SDG 14.4
Restoring fisheries through refugia systems in the South China Sea and Gulf of Thailand
Disputed Islands (separate from UNCLOS)

China's maritime territorial claims are based on distance from claimed islands

UNCLOS 200 nautical Executive Economic Zone

The South China Sea and Gulf of Thailand
A global center of shallow water marine biological diversity

> 8,600 species of several taxonomic groups
> 3,300 fish species
> 45 species of Mangroves
> 700 species of Corals
> 20 species of Seagrass

In the waters of the Philippines. (Photo by Astrid M. Barros)
Supports significant fisheries that are important to the food security and livelihoods.

3.7M people are involved.

9.7M tons of fishes in 2015.
17% of the World Marine Capture Fisheries are:

1) INDONESIA, 6.03MT
2) Viet Nam, 2.61MT
3) Philippines, 1.95MT
4) Thailand, 1.50MT
5) Malaysia, 1.49MT
6) Myanmar, 1.09MT
I: Illegal
U: Unreported
U: Unregulated

A KEY THREAT TO MARINE ECOSYSTEM

1) Illegal Fishing Activities within Country
2) Poaching in Other Country’s EEZ
3) Illegal Trading of Live Reef Food Fish, Ornamentals, and EAS
4) Landing of IUU Fishing in High Seas & RFMO Areas

References: WWF
What's happened in the SCS & GOT
ASEAN-SEAFDEC DECLARATION ON COMBATING IUU FISHING

SAP FOR THE SCS
Fisheries refugia: a novel approach to integrating fisheries and habitat management in the context of small-scale fishing pressure

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ABSTRACT

Fisheries of the South China Sea, including the Gulf of Thailand, are characterised by high levels of small-scale fishing effort. Increasing fishing pressure, coupled with continued decline in the expanse and quality of coastal habitats critical to the life-cycles of most species, has raised serious concerns regarding the long-term sustainability of Southeast Asian fisheries. This paper reviews the development of a UNEP/GEF South China Sea Project initiative to address the regional need to improve the integration of fisheries and habitat management.

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Box 3. Definition of fisheries refugia

“Spatially and geographically defined, marine or coastal areas in which specific management measures are applied to sustain important species [fisheries resources] during critical stages of their life cycle, for their sustainable use.”

Thus, fisheries refugia should:

- not be simply ‘no take zones’;
- have the objective of sustainable use for the benefit of present and future generations;
- provide for some areas within refugia to be closed due to their critical importance [essential contribution] to the life cycle of a species or group of species;
- focus on areas of critical importance in the life cycle of fished species, including spawning and nursery grounds, or areas of habitat required for the maintenance of brood stock;
- have different characteristics according to their purposes and the species or species groups for which they are established and within which different management measures will apply; and
- have management plans.

Management measures that may be applied within fisheries refugia may be drawn from the following [non-exhaustive] list of classical fisheries management actions:

- exclusion of a fishing method (e.g. light luring, purse seine fishing);
- restricted gears (e.g. mesh size);
- prohibited gears (e.g. push nets, demersal trawls);
- vessel size/engine capacity;
- seasonal closures during critical periods of fish life cycles;
- seasonal restrictions (e.g. use of specific gear that may trap larvae); and
- limited access and use of rights-based approaches in small-scale fisheries.
A REGIONAL SYSTEM OF FISHERIES REFUGIA

Transboundary species
✓ migration pattern ?
✓ Identified refugia ?
WORKING MECHANISM TO ESTABLISH FISHERIES REFUGIA

**National Structures**
- National Fisheries Refugia Committee
- National Scientific & Technical Committee
  - Management Board Busuanga, Palawan
  - Management Board Bolinao, Pangasinan
  - Management Board Masinloc, Zambales

**Regional Structures**
- Project Steering Committee
- Regional Scientific & Technical Committee

**Stakeholders Cooperation**
- Environment Agency Habitats

**Fisheries Agency Fish Stock**
PROCESS OF ESTABLISHMENT THE FISHERIES REFUGIA
GOOD PRACTICES ON FISHERIERS REFUGIA of CHUB MACKEREL IN THAILAND
A Regional System of Fisheries *Refugia*

Focus on fish life-cycle and critical habitat linkages
Healthy Ecosystems Support Sustainable Fisheries
THANK YOU