



SUMMARY ON COUNTRY INPUTS AND LITERATURE REVIEW (step 1)

Presented by :

SOMBOON SIRIRAKSOPHON

No.	Questions	INPUTS FROM CAM, MY, TH, PH, MFRDMD
1	<p>To achieve a <i>sustainably management of Rastrelliger brachysoma resources in national EEZ and at Sub-regions (GoT/SCS)</i>, what are the issues/knowledge gaps/scientific questions/priority areas should be addressed based on your opinion/expertise and country requirements.</p>	<p>National level:</p> <ul style="list-style-type: none"> • Insufficient data on population and abundance • small size identification • study on otolith (to know age of fish) • DNA study • restudy on migratory route, spawning ground (to recheck) • conduct study to collect both data capture production and biology • Regular monitor data collection on capture production • Stock status of R brachysoma (distribution and abundance) • Population dynamics (Growth parameters, mortalities and relationship to other regional stock) • Spawning grounds and season on R brachysoma in SCS • Fisheries Management Plan • Effects/Loss to IUUF (esp. poaching) • Review on existing and effectiveness of regulations • Actual effort to exploit the resources • develop co-management schemes/arrangements. <p>Sub-regional level:</p> <ul style="list-style-type: none"> • data collection needs to standardize (before combine the data) • stock assessment for transboundary species • Population dynamics • Stock structure • study on migratory route, spawning ground • Transboundary distributions • transboundary management mechanism/plan • Insufficient biology and landing data collection • Data sharing • Lack of management body • Multi gear to harvest

<p>2 ☐</p>	<p>Please elaborate on the roles of the four cross-cutting themes in addressing these science questions to support the future actions on RAP if any ¶ A. Capacity building and technology transfer ☐</p>	<ul style="list-style-type: none"> ▪ DNA study ¶ ▪ Otolith ¶ ▪ Data collection (make the same standard in each country) ¶ ▪ Data analysis ¶ ▪ Stock assessment for transboundary species ¶ ▪ Modeling for stock assessment ¶ ▪ knowledge on identification of species, biology and analysis ¶ ▪ fishing gear technology, ¶ ▪ database- software. ¶ ▪ Traceability system using technology-logbook ¶ <p>¶ Role of partnership: ¶</p> <ul style="list-style-type: none"> ▪ Improved capacities among countries (i.e. stock assessment, data collection, enforcement, etc) will harmonize management strategies and measures for the stock. ☐
<p>☐</p>	<p>B. Potential Partnerships (at country, Regional and international) ¶ ☐</p>	<ul style="list-style-type: none"> • University ¶ • Scientist among regional country ¶ • SEAFDEC ¶ • AMS ¶ • Regional Action bodies: GEF, IOTC ¶ • Hokkaido University ¶ • National Fisheries Research Institutions ¶ <p>¶ Role of partnership: ¶</p> <ul style="list-style-type: none"> • This will improve management of the transboundary stock by access to data which will be useful in the collective assessment in the region. ¶ • This will also result to a more realistic/reliable ☐

<ul style="list-style-type: none"> □ □ 	<p>C. Access to information, data and knowledge (such as satellite data, regional production data/statistic, ocean data simulation, etc) ¶</p>	<ul style="list-style-type: none"> ▪ Regional fisheries statistic data (SEAFDEC) ¶ ▪ Water quality data from Pollution Control Department ¶ ▪ Trawl base ¶ ▪ Ocean Forecasting system (e.g. IOC/WESTPAC, SEAGOOS, etc. ¶ <p>¶</p> <p>Role of partnership ¶</p> <ul style="list-style-type: none"> ▪ This activity will improve participation among all stakeholders on responsible practices □
<ul style="list-style-type: none"> □ ¶ ¶ □ 	<p>D. Communication and awareness raising ¶</p>	<ul style="list-style-type: none"> • Educate people and student in fisheries communities ¶ • Distribute brochures or any media to promote of fisheries management ¶ • Raise awareness of both small-scale fishers and commercial fishers ¶ • Sharing of the findings to both policy management level and fishermen ¶ • develop consultation among researchers, managers and stakeholders (EAFM) ¶ • support the Sustainable management concept, Co-management, and EAFM. □



LIST OF KNOWLEDGE GAPS/ISSUES BY TARGET COMPONENT(step 2)

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COMPONENT 1: DATA AND INFORMATION

- Insufficient landing data, biological data collection for population and abundance study
- study on migratory route, spawning ground
- Regular monitor data collection on capture production
- Identify Spawning grounds and seasons

COMPONENT 2: UNDERSTAND THE FISH STOCK STATUS

- DNA study
- Stock status of R brachysoma (distribution and abundance)
- Population dynamics (Growth parameters, mortalities and relationship to other regional stock)
- Actual effort to exploit the resources
- stock assessment for transboundary species
- Stock structure
- transboundary distributions
- Multi-fishing gears to harvest

COMPONENT 3: MANAGEMENT RESPONSES

- Fisheries Management Plan
- Review on existing and effectiveness of regulations
- develop co-management schemes/arrangements
- transboundary management mechanism/plan
- Effects/Loss to IUU fishing
- database- software
- Traceability system using electronic logbook
- support the Sustainable management concept, Co-management, and EAFM



**BRAINSTROMING
SESSION 1-GROUP 1**

COMPONENT 4: AWARENESS BUILDING

- Educate people and student in fisheries communities
- Distribute brochures or any media to promote of fisheries management
- Raise awareness of both small-scale fishers and commercial fishers
- Sharing of the findings to both policy management level and fishermen
- develop consultation among researchers, managers and stakeholders (EAFM)
- to support the Sustainable management concept, Co-management, and EAFM

COMPONENT 5: STRENGTHEN REGIONAL COOPERATION

- Standardized data collection for regional stock assessment
- Data sharing
- Lack of management body
- Develop the transboundary management mechanism/plan

COMPONENT 6: STUDY THE ENVIRONMENT IMPACT

- Temporary disappear of short mackerel in the Gulf of Thailand
- IMPACT of climate change to fish migration route

COMPONENT 7: ENHANCE CAPACITY BUILDING

- Inadequate knowledge on research works as follows:
 - Species identification of small size (juvenile) and larval fishes
 - otolith (to know age of fish)
 - Data collection at landing sites: catch and biological data
 - Data analysis
 - Stock Assessment and modeling for stock assessment
- Fishing gear technology





Sweden
Sverige



Technical Consultative Meeting on Drafting of the Regional Action Plan for Management of Transboundary Species Indo-Pacific Mackerel in the Gulf of Thailand Sub-region, 12-13 September 2019, Chonburi, Thailand
