



Sweden
Sverige

Management of Transboundary Fish Stocks of Indo-Pacific Mackerel in the Gulf of Thailand

*Ms. Saisunee Chaksuin
Gulf of Thailand Sub-region Coordinator
SEAFDEC-Sweden Project*



Regional scientific and Technical Committee Meeting of the
SEAFDEC/UNEP/GEF Fisheries *Refugia*
in the South China Sea and Gulf of Thailand,
21-23 May 2019, Kampot, Cambodia



VISION

Sustainable use of aquatic resources and reduced vulnerability to climate change, by fishing communities in the ASEAN region

OUTLINE



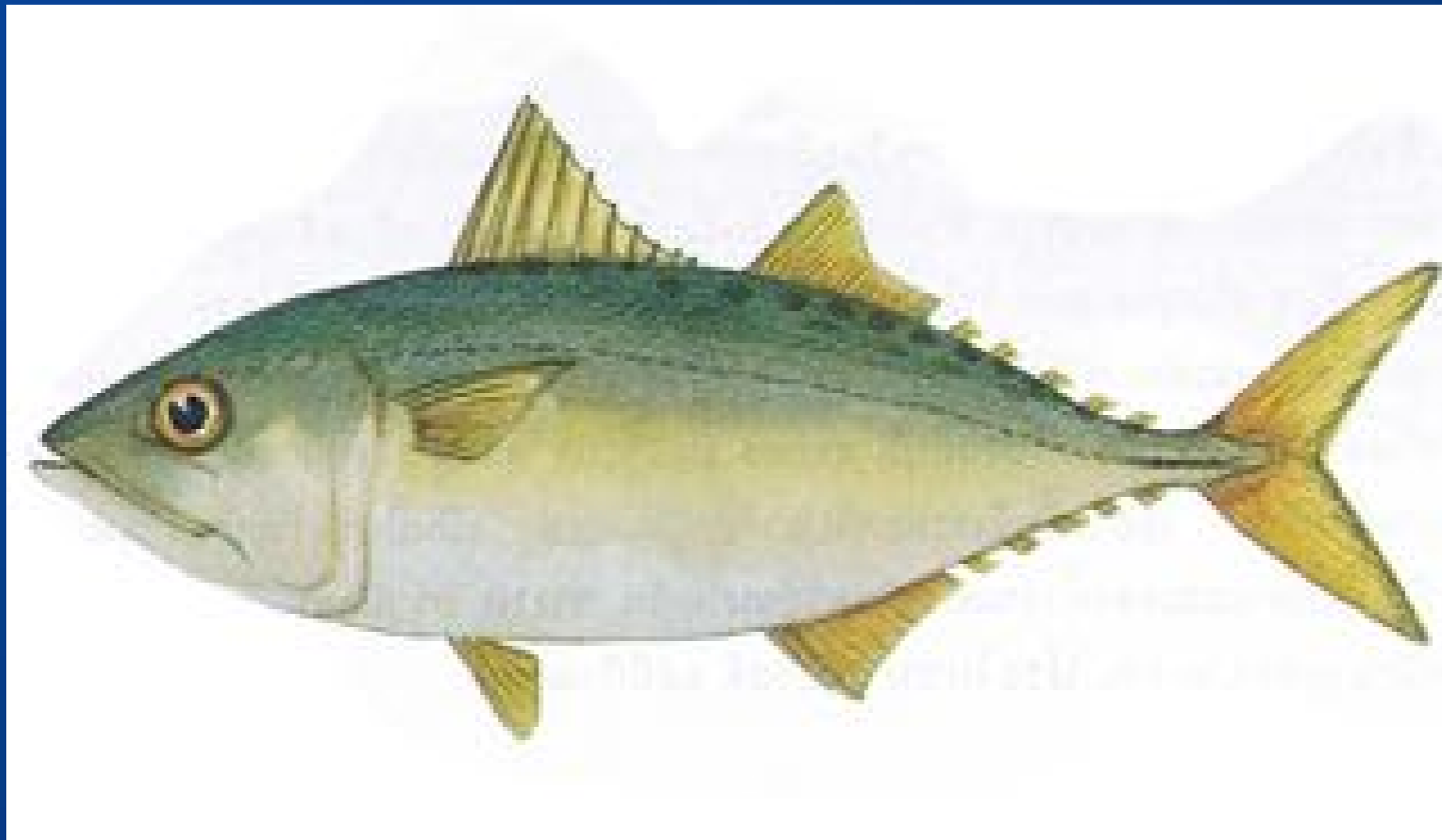
Sweden
Sverige

- Introduction
- Background
- Activities
- Results
- Conclusion
- Next Step



Target species

- Common name: short mackerel, Indo-Pacific mackerel
Platoo (Thai)
- Scientific name: *Rastrelliger brachysoma*



Gulf of Thailand Sub-regional Initiatives on transboundary fish stocks



- SEAFDEC-Sweden project supports the Gulf of Thailand countries (Cambodia, Malaysia, Thailand and Viet Nam) to discuss on the transboundary species towards for the sustainable use of fisheries resources.

Gulf of Thailand Sub-regional Initiatives on transboundary fish stocks

At the 5th Meeting of the GoT in 2015, SEAFDEC was suggested to:

- Encourage GoT countries to formulate policies by including data collection activities in the national policy frameworks to support long-term fisheries management
- Conduct sub-regional activities for better understand stock status and migratory pattern of Platoon which will be used as a basis for establishing agreements on coordinated national measures for transboundary stock.

Sub-regional Initiatives for Transboundary Fish Stocks in GoT

- 2016: Expert Group Meeting on Stock Status and Geographical Distribution of AIB Species in the GoT
- 2017: Technical Meeting on Planning for Development of Stock Study for AIB Species in the GoT
- 2017: Stock Study on Indo-Pacific mackerel in GoT since late 2017



Sub-regional Initiatives for Transboundary Fish Stocks in GoT

➤ 2018:

- Indo-Pacific mackerel Tissue Sampling were collected in Cambodia, Malaysia, Thailand and Viet Nam
- DNA Analysis were conducted by Genetic Laboratory of Kasetsart University, Thailand



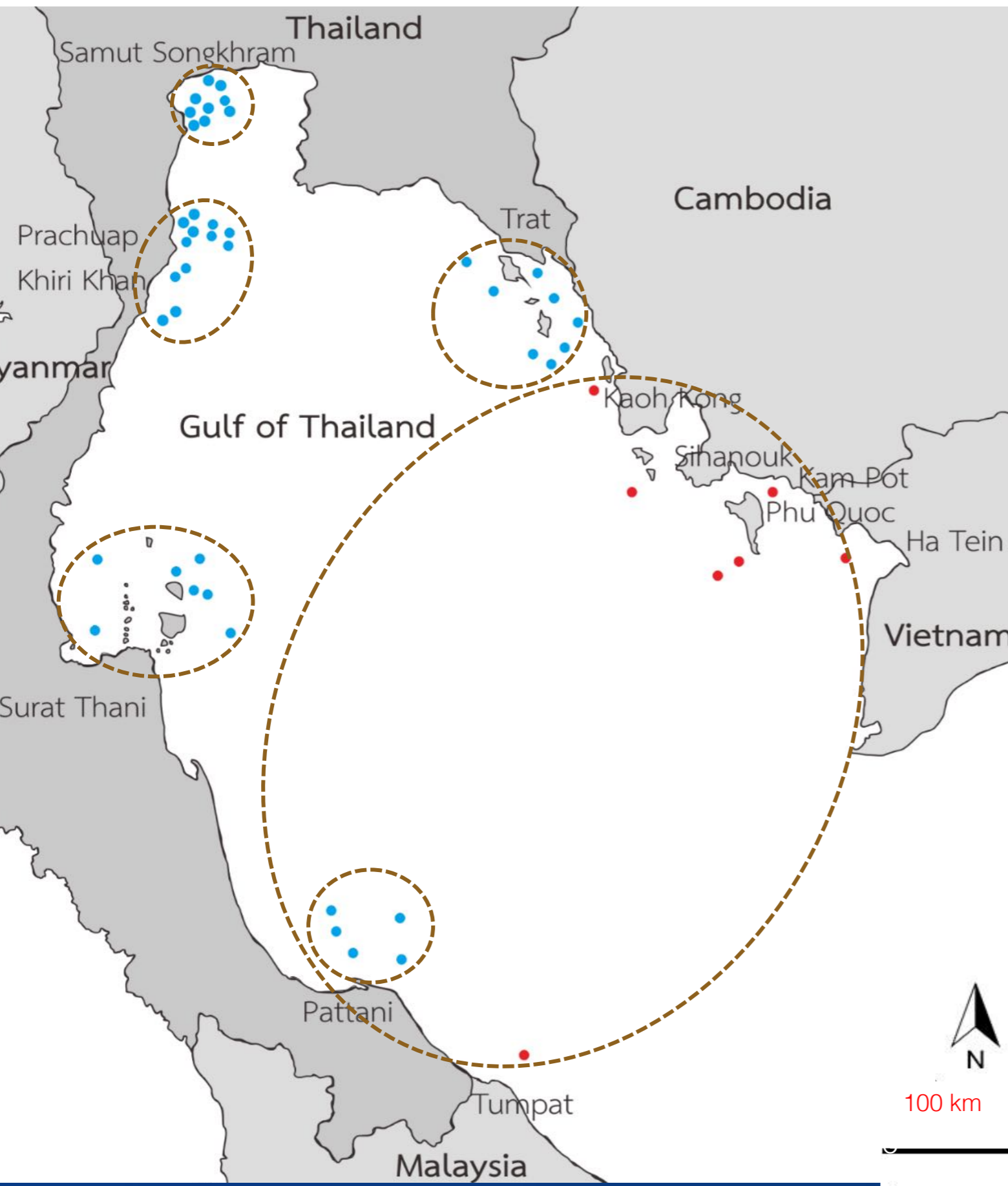
➤ 2018:

- ❖ Gulf of Thailand Technical Meeting on Management of Transboundary Species: Indo-Pacific Mackerel 19-20 December 2019, Bangkok, Thailand
- ❖ Objective to disseminate the result from the DNA studying of Indo-Pacific mackerel in the Gulf of Thailand

RESULTS



Sweden
Sverige



Sampling localities in the GOT

- Population differentiation is found in the GoT
- Thailand populations are genetically different to each other in moderate level
- Cambodia, Vietnam, Malaysia and Pattani (Thailand) populations are genetically similarly to each other.

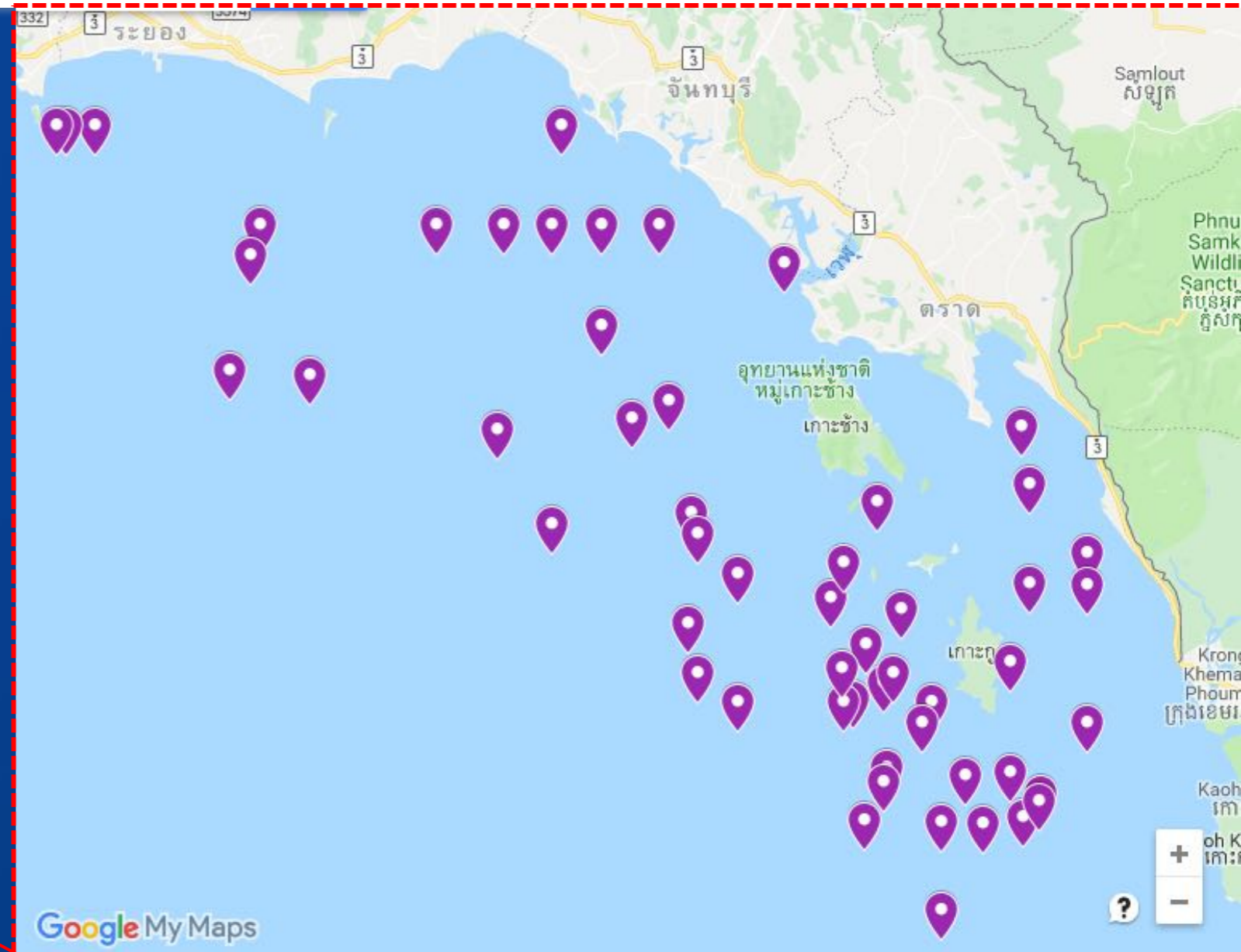
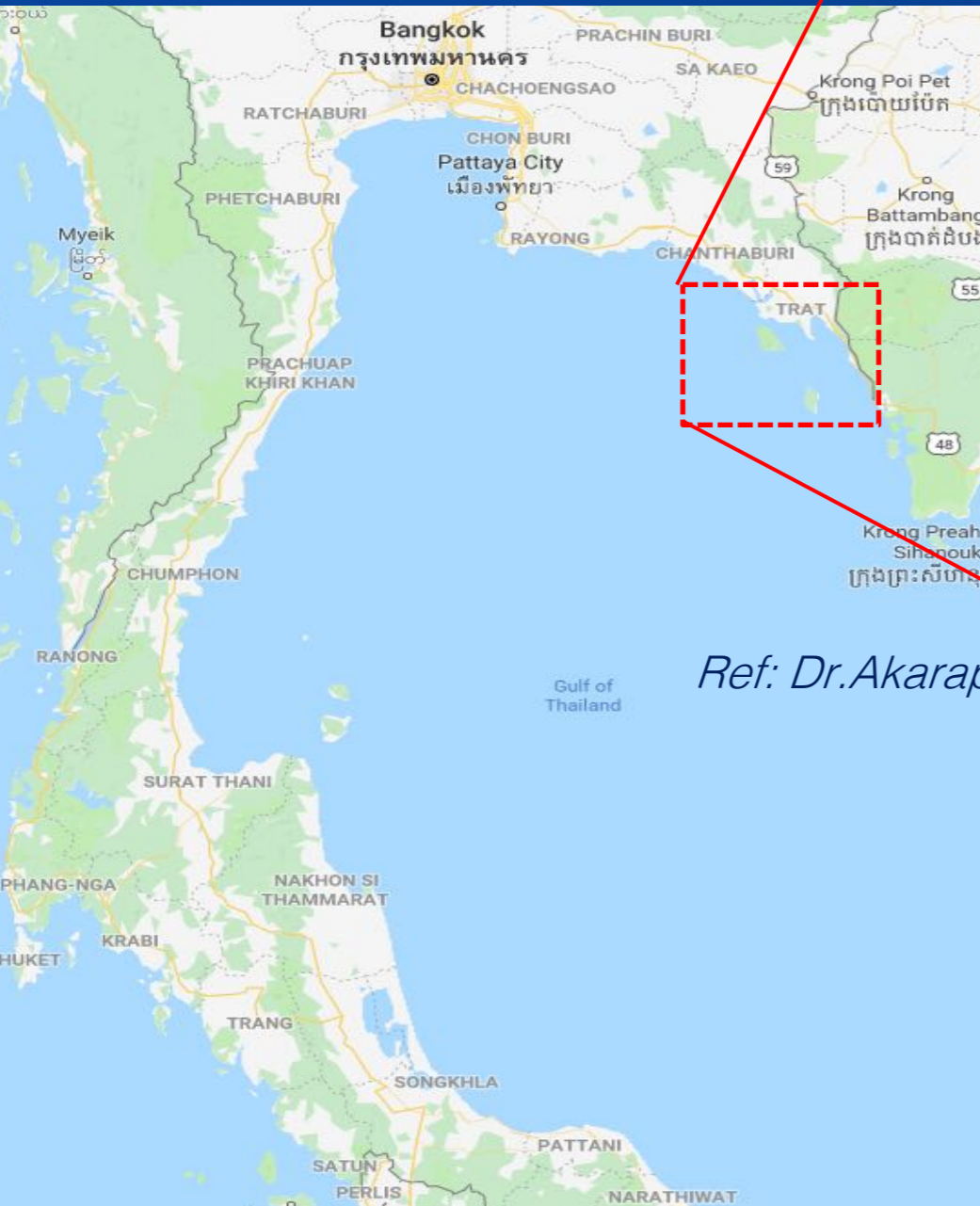
*Ref: Dr.Akarapong/Dr.Sirinthon,
Kasetsart University, 2018*

RESULTS

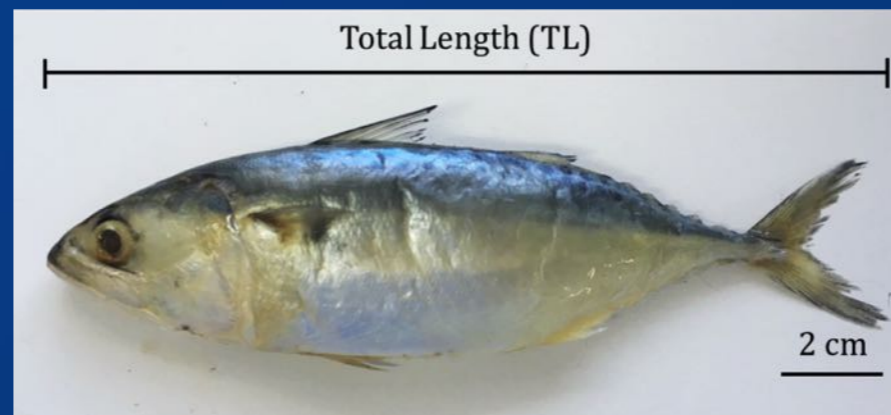


Sweden
Sverige

Thailand and Cambodia



Ref: Dr.Akarapong/Dr.Sirinthon, Kasetsart University, 2018



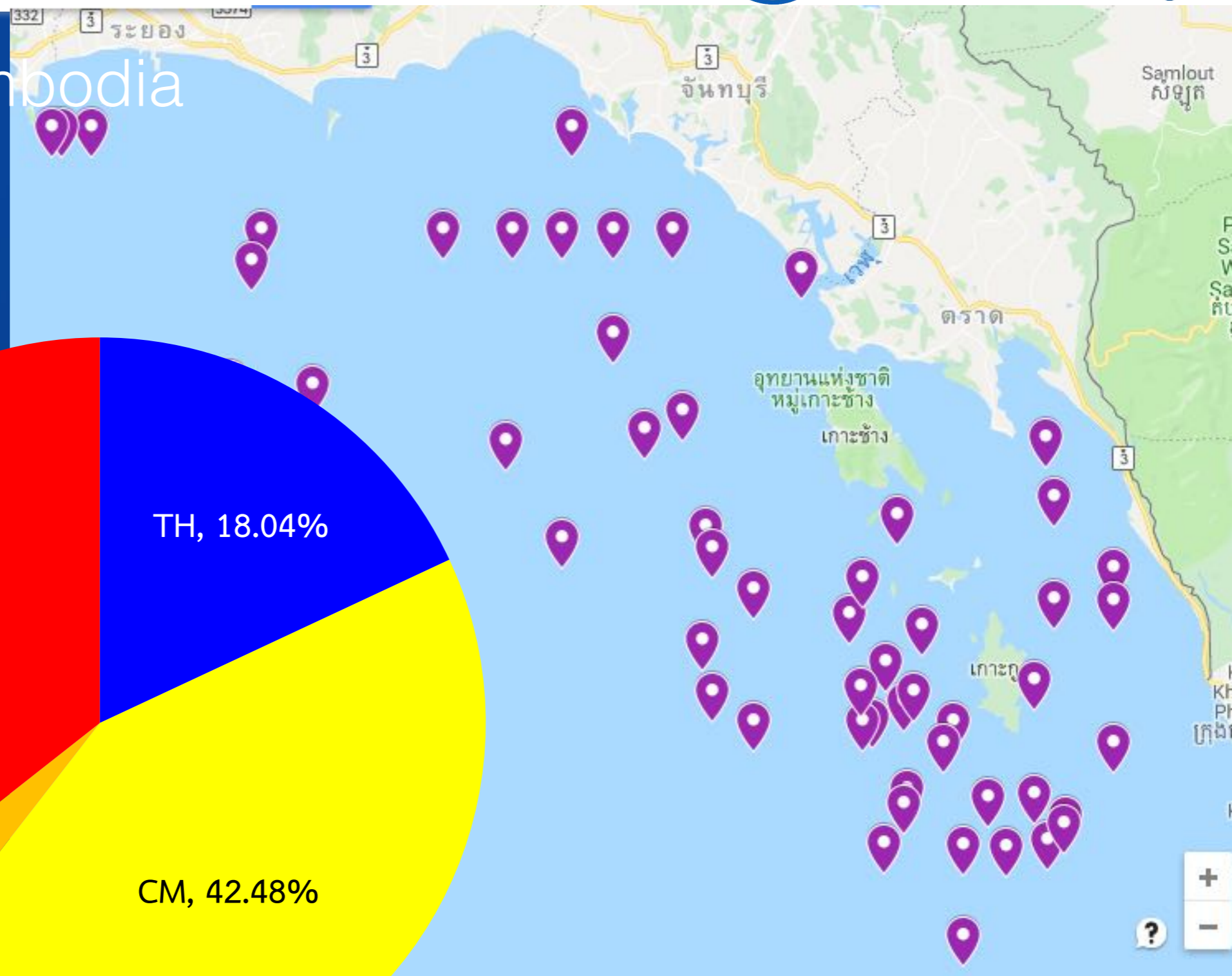
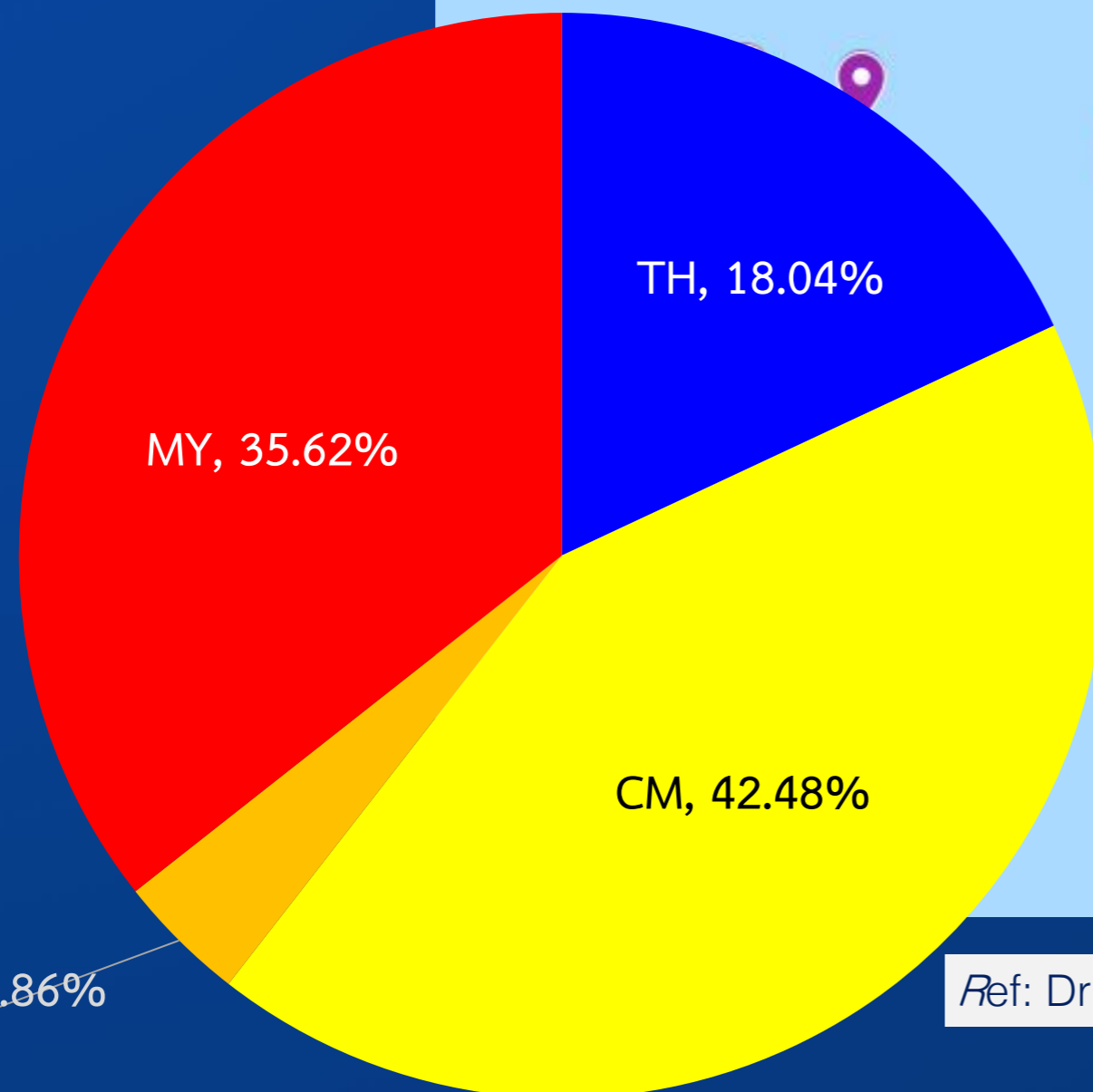
n=310; mean TL \pm SD = 16.65 \pm 1.38 cm

RESULTS



Sweden
Sverige

Thailand and Cambodia



Ref: Dr.Akarapong/Dr.Sirinthon, *Kasetsart University, 2018*

• **Recommendations** and **follow-up actions/needs** towards development of the sub-regional transboundary species management plan- Indo-Pacific mackerel

Recommendations	Follow-up actions/needs
1. MSA study in Cambodia, Malaysia, and Viet Nam	Fishery <i>refugia</i> project to be consulted with RSWG for accommodating in their work plan of activity
2. Monitor the change of tidal, sea surface temperature	Consult with the countries the possibility to install data logger in safe place of the participating countries, or to have collaboration research with academic
3. Monitor larvae transport	(same as above)

• **Recommendations** and **follow-up actions/needs** towards development of the sub-regional transboundary species management plan- Indo-Pacific mackerel

Recommendations	Follow-up actions/needs
4. Simulation of chlorophyll A, current, temperature and etc.	To coordinate and collaborate with the countries (<i>fishery refugia</i> project)
5. Biological and physical study in the GOT	To follow-up with SWG physical oceanography and larvae expert (JTF project)
6. Biological and physical study in the GOT	Hotspot of eggs and larvae and logbook (refer to survey result conducted by MV SEAFDEC 2)

• **Recommendations** and **follow-up actions/needs** towards development of the sub-regional transboundary species management plan- Indo-Pacific mackerel

Recommendations	Follow-up actions/needs
7. Stock assessment	<ul style="list-style-type: none">- To conduct stock assessment through existing SWG (ASEAN-SEAFDEC)- Procedures: 1) conduct population stock in the GOT; 2) total landing; 3) MSA; and 4) prioritization of the most important genetic stock
8. Establishment of database	<ul style="list-style-type: none">- all important data/information for management- establish specialist group

SEAFDEC-Sweden Project in discussion with
SEAFDEC/UNEP/ GEF Fisheries *Refugia*
Project to facilitate the sub-regional
consultation to develop action/management
plan for Indo-Pacific mackerel (short
mackerel) within 2019



Sweden
Sverige

Thank you

THANK YOU

For more information:

Dr. Worawit Wanchana (worawit@seafdec.org)

<https://www.facebook.com/SEAFDECSwedenProject/>