SUMMARY ON COUNTRY INPUTS AND LITERATURE REVIEW (step 1)

Presented by :

SOMBOON SIRIRAKSOPHON

No.	Questions	INPUTS FROM CAM, MY, TH, PH, MFRDMD
1	To achieve a *sustainably management of* **Rastrelliger brachysoma resources in national EEZ and at Sub-regions (GoT/SCS)**, what are the issues/knowledge gaps/scientific questions/priority areas should be addressed based on your opinion/expertise and country requirements.	**National level:** • 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. **Sub-regional level:** • 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**

2	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*	▪ 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 ***Role of partnership***: ▪ Improved capacities among countries (i.e. stock assessment, data collection, enforcement, etc) will harmonize management strategies and measures for the stock.
	B. Potential Partnerships (at country, Regional and international)	• University • Scientist among regional country • SEAFDEC • AMS • Regional Action bodies: GEF, IOTC • Hokkaido University • National Fisheries Research Institutions ***Role of partnership***: • 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

	C. Access to information, data and knowledge (such as satellite data, regional production data/statistic, ocean data simulation, etc)	▪ Regional fisheries statistic data (SEAFDEC) ▪ Water quality data from Pollution Control Department ▪ Trawl base ▪ Ocean Forecasting system (e.g. IOC/WESTPAC, SEAGOOS, etc. ***Role of partnership*** ▪ This activity will improve participation among all stakeholders on responsible practices
	D. Communication and awareness raising	• 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)

Presented by :

SOMBOON SIRIRAKSOPHON

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

BRAINSTROMING SESSION 1-GROUP 2