

Ocean Economy and Ocean Health in Thailand



THE EAST ASIAN SEAS CONGRESS 2015

Global Targets
Local Benefits

Setting the Sustainable Development Agenda
for the Seas of East Asia beyond 2015

16-21 November 2015 • Danang, Vietnam

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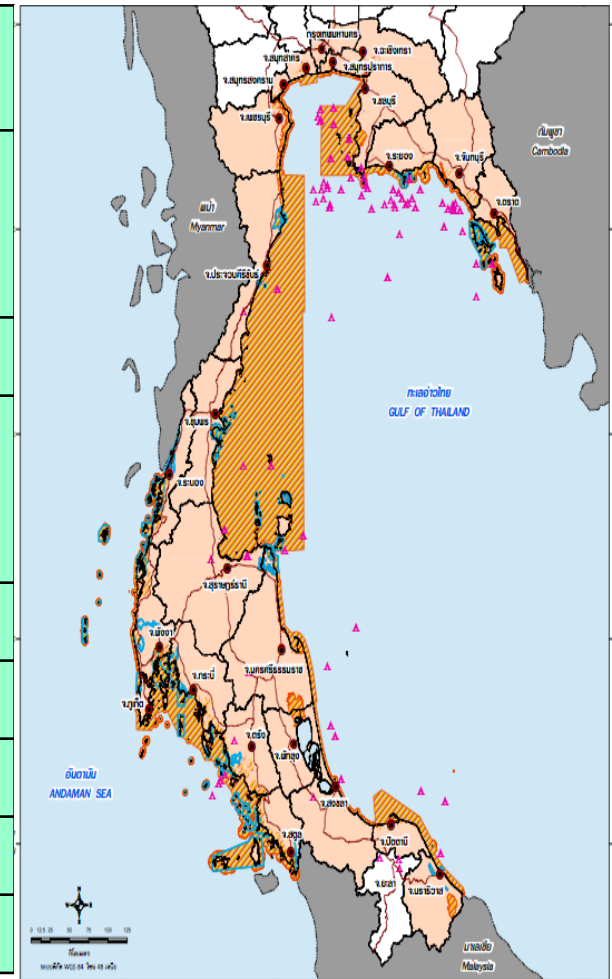
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Workshop 3.3: Blue Economy Development: Where are we now? Where are we headed?

Valuation of Marine and Coastal Resources and Activities

Marine and Coastal Resources and Activities	Padermsak Jarayaphand (2007)	Nabangchang (2013)
1. Value of Marine and Coastal Resources		(Fisheries only)
1.1 Biological	6,703	3,744
1.2 Minerals	14,259	-
2. Use values	-	-
2.1 Commercial maritime navigation	174,883	-
2.2 Related industries	9,745	-
2.3 Tourism	5,640	12,413
2.4 Others	1,422	-
3. Indirect use value	-	5,547
4. Non use value	-	369



Unit: million US\$

OCEAN ECONOMIC SECTORS AND THEIR RESPECTIVE OUTPUTS

Nr.	Sectors	Output (m US\$)	Share to Total Output (%)
1	Fisheries and Aquaculture	3,472.69 (2013) ¹	?
2	Mining (minerals, oil and gas)	17,703.49 (2014) ²	?
3	Marine industries (manufacturing)	22,685.71 (2014) ³	?
4	Marine transportation (shipping)	99,355.46 (2005) ⁴	?
5	Marine tourism and recreation	4,030.66 (2003) ⁵	?
6	Marine construction	?	?
7	Marine services	?	?
	Total	?	?

*35 Baht = 1 US\$

EMPLOYMENT IN THE OCEAN ECONOMY

Nr.	Sectors	Employment	Share (%)
1	Fisheries and Aquaculture	253,450 (2000) ¹	?
2	Mining (minerals, oil and gas)	?	?
3	Marine industries (manufacturing)	?	?
4	Marine transportation (shipping)	?	?
5	Marine tourism and recreation	?	?
6	Marine construction	?	?
7	Marine services	?	?
	Total	?	?

1. Department of Fisheries (2000 and 2013)

2. Marine Department (2014)

3. Department of Marine and Coastal Resources (2014)

4. Professor Dr. Padermsak Jarayabhand (2005)

5. National Statistical Office of Thailand (2003)

GLOSS-VALUE ADDED, AND CONTRIBUTION TO GDP

Nr.	Sectors	GVA (m US\$)	Share in GDP (%)
1	Fisheries and Aquaculture	?	?
2	Mining (minerals, oil and gas)	?	?
3	Marine industries (manufacturing)	?	?
4	Marine transportation (shipping)	?	?
5	Marine tourism and recreation	?	?
6	Marine construction	?	?
7	Marine services	?	?
	Total	?	?

*35 Baht = 1 US\$

OCEAN ECONOMIC SECTORS AND THEIR RANK

Nr.	Sectors	Output	GVA	Employment
1	Fisheries and Aquaculture	?	?	?
2	Mining (minerals, oil and gas)	?	?	?
3	Marine industries (manufacturing)	?	?	?
4	Marine transportation (shipping)	?	?	?
5	Marine tourism and recreation	?	?	?
6	Marine construction	?	?	?
7	Marine services	?	?	?
	Total	?	?	?

Issues at stake of ocean health

Declining of mangrove forests	<ul style="list-style-type: none"> • Shrimp farming • Urbanization • Coastal erosion
Deteriorating quality of coastal waters	<ul style="list-style-type: none"> • Discharge of wastewater (five main river outlets) • Land-based pollution from industry, agriculture and households
Reduced areas of beach forests (ecosystem)	<ul style="list-style-type: none"> • conversion for alternative uses particularly for hotels, guesthouses, resorts etc.
Declining coverage and quality of coral reefs	<ul style="list-style-type: none"> • Bleaching (90%?); aggravated by sedimentation; tourism; wastewater discharge; fishing gears

Issues at stake of ocean health

Declining population of marine endangered species	<ul style="list-style-type: none"> • Deteriorating habitat, declining quality of coastal waters, degraded coral reefs, fishing practices and by catches, marine litter
Increasing areas of coastal erosion (mud flat, sandy beach)	<ul style="list-style-type: none"> • Reduced mangroves, reduced sedimentation, increasing coastal construction, increasing coastal erosion protection
Declining population of marine mammals and marine turtles	<ul style="list-style-type: none"> • Degraded habitat, loss of nesting ground (sandy beach) • fishing gears, marine litter, tourism (injured by boat propellers, jet skis, etc.),
Declining population of endangered marine fishes (sharks, rays)	<ul style="list-style-type: none"> • Fishing gears (by catches)
Acidification	<ul style="list-style-type: none"> • Declining quality of coral reefs
Eutrophication	<ul style="list-style-type: none"> • Increasing nutrient load causing plankton (algal) bloom

Issues and Constraints Related to the Assessment of Ocean Economy and Ecosystem

<p>Fisheries: Based on market values</p>	<p>May not adequately reflect the revenues from small-scale coastal fisheries</p>
<p>Tourism: Based on market values</p>	<p>This is the financial revenue while ideally should consider the use value from recreation based on the value of consumer surpluses</p>
<p>Indirect use value: Carbon sequestration Shoreline protection</p>	<p>There are other indirect benefits from coastal ecosystems which are not included in this review and will require further in-depth studies</p>
<p>Non-use values</p>	<p>Non-use values are estimated using Benefits Transfer and it should be recognized that these non-use values can change over time subject to awareness, income, etc.</p>

Issues and Constraints Related to the Assessment of Ocean Economy and Ecosystem Services

Limitation of Data availability

- Coverage (lack of important data on ocean and ocean-related to coastal activities)
- Time (different years of data collection/ out-of-date/ inconsistency)

Disaggregation of data across ministries and line agencies

- Policy/planning/operational agency (use most up-to-date data of their own and/or data available from different sources/ difficult to integrate)
- Research institution/university (use their own data due to functionality and authority)
- Statistic agency (policy driven/time and budget constraints)

Limitation of data accessibility

- Soft file accessibility to websites is good but less variability and too general
- In-depth data can be accessed but very limited via hard copy and document from particular agencies and persons

Capacity Constraints

- Less understanding on importance of issues and methodology of assessment, valuation and reporting system on ocean and coastal activities (only defense)
- Limited economist working on economic valuation of ocean/marine and coastal resources and activities

Recommendations

- National policy on importance of assessment of ocean/coastal-related economic activity should be clearly addressed.
- UN Statistical Commission's System of Environmental and Economic Accounting (SEEA) should be integrated into national economic and environmental accounts.
- Technical workshops on assessment of ocean/coastal-related economic activity should be organized for public-private organization/academia related to national income accounts, economic planning, environmental and resource management and investment promotion.



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