



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

AGENDA 4

THE RESULTS FRAMEWORK

PCU

Objective/ Targets

- 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
- 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 to safeguard fish stock and critical habitat linkages at priority sites
- 3) National and regional systems for knowledge management and sharing, including the development of indicator sets and standardized statistics to guide the replication, scaling-up and mainstreaming of good practices in the use of fisheries refugia as a spatial planning tool
- 4) Effective multi-lateral and intergovernmental communication and joint decision-making, including the use of a consensual knowledge-base in planning ecologically and cost-effective management actions

COMPONENT 1

Identification and management of fisheries and critical habitat linkages at priority fisheries *refugia* in the South China Sea and Gulf of Thailand

EXPECTED OUTCOMES:

Reduced stress on fish stocks and coastal habitats via improved national management of key anthropogenic threats to fisheries and critical habitat linkages in the South China Sea and Gulf of Thailand. Specific stress reduction outcomes of component 1 include:

- **269,500 ha of fish *refugia* habitat** conserved and effectively managed at 14 priority sites
- **50% reduction in fishing pressure** within *refugia* at times critical to the life-cycles of fished species of transboundary significance

- ❖ Fisheries and critical habitat linkages at 14 priority sites in the South China Sea and Gulf of Thailand safeguarded via the delineation of fisheries *refugia* boundaries and the setting of priorities for *refugia* management.
- ❖ Amelioration of key threats to fish stock and critical habitat linkages via the adoption and implementation of community-based *refugia* **management plans** at 14 sites.
- ❖ Catalyzed community action for fisheries *refugia* management at 14 sites.
- ❖ Empowered fishing communities, particularly artisanal fishermen and women involved in inshore gleaning and processing, for enforcement of **agreed management rules** at 14 priority *refugia* sites in the South China Sea and Gulf of Thailand.
- ❖ Strengthened civil society and community organization participation in fisheries *refugia* management.

EXPECTED OUTCOMES:

- 269,500 ha of fish *refugia* habitat conserved and effectively managed at 14 priority sites

Present Status:

- Target: 15 Refugia
- 5 Refugia adopted (168,206 ha) as June 22
- 7 Refugia in Final steps (642,443 ha) waiting ?
- 3 Refugia ongoing ??

ACTIONS

Update the situation from 5 countries: CM, ID, MY, PH, VN

No. in map	Fisheries <i>refugia</i> Site	Target Species	Area (ha)	Status
1	Off Trat, Thailand	Indo-pacific mackerel	154,600	Approved
2	Peam Krasob, Koh Kong, Cambodia	Indo-pacific mackerel	1,283	Approved
3	Prek Sangke, Village, Tek Thlar Commune, Prey Nub District, Preah Sihanouk, Cambodia	Blood Cockle	116	Approved
4	Prek Thnaot, Kampot, Cambodia	Grouper	284	Final process
5	Marine Fisheries Management including Refugia at Koh Po & Koh <u>Tonsay</u> Archipelago, <u>Kep</u> , Cambodia	Blue swimming crab	11,307	Approved
6	Around Koh Sed, Surat Thani, Thailand	Blue swimming crab	900	Approved
7	Tanjung Leman, Johor, Malaysia	Spiny lobsters	140,023	Final process
8	West Kalimantan, Indonesia	Indian white shrimp	414,807	Final process
9	Off <u>Miri</u> , Sarawak, Malaysia	Tiger prawn	85,200	Final process
10	Off Coron Islands, Palawan, Philippines	Redbelly yellowtail fusilier	1,242	Final process
		White-tipped scad	-	Ongoing
		One-stripe fusilier	624	Final process
11	Masinloc coastal area, Zambales, Philippines	Frigate tuna	-	Ongoing
		Fringe scale sardine	-	Ongoing
12	Bolinao coastal area, Pangasinan, Philippines	Siganids	263	Final process
13	Bangka Belitung islands, Indonesia	Mitre squid	-	Ongoing
14	Bach Long Vi Island, Viet Nam	Spiny lobster	-	Ongoing
15	Con Dao Island, Viet Nam	Spiny lobster	-	Ongoing
TOTAL (ha)			810,649	

COMPONENT 1

EXPECTED OUTCOMES:

- 50% reduction in fishing pressure within refugia at times critical to the life-cycles of fished species of transboundary significance

HOW?/ NEEDS:

- Fishing vessels Data before and after the establishment
- Measures on the vessel prohibition /restriction
- Enforcement program
- Concerned stakeholders

ACTIONS

Brainstorming/
Suggestions from countries

CAMBODIA >>>

INDONESIA>>>

MALAYSIA >>>

PHILIPPINES >>>

Thailand >>>

VIET NAM >>>

COMPONENT 1

EXPECTED OUTCOMES:	CAM	ID	MY	PH	TH	VN	
❖ Fisheries and critical habitat linkages at 15 priority sites safeguarded via the delineation of fisheries <i>refugia</i> boundaries	3/4	0/2	0/2	0/3	2/2	0/2	
❖ Adoption & implementation of community-based <i>refugia</i> management plans at 15 sites.							
❖ Catalyzed community action for fisheries <i>refugia</i> management (Networking of Site Board)							
❖ Empowered fishing communities, particularly artisanal fishermen and women involved, for enforcement of agreed management rules							
❖ Strengthened civil society and community organization participation in fisheries <i>refugia</i> management. (GEF-SGP)	Reason why: ?						

COMPONENT 2

COMPONENT 2

Improving the management of critical habitats for fish stocks of transboundary significance via national and regional actions to strengthen the enabling environment and knowledge-base for fisheries refugia management

EXPECTED OUTCOMES:

Increased institutional capacity in the 6 participating countries for the designation and operational management of fisheries refugia via the transformation of enabling environments and the generation of knowledge for planning. Specific stress reduction outcomes of component 2 include:

- **20% increase in fishing vessels applying improved gear and techniques to safeguard fish stock and critical habitat linkages**

- ❖ Strengthened enabling environments for the **effective management of the effects of fishing** on fisheries and critical habitat linkages.
- ❖ Cross-sectorial agreement on **national guidelines** for the use of fisheries refugia for integrated fisheries and habitat management
- ❖ **Endorsed policy, legal,** and planning frameworks for the establishment and management of fisheries refugia
- ❖ Enhanced access to information relating to **status and trends in fish stocks** and their habitats (link to Dashboard)
- ❖ Improved national and regional-level management and sharing of information and data on fish early life history (**Online National and Regional websites**)
- ❖ Enhanced access to information relating to the locations and status of coastal habitats & refugia areas (**Google map**)
- ❖ Strengthened information base for the planning, monitoring and evaluation of management at priority sites
- ❖ Regionally and locally appropriate **best practices** generated to address the effects of trawl and motorised push net fishing on seagrass habitat, and the capture of juveniles, pre-recruits and fish in spawning condition

COMPONENT 2

EXPECTED OUTCOMES:

- 20% increase in fishing vessels applying improved gear and **techniques** to safeguard fish stock and critical habitat linkages

HOW?/ NEEDS:

- Measures on the gears prohibition /restriction
- Enforcement program
- Concerned stakeholders

ACTIONS

Brainstorming/
Suggestions from countries

CAMBODIA >>>

INDONESIA>>>

MALAYSIA >>>

PHILIPPINES >>>

Thailand >>>

VIET NAM >>>

COMPONENT 2

OUTPUTS	CAM	ID	MY	PH	TH	VN
❖ Policy reformed/ revised						
❖ National Guidelines on Use of FR						
❖ National Reports including endorsed Policy, Legal Reformed, executive orders/provincial orders, and National Action Plan						
❖ Stock Status of Priority Fish (National Statistic, Regional statistic Dashboard)						
❖ Online National Database (and Regional One)						
❖ GIS online for all refugia sites (Google earth)	Regional Program is ongoing					
❖ Fisheries and habitat data collection programs operational to established refugia						
❖ Best practice fishing methods and practices demonstrated at refugia site						

COMPONENT 3

COMPONENT 3

Information Management and Dissemination in support of national and regional-level implementation of the fisheries refugia concept

EXPECTED OUTCOMES:

Strengthened knowledge management and information sharing and access for enhanced uptake of good practice in integrating fisheries management and biodiversity conservation in the design and implementation of fisheries and environmental management systems, including Marine Spatial Planning

- ❖ **Enhanced uptake of best practices in integrating fisheries management and biodiversity conservation**, in the design and implementation of fisheries management systems
- ❖ **Improved community acceptance** of area-based approaches to fisheries and coastal environmental management
- ❖ **Knowledge generated** and experiences from establishing and operating fisheries *refugia*, captured and shared nationally, regionally, and globally.
- ❖ Information and Education Campaigns for small-scale fisherfolk on the links between fisheries, habitats and biodiversity coordinated regionally through a **National and Regional Education and Awareness Centre**
- ❖ **Standardised methods for collection and analysis of information and data**, for use in assessing the impacts of *refugia* and in the design **appropriate indicators** for the longer-term operation of the regional system of fisheries *refugia*

COMPONENT 3

OUTPUTS	CAM	ID	MY	PH	TH	VN
❖ 6 online national and 1 regional catalogue of best practice approaches and measures						
❖ Awareness materials published online (otherwise share to Reg. Website)						
❖ Online national web portals on fisheries <i>refugia</i>						
❖ 6 published GEF IW experience notes (Format enclosed)						
❖ Information and education materials accessible at SEAFDEC and online						
❖ 1 regionally endorsed report published online (RAP-Indopacific mackerel + Indicators)	Regional Program completed					

COMPONENT 4

COMPONENT 4

National and regional cooperation and coordination for integrated fish stock and critical habitat management

EXPECTED OUTCOMES:

Cost-effective and efficient coordination of national and regional level cooperation for integrated fisheries and environmental management

- ❖ Strengthened cross-sectorial coordination in the establishment and operation of fisheries refugia in the participating countries (**NFRC TORs**)
- ❖ National scientific and technical expertise and knowledge harnessed to inform policy, legal and institutional reforms for fisheries refugia management in the participating countries (**NTSC TORs**)
- ❖ Community-led planning of fisheries refugia management at priority locations (**STB TORs**)
- ❖ Regional cooperation in the integration of scientific knowledge and research outputs with management and policy making (**RSTC TORs**)
- ❖ Regional cooperation in the establishment and operation of a regional system of fisheries refugia (**PSC TORs**)
- ❖ Effective coordination of regional and national-level activities and reporting requirements of UNEP and GEF satisfied (**PCU TORs**)

COMPONENT 4

OUTPUTS	CAM	ID	MY	PH	TH	VN
❖ NFRC TORS ❖ List of Members						
❖ NTSC TORs ❖ List of Members						
❖ Site Management Board (TORs) ❖ List of Members						

REQUIRED ACTIONS FROM RSTC

- ❖ Sharing the Awareness Materials to PCU for Regional Website
- ❖ Develop the Experience Note (following the Template from GEF IW)
- ❖ Submit the TORs and List of Members of the NFRC, NTSC, and Site-based Management Board (in PDF format)