



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

REPORT

CONSULTATION MEETING FOR PROJECT IMPLEMENTATION

**BANGKOK, THAILAND
13 NOVEMBER 2018**

Prepared by
**DEPARTMENT OF FISHERIES
THAILAND**

**SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
TRAINING DEPARTMENT**



**Southeast Asian Fisheries
Development Center**



**United Nations
Environment**



**Global Environment
Facility**

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REPORT OF THE MEETING

I. INTRODUCTION

- 1) The meeting for consultation on the implementation of the Project entitled “Establishment and Operation of a Regional System of Fisheries Refugia in the South China Sea and Gulf of Thailand” was held at the Marine Fisheries Research and Development Division, Department of Fisheries (DOF) on 13rd November 2018. It was aimed to prepare technical information for the forthcoming National Scientific and Technical Committee Meeting. The meeting was chaired by Ms. Praulai Nootmorn, Senior Expert in Marine Fisheries, Department of Fisheries as the Thailand’s National Focal Point, and participated by technical resource persons from the areas of Trat and Surat Thani Provinces including DOF Project Staff, names of which are listed in **Annex 1**.
- 2) Results of the meeting including priority species and Fisheries Refugia sites in Trat and Surat Thani Provinces are as follows:

II. PRIORITY SPECIES AND FISHERIES REFUGIA SITE IN TRAT PROVINCE

A) Priority Species

- 3) The meeting agreed to propose Indo-Pacific mackerel as the priority species in Trat Province due to its economic importance in Thailand. In addition, it is the trans-boundary species of Thai-Cambodian waters. Recent supporting technical information of Indo-Pacific mackerel including their size, maturity, larvae and juvenile distribution, stomach contents, and DNA were available.
- 4) Distributions of sizes, maturities, and larvae of Indo-Pacific mackerel in Trat Province during the year 2017-2018 were presented by Mr. Kumpon Loychuen, Director of the Eastern Gulf Fisheries Research and Development Center (Rayong), as shown in **Annex 2 and 3**. From the study, mature Indo-Pacific mackerel and their larvae were found abundant in the waters off Trat Province during January-April. Fishing gears in the area were mainly commercial purse seine, anchovy purse seine, anchovy falling net, and Indo-Pacific mackerel gill net.

B) Fisheries Refugia Site

- 5) It was concluded that Fisheries Refugia site was to be the area in which larvae and mature fish existed. The area was estimated at 5,809.82 km² with its boarder shown in figure 1.

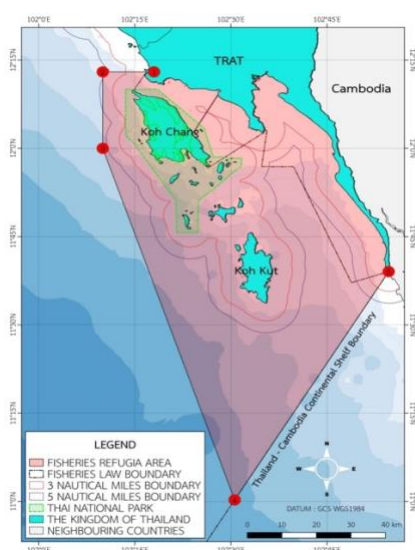


Figure 1 Proposed Fisheries Refugia site in Trat Province (for discussion).

1. 12°13'0"N 102°18'0"E
2. 12°13'0"N 102°10'0"E
3. 12°00'0"N 102°10'0"E
4. 11°0'15.7"N 102°30'35.36"E
5. 11°39'3.38"N 102°54'38.18"E

III. PRIORITY SPECIES AND FISHERIES REFUGIA SITE IN SURAT THANI PROVINCE

A) Priority Species

- 6) The meeting agreed to propose blue swimming crab to be the priority species in Surat Thani Province due to its economic importance and needs of fishermen in the area. Moreover, blue swimming crab had been included in the Fishery Improvement Program (FIP) in Ao Ban Don, Surat Thani Province, resulted in the availability of its recent technical information. Fisheries Refugia for blue swimming crab in Surat Thani Province would be integrated with the FIP to make the most advantage for ecosystem, fisheries, and fishermen in the area. It was hoped to be the best practice of fisheries management in the country.
- 7) Coastal ecosystem and activities of FIP in Surat Thani Province, including life cycle of blue swimming crab were prepared by Assist. Prof. Dr. Amonsak Sawusdee, Head of Resources and Environment Department, Walailak University, some of which are shown in **Annex 4**.

B) Fisheries Refugia Site

- 8) The meeting concluded that project site should be the whole coastal area of Surat Thani Province, in which Koh Samui and Koh Pha Ngan are included. Project site covered the area of 4,957.99 km² with its boarder shown in the figure 2.

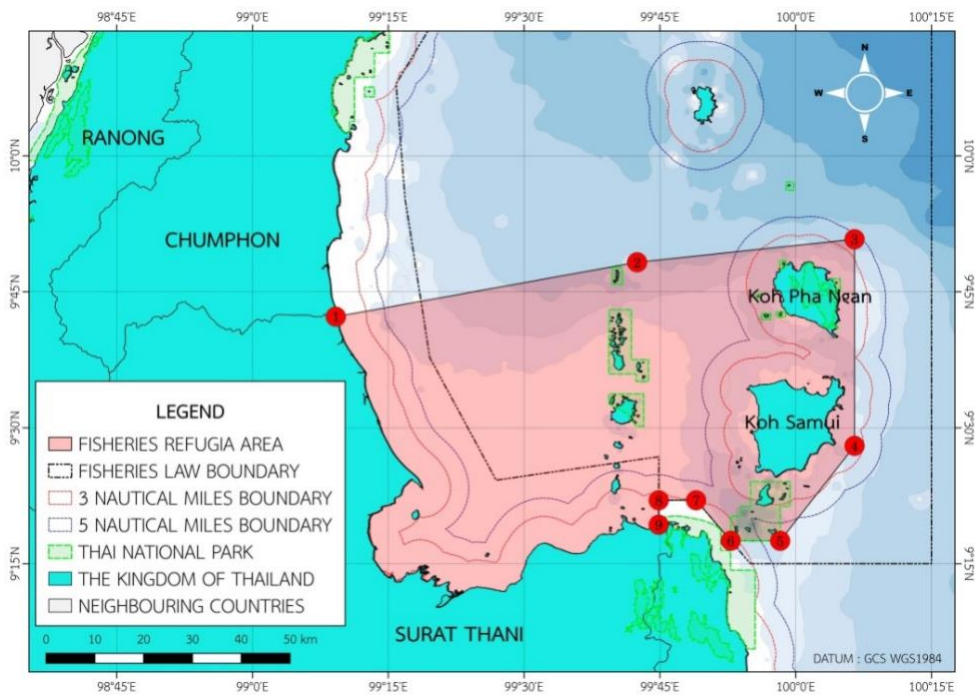


Figure 2 Proposed Fisheries Refugia site in Surat Thani Province (for discussion):

1	9°42'15"N 99°09'12"E	6	9°17'32.09"N 99°52'49.19"E
2	9°48'15.35"N 99°42'28.98"E	7	9°22'0"N 99°49'0"E
3	9°50'48"N 100°6'30"E	8	9°22'0"N 99°44'52"E
4	9°28'0"N 100°6'30"E	9	9°19'18"N 99°44'52"E
5	9°17'31.58"N 99°58'16.96"E		

IV. TECHNICAL INFORMATION NEEDS

- 9) Data of the chlorophyll along the coastal area of Trat Province was to be prepared by Mr. Kumpon Loychuen, Director of the Eastern Gulf Fisheries Research and Development Center (Rayong).
- 10) Data of the current along the coastal area of Trat Province would be obtained from GISTDA, coordinated by Ms. Prulai Nootmorn, Senior Expert in Marine Fisheries, Department of Fisheries.

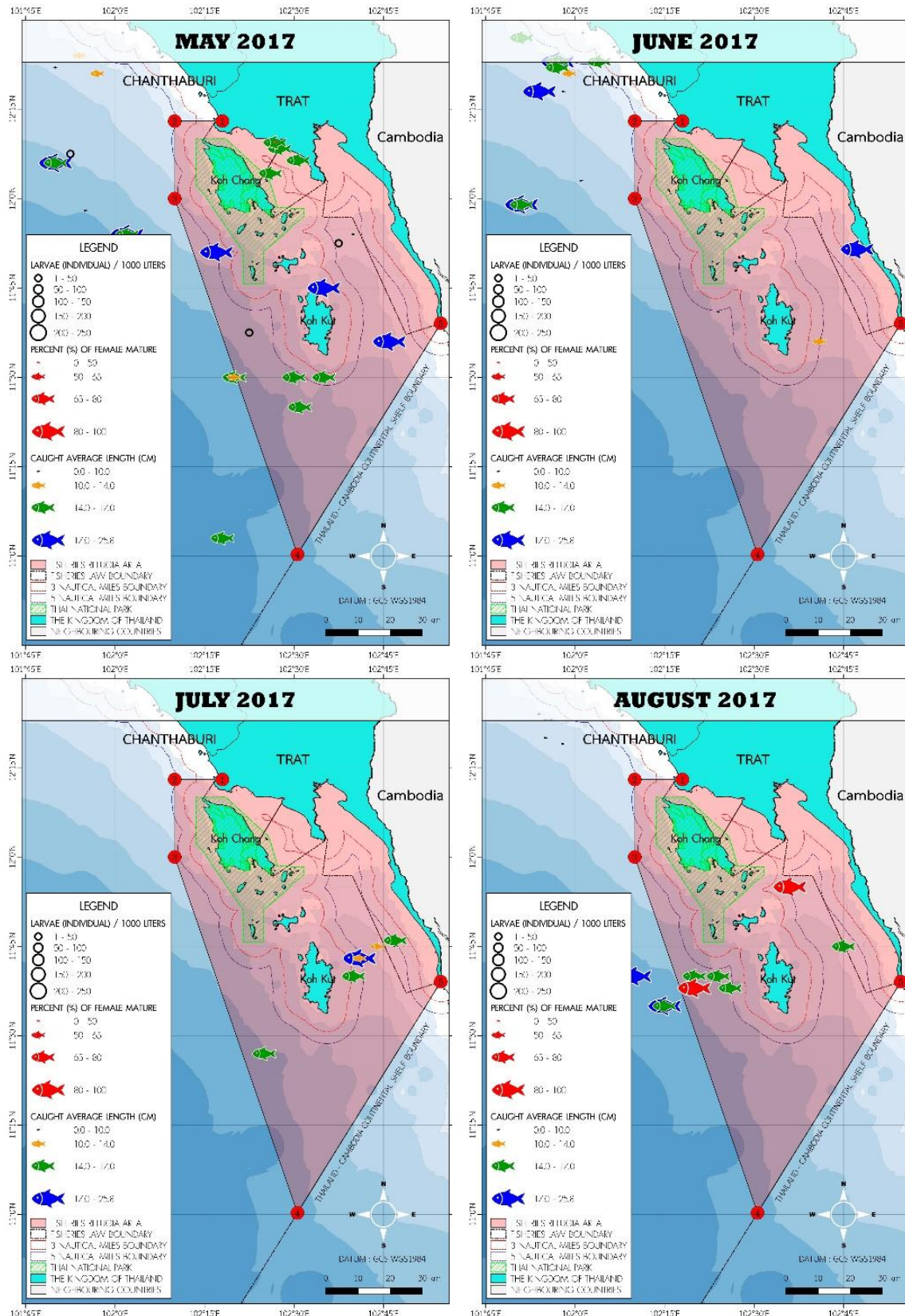
Annex 1: List of Participants

1. Ms. Prulai Nootmorn (Thailand's National Focal Point)	Senior Expert in Marine Fisheries, Department of Fisheries
2. Mr. Kumpon Loychuen	Director of the Eastern Gulf Fisheries Research and Development Center (Rayong), Department of Fisheries
3. Assist. Prof. Amonsak Sawusdee, Ph.D.	Head of Resources and Environment Department, Walailak University
4. Mr. Pinyo Prasanya	Technical Officer, Eastern Gulf Fisheries Research and Development Center (Rayong), Department of Fisheries
5. Ms. Pannalak Srithong	Fisheries Refugia Project Staff, Department of Fisheries
6. Ms. Jutima Jangjaiboon	Fisheries Refugia Project Staff, Department of Fisheries
7. Ms. Chanokporn Muenchamnan	Fisheries Refugia Project Staff, Department of Fisheries

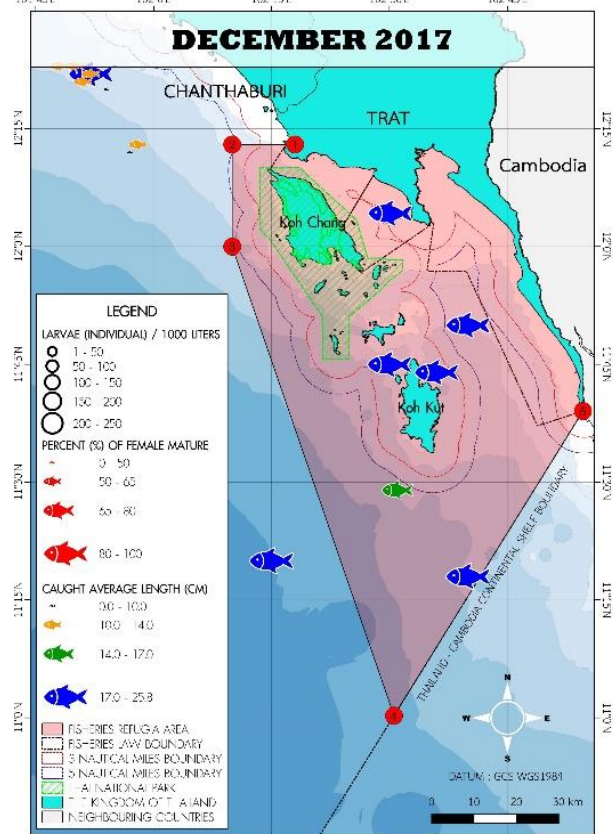
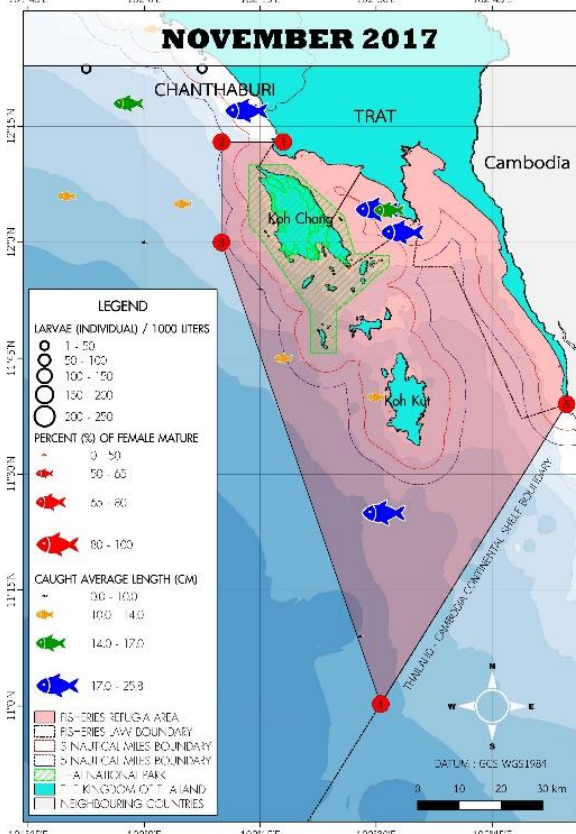
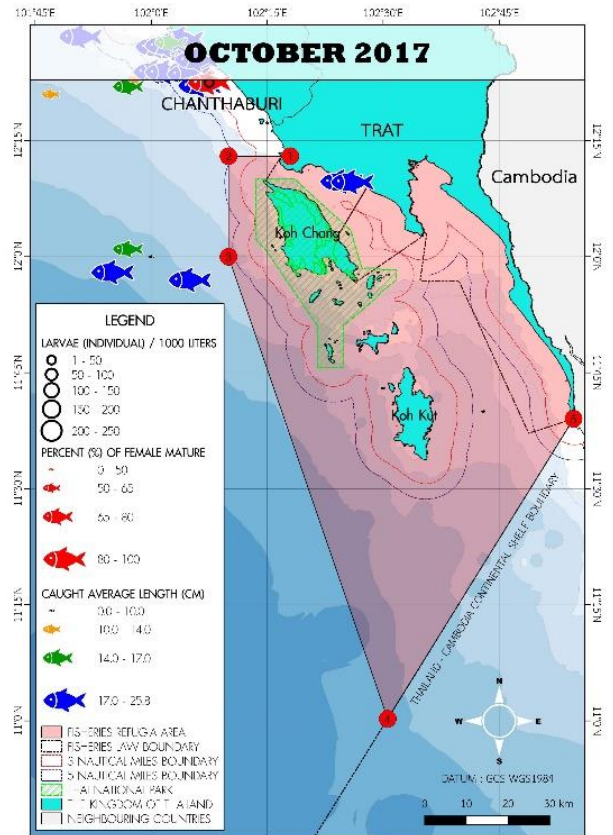
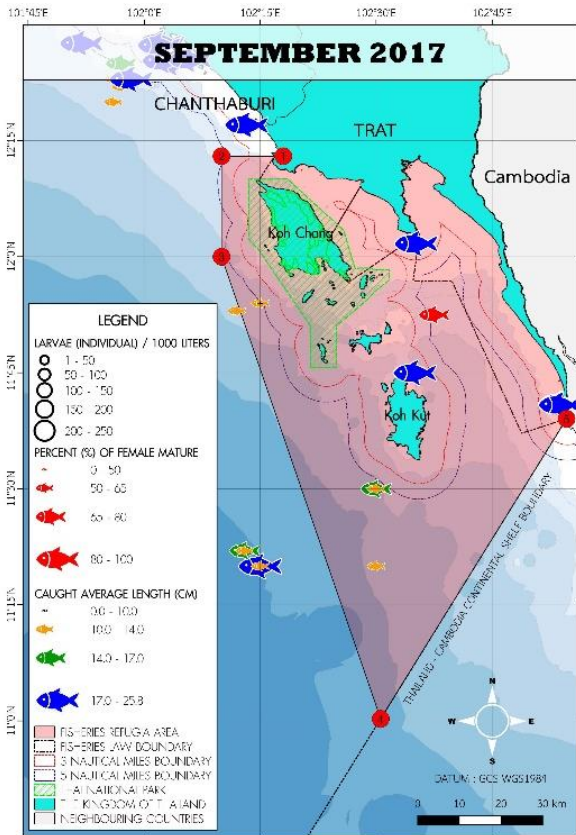
Annex 2

**Distribution of larvae, mature females, and sizes of Indo-Pacific mackerel
in Trat Province during Mar 2017 – April 2018**

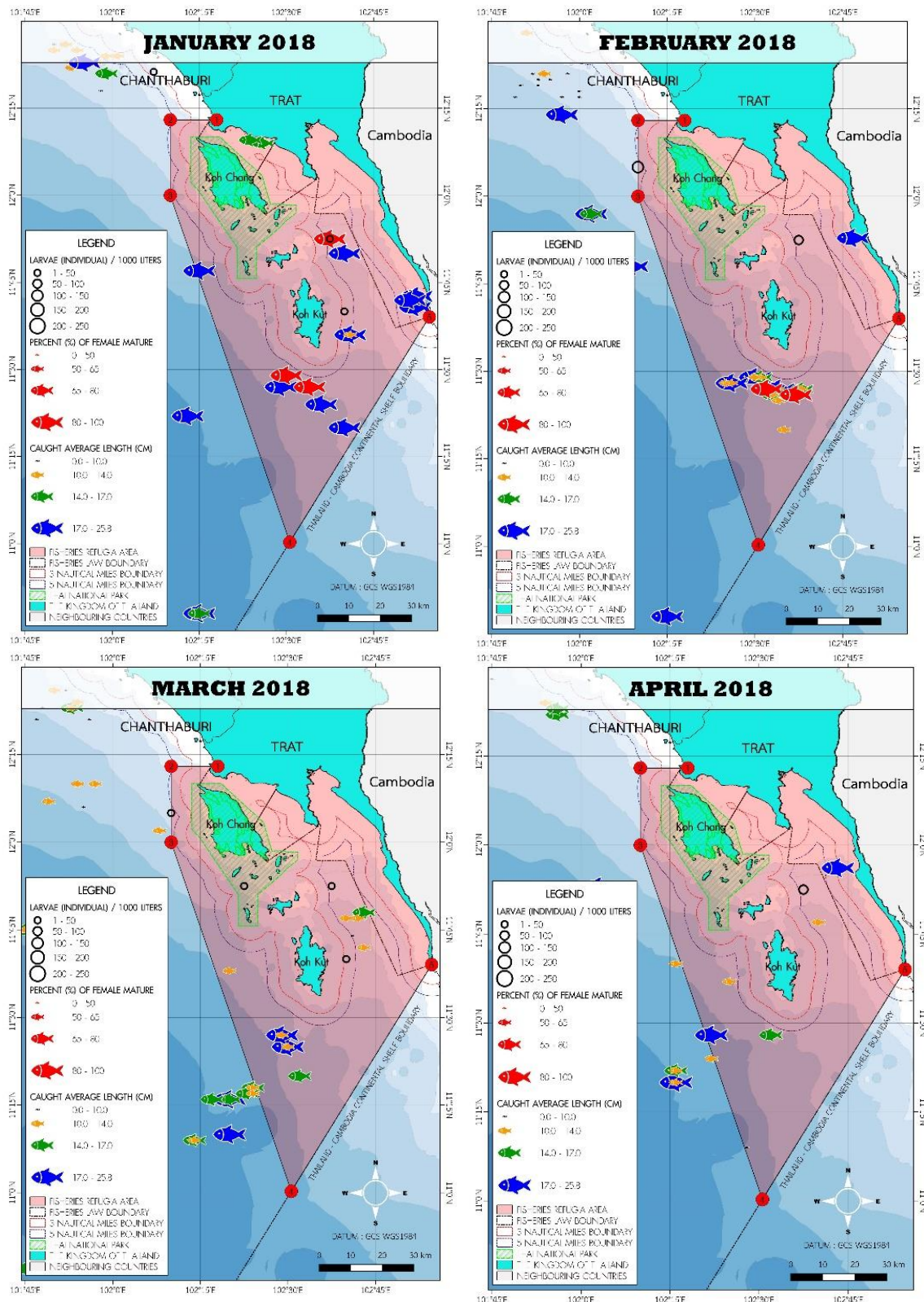
(source: Eastern Gulf Fisheries Research and Development Center (Rayong))



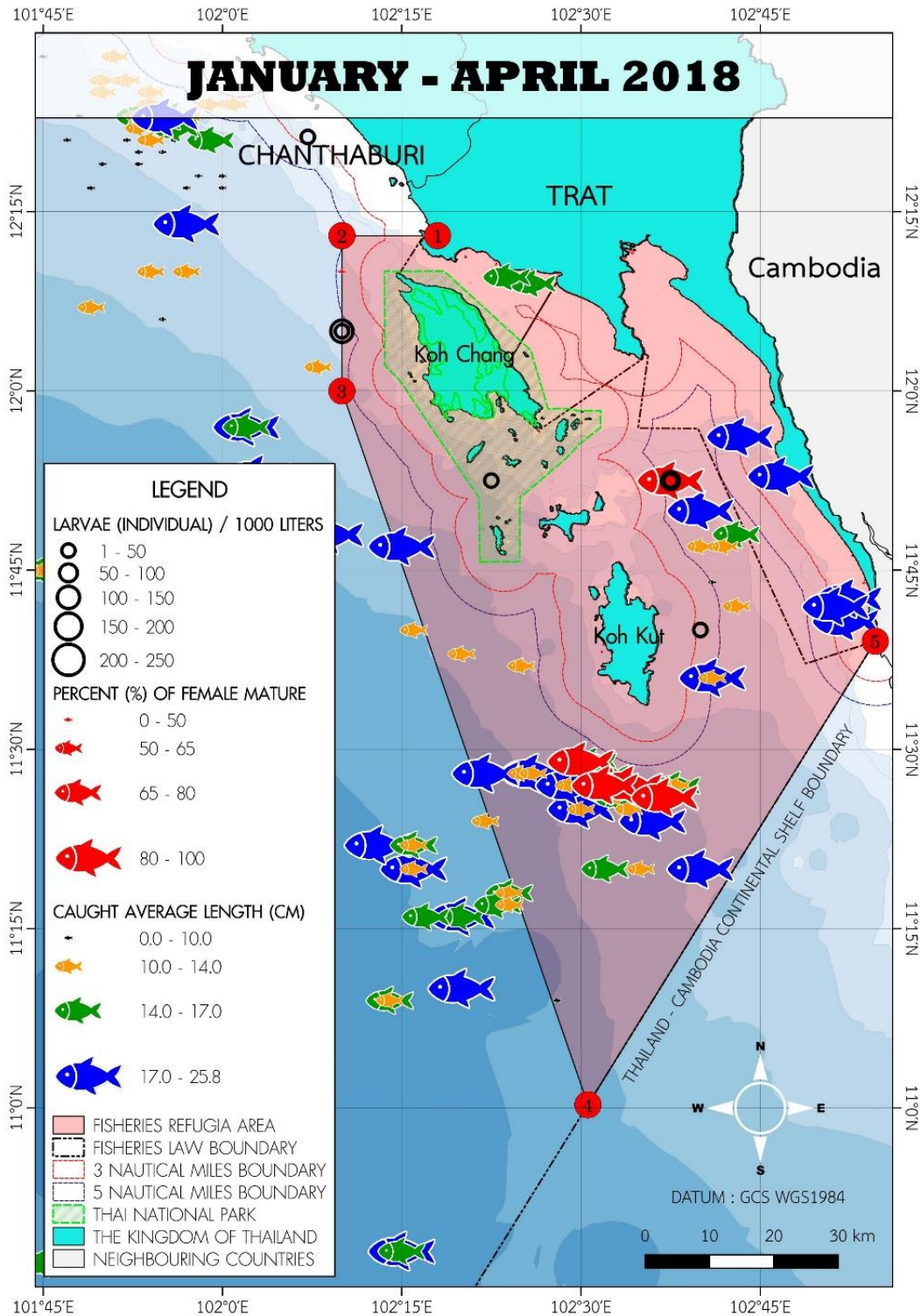
Annex 2 (cont.)



Annex 2 (cont.)



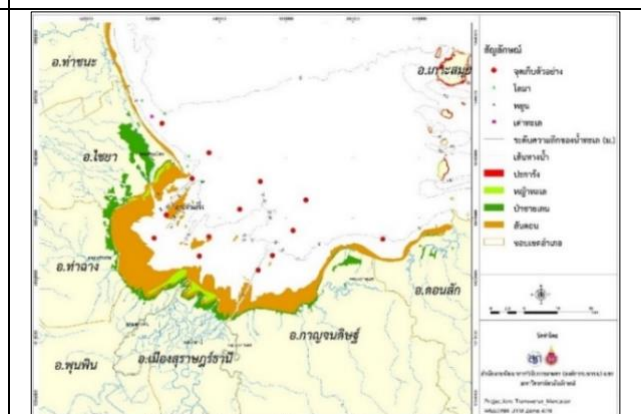
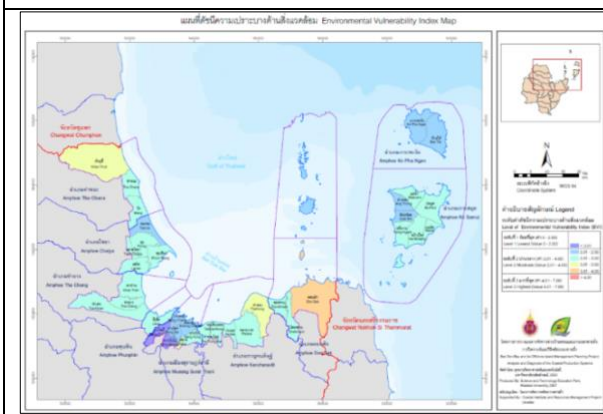
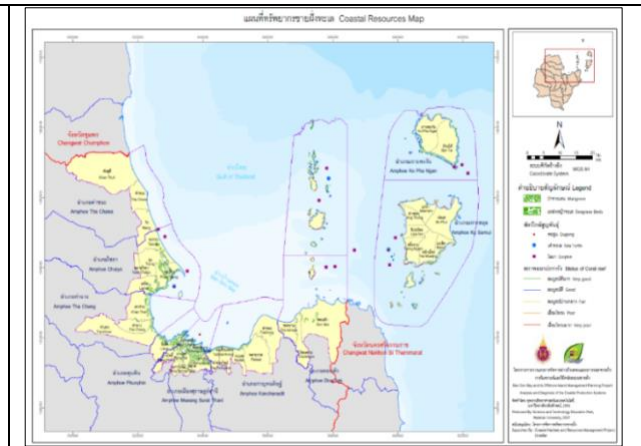
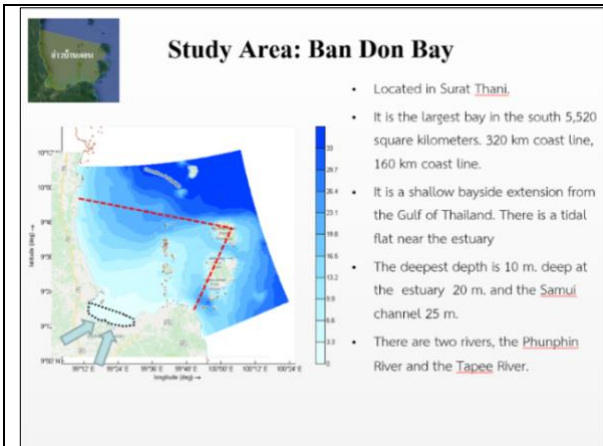
Annex 3
 Distribution of larvae, mature females, and sizes of Indo-Pacific mackerel
 in Trat Province during January – April 2018
 (source: Eastern Gulf Fisheries Research and Development Center (Rayong))



Annex 4

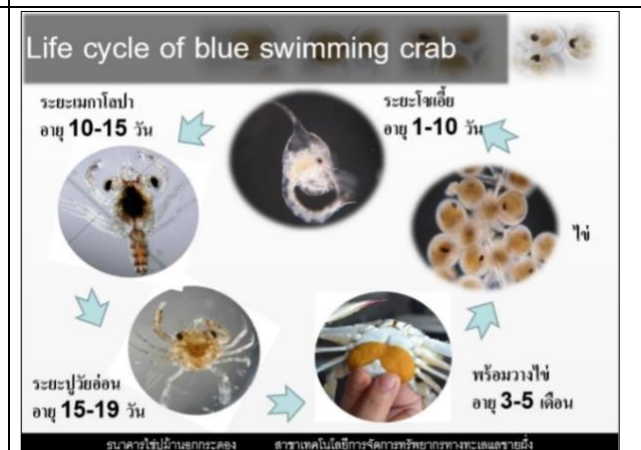
Some technical information in the coastal water of Surat Thani Province

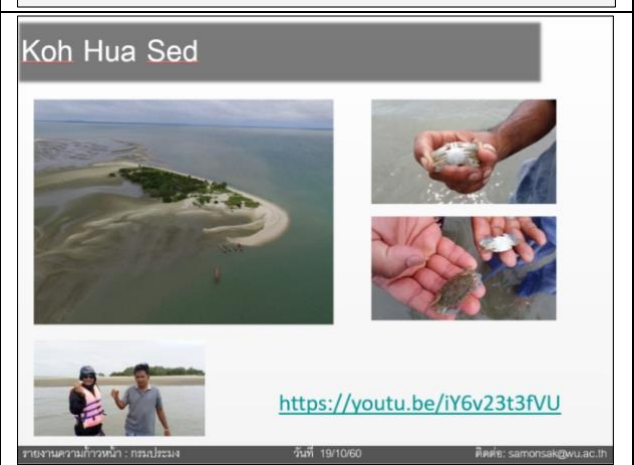
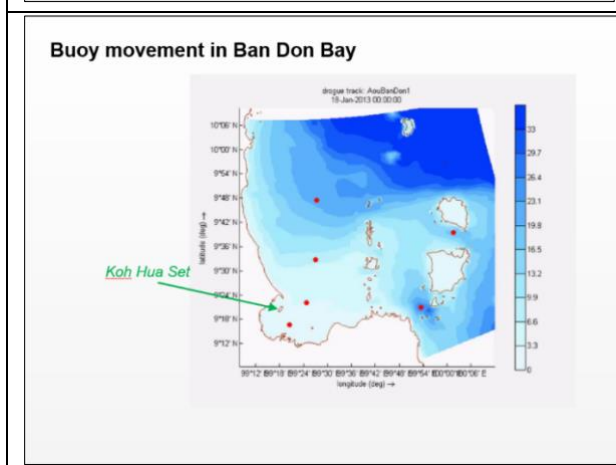
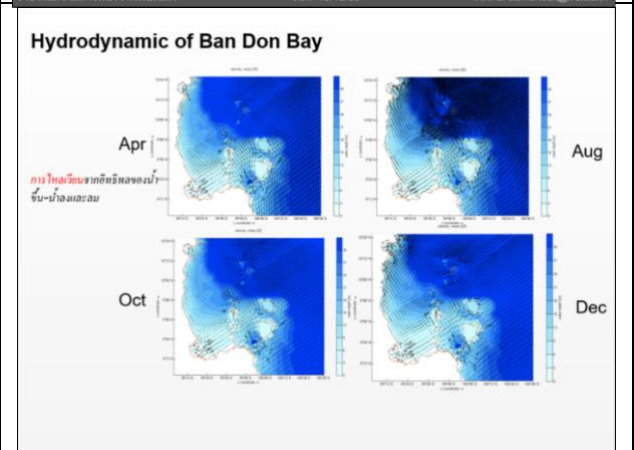
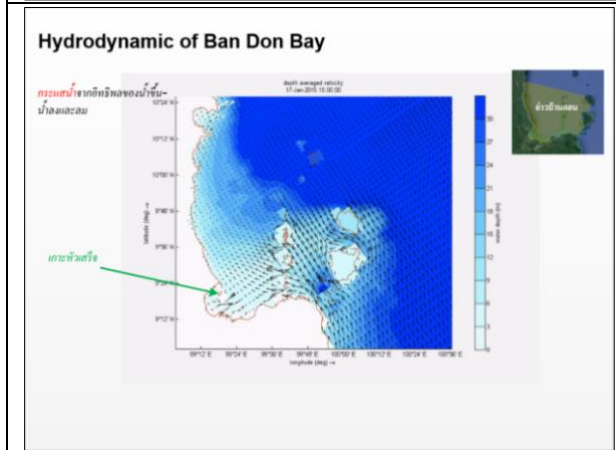
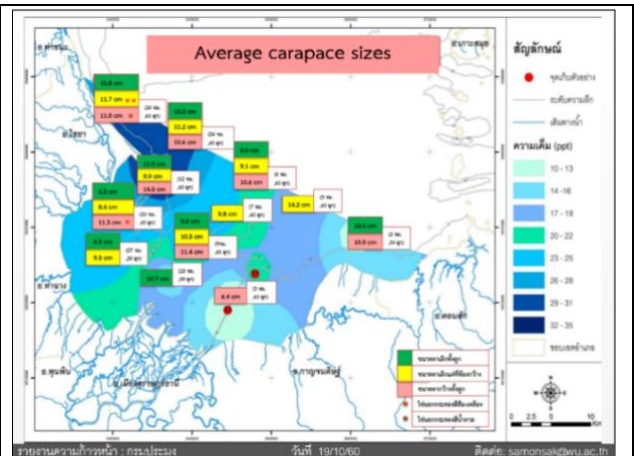
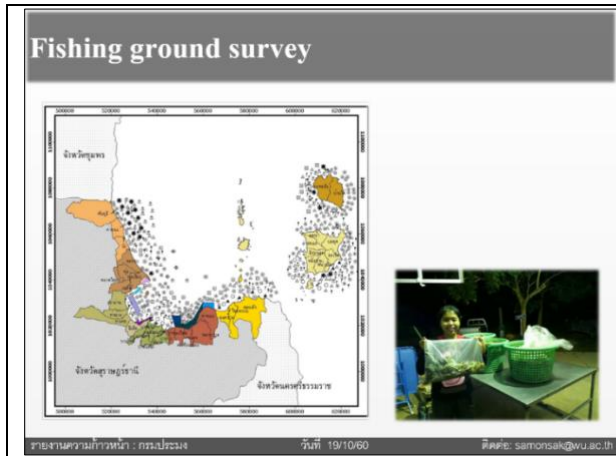
(source: Assist. Prof. Dr. Amonsak Sawusdee)



Fishery Improvement Program (FIP)

MRAS, TYG, TFFA, TFFP, HANDY, WWF





Meeting Photographs

