นิพนธ์ต้นฉบับ

ชุมชนประมงในภาคใต้: การเปลี่ยนแปลง ปฏิกิริยาและทางเลือก

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บทคัดย่อ

การขยายตัวของตลาดโลกและการนำเอาเทคนิคเครื่องมือใหม่ ๆ มาใช้ในการทำประมงจับสัตว์น้ำ ได้ก่อให้เกิดการเปลี่ยนแปลงด้านเทคโนโลยี เศรษฐกิจและสังคมขึ้นอย่างขนานใหญ่ในกลุ่มประเทศชายฝั่งแถบเอเชีย โดยเฉพาะอย่างยิ่งในประเทศไทยซึ่งมีวิถีชีวิตความเป็นอยู่ที่พึ่งพาการทำประมงมายาวนานและมีชุมชนชาวประมงอยู่เป็นจำนวนมาก แม้ว่านโยบายรัฐที่มุ่งเน้นการส่งออก การพัฒนาความทันสมัยและการส่งเสริมการผลิตเชิงพาณิชย์ในภาคประมงจะทำให้ประเทศไทยกลายเป็น 1 ใน 10 ประเทศที่จับสัตว์น้ำได้สูงสุดของโลกในช่วงเวลาอันสั้น แต่ก็ได้ก่อให้เกิดผลเสียตามมาหลายประการ อาทิ การจับสัตว์น้ำเกินขนาด สภาพร่อยหรอและความเสื่อมโทรมของทรัพยากรสัตว์น้ำ ปัญหาเหล่านี้ส่งผลกระทบโดยตรงต่อชีวิตความเป็นอยู่ของชาวประมงชายฝั่ง ซึ่งเป็นกลุ่มประชากรส่วนใหญ่ในภาคประมง บทความนี้มีวัตถุประสงค์เพื่อที่จะศึกษาถึงปฏิกิริยาที่ชุมชนประมงขนาดเล็กแถบชายฝั่งมีต่อปัญหาและผลกระทบที่เกิดขึ้น รวมทั้งวิเคราะห์ลู่ทาง ปัญหาและข้อจำกัดของทางเลือกและแนวทางการพัฒนาประมงชนาดเล็กที่องค์กรพัฒนาเอกชนกำลังดำเนินการอยู่ในชุมชนประมงชายฝั่ง เนื้อหาของบทความแบ่งออกเป็น 3 ส่วน ส่วนแรกเป็นการอภิปรายความเป็นมาและลักษณะสำคัญของเศรษฐกิจการประมงของประเทศไทย สาระของส่วนที่สองเกี่ยวข้องกับผลกระทบอันเนื่องจากการพัฒนาด้านเทคโนโลยีและการประมงเชิงพาณิชย์ที่เกิดขึ้นกับชุมชนประมงชายฝั่ง ส่วนที่สามเป็นการสำรวจและอภิปรายแนวคิดเรื่องการจัดการทรัพยากร ประสบการณ์ในการจัดการทรัพยากรโดยชุมชนในฐานะที่เป็นทางเลือกและแนวทางการพัฒนาใหม่ ๆ ตลอดจนประเด็นคำถามการวิจัยที่น่าสนใจ

คำสำคัญ : ชุมชนประมง, การพัฒนาประมง, ทางเลือกการพัฒนา, การจัดการทรัพยากรชายฝั่ง, การจัดการทรัพยากรโดยชุมชน

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ORIGINAL ARTICLE

Fishing Communities in Southern Thailand: Changes and Local Responses

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The emergence and expansion of world market and the rapid adoption of new production technologies in marine fisheries have produced major technological and socio-economic transformation in many coastal states in Asia, particularly in Thailand which has a long maritime tradition, and a large number of fishing communities and fishers. Processes of fisheries modernization and commercialization and state policy of export-led development, while quickly establishing Thailand as one of the world's top ten major fishing countries have however resulted in serious problems of overfishing and depletion of fish resources, which in turn meant loss of productivity and incomes for the majority of small-scale, coastal fishers. This paper's specific focus is to explore the responses these impacts have generated from small-scale, coastal fishing communities. The paper also discusses prospects and problems associated with alternative development efforts put forward by non-governmental organizations working among coastal fishing communities. The paper is divided into three parts. The first gives a background to Thailand's fishing economy. The second part deals with the impacts of tecnological developments and commercialization within fisheries and small-scale coastal fishing communities. Finally, the third part briefly reviews and discusses frameworks for understanding of resource management, experiences of community-based resources management as alternative development strategies, and relevant research issues.

Keywords : fishing communities, fisheries development, development alternatives, community resource management

Introduction

Coastal resources have historically played an important role for coastal population in Asia. In Thailand, Malaysia and Indonesia a large number of population have been living in communities located within coastal environments, deriving their livelihood from harvesting products, mainly fishing. Traditionally, the extent of coastal resource dependence and utilization by these communities was limited and centered largely on local consumption. However, the rise of industrial revolution, the emergence and expansion of world market and the rapid adoption of new production technologies in marine fisheries have produced a major technological transformation in many coastal states in Asia. The so-called 'blue revolution' has been particularly important in Thailand which has a long maritime tradition, a large number of coastal fishing communities, and a high degree of dependence on fish for dietary protein.

Commercialization of fisheries of the small-scale, rural fishing communities in Thailand was influenced by a combination of forces from private entrepreneurs, foreign interests, international

donors and state interventions to promote the development of a highly productive seafood export industry. Fisheries development and modernization processes have quickly established Thailand as one of the world's top ten major fishing countries. The processes, however, have resulted in serious problems of overfishing and depletion of fish resources, which in turn meant loss of productivity and incomes for the majority of rural fishers in coastal areas.

This paper's specific focus is to explore the responses these impacts have generated from small-scale fishing communities. The paper also discusses the prospects and problems associated with the alternative development efforts put forward by non-governmental organizations working among coastal fishing communities. The paper is divided into three parts. The first gives a background to Thailand's fishing economy. The second part deals with the impacts of tecnological developments and commercialization within fisheries and small-scale coastal fishing communities. Finally, the third part briefly reviews and discusses frameworks for understanding of resource management, experiences of community-based resources management as alternative development strategies, and some relevant research issues.

The Fisheries Economy in Thailand

Thailand's coastline is approximately 2,800 km, most of which are located in the Southern region. In 1967 the total number of fisheries households was about 38,000 and the figure has increased to 50,000 in 1995. The majority of these rural fishers live in some 2,500 fishing communities scattering over 24 coastal provinces, and 13 of these are located in the South. According to 1997 national census, about 38,000 fisheries households or 70 percent of the total can be characterized as small-scale fisheries households whose livelihood primarily depend upon marine fishing near the shoreline (see Table 1). Of these, 34,726 households or 90 percent of total small-scale fisheries households are those living in fishing communities spreading along the eastern and

Table 1 Fisheries households and fishing boats in 1967, 1985 and 1995

Year	1967	1985	1995
Total number of fisheries households	38,321	49,862	50,176
Type of fisheries households:			
1. Small-scale/Coastal	35,940	37,318	38,230
- Without fishing boat	6,485	3,208	3,009
- With non-powered boat	15,715	7,319	2,617
- With outboard motorized boat	13,740	26,791	35,613
2. Medium- and Large-scale (With inboard motorized boat)	2,381	13,927	11,873
Type of fishing boat			
1. Non-powered boat	16,584	8,077	2,836
2. Motorized boat	19,047	45,350	51,702
- Outboard motorized boat	n.a.	28,368	36,431
- Inboard motorized boat	n.a.	16,982	15,271
Total number of fishing boat	35,631	53,427	54,538

Source: National Statistics Office and Department of Fisheries (1967; 1985; 1997).

western coasts of Southern Thailand.

Prior to the 1950s, Thailand's fish production had mostly come from the traditional small-scale sector of labor-intensive fisheries which mainly relied on non-powered boats with limited fishing range and simple gear to fishing grounds near the coast. The depletion of coastal fish resources was also prevented by the low productivity ot the technology (oar-or wind-proplelled wooden craft, cotten nets, simple preservation technologies such as salting and drying). However, profound changes in the fish economy had occurred by the early 1960s. They were caused by a combination of private and public interventions with the external support from international agencies in trying to modernize the fish economy in order to benefit from world market opportunities in the trade of fish. This modernization drive largely concentrated on the increased use of powered boats, synthetic nylon nets, and more efficient gear and had important results on the structure of the industry. During the 1970s available statistics shows that althought the number of total fishing boats in the country declined 22 percent, the number of motor-powered fishing boats increased 10 percent and the quantity of fished landed increased to almost 8 times (Wattana Sugunnasil, 1997, 30,11). By 1995, of the total 54,538 fishing boats, more than 90 percent were motorized fishing boats of various sizes (National Statistics Office and Department of Fisheries, 1997).

The rapid expansion of fish production has also been marked by spectacular increase in total catches and landings, and since the early 1970s Thailand has been constantly ranked as one of the world's top ten major fishing countries. The country's total marine landings which remained stable at around 150,000 tons up to 1960 have reached 1,300,000 tons in 1970, and increased to around 2,750,000 tons in 1993 (see Table 2). During 1978-1994 the volume and value of processed seafood export products increased dramatically from 240,000 tons to 1,250,000 tons and from US$ 13 million to US$ 4.4 billion, respectively. Thus, within the past three decades or so, Thailand's marine fisheries sector has been transformed from "a poor man's occupation" (Panayotou & Songpol Jetanavich, 1987) into a multi-billion dollar industry, vertically linked with processing sector and other associated industries. Thailand today ranks the World's largest producer and exporter of fish products. This phenomental increase in marine landings and fisheries export products in volume and value have been exclusively attributed to the rapid de-

Table 2 Total volume of fish landings, 1960-1993

	Total fish landings (1,000 tons)		% Marine fisheries to total landings
	Total landings	Marine fisherties	
1960	219	147	67.1
1965	615	529	86.0
1970	1,449	1,336	92.2
1975	1,555	1,395	89.7
1977	2,190	2,068	94.4
1980	1,792	1,648	91.9
1983	2,225	2,100	94.4
1986	2,573	2,349	91.2
1989	2,740	2,539	92.7
1993	3,327	2,752	82.7

Source: Department of Fisheries. Fisheries Statistics. Various Issues.

velopment of fishing trawlers within and ouside Thailand's fishing waters (Boonlert Phasuk, 1995, 1996).

Fisheries gained importance with the onset of national economic development planning in Thailand since the early 1960s. The relatively long coastline and the highly productive shallow tropical waters gave fisheries the status of a sector capable of accerlerating the growth of the economy of the country. Early on, planned marine fisheries development had mainly focused on increasing the fish harvest and augmenting export earnings. Agriculture was the main engine of economic growth until the 1970s. During the shift to export-oriented industrailization since the 1980s, natural resources remained the major basis of the Thai economy. Fisheries, particularly processed sea food contribute significantly to value-added exports. With the adoption of modernization as a driving force to fisheries devlopment, the state become actively involved in promoting the direction of investment in the sector, instituting many attractive subsidies, and investing in capital-intensive infrastructure facilities such as fishing ports and landing centers. However, it should be stressed that most of the attention, effort and resources have been absorbed in the country's modern fishing sector, with the modernization of the small-scale sector often receiving only scant or delayed attention, few resources and little effective support. Between 1953 and 1986, for example, almost US$ 10 billion in external assistance was provided to the government. Of this, only US$ 4 million have been devoted to development of small-scale subsector (Boonlert Phasuk, 1987). Indeed, in Thailand, like many other developing countries, the motorization of traditional vessels, the modernization of traditional gear and the improvement of traditional marketing and processing methods among coastal fishing communities have often resulted from local and private initiative and were rapidly and widely adopted by most small-scale fishers within a short period of time (Fraser, 1960, 1966; Chaweewan Prachuabmoh, 1993; Wattana Sugunnasil, 1996)

Capital intensive development in the marine fisheries industry has produced a sector with a dualistic character. Beside the small-scale fishery sector a fully mechanized export-oriented sector came into being. In 1995, the small-scale fishery sector included some 38,230 fisheries households and about 39,260 fishing boats; the midium- and large-scale mechanized sector had about 11,800 households and 15,271 fishing boats (see Table 1)

It should be noted that, to survive and to remain comparatively efficient, small-scale fishers must have a capacity to adaptive change and intitiative innnovations. It is this capacity within small-scale fishing sector that have been largely ignored and overlooked by national or international policy makers and experts. Yet evidence from research and experiences of small-scale fisheries development from coastal fishing communities in Southern Thailand and other countries clearly indicates a rather dynamic sector whose actors have been quite well adaptive to new economic opportunities, and willing to innovate and to change their methods so they could gain more benefits from their new market environment (see, for example, Firth, 1966; Fraser, 1960, 1966; Donalson, 1980; Gillet, 1985; Chaweewan Prachuabmoh, 1993; Wattana Sugunnasil, 1996)

Fisheries Development and Its impacts

In the early 1960s, increasing numbers of rural fishers in coastal fishing communities, many with credit obtained from financier-traders, began to invest in moter-powered boats and synthetic nets. This development represented an improvement of technological levels of small-scale fishers, resulting in greater efficiency, higher productivity, and an increase in income. However, small-scale fishers had also began to experience adverse effects from trawler fishing which had been introduced at this period. Trawler fishing required heavy capital investment in bigger boats, larger engines, and expensive nets but proved highly efficient and productive in comparison with the passive traditional methods of fishing

which mainly relied on stationary gear. Trawling quickly became the most lucrative methods of fishing method and attracted a large number of private entrepreneurs. In the mid-1970 total landings by trawlers was 1.1 million metric tons or 80 percent of total landings by all fishing methods, and in 1991 fish landings by trawler increased to around 1.4 million tons although its share of total landings decreased to 56 percent (see Table 3). According to one report, there were only about 99 trawlers in 1960 and the number has increased to 11,745 in 1982 (Vorawoot Hirunruk, 1986), although another source indicates that to maintain a sustainable yield of fishing grounds in the Gulf of Thailand, the maximum number of trawlers is estimated to be only 5,000 (Boolert Phasuk, 1987). This conflicting information points to the failure of the authorities to effectively and closely monitor the development of fishing industry and, particularly, its impact on marine resources, which could be used to evaluate the economic and social benefits and cost of the new technology.

Despite the absence of information on the early development of the trawler fishing industry, there is evidence to show that its impact on small-scale fishers and coastal fishing communities was immediate and adverse. In the early 1960s, fishers living in a coastal community had already complained about a rapid declined in their catch and during 1956-1963 total landings in Southern border provinces had decreased from 9,000 tons to 3,000 tons (Fraser, 1966, 94). Although equipped with more powerful engines which could have enabled the boats to operate further offshore, trawler fishers prefered to work within the inshore and coastal waters where the more valuable and profitable fish resources and prawns were located. This often meant intruding into the traditional fishing grounds of coastal fishing communities in pursuit of high-priced marine species and damaging the nets and other gear of small-scale fishers.

As this coincided with a rapid growth of the medium- and large-scale mechanized trawler fleet, conflicts with small-scale fishers were bound to arise. The latter suffered not only decreasing decline in their catch but also increasing damage to their fishing gears. Such losses sometimes caused violent reactions. A survey of conflicts occurred within the fisheries sector during the 1960s and the 1990s as reported in research findings and newspaper indicates that the incidents have been widespread and endemic, and sometimes escalated into violent and bloody confrontations (Wattana Sugunnasil,1998, 33-46). This certainly represents only a small part of the total number of conflicts and clashes either going unreported or failing to make their way into academic studies.

The seriousness of these conflicts was further aggrevated by the consequences of mechanized fishing for the small-scale fisherst's share in fish production and, subsequently, their incomes. During 1970-1989 production in small-scale fisheries sector fell from about 400,000 tons to 264,000 tons while its share in the total fish catch dropped from 30 percent to 10 percent tons (see Table 4). Another source reports that between 1971 and 1986 total catch by small-scale fishers

Table 3 Volume of marine capture landings by type of fishing gear (unit: tons)

Year	Trawl net	Purse seine	Gill net	Moving gear	Stationary gear	Hooks & lines
1973	1,125,098	117,446	50,501	39,190	40,127	6,898
1980	1,055,150	224,622	121,131	59,719	41,427	8,767
1985	1,002,392	570,917	141,868	62,942	36,008	9,413
1991	1,398,544	737,811	103,702	66,175	35,569	6,630

Source: Fisheries Department. Fisheries Statistics, 1982, 1992

Table 4 Fish production of small-scale fisheries sector

Year	Volume (tons)	% of Total fish landings
1970	400,707	30.0
1982	294,013	14.8
1984	283,948	14.8
1989	264,056	10.4

Source: Platteau, 1989, 569; Veravat Hongsakul, 1987, 21; Quist, 1993

decreased from about 146,000 tons to 83,815 tons (Sombat Sakuntasatein, Sathaporn Taksadipong, & Thawin Rakthong, 1990). Although the large number of small-scale fishers could contribute to high levels of fishing effort, it is generally accepted that intensive trawl fishing in the coastal waters over the past decades was largely responsible for the overexploitation and the overfishing of marine resources in the areas. The current situation is clearly reflected in the index of abundance or catch per unit effort rates in the Gulf of Thailand which have been declining steadily from 279 kg/hr in 1961 to 54 kg/hr in 1985 (Johnson, 1997, 22). Further, since the mid 1960s, although the number of small-scale fisheries households have increased about 6 percent, those with motor-powered boats have increased more than 160 percent (see Table 1).

Given an increase in total fishing effort, the considerable growth of small-scale fishers using motor-powered boats, and the decline in total marine fish landing of in small-scale fisheries sector, this implies an even smaller catch per unit effort and per capita. This situation instigated a vicious circle of overfishing of the coastal resources to counter declining outputs, which in turn caused small-scale fishers and their families to further intensify their fishing efforts. Aside from opting out of the fisheries sector altogether, the small-scale fishers responded to the pressure of competing fishing efforts, depleting resources, and declining catch with a strong motivation for innovation. Some tried to maintain their position by diversifying craft and gear while seaching for improved, appropriate technology. Others, however, have turned to use increasingly more effective, but illegal fishing methods such as poisons, explosives, push nets and other destructive fishing which meet their short-term needs at the expense of long-term interests in resources sustainability. The economic and the ecological impact of profit drive created new tensions and bad feelings within and between many fishing communities (Phisit Chansanoh,1994; Sunantha Ninphet,1996).

Competing fishing efforts and heavy dependence on marine resource which has been regarded as a common property resource necessitates establishment of legal restrictions. In Thailand, the fisheries sector is an area in which the government have excercised governance since the 1950s. Access to fisheries in general is governed by Fisheries Act, and a series of Ministerial rules and regulations; Ministerial regulation of 1972, for example, stipulates that fishing by trawlers and push nets are banned from within 3 km (approximately 1.6 neutical miles) of the coastline. However, despite the law, commercial trawlers continued their encroachment in coastal fishing grounds, thus resulting in conflicts among coastal resource users. The lax and ineffective enforcement of these regulations by the authorithies fueled a growing discontent among small-scale fishers. They complained of the indirect effect of trawling in terms of decreased catch as well as the destruction of nets and traps by illegal trawling. The lax enforcemnt of the regulations by the concerned authority further encouraged some small-scale fishers to continue to engage in illegal fishing and a number of trawlers to encroach into designated 3 km coastal areas. It is inevitable that conflicts continues to erupt between small-scale fishers and commercial trawlers and illegal fishing, such as the use of cyanide, dynamite, etc., remain unabated.

The open access of a common property resource as illustrated by the case of coastal marine resources in Southern Thailand has resulted in various conflicting problems. In the absence of effective control and enforcement, access to the

fishery is de facto free and open. Although a license fee and permit are required for fishing, officials do not strictly enforce the law and users do not pay. Increasing population in coastal fishing communities puts pressure on the already overexploited resources, and thus exacerbates the deteriorating socioeconomic condition of rural fishers (Wattana Sugunnasil, 1997). Over more than three decades since the early 1960s, modernization and export-led development of fisheries sector has resulted in widespread conflicts and serious problems of overfishing and depletion of the marine resources. The processes therefore meant loss of productivity and incomes for the majority of small-scale fishers, who were only peripheral benificiaries of this modernization model.

Responses of Small-scale Fishers

The marine fisheries are generally considered in much of the literature on fisheries development as 'common property' or 'open-access' resources. Generally, these terms imply that marine resource by nature are not subject to exclusive property rights and are thus freely accessible. This makes fishing highly competitive and the marine resources upon which it relies extremely vulnerable to overfishing and subsequent depletion. Paticularly, in the context of commercialization drive, a chance to make profit will eventually cause existing fishers to increase their efforts and new fishers to enter until the net economic yield is dissipated (Panayotou, 1982). Based on the assumption that resource outside of private ownership will be overexploited as the result of the inability of resource users to effectively engage in self-monitoring and regulation, state intervention and control is seen as the only effective means of ensuring sustainable use.

The above perspective has been criticized as historically and empirically faulty (McCay & Acheson, 1987). Firstly, open access in the sense of free entry and unrestricted use of resources exploitation system has to be crearly distinguished from common property. The latter refers to situation in which there are specific legal or customary rights of joint use over a particular territory, where 'the resource is held by an identifiable community of independent users...(who)...exclude outsiders while regulating use by members of the local community' (Feeny, Berkes, McCay, & Acheson, 1990, 4). Traditionally, for example, caste, ethnicity, kinship and/or village membership were common means of exclusion. Such system of limited access and regulations, as suggested above, have important resource management functions. Secondly, there turn out to be many cases where resource users are capable of self-organization to effectively regulate use in way that do not involve privatization. Examples of community-based management in fisheries can be observed in various countries such as Japan (Ruddle, 1985, 1989; Yamamoto 1987), the South Pacific (Ruddle & Johannes, 1985; Baines, 1989; Hviding & Baines, 1994), Turkey (Berkes, 1986), the Phillippines (White, 1989), Indonesia (Bailey & Zerner, 1992) and the United States (Acheson & Wilson, 1996) Such regimes may developed prior to state governance and persisted or may developed informally outside a state-based regulatory regime or may contemporarily developed with outside help and subsequent legitimatization of the arrangement by the state (White, 1989).

The crucial element of common-property systems in fisheries is the limitation of access to the resource. Without some kind of access limitation, a productive fishery will eventually attract too many fishers to render it unproductive. To solve this problem, many societies have developed management systems whereby the right to fish in a particular area is controlled by a family, clan, community or group of communities. Given the limitations of government in implementing effective management, these community-based resource management systems are seen by some observers as a potential alternative to state-based regulation.

However, it should be pointed out that community-based management may not appropriate for every fishing community. The existence of traditions, local organizations, homogeniety, and relatively small size of community are four

crucial conditions which have been suggested to be of particularly important for successful coastal fishery management (Berkes, 1986). Accordingly, many communities may not be capable of or willing to taking on the responsibility of community-based resource management system. The lack of economic, social and/or political motivations and incentives to engage in such a community management effort can be a serious obstacle in many fishing communities.

In the case of Southern Thailand, evidence from a number of studies in coastal fishing communities (Chaweewan Prachuabmoh,1993; Sunantha Ninphet, 1996; Maneerat Mitprasart, 1996; Wattana Sugunnasil, 1997) indicates that local fishing communities are increasingly driven by the same market incentives and economic imperatives which motivate business and commercial groups in other sectors. The emergence of national and global markets for fisheries resource, as well as consumer products, have created a new sets of incentives that are affecting local fishers's cultural and economic interests and institutions. Adherence to traditional redistributive arrangements appear to have been declining and differentiation in job and personal preferences has been noted. Such changes may have been induced by increasing resource scarcity, rising incomes and rising consumerism. In other words, the sharply increased heterogeniety among the coastal fishing communities appear to have been eroding sociocultural and political basis for collective management solutions.

Yet, despite evidence indicating the complexity of conflicting problems and difficulties in collective coastal resource management, there are a number of fishing communities which are now working on their community-based management projects to decrease poverty-driven overexploitation of coastal resources in Southern Thailand (Quist, 1993; Nithi Rithibhornbhun, Phisit Chansanoh, Sutanya Tongrak, & Rapeepan Suwannachote, 1993; Phisit Chansanoh, 1994; Nukul Rattanadakul & Flos, 1995; Project of Coastal Zone and River Basin Management Through Community Organizations and Networks in Southern Thailand, 1996; Sunantha Ninphet, 1996; Maneerat Mitprasart, 1996; Wattana Sugunnasil, 1997). A common factor in most of these communities has been the involvement of a local NGO as key in community organization and mobilization. Success can also be atttributed to: the small size of the communities involved; the achievement of early and demonstrable results; and, to a lesser degree, support of local government authorities. Experience from these communities also highlight the fact that although the progress of their building confidence and capability to assume more powerful roles in resource management is growing, the process of empowering community organizations is slow.

Not surprisingly, a decade or so into this NGO-driven effort, only modest changes in resource use patterns have occurred, reaffirming the fact that community-based coastal management initiatives must be seen as long-term efforts. Yet the results indicate that this effort has generated the conditions in the community that allow them to play a more active role in management (Wattana Sugunnasil, 1998). First, small scale fishers and local residents in many fishing communities have developed an understanding of the relationship between coastal ecosystems, economic growth, and their well-being, and the need for sustainability of resource use is better understood. Second, coastal fishers who participated in and involved with the programs have now experienced the benefits of organization, coordination, network building, lobbying, and direct action. Third, in the past decade there has emerged an increasingly dense network of many environmentally-oriented NGOs in Southern Thailand who are committed to participatory and informed decision making, to conservation through the development of economic alternatives for the disadvantaged, and to move the process forward. Fourth, network of regional and local partners linked by a common plan are beginning to develop the experience and confidence necessary to form coalitions and seek the support of decision makers. To some extent, a concrete result of such efforts is the 'Federation of the Local Fisherfolk Organizations' which was

formed in 1993 to bring pressure on the government and on competing commercial and industrial interests to restore use of resources to their members. The organization has also created broad coalitions with regional and national groups which have similar interests, and to publicize fisherfolks' grievances and cause. Increasingly, it is advocating for the government to enforce regulations and to adopt policy initiatives directed at addressing the open access problems in fisheries, and is demanding the local participation in resource management decisions (Banchong Nasae, 1996).

Small-scale fishers in many communities have therefore been given tools and the opportunity to publicize and articulate their grievances, their cause, and their hope for the future of their resouce-dependent communities, and to take an active role in turning that hope into strategies containing specific actions. These include the establishment of mangrove community forests and marine sanctuaries to rehabilitate local marine resources, the formation of a group of local volunteers to enforce fisheries regulations, the deployment of artificial reefs, and the establishement of linkages with both government and private institutions in support of community resource management.

However, the question of how widespread the community-based coastal management and the empowerment process among fishing communities can become is still open and several issues need to be taken into consideration.

In the first place, community-based management, as mentioned earlier, is not the one and only solution for resource management. In fact, it may not appropriate for every fishing community. Many communities may not be capable of or willing to taking on the responsibilty of community-based resource management system. The lack of economic, social and/or political motivations and incentives to engage in such a community management effort can be a serious obstacle in many fishing communities. For some small-scale fishers and some fishing communities and, social costs and risks in changing fisheries management systems may be too high. Therefore, attempts to create or strengthen contemporary community management institutions must be based upon a realistic assessment of the motives, interests, and cultural conceptions which drive local fishers.

Secondly, much of what state intervention and control for public resources has been realized within what has been called 'environmental manage-rialism' (Redclift, 1987), which means introducing environmental and resource management considerations, generally in a cost-benefit formulation, into the governmental planning and implementing agencies. Although these technocratic, top-down planning and implementing practices are those that encouraged marine overt-exploitation that have contributed significantly to coastal resource degradation and conflicts, it is clear that community-based coastal resource management does not exclude the role of government. Instead, it represents a new form of partnership between government and community-based organization. In essence, it is about power-sharing in the integrated planning and management of coastal areas.

There is growing evidence of the demand by local resource users to be more actively and meaningfully involved in what have been formerlly government decisions (Pomeroy, 1994; Phisit Chansanoh, 1994; Banchong Nasae, 1996; Wattana Sugunnasil, 1998). Traditional forms of pulblic consultation are no longer adequate. Yet there is still debate over the degree of public involvement that is desirable and feasible.

Community-based approach also implies a shift in the philosophy of management with increasing participation. It requires government to re-define its role and in doing so, develop new institutions that facilitate broader participation. This approach refers to goverment's role not as an arrogant and cumbersome bureaucracy, but rather an agile and responsive state, accountable to its citizens. Beyond such a change in government philosophy and a willingness to share power with community-based organizations, the most important and perhaps difficult role that government will have to play is in legitimizing community-based institutions, and delegating power to the

community.

Thirdly, planning and implementation of community-based resource management can be a complex and long-term undertaking and local NGOs are crucial actors in this regard. In the past decades there has emerged an increasingly dense network of NGOs that now contests all issues of environmental issues. Some have even pointed to a trend to 'NGOization' within nations and internationally (Buttel, 1992). According to this point of view, NGOs are assuming a level of power and influence that was previously thought to be possible only on the part of states. NGOs are able to do so not only because of their mobilizing capacity, but also because of the vacuum created by the state and the resource management regimes they have fostered having lost legitimacy.

However, environmental concerns will probably need to be tied to social justice in order to be enduring, and many resource conservation issues cannot be resolved without addressing the poverty and social marginality that drive marine destruction and coastal resource degradation. In this regard, it is encouraging that many environmentally-oriented NGOs in fact were previously social-justice oriented ones or staffed by persons whose commitments are as much or more to social justice as to environmental conservation. Many environmental and sustainable development-oriented NGOs in Southern Thailand, self-consciously employ environmental claims as a calculated means of agitating for social justice goals.

Finally, there is an urgent need to increase our knowledge of community organization and co-operation among small-scale fishers to better appreciate the potential role of local communities in coastal resource management. On the one hand, studies are needed to explore the range of possible social designs which would encourage effective resource management at local levels. Nevertheless, there has been a tendency within major theoretical tradition in enviromental sociology to see the basic dynamics of modern capitalist societies as involving a very strong tendency toward environmental degradation (Buttel, 1996). Such theoretical perspectives that stress the structural inevitability of the forces leading to environmental degradation seem to have difficulty in explaining the conditions under which environmental improvement is possible.

To find some middle ground between structural inevitability and voluntaristic optimism regarding community-based resource management, research is required to document the contents of traditional and local territorial rights, structure of institutions, sucess and failure in resource management. Also, case study analysis of existing systems will provide a basis for understanding the larger economic, political, and ideological contexts within which such sytems operate.

On the other hand, the emergence of local organizations and coalitions can be seen as sites where local people can experiment with new kinds of social identity. They may empower people, providing relatively safe places for identity-testing and the context for the learning of new skills. The differentiating effects of global economic integration and the erosion of state capacities to manage coastal resources seem to provide the opportunity for coastal fishing communities and rural fishers to present themselves. Research is required to explore the significance of this new 'local expression' (McMichael, 1996; MacNaghten & Urry, 1995); the extent of its political significance; and its implications for current research on environmentalism as a new social movement.

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