Evolution of common management : Opportunities and challenges for fishing communities in Thailand.

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Abstract

This paper seeks to analyse the evolution of the Common Fisheries Policy as a Community tool for the management of a common-pool resource in the context of Ban Don Bay in Suratthani Province, Thailand. This study applied a qualitative approach to collect data by interviewing key informants in the study area. The participants of the study were traditional fishermen and their families. The study used a paradigms of fisheries management (conservation, economic and social/community) and the concept of common pool resource. Results from the study found that policies of the state in each of the affected resource management. And the livelihoods of fisheries. People living in traditional fishing communities tend to be a vulnerable group due to the rapid changes caused by the environmental degradation that has resulted from short-sighted governmental policies, capitalization and natural disasters. It was also found, however, that the people living in these communities are extremely resourceful, industrious and adaptable, showing a commendable degree of flexibility in their ability to cope with severe situations by invoking a variety of effective strategies that utilize human capital, natural capital and social capital. They have been particularly effective in drawing upon their local wisdom and knowledge, conducting local research to identify and analyze various problems, which has, in turn, permitted them to propose and implement successful solutions to the problems they face. The fishing communities of Ban Don Bay, therefore, have a lot to offer in terms of teaching and assisting others communities who face similar problems in terms of the rapid change wrought by environmental degradation and ill-conceived government policies.

Keyword common , management , common pool resource , fishing communities opportunities and challenges

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1. Introduction

"Ban Don Bay" is the important coastal resource pool contributing to social and economic aspects of Thailand, the major international watershed and one of the most biological diversity places in the south of Thailand. People living around Ban Don Bay do traditional fishing and rely on natural resources and environment for a long time. The Bay is major fisheries resource and produces an economic growth continually as well as being used as a main sea area for fishery activities such as shrimp, cockle, oyster,greasy grouper and white perch farms. According to survey conducted by the Department of Fisheries, it found that total 96,754.28 rai coastal farm area splitinto 66,023.26 rai shell farm, 30,726.80 rai shrimp farm and 4.22 rai fish farm. Changes in land utilization have affected Ban Don Bay area materially due to fisheries, agriculture, industrial factories, community expansion and tourism. (Walailak University: 2008)

As for Ban Don Bay's overall current problems, fisheries resources in the bay get into state of decadence. Fisheries destroying environment causes environment and a large number of marine fishery resources destabilized. Furthermore, fisheries regulation and law enforcement fails to executesuccessfully due to economic and social cause including instrument and task force from relevant agencies. Some problems caused by conflicts among fishermen and lacking fundamental information concerning resources and environment. As earlier stated, Ban Don Bay has a shortage of environmental management plans and measures, systematic fishery resources management in the Bay, conflict on fishery area among local fishermen and between fishermen and fishery farmers, market promotion as well as pollution issues. (Forest-Sea for Life Foundation)

Additionally, serious problems confronting Ban Don Bay causeits natural resources cannot adapt to balance state and its coastal ecosystem is destroyed gradually, the fishery resources disappear from the area and become a critical issue that affects traditional fishermen's income distinctively. As Ban Don Bay is the common resource pool for a long time and after government policy generating traditional fishermen's income, it results in the destructive fisheries and non-environmentally-friendly practices. The said project has effect on way of life of traditional fishermenliving around Ban Don Bay from simply way of life and living with natural resources interdependently. The term "development" as we defined causes troubles against traditional fishermen communities which are regarded as the poorest household (Bene, 2006). Nevertheless, the project is a necessary instrument in coastal fishery resources management and conservation effectively.

With regard to traditional fishery, the development brings both opportunities and various effects against coastal area such asdeterioration of coastal resource and environment caused by destruction and excessive exploitation until the natural resources decreased rapidly leading to natural resources scarcity and competition problem, intrusion by influential persons to occupy the area without approval as well as obstructing demolition of officials and causing conflict among benefit groups in Ban Don Bay area. These problems need urgent attention and management. As power is exercised subject to the government law to exploit local resource and it causes

communities' right violation issue leading to conflicts among benefit groups because Ban Don Bay area has been used by people and beneficiaries from many groups including traditional fishermen, business groups, private organization, NGOs and government agencies. Each group varies in direct and indirect exploitation depended on each case. Resource exploitation of one group may affect another group. Meanwhile, an existed legal gap hinders overall management (Thailand Research Fund, 2013). The effect leads to resource utilization conflict of benefit groups and causes effect on subsistence of each party such as conflict between traditional fisheries and commercial fisheries, among shell farmer groups and between shell farmer groups and marine transportation group. (Mingsan Kao-Saard et al., 2012)

However, it is obvious that such problems caused by the coastal resource management propelled by the government agencies and lacking connecting and coordinating with other parties as well as valuing differences, creating mutual confidence, conducting mutual management and expecting mutual goals by utilizing power of difference, creating think method to settle the conflict-discrimination so that it leads to creative solution of complicated problem concerning coastal resource Ban Don Bay area management(Thailand Research Fund, 2013) responding to Ostrom's approach that stated that resource management would yield better efficiency, in event management and management regulations issuance conducted by beneficiaries themselves willingly because they can coordinate to work towards mutual goal desired by all parties. In case they have chance to exchange their opinions, resource utilizers know their area in ecosystem and know other resource utilizers, they can establish acceptable regulation suitable for the area. (Chon Boonnak, 2011)

Summarily, it found that Ban Don Bay's coastal resources management consists of many different problems raised by consequences of the government policies that affected fisheries communities which are major mechanismfor resources management. Therefore, subject to the government policies, how canfishing communities create opportunities to manage resource? In order to go towards challenges in adaptation for sustainable living under fishery resources comanagement with other parties effectively.

2. Methodology

The study method employed a qualitative research by carrying out in-depth interview of main informants as follows: traditional fishermen from 3 communities including Takien Thong, Lee Led and Phum Rieng communitiesas amount of 9 informants. Also, a non-participant observation was adopted in fishery activity, marine resourcerestorationactivity as well as studied communities' ecology. During interviewing, the triangulation was followed in personal, time and place aspects. After that, the data was classified into categories according to the interpreted issues and then summarized followed by presentation with descriptive analyze.

3. Result

3.1 Common Resource Pool Management of Traditional Fisheries Communities in Ban Don Bay Context

According to communities and papers study, the resource management development and communities' changes context were categorized into following periods:

Fishery for Living period is earning their livings by using resource abundance in the Bay. Fishery is made for living in household clinging to natural system in earlier B.E. 2504 (1961). Fishermen sail their fishing boat not far from seashore, not risk and live with security, happiness and quality in their lives. It is a simply way of lives.

CommercialFishery period is the period approached by capitalism. Earning for household started changing to commercial production. In late B.E. 2504 (1961), there was promotion for commercial fishery using trawl net and put net which affected the communities seriously. After B.E. 2530 (1987), fishing boats with put net came in Ban Don Bay and had caused critical problem since B.E. 2533 (1989).

Mangrove Forest Concession periodis the yearstarting mangrove forest concession. The concession was granted and since B.E. 2511 (1968) in Chaiya and Tha Chang districts the forest has been degenerated and some groups had begun exploiting the area such as shrimp farm, illegal lumbering and occupying for residence. During B.E. 2511(1968) – 2520 (1977), it began charcoalconcessionarea and B.E. 2520 (1977) was the year capitalists intruded intomangrove forest for making shrimp farm in Chaiya and Tha Chang districts.

Shrimp Farm Promotion periodis the year capitalists sought for their own private interests mainly. In addition to B.E. 2528 (1985), in 2548 (2005) there was expansion for more cockle farm area and there was an asset capitalization policy in B.E. 2547 (2004) called "Sea Food Bank" project in order to emphasize on develop new country's sea food to make up to natural products. The project caused local social relation form changed, in particular meaning of area and area ownership systembecause coastal area was controlled and reconstructed by the government into portions. It resulted in inequitable access resources of each group and became the Open Access Resource. Many areas were opened for concession or rent by private parties that owned such ownerships ultimately. This new area utilization overlapped the existing common area utilization once claimed by the communities. The changed area utilization form affected the traditional fishermen's livings leading to conflict on access coastal resources complicatedly.

Resource Restoration periodis the year BanDon Bay began mangrove forest restoration process and movement launched by people and local private development organization such as Forest-Sea for Life Foundation in Ban Don Bay restoration. They changed from isolated working to coordination with the government in resisting capitalism.

"Conservation and restoration are our duty those who live in sea nearby. So, we will do till our last effort." Former village chief said.

Southern Development Plan periodis the year might affect Ban Don Bay inevitably such as Tapee-PhumDuang Watershed Development project that pumped water from PhumDuang River, flowing down to Ban Don Bay, to Chaiya and Tha Chang districts. The project was opposed by people because they concerned that such practice would affect marine and coastal environment.

As considered development and changes of Ban Don Bay communities and natural utilization development and changes of Ban Don Bay communities contexts, it found that major factor of Ban Don Bay changes arisen from the government's promotion policies emphasizing on economic development and allocating common area to private or individual area. It allowed offensive move of various capitalism groups and illegal excessive expansion beyond stipulated zone such as commercial fishery promotion policy, mangrove forest concession, shrimp and cockle farms and recent problem namely Southern Development Planestablished under conflict among traditional fishing communities clearly until there was appeal from the Traditional Fishermen Alliance of Thailand latterly.

3.2 Government Policy : Crisis or Opportunities of Fishing community in Common Property Resource Management

In managing common property resource which the coastal resource is the common property resource, it provides opportunities for capitalists and experts to make a career independently. Thus, the government makes effort to solve problem by issuing various policies in order to handle conflict, solve resource deterioration problem and create coordination in coastal resource management. However, these problems has still arisen gradually and expanded its violence because the coastal resource management problem is regarded as difficult problem to settle due to its complication. It is unlikely to solve effectively as considered only structural management aspect given to the government as a result of lacking relevant personal, finance and knowledge conforming to existing problem against resources. One of these causes is local people is unable to participate in management because it lacks of law measure granting community's authority to exercise their right in common property resource management. (Udomsak Sinthiphong, 2013). In addition to fundamental restriction, it summarized as follows:

1. Government's Development Policy The development policy established by the government gave both positive and negative results towards Ban Don Bay. Since government's policies designed by coordination between politicians and private business persons in the past, it resulted in interest and established policies affecting traditional fishery practices such as developed shrimp farming promotion and development policy leading to loss of the vast of mangrove forest areal, approval of marine area occupied by private, granting mangrove forest concession as well as an important policy for poverty problem solution in B.E. 2547 (2004) was the asset capitalization policy generated by concept wishing allow poor people access to funds by

transforming their asset to fund. It provided opportunity and hope for poor people to clear their debts entirely together with promoting occupation relating to each community's environment with Sea Food Bank project. This project was a combination of concept of the asset capitalization policy and need for solving deteriorationin fishery area and decrease of fishery products. In other words, it developed the country's sea food production base to make up to natural products. Coastal farming was deemed one of major option because currently 130,006 rai coastal area of Thailand has already owned fishery farming such as mussel and brackish water fish farms. The Department of Fisherieshas estimated potential farming and found that it lefts 154,386 rai and tourism policy was another policy established in B.E. 2551 (2008) also affected people living in Ban Don Bay.

Moreover, the governmental, economic and market structures dominated individual lives and public goods like coastal fishery resources was an Open Access accessed by people. Thus, utilization without conscious mind and responsibility led to "tragedy of resource" ultimately as well as state power allowed capitalists access to exercise right completely. Until, it was mentioned that "as sea is owned" person left behind from utilization is a least-bargained group that is the traditional fishermen and beneficiary is capitalist group both inside and outside area.

Conforming tocommunities interview, it found that "existing resource demolition caused by the government policy implementation that breaches communities' right."

2. Rule, Law, Regulation and Measure established by Government As considered each law, it found that it provided opportunity for private business sector to exploit resource absolutely. However, traditional fishermen were thrown out from living area and left for concessionand private sector. Furthermore, complicated law of each relevant agency concerning marine and coastal resource management had around 15 agencies and 20 laws but it lacked of a process of integration for example the Department of Fisheries followed Fisheries Act B.E. 2490 (1947) emphasizes on farming and fishing, Department of Marine Transportation and Merchant Marine is responsible for dredging watercourse and waterway encroachment, Department of Marine and Coastal Resourcestakes responsibility for resource conservation, Department of National Parks and Wildlife and Plant Conservation takes care of islands and sea area declared as national parkand in case of tourism port construction. As stated above, it found that within the same sea the responsibilities were shared by various agencies and caused conflict among them. Furthermore, coastal resource management system failed to decentralize to provincial agency and local administrations lacked of mutual measure to coordinate in implementation among governmental agencies or betweengovernmental agencies and private sectors or between communities sector and civil societysector. Even though Constitution of the Kingdom of Thailand B.E. 2550 (2007) legislates in Chapter 3, Part 12 on Human Right, Section 66-67 that emphasizes on local community in resource management participation as follows:

Section 66 Persons assembling as to be a community, local community or traditional local community shall have the right to conserve or restore their customs, local wisdom, arts or good culture of their community and of the nation and participate in the management, maintenance and exploitation of natural resources, the environment and biological diversity in a balanced and sustainable fashion. (the secretariat of the house of representative, 2012)

Section 67 he right of a person to participate with State and communities in the preservation and exploitation of natural resources and biological diversity and in the protection, promotion and conservation of the quality of the environment for usual and consistent survival in the environment which is not hazardous to his health and sanitary condition, welfare or quality of life, shall be protected appropriately.(the secretariat of the house of representative, 2012)

However, in an empirical truth, it found that Thailand's coastal resource management was under centralism management system of the government as well as underdeveloped law and lacking law supporting coastal resource, so resource management failed to implement effectively due to lacking connection of management and clearness of regulations as well as overlapped power of government agencies causing solution without flexibility and consistency with current situation.

3. Industrial Development Effect from coastal area development: Ban Don Bay surrounding area had plan and developmental project especially southern development plan such as Nuclear Power Plant construction (Tha Chana district), Biomass Power Plant (Tha Chana district), Incineration Plant (Kanchanadit district), Deep Sea Port construction (Don Sak district) and Tapee-PhumDuang Watershed Development projectthat pumped water from PhumDuang River, flowing down to Ban Don Bay, to Chaiya and Tha Chang districts. The project was opposed by people because they concerned that such practice would affect marine and coastal environment.

According to such above crises occurred in the communities, the communities regarded that Ban Don Bay problem caused by short-sighted governmental policies that failed to realize area context and using economic development figure as indicator within holistic management in fishery resources. It should realize paradigm in conservation, economy and society. As considered more in-depth, it also found that responsible fishery trend towards ecosystem should be primary concern of government.

3.3"Institution Design" Challenges of Fishing Communities in Common Property Resource Management

Ban Don Bay's coastal resource had complicated problem and hindered effective management in the old form depending on solely government agencies or communities. Coastal management is required to coordinate among sectors in controlling as partners, so it can cope with fault of government agencies and Top-Down management (Pierre and Peters, 2000; Kooiman, 2003). This approach is consistent with Co-Management concept (Pomeroy, 2011) emphasizing

on integration among sectors including government, local administration, private development agency and community. No more working separately like the past. With this concept, if comparing coastal resource management to economics goods, it found that the coastal resource is similar to public goods that is open access for people but subsequent problem is people who used the resource not participate in taking care (Chon Boonnak, 2011). After that, the concept was developed on Common Pool Resource Management presented by Elinor Ostrom, economist who won 2009 Nobel Prizein Economic Science. The concept was proved that it has significance in international and national level. The key condition leading to successful common pool resource management requires supporting factor for effective management. Therefore, under changed economic rules or condition and other condition affect communities' resource management significantly. Major issue should be studied and moved forwards is what is factor contributing to community's successful resource management? And what is factor contributing tocommunity's adaptation and survival in complicated social ecosystem?

Under situations occurred inBan Don Bay's fishing community, they could assemble into organization in order to co-manage resources. It started with network working, not only resource management assembly but also they worked better than the government did and learned adaptation to local researcher supported in research by the Thailand Research Fund as well as interpreting their own fishery knowledge to help in resource restoration effectively.

According to head of traditional fishery household, he was quoted as giving interview that "everything must be researched. If we do not conduct research, the data cannot be trusted because we need real knowledge to protect resources." This is consequent of encouraging people organizes to work together, create new knowledge based on learning systematic data collection provided by coordination with private development organization and making effort tocreate conservation trend according to their own community aspect because they believed that conservation was a fundamental paradigm leading to resource co-management through activities.

According to local chief, he said that "fishing community earns their living day by day that outside. The issue is villagers do not know 'conservation' and 'enough'. What is the conservation? They recognized when it was late. But we tried to use fishing community networks builder for knowledge base on conservationthrough growing mangrove forest activity."

"Omit hundred, wait for thousand. Only human destroys resources but destroy innocently" Former village chief said

According to the former village chief "conscious in resource conservation is giving good thing return to sea, old man sea and community's source of food, so we have sea respect ritual which is river renewal ceremony."

In accordance with Berkes' concept (1987), he regarded that definition of conservation shall be considered because conservation is not international character; it depended on interpretation of groups whose cultures are different.

Furthermore, Ban Don Bay's traditional fishing community is the neighborhood expressed value explained by Ostrom that this property was required in strong self-management of community which consists of following aspect (Jensen, 2000 : 638-43) :

- 1. There is a clear definition of who has the right to use the resource and who does not, and clearly defined boundaries of the resource.
- 2. Users feel that their obligations for managing and maintaining the resource are fair in light of the benefits received.
- 3. Rules governing when and how the resource is used are adapted to local conditions.
- 4. Most individuals affected by the rules can participate in setting or changing them.
- 5. Use of the resource and compliance with rules is actively monitored by the users themselves or by parties accountable to the users.
- 6. People violating the rules are disciplined by the users or by parties accountable to them, with penalties imposed in accordance with the seriousness and context of the offense.
- 7. Local institutions are available to resolve conflicts quickly and at low cost.
- 8. Government authorities recognize users' rights to devise their own management institutions and plans.

According to the concept, this reflected that common resource management based on Ostrom's theory (Ostrom ,1990) was management via social process and measure supporting coordination in process, right to access to resource, monitoring as well as considering regulation drawn by coordination, imposing penalty for communities' unification in responsibility for their own resources, acknowledgement from the government agencies granting right to resource management with considering connection both micro- and macro-levels, giving significance both large- and sub- systems. It might say that in resourceco-management, if it can employ Ostrom's theory on "Institution Design" concretely, it can lead to resource management for public because currently resource management problem always caused by structural problem hindering resource co-management for overall interest and environmental irresponsibility. Yet, strong communities system might confront with capitalism groups, powers and distorted policies in co-management.

However, Ostrom's principle might not perfect form giving good result in Thailand because this nation has complexity in varied aspects including economic, politic, social and cultural issues. Thus, it might be necessary to find a resource co-management in Thai context for actual fairness, responsibility and sustainability.

4. Conclusion

"As this sea is owned", the coastal resource management is an issue the fishing communities shall learn so that they can respond to challenges and find a solution to adaptation for co-management responsibly. It, also, needs to consider roles of economic, politic, social and cultural issues by encouraging a process of integration, resolving conflicts and adhering to public interest basis of all parties including the governmental, private, private development organization and people sectors. If we design suitable regulation subject to Ostrom's theory on "Institution Design", the **resource co-management** is likely to be a good option for resource sustainability and one option for Ban Don Bay fishing communities those who make effort to move towardscoastal resource management that "this sea owned by all, not just a capitalist seeking private interest."

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