



*Eight countries, connected by one ecosystem,
working together to secure its future.*



Transboundary Diagnostic Analysis: Bay of Bengal Large Marine Ecosystem

Thailand Report



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Transboundary Diagnostic Analysis: TDA

Bay of Bengal Large Marine Ecosystem Project: BOBLME

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Summary

Transboundary Diagnostic Analysis: Bay of Bengal Large Marine Ecosystem Project

A series of meetings was organized for the introduction of the Transboundary Diagnostic Analysis (TDA): Bay of Bengal Large Marine Ecosystem Project in all of the 6 Andaman Provinces of Thailand, representatives from Thai government regional agencies, NGOs, and central government agencies. Each meeting was summary as follow;

1. Andaman provinces meeting (February 7 – 14, 2011)

Mr. Sakanan presented the background of the implementing of the BOBLME project in Thailand and roughly introduced the project at the beginning such as, the objectives, further steps after implementing the TDA: BOBLME project, the situations of coastal and marine environment, the mutual problem issues among the regional countries and the roots of problems which classified into three issues: overexploitation of the capacity of natural production, the degradation of marine ecosystem and pollution. In addition, there are some opinions and issues discussed in the meeting by the representatives from the six provinces along Andaman coastal areas which are organized during February 7 – 14, 2011. In addition to the TDA report, the issues from the six provinces are presented as follows:

1) Ranong province

- Cross border fishery issue should be negotiated at a government level.
- Fishing with floating basket in national park areas often causes troubles to national parks.
- The fishermen use fish net which are smaller than the standard. Therefore, there should be an emphasizing on the measurement to strictly control the seines' producing factory.
- The officers are unable to constantly investigate, and unable to cover all the areas of inspection.
- Mud crabs population (Poo Dam) is decreasing due to the use of fishing tools to catch too small aquatic animals by the fishermen.
- The Knowledge Management (KM) should be managed by the locals, and allow them to collect the information to the government.
- The organizing of training should be seriously operated together with the agencies who actually work in the area.
- The problem of disappearance of catchment areas due to the increasing of land encroachment, leads to the flood problem in the coastal communities.
- There is not any management on the support of the draining of ships' oil at the port.
- The wastewater treatment must be publicized because it is difficult to enforce the law; indeed, an understanding of the regulation management should be created, particularly, by the local administrative organization.

2) Phuket province

- There is sediment arose from the opening of soil surface and it flows into the sea.
- The problem of wastewater from communities and tourism development area is found.
- The law is unable to enforce due to the politics and influential people.
- The problem of fishing boats management is found that the fishermen registered their boats in a certain type of fishing but they fish in another type of the license.
- The law enforcement in each country is different.
- The number of mangrove forest is decreasing due to the over utilization such as government office and land encroachment.
- There is an increasing of small-crabs catch especially blue swimming crab (Poo Ma) for the crabmeat.
- The integration by the government sector completely fails which needs to be solved in the management system.
- There is a change in nature as the current is changed after the Tsunami.
- In some areas, it was found that the fish catch are bad smell and cannot be eaten such as in the port area.

3) Phangnga province

- There is an increasing of the tourism development.
- Fishing in national park areas is found.
- There is an initiative of providing information and news to the residents' sector.
- The coastal area management is need.
- Garbage problem is increasing.
- There is a conflict on the area between the large fishery and the small fishery.

4) Krabi province

- There is a proposal on conducting of a provincial coastal development plan.
- The tourism development may cause an effect to the ecosystem such as in Phi Phi Islands.
- During the period of "Bay Closing season", the fishermen lack of alternative careers.
- Small aquatic animal catch is increasing.
- The price of aquatic animal is declined.
- The problem of the decreasing number of blue swimming crab (Poo Ma) resulted from the high demand of crabmeat, so, the small crabs are caught without reproducing and nowadays, there is still no resolution for this problem. In case of the illegal feeding crabs that have eggs outside its shells, the solution is to establish the Blue swimming crab (Poo Ma) Bank Project".

5) Trang province

- The growing of tourism causes the garbage's problem.
- There is a coastal erosion problem.
- Due to a declining in fishery resources and changes, nowadays, the fishermen tend to change their career of fishing to farming and tourism business.
- The problem of coral bleaching is found.
- There is an increasing of small aquatic-animals catch.
- The management of garbage on the islands is ineffective.
- The problem of wastewater is found.
- The soil-sediment flows into the sea and are cover on the seagrass beds.
- The increasing number of Dugong's death makes the local have a co-regulation in specifying appropriate fishing tools.

6) Satun province

- Due to a large number of fishing boats crossing borders, a co-discussion between countries should be operated.
- There are many bi-nationality registered boats which are supported by Malaysian capitalists.
- It is found that Thai small fishing boats often have a problem of intruding into Malaysian territorial because in the past Thai people usually traveled between the two countries.
- Satun Fishery Association has set a regulation on friendly fishery to the environment.
- According to Fishery Law, there is a prohibition to fish in 3,000 meters zone but the local want to decrease the prohibited zone to be 2,000 meters.
- Bottom gill net cause damages to sea floor which are still lack of baseline studies on the seafloor community.
- A management plan should be made at a community, sub-district, district and village levels, especially, on the islands where there are many villagers live in.
- Due to a lack of control for the growing of tourism in Li Pae Island, it causes effects to natural resources and environment.
- The increasing of small-aquatic animals catch is resulted from the demand of the animal feed's manufacturers and anchovy industries.
- The management of garbage disposal in islands and coastal is ineffective.
- There is a lack of control for the application of the Law and the enforcement.
- Although the artificial corals facilitate the fishermen for effortless catch and safe time, the resources are increasingly damaged by them as well.
- During the closing season of tourism, the local private sectors still run their business in the islands such as in Li Pae Island.

In summary, the 6 provinces meeting reveal the courses of the degradation of natural habitat and deterioration of sea water quality and the decrease of marine resources are caused by;

1. The overexploitation of natural resources, especially marine resources, leads to the questions that what is the cause of the declining of resources such as small-aquatic animal catch, the use of inappropriate tools and the examples of the tools.
2. The problem of degeneration of the mangrove's ecosystem, sea grass and coral reefs.
3. Issues on pollution from land and shipping, farming, harbors, sailing channel, sediments, wastewater from communities, and etc.

2. Phuket Meeting (March15, 2011)

Phuket Royal City Hotel

Mr. Sakanan Plathong furthers his presentation that the output from the 6 provinces meeting are presented to the representative from the central Government agencies, Andaman provinces, local NGOs at the Phuket Royal City on March 15, 2011. The meeting end up with many *suggestions and issues from Transboundary Diagnostic Analysis*, which are;

1. The Department of National Park, Wildlife and Plant Conservation should be added as one of the institutes that are responsible for environmental and marine concerns among the countries in Bay of Bengal in part of Thailand. This is because the main marine resources such as coral reef and seagrass beds exist in the area under the responsibility of the Department of National Park, Wildlife and Plan Conservation.
2. According to the root of problem of the natural resources degradation, a poor fishermen village was mentioned as one of the cause of problems. The meeting viewed that it was impossible because the root of the problem should be on the wealth, demanding, and insufficiency. For example: although the small-scale fishermen can catch fish in a few kilograms, it is enough for their livelihood while the large-scale fishermen have to increasingly catch fish in order to have money for hiring and the family's expenses.
3. In relation to marine pollution problem issues, organizing related to tourism activities and marine aquatic food processing should be added as causes of the marine pollution problems.
4. According to the transboundary diagnostic analysis in Thailand, the problems should be analyzed and ranked for their significances and urgency.
5. Thailand and this region still lack of knowledge about the sea bed ecosystem at a deep sea level up to hundreds feet. For example: sponge ground and a pinnacle area which are fishing grounds of large trawling and has been heavily utilized. Therefore, it is possible that the marine ecosystem in this area may be in a serious degeneration which needs to be studied on its present conditions in all aspects, in order to apply the obtained knowledge for further management.

6. The problem of political influences, and immoral, dishonest and corrupted politicians, has the root of problem from people. This is because the people like to elect the politicians who are the same as them without proper decision. Therefore, the change should be started from the people by raising their awareness and having proper voting.
7. The determination on the procedure for local community development in Thailand is only managed by the group of people at administrative level, thus, villagers or people in communities rarely take part in this decision making. Another main issue is the valuing on the ecosystem which is found that the environment and resources are valued at very low level.
8. In case of the arrest of fishing boats at the border areas between countries, there should be an agreement on a clear criterion for the arrest, including the concern on two-nations ships. Accordingly, it is suggested that the BOBLME project should take part in cooperating with the agreement between the countries.
9. Regarding the issue on conflicts between communities and national parks, although some areas might have been utilized by villagers before the announcement of establishing a national park, however, when it becomes a national park, the management should rely on a conservation dimension along with the utilization. Thus, in the future there should be the creating of a proper regulation for sustainably utilization of natural resources.
10. The revision of rules for fishery utilization should be revised in a certain area by holding to a principle of the permission according to season, period of fishing, types of tools to catch aquatic animals, and kinds of permitted aquatic animals for catching.
11. Local agencies at sub-district, provincial, and group of provinces levels want to make a coastal resources management plan for their own areas which is already under a budget allotment. However, they still lack of organizations or agencies which are specialized in natural resources management to collaborate in this task.
12. Nowadays, the Department of Marine and Coastal Resources is conducting on a working plan for the coastal resource management by the associated network of coastal and marine resource management in 23 provinces. This is to perform work in three levels: province, group of provinces, and national levels.
13. The announcement of protected area may increase conflicts between villagers and government officers. Thus, the effective resources management should allow the resource's users to be the owner of the resources because if they feel that they are co-owners, they would have more involvement in the conservation. In addition, there should be a support law for the communities in order to keep benefits of their resources in their own areas.
14. The knowledge and the awareness on the benefits of resources conservation should be informed to villagers, concretely, as well as, it is a breeding ground and nursery area of the aquatic animals for the fishermen. Subsequently, the villagers would be more understandable and cooperate for the conservation because they are directly obtained the benefits.
15. The marine coastal ecosystem conservation should be started from the upper water shade areas because it will continually impact to the end of the river, that is, the coastal ecosystem.
16. With respect to the BOBLME project, it was suggested that there should be a pilot project in the concerned area to concretely see how it works. The meeting has proposed the area of Tha-Jeen canal in Phuket province where there are still a lot of garbage in the canal due to the community along this canal bank still lack of a good awareness for the

garbage management and often throw the garbage into the canal. For example: there might be an initiated project by using EM Ball and the campaign for not throwing garbage in to the canal, in order to restore the water quality in Tha-Jeen canal. In addition, the Marine Department is willing for cooperation and continually conducts the projects in this area.

17. The BOBLME project would be a great opportunity for creating networks in order to exchange and learn the ways to manage the ecosystem between nations in the Bay of Bengal such as the ecosystem management of the seagrass beds and coral reef in Thailand.

3. Central government agencies Meeting (August 8 – 9, 2011)

Department of National Park, Wildlife and Plant Conservation

Department of Marine and Coastal Resources

Department of Fisheries

The separated meeting was organized in a small group meeting with the staffs of the Department of National Park, Wildlife and Plant Conservation, Department of Marine and Coastal Resources and Department of Fisheries. The concept idea of TDA report and the results from the 6 provinces meeting and the Government agencies meeting in Phuket was presented to each key government agencies.

Mr. Sakanan presented the background of the implementing of the BOBLME project in Thailand and roughly introduced the project at the beginning such as, the objectives, further steps after implementing the TDA: BOBLME project, the situations of coastal and marine environment, the mutual problem issues among the regional countries and the roots of problems which classified into three issues: overexploitation of the capacity of natural production, the degradation of marine ecosystem and pollution. In addition, there are some opinions and issues discussed in the meeting by the representatives from the six provinces along Andaman coastal areas which are organized during February 7 – 14, 2011.

- Participants have no objection with the result of the Tranboundary Diagnostic Analysis for the BOBLME program. The TDA studies have strengthen their current perception on the Andaman Sea issues, which are the over- exploitation, degradation of natural habitat and the pollution. In the future, the effect from climate change will be stronger. The information from the 6 provinces is very informative and provides new information for the government agencies, especially the transboundary issues in Satun and Ranong Provinces. It should be translated to the activities. The program should be implemented urgently.
- The Department of National Park, Wildlife and Plant Conservations should be included in the key organization for the management of the marine and coastal resources since most coast lines in the Andaman coast are included in a series of 18 marine national parks in the Andaman Sea. In addition, the department has approved the management plan of the Andaman Sea Nature Reserves which are covering the 17 Marine National Parks and 1 non-hunting area in the Andaman Sea. The target of this plan is to establish the management system for the Andaman Sea Protected Areas network and will

nominated the area to the World Heritage Committee. The objective of this management plan is not only managing the area inside the protected areas, it will also encourage the management of the buffer zone around the national park boundaries. In addition, the community based management will be strengthened to the communities within the boundaries of the national parks. The Protected Area Committee (PAC) will be set up for each of the marine national parks and non-hunting area. Currently, the Department has many programs with IUCN, WWF and UNDP for the capacity building to the staffs of the marine national park.

- The BOBLME can provide support for the management of coastal communities such as awareness program, coastal zone management preparation and education program to local communities and schools.
- In addition, the Department of National Park will have a special program for the management of Tarutao National Park, Satun province. The new management recommendation is welcome to the program. Tarutao marine national park is located near the Sarai island which is the priority site for the Department of Fisheries for the management of coastal resources under the BOBLME program. Local residents are fishing very close to the national park and during some season they fish within the national park.
- Much more research should be carried out to evaluate the current status of coral reef and other marine resources in the areas. The current uses and threats should be evaluated. The monitoring program should involve local operators or residents to be part of monitoring program. There is a need to establish database of marine resources in the Andaman Sea.
- The past and present uses of local fishing communities and the sea gypsies in the Andaman sea should be gather as well as the traditional knowledge of the sea such as drug from the sea, climate characteristics and natural warning indicators to the disaster. The Urak Lawoi sea gypsies in the southern Andaman Sea is an interesting group.
- The Department of Marine and Coastal Resources has 3 leading centers in the Andaman Coast which are the Phuket Marine Biological Center (Marine, Coastal Resources and Mangrove Research and Development Institute which aims at basic research and monitoring of marine and coastal resources as well as seawater quality in the Andaman Sea. In addition, there are two Marine and Coastal Resources Conservation centers in Phuket and Trang provinces. The Conservation centers in Phuket and Trang have primary mandates on the management of marine and coastal resources especially the promotion of community based management of the coastal community. Some issues have been implemented such as awareness program, promotion of community based management and the artificial reef.
- In addition, there is not a clear jurisdiction between government agencies that look after the coastal and marine resources. There are many authorities but lack of well coordination. Thailand should have a national marine policy and special agencies to look after national marine interest.
- The future need is the education program such as the preparation of coastal zone management for government officers and local Administrative Organization. In addition, the sedimentation prevention from the island and mitigation to coral reef should be strengthened since the coral reef degradation has been caused by sedimentation, climate change and pollution.
- The Department of Fisheries officers concerned about the marine national park conflict with the coastal fishing communities. The current laws of the national park act do not

allowed fishing in the national park boundaries. The nomination of the World Heritage Areas may increase more conflict with the local fisheries.

- Mr. Tanoo Nabnian (local NGO in Phuket) provides information that, in general, the local NGOs and local communities in the coastal area of the Andaman Sea have agreed with the nomination of the Andaman Sea Nature Reserves to the World Heritage committee. During the management plan preparation, the researchers have many meetings with local communities. They believe that the agreement and the recommendation that has been emphasized in the management plan will be implemented. The World Heritage brand will help preserving the natural resources since it will encourage the government agencies to pay more attention to the conservation of the Andaman Sea. In addition, there are going to be many development projects on the Andaman Sea Coast.
- Mr. Sakanan Plathong adds more information on the nomination of the Andaman Sea Nature Reserves that the current management plan and zoning was established a mechanism to solve the community conflict. It was mentioned in the management plan that the local fisheries can be allowed if the fishing is not illegal to the Fisheries Act. Therefore it will strengthen the prevention of illegal fisheries in the national park boundaries. In addition, the Pakbara, Satun province is the target area for the deep sea port development project. These activities will be the new threat to the coastal area of Satun province.
- Mr. Petch Manoprawit has agree to the strengthen of the management network of the Andaman Sea Nature Reserves. It can be a demonstration site for other countries in the regions for the management of marine protected area network. He proposed to submit a proposal to the BOBLME program.
- Other suggestion from participants
 - Artificial reef program should be evaluated
 - Sarai islands can be an implementation site for BOBLME project