of fish. Generally, the fisheries refugia spatially and geographically defined, marine or coastal area in which specific management measures are applied to sustain important fish species during critical stages of their life cycle, for their sustainable use.

**2.3** He added that the establishment process of fisheries refugia needs to spend much times and there are many stages of this process. The provincial level worked with technical aspect and the national level worked with legal aspect. The national level starts to prepare the proclamation as long as the provincial level approved the boundary of the refugia site completely.

**2.4.** Regarding the management measures, some measures are taken to ensure effectively fisheries refugia management such as practicing closing season, installing mooring buoys around the boundary of BSC FR, patrolling, cracking down illegal fishing, deploying concrete blocks into MFMA and refugia site, and disseminating.

## 3. Discussion on Identification of Suitable Sites and Species for Marine Fisheries Refugia Establishment

**3.1 Mr. Chheng Phen** opened a floor for discussion on the plan preparation for fisheries refugia establishment and requested participants to provide inputs on this point.

**3.2 Mr. Ouk Vibol** had an idea that now three fisheries refugia sites have been established already such as Kep for blue swimming crab, Koh Kong for short mackerel, and Preah Sihanouk for blood cockle provinces. He added that he requested the head of each FiAC to provide sites and species for fisheries refugia establishment in provinces because we don't have any idea related to

site and species proposed for fisheries refugia establishment. The piece of information was very important for us to integrate plan for fisheries refugia establishment and management.

**3.3 Mr. Sar Sarin** informed the meeting that Kampot province has planned to establish five fisheries refugia sites in the total area of 472ha with targeted species such as young mud crab, juvenile grouper, rabbit fish, and oyster.

**3.4 Mr. Kuch Vireak** informed the meeting that for Kep province, we have planned to establish a new site for blue swimming crab refugia in the size of 50ha.

**3.5 Mr. Seng Bunna** informed the meeting that Koh Kong province has planned to establish a new site for blood cockle refugia in the size of 200ha.

**3.6 Mr. Kim Ann** informed the meeting that for Preah Sihanouk provinces, we have planned to create four fisheries refugia sites in the total area of 810ha with targeted species such as shellfish, vinegar crab, and blood cockle.

**3.7 Mr. Ouk Vibol** replied that he noted and will integrate the piece of information into the national plan for fisheries refugia establishment.

**3.8** Proposal for marine fisheries refugia establishment in coastal area was shown in annex 3

#### **4. Discussion on Plan Prepare for Fisheries Refugia Establishment and Management**

**4.1 Mr. Ouk Vibol** requested all participants to consider and provide comments on plan preparation for fisheries refugia establishment and management, especially focusing on goal and objectives of the plan.

**4.2** The meeting agreed to develop the goal of the plan *“Establishment and Management of Fisheries Refugia do whatever to ensure sustainability and effectiveness through participating in all kinds of stakeholders at local, provincial and national level”*.

**4.3** The meeting agreed to develop three objectives to achieve the goal of the plan. These objectives are: *objective 1: fisheries refugia must be established at the coastal area, objective 2: fisheries refugia must be managed effectively, and objective 3: fisheries refugia management must be monitored and evaluated*

**4.4 Mr. Ouk Vibol** proposed the meeting to consider and provide inputs on the log frame of plan for fisheries refugia establishment and management.

**4.5** The meeting agreed to develop the log frame of the plan to be shown in annex 4

#### **5. Closure of a meeting**

**5.1 Mr. Chheng Phen** thanked very much to all participants again, participating in this meeting actively and to get fruitful results of this meeting. Then he declared to close the meeting at 5:10pm

**ANNEX 1: List of Participants Attending Provincial Consultation Meeting for Fisheries Refugia Establishment and Management Plan Preparation in Preah Sihanouk province on 07-08 September 2022**

No.	Name	Sex	Title	Organization	Telephone
1	Chheng Phen	M	Deputy Director	FIA	012919866
2	Ouk Vibol	M	Director	DFC/FiA	012908121
3	Leng Sy Vann	M	Deputy Director	DFC/FiA	017446373
4	Kim Ann	M	Vice Director of FiAC	FiAC/PDoA in Preah Sihanouk province	012868545
5	Kim Sokha	M	Head of Division	DFC/FiA	012784687
6	Leng Phalla	F	Marine Project Manager	WEA organization	092664154
7	Sar Sarin	M	Director of FiAC	FiAC/PDoA in Kampot province	012932909
8	Va Sotepy	F	Officer	DFC/FiA	085237616
9	Kao Monirith	M	Deputy Director	Marine Fisheries Administration Inspectorate/FiA	012583828
10	Seng Bunna	M	Vice Head	Koh Kong FiAC	016885709
11	Nou Gnuy	M	Head of Division	Koh Kong FiAC	016933192
12	Kuch Vireak	M	Director	FiAC/PDoA in Kep province	012875557
13	Chhork Sineath	M	Head of Division	FiAC/PDoA in Kep province	012828926
14	Ek Chamroeun	M	NFC	FACT organization	077458152
15	Vooun Seila	M	Vice Head	FiAC/PDoA in Kampot province	01267008

**ANNEX 2: Schedule for Provincial Consultation Meeting for Fisheries Refugia Establishment and Management Plan Preparation in Preah Sihanouk province on 07-08 September 2022**

Date/Time	Description	Responsible person
<b>06 September 2022</b>		
10:00am-3:00pm	Leaving Phnom Penh for Preah Sihanouk	<ul style="list-style-type: none"> <li>• Mr. Ouk Vibol</li> <li>• Mr. Leng Sy Vann</li> <li>• Mr. Va Sotepy</li> <li>• Mr. Kim Sokha</li> </ul>
<b>07 September 2022</b>		
8:30am- 9:00am	Registration	Ms. Va Sotepy Officer of DFC/FiA
9:00am- 9:15am	Opening a meeting	Mr. Ouk Vibol Director of Department of Fisheries Conservation
9:15am- 9:30am	Lunch break	All
9:30am- 10:30am	Presentation of concept of fisheries refugia and the establishment process and management of fisheries refugia	Mr. Leng Syvann Deputy Director of Department of Fisheries Conservation
10:30am- 12:00am	Discussion on setting potential sites and species for fisheries refugia establishment	All
12:00pm-2:00pm	Lunch break	All

2:00pm -5:00pm	Continue discussion	All
<b>08 September 2022</b>		
9:00am-12:00pm	Discussion on action plan prepare for fisheries refugia establishment and management	All
12:00pm-2:00pm	Lunch break	All
2:00pm-5:00pm	Discussion on action plan prepare for fisheries refugia establishment and management	All
5:00pm-5:10pm	Closing a meeting	Mr. Chheng Phen Deputy Director General of FiA
<b>09 September 2022</b>		
9:00am -1:30pm	Leaving Preah Sihanouk for Phnom Penh	All

**Annex 3: Proposal for Marine Fisheries Refugia Establishment in Coast Area**

No.	Name of Fisheries Refugia	Size (ha)	Location	Fisheries Resource Species	Habitat Types	Status
1	Blue Swimming Crab refugia	417	Koh Po Island, Kep province	Blue swimming crab	Seagrass	Approved on 12 April 2018
2	Short mackerel refugia	1283	Peam Krasob, Koh Kong province	Short mackerel	Mud	Approved on 16 September 2019
3	Blood cockle refugia	116	Prey Nob, Preah Sihanouk province	Blood cockle	Mud	Approved on 20 August 2020
4	Rabbit refugia	166	Prek Thnaot, Kampot province	Rabbit fish	Seagrass	FiAC proposal
5	Blood cockle refugia	200	Kampong thmor, Koh Kong province	Blood cockle	Mud	FiAC proposal
6	Shellfish refugia	500	KamPehn commune, Stung Hav, Preak Sihanouk province	Shellfish	Mud	FiAC proposal
7	Blood cockle refugia	200	Ou Chrao commune, Prey Nob district, Preah Sihanouk province	Blood cockle	Mud	FiAC proposal
8	Young mud crab refugia	20	Lo Lok Kresna, Kampot province	Young mud crab	Mud and seagrass	FiAC proposal
9	Young mud crab refugia	20	Prek Thnaot, Kampot province	Young mud crab	Mud and seagrass	FiAC proposal
10	Juvenile grouper	216	Tropaing Ropao, Kampot province	Juvenile grouper	Seagrass and mud	FiAC proposal
11	Oyster refugia	50	Koh Touch, Kampot province	Oyster	Rock and sand	FiAC proposal
12	Blue swimming crab refugia	50	Kep province	Blue swimming crab	Seagrass	FiAC proposal

13	Vinegar crab refugia	50	Bantay Brey, Andoung Thmor commune, Prey Nob district, Prek Sihanouk province	Vinegar crab	Mud and seagrass	FiAC proposal
14	Blood cockle refugia	60	Bekkrong village of Prey Nob commune, and Chhum Po Kmao village of Tual Torting commune, Prey Nob district, Preah Sihanouk province	Blood cockle	Mud	FiAC proposal

#### Annex 4: Action Plan for Marine Fisheries Refugia Establishment and Management in Coastal Area

Objectives	Action Plan	Time	Indicator	Responsible Institutions
<b>Objective 1: fisheries refugia must be established at the coastal area</b>				
1.1 Data and Information collection to identify prioritized sites for fisheries refugia establishment		2022-2023	One technical field report	DFC, PDoA, FiAC, and NGOs
1.2 Study the evaluation of biological condition of fisheries resources species targeting protection		2022-2023	One technical field report	DFC, PDoA, FiAC, and NGOs
1.3 study evaluation of fisheries habitat in fisheries refugia sites planning to establish		2022-2023	One technical field report	DFC, PDoA, FiAC, and NGOs
1.4 study evaluation of socio economic, fishing, management, and threats		2022-2023	One technical field report	DFC, PDoA, FiAC, and NGOs
1.5 Mapping fisheries refugia sites		2022-2023	8 maps	DFC, PDoA, FiAC, and NGOs
1.6 Meeting a discussion with relevant stakeholders to identify boundary and support fisheries refugia establishment		2023-2024	12 meeting Reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
1.7 Preparing draft proclamation on fisheries refugia establishment		2023-2024	5 draft proclamation	DFC, Provincial Administration, PDoA, FiAC, and NGOs
1.8 Consulting meeting on draft proclamation		2023-2024	8 meeting reports	DFC, FiAC, and NGOs
1.9 Proposing adoption on the proclamation of establishment of fisheries refugia by the Minister of Agriculture, Forestry, and Fisheries		2023-2024	5 proclamations adopted	DFC and FiA
<b>Objective 2: fisheries refugia must be managed effectively</b>				
2.1 Establish management teamwork		2024-2025	Two Technical working group, one in Kampot and another one in Preah Sihanouk provinces	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.2 Prepare management plan		2024-2025	2 management plan documents in coastal area	DFC, Provincial Administration, PDoA, FiAC, and NGOs

2.3 Strengthen law enforcement	2023-2028	180 patrolling reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.5 Installing mooring buoys at the boundary of fisheries refugia	2024-2025	50 buoys	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.6 Deploying concrete boxes into fisheries refugia site	2023-2028	500 concrete boxes	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.7 Seeking budgets for fisheries refugia operation and management	2023-2028	FiA and development partners budgets	DFC/FiA and NGOs
2.8 Study the evaluation of fisher's catching rate	2023-2028	25 technical reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.9 Study technology of fishing gears	2023-2028	25 technical reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.10 Study the evaluation of fishing vessel types	2023-2028	25 technical reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.11 Study impact evaluation of destructive fishing gears on fisheries resources	2023-2028	25 technical reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.12 Study evaluation of fisheries resources happening in fisheries refugia sites	2023-2028	25 technical reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.13 Study evaluation of fisheries habitat types taking place in fisheries refugia site	2023-2028	25 technical reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.14 Study evaluation of catching rate of each fish species in the fisheries refugia site	2023-2028	25 technical reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.15 Study biological condition of fisheries resources species by scientific manner	2023-2028	25 technical reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.16 Study water quality	2023-2028	50 water quality reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.17 Study impact on catching quantity causing from climate change	2023-2028	25 technical reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.18 Study impacts on habitat and environment causing from climate change	2023-2028	25 technical reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.19 Organizing the meeting of technical working group at provincial level	2023-2028	100 meeting reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.20 Organizing provincial management committee meeting	2023-2028	50 meeting reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.21 Disseminate and educate the importance of fisheries refugia or relevant regulation and legislation	2023-2028	50 meeting reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs



2.22 Developing community fisheries network to share information related to fishing offending thought social media	2023-2028	5 community networks	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.23 Share information and experiences of fisheries refugia management with neighbor countries	2023-2028	Three times for Vietnam and Three times in Thailand	DFC, Provincial Administration, PDoA, FiAC, and NGOs
2.24 Producing extension materials			DFC, Provincial Administration, PdoA, FiAC, and NGOs
2.25 Patrolling materials and equipment	2023-2028	50 ICOMs, 25 GPS, 10 Patrolling boats, 250 lifejackets, 10 Cameras	DFC/FiA and NGOs
<b>Objective 3: fisheries refugia management must be monitored and evaluated</b>			
3.1 Preparing annual action plan for fisheries refugia management	2023-2028	25 workplans	DFC, Provincial Administration, PDoA, FiAC, and NGOs
3.2 Preparing yearly progress reports	2023-2028	25 annual progress report	DFC, Provincial Administration, PDoA, FiAC, and NGOs
3.3 Study evaluation of fisheries refugia management	2023-2028	25 evaluation reports	DFC, Provincial Administration, PDoA, FiAC, and NGOs

**ANNEX 3: Participants' Photos attending Provincial Consultation Meeting for Fisheries Refugia Establishment and Management Plan Preparation in Preah Sihanouk province on 07-08 September 2022**



