PERSPECTIVE OF FISHERS ORGANIZATIONS INTEGRATED TO COASTAL FISHERIES MANAGEMENT: THROUGH EXPERIENCES GAINED IN THAILAND

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ABSTRACT

The purpose of the discussion which follows is to clarify the roles of fishers organizations in coastal fisheries management. Even if there is much disagreement over the appraisal of fishers organizations, whatever the type of intermediary organizations will be expected to entail sharing-responsibility between government and fishers. A cooperative system is applicable to comanagement and community-based management regimes. Cooperative movement in Thai fisheries has not yet been mature enough to expand their activities into fisheries management. Nowadays, however, much effort has been made to create a new framework of promotion policy for fishers organizations by the Thai government. Experiences gained in Thailand will give a profound insight into a direction of fishers organization in sustainable fisheries management.

1. Introduction

1.1 Objectives

Decentralization of fisheries management is a key concept in new regimes, placing great emphasis on the encouragement of fishers' participation in the management. Policy makers, administrators and fishers recognize a pressing need to set up a particular type of fishers organization that functions as a management body at local level. The major purpose of this paper is to discuss the organizational structure and operation principles of the organizations.

The first part of this paper will briefly review, from a management aspect, the framework of new approaches to small-scale fisheries development. The second part will clarify the roles of intermediary organizations that entail sharing-responsibility between government and fishers. This part will also present a general view of cooperative-governance of fisheries resources. In the third part, the focal point will be on the development of fishers organizations currently existing in Thailand. There is considerable disagreement, not only in Thailand but also elsewhere in Southeast Asia, over whether or not traditional cooperative organizations could be transformed into effective management bodies. This becomes a controversial issue. This part will first

examine the substantial reasons of disagreement through experiences gained in Thailand. It will also examine a new framework of promotion policy for fishers organizations that the Thai government has just set up. The final part will conclude the perspective and direction of fishers organizations in coastal fisheries management.

1.2 Background

The Southeast Asian nations have rapidly expanded commercial fisheries and fisheries-based industries during the last three decades. The introduction and expansion of highly productive technologies have brought a rapid increase in production. A strong inducement to urge the development of commercial fisheries come primarily from an ever-increasing foreign demand for highly valuable species. The expansion of domestic consumption has become another important factor in the realization of a high growth rate of fisheries and fisheries-based industries. As a result, the industries have successfully increased their contribution to the national economy, providing a wide variety of employment opportunities.

However, too rapid a development of commercial fisheries has caused several contradictions. Under government-centered control over marine resources, fishers have enthusiastically increased their catch effort in fishing open-access resources. Profitable fishing business attracts newcomers and provides high employment. Local overcapitalization and overfishing are widespread throughout the country. Severe competition has occurred not only between large-scale and small-scale fishers but also local internecine problems within the small-scale fishing groups. Unequal of distribution of marine resource has become a serious social problem. Poverty alleviation cannot yet be achieved. Deteriorating coastal environments and depletion of marine resources have caused a crisis in fishing communities for their survival in economic and social terms. The Government's 'long-sighted' policy for fisheries management may often give a sense of hopelessness to poor small-scale fishers (Chong, K., 1994). Even if policy is directed towards the sustainable use of marine resources, its implementation will sometime endanger social stability and then become a political controversy.

It is obvious that narrowly focused policy for improving production of small-scale fisheries cannot solve dilemmas that fishers face. Governments, development agencies and NGOs organize many comprehensive programs which are designed to sustain economic and social stability in fishing communities. Establishment of effective management with participatory approaches is the most essential in the implementation of the programs.

2. Framework of Effective Management and Concept of Participatory Approaches

2.1 Towards Effective Management

Governments of Southeast Asian nations have so far made great efforts to structure the hierarchy of fisheries management. However, from the top-down approaches have often failed in gaining fishers' response and support. They scorn government control over their fishing activities, regarding it as bureaucratic and ineffective. They are excluded from the decision-making process of fisheries management. Restrictions on destructive fishing activities have little effect. Small-scale fishers stand in a vulnerable position relative to large-scale ones. They equip fishing boats with highly productive fishing gear and often invade restricted or preserved areas for small-scale fishers. Coastal fisheries resources, even today, are virtually open-access.

Government-centered regimes of fisheries management in Southeast Asia have found a difficulty in sustaining the stable use of coastal resources. The regimes have hardly attained equal distribution among fishers, although commercial fisheries have rapidly developed. Governments have increased their authority in fisheries management whilst local control, through traditional management and custom, has correspondingly diminished (Nielse, R. N. & Vedsmand, T. 1995). Pomeroy refers to the misleading "standard-package" approach to fisheries development, which neglects the mixed nature of small-scale fishers and their great diversity depending upon their functions (Pomeroy, R. S., 1991).»

being regarded as an adequate measure to fit in with local conditions. A fishery cannot be managed effectively without the cooperation of fishers in any process of making laws and regulations (Pomeroy, R. S. & Williams, M.J., 1994).

Decentralization of a government-centered regime is indispensable for the establishment of user-based resource management in coastal fisheries. This regime often faces a difficulty in enforcing fisheries laws and regulations due to lack of a workable administrative system, personnel and budget. The procedure of decentralization has several advantages. Firstly, fishers' indigenous knowledge of coastal fisheries resources is of great use in the enforcement of conservation measures being suited to local conditions. Secondly, their participation and cooperation in a sustainable management regime is cost-effective rather than the traditional from the top-down approach. Thirdly, local communities and people may be able to administer regulatory institutions that are superior to externally-imposed regulations (Townsend, R.E., 1995).

As many anthropological studies indicate, traditional community-based fisheries management used to have self-governing functions in using land and coastal resources within a well-defined narrow locality. Akimichi points out that the traditional marine fisheries tenure and its administration depend heavily on such distinct conditions as low population density, homogeneity of kin- or territorially-

based communities, use of primitive technologies, isolation from urban fish markets (Akimichi, T., 1995). Fishers and residents arrange a particular type of informal institution with self- and mutual-help functions enabling them to survive. Communities often have a "shared-poverty" function, too. They share same cultural backgrounds.

Jentoft theoretically describes that a traditional community-based fisheries management represents an institutional arrangement for mutual adjustment among fishers within a certain defined area (Jentoft, S. & Kristoffersen, T., 1989). This arrangement is informal. Initiatives of fisheries management belong to fishers and local residents, not to any authority of central government. Of course, traditional systems cannot always evolve into formal ones. Influenced by an infiltrating commercial economy, traditional communities have diminished the function of governing common property in their immediate vicinity. Moreover, government-centered regimes have increasingly threatened the survival of traditional community-based fisheries management. Local government control over fishing activities and coastal resources is spreading throughout the country, as Bailey and Zerner analyze 'sasi' systems in Indonesia (Bailey, C. & Zerner, C., 1991).

Regardless of whether or not a community-based fisheries management could be transformed into formal and institutional ones, traditional experiences and customs may provide a profound insight into what viable model of institution will be more suited to people's self-governance of coastal fisheries resources. There may be a wide variety of models whereby fishers participate in the decision-making process of fisheries management. Co-management and/or community-based models are the ones that transfer government-centered powers to the local level.

2.2 Participatory Approach and Co-management

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It is widely acknowledged that co-management represents a particular partnership between government and local fishers (communities, and institutions): of course, there are some disagreements over the detailed concepts of co-management. The partnership shares responsibility and the authority of fisheries management between both parties (Pomeroy, R. S. & Williams, M. J., 1994; McCay, B. J., 1993). This is expected to develop an institutional framework which stimulates fishers to participate in the decision-making process of management.

A framework of co-management contains the ideal of decentralization and deofficialization. On the other hand, it sets up intermediary institutions which are legally controlled by government. This seems a contradiction. A traditional community-based fisheries management might not be applicable to the creation of a new regime without legitimacy. Government-centered regimes have found a difficulty to enforce fisheries restrictions in order to reduce the depletion of coastal fisheries resources. The co-management approach takes a middle position between government-centered and traditional community-based management. Obviously, the organization and activity of co-management is legalized by central government.

Within the scope of legitimacy, fishers will take self-governance of fishing activities. Co-management may be composed of a government-centered regime.

The question is to what extent government agencies will devolve their present duty of governing coastal fisheries. This is a very difficult one. Bureaucrats and policy makers probably hesitate to transfer their initiatives to the local level, on the grounds that fishers are incompetent as administrators of resources. Decisively, a deofficialization strategy greatly influences the whole aspect of a bureaucratic system including the local administration currently prevailing. It becomes a political controversy. Another question is what institutional framework should be designed for enabling small-scale fishers to take initiatives in fisheries management. It is generally understood that there are two substantial elements for promoting fishers' participation through any institutional framework; territorial use rights in fisheries (TURFs) and fishers' organizations (FOs). These elements are interlocked reciprocally.

The availability of TURFs is a prerequisite for community-based fisheries management, as Christy describes (Christy, F. T., 1992). It is a central element of co-management (Pomeroy. R. S. & Williams, M.J., 1994). TURFs are given to individual fishers, groups of fishers, communities and/or local governments. They may be divided into territorial use rights for capture fisheries and for aquaculture. They are regarded as exclusive access rights to coastal fisheries. The cooperative use and self-governance of resources will bring efficiency and equity to those fishers who possess the right to entry into fisheries.

In a traditional community-based fisheries management, communal organs in various forms have responsibility not only for controlling production activities of fishers but also arranging equal distribution of resources to community members. The communal organs have a 'shared-poverty' function. In case studies on the 'sasi' system in Maluku Island, community's leaders and elite have little discretionary powers that lead to their own profit making (Kissaya, E., 1993; Mantjoro, E., 1993). Their management activities have legitimacy by passing through mutual consent of all resource users in the community. In cases where a 'sasi' system works effectively, a group of committees carefully watches fishers' law-abiding activities and guides them to conserve scarce resources. Any offender is punished by the group. It acts as a management body which coordinates among the resource users concerned and avoids a conflict of interest. The group extends its function within defined territorial boundaries. It is noteworthy that sustainable use and equitable distribution of scarce resource are firmly built into traditional communities.

Government and resource users jointly establish particular types of formal organizations, as traditional fishing communities have established communal organs. Their membership may be open exclusively to those fishers who have a license and limited entry to coastal resources. Or the membership is open to any residents which defined boundaries. In either case, the management of TURFs is a key role of organizations.

FOs are communal in nature, as long as fishing communities are primary units for the management of TURFs. They may be attuned to the greater importance of communal benefit rather than individual ones. An egalitarian movement will reduce a large gap in terms of distribution of coastal resources among fishers. On the other hand, FOs show a corporate nature in organization. Under a rapid development of commercial fisheries, fishers have a strong will to advance in economic terms. Their motivation deeply affects the operational principles that FOs adopt. Fishers much prefer to maximize own individual benefit rather than to sustain economic equality among them. They are organized into a management body almost as competitors. In fact, many traditional fishing communities which have arranged an institutional framework for the sustainable use of coastal resources have gradually diminished the functions of avoiding social conflicts (Mantjoro, E. & Akimichi, T., 1995).

There will appear a wide variety of forms of FOs acting as management bodies. The basic ideal and practical components of TURFs are the major elements which affect their organization and operation. While TURFs neither concern local intimacy nor communal cohesion of fishers, the organization of FOs entail flexibility and openness. They are corporate in nature, based on competitiveness and efficiency. These organizations will be capable of managing such as individual transferable quota. On the other hand, there are many obstacles to introducing TURFs.

In Southeast Asia, coastal fisheries still provide rural people with an important means of livelihood. Some restrictions on coastal fisheries, which are conducive to the sustaining of scarce resources, will make a number of fishers and their families face a crisis of survival. Fishers have not yet grown mature enough to adapt themselves to complicated management regimes. Probably, they prefer to take a noncommittal attitude toward determination in the management of TURFs. It is obvious, of course, that they need a well-defined right to determination in the decision-making process (Townsend, R. E., 1995). Small-scale fishers adopt collective measures to manage and utilize coastal fisheries resources. FOs rely on local and social intimacy among fishers, and then develop communal procedures of decision-making processes into formal democratic ones. The cooperative ideal and procedures of resource use are becoming the most significant.

3. Expectations and Dilemma of Fishers Organizations in Thailand

3.1 Disagreement over Promotion for Cooperative Organizations

There is a pressing need to promote cooperative organizations and encourage people's participation in rural development, but this is very difficult work especially in small-scale fisheries. As Yamao describes, even today, the appraisal of rural-based cooperatives has fluctuated between a negative and positive light (Yamao, M., 1993). In fisheries fields, there have been a plenty of failures to set up self-help organizations which adopt cooperative principles and manners.

Governments in Southeast Asia have made many fresh departures in the creation of cooperative organizations in various forms during the last two decades. In Thailand, there exists at least four different types of fishers organizations: fisheries cooperatives, agriculturists groups for fisheries, fishers groups, and BAAC (Bank for Agriculture and Agricultural Cooperatives)'s clients groups. There are several substantial reasons for the coexistence of cooperatives and 'quasi-cooperatives.' Plural government agencies involved in rural development have made considerable effort to establish distinct types of fishers organizations according to their own objectives. Lack of coordination among the agencies has led to the complicated systems of fishers organizations. As a result, fishers' movement toward the improvement of cooperative activities has been divided into several sections. Promotion policy for cooperative organizations have always fluctuated between political and economic aspects, and between pessimistic and optimistic appraisal. Such changeable attitudes towards cooperative organizations are the major cause hindering the smooth development of fishers participation in whatever the type of cooperatives.

Fishers tend to regard any cooperative organizations as agencies of government's relief work. They often hesitate to deal with cooperative business activities since they have to follow complicated procedures. More decisively, the organizations do not cover all the aspects of production and distribution that fishers need. Membership of cooperative organizations are a tiny portion of all fishers in small-scale fisheries. Therefore, they can hardly act as conduits of government support to all fishers.

Naturally, promotion for fishers organizations, which is at the core of comanagement and community-based fisheries management, becomes a matter of controversy. However, many failures of traditional cooperative organizations remind policy makers and administrators that they will be little use in coastal resource management.

3.2 Appraisal of The Present System of Fishers Organizations in Thailand

Fisheries cooperatives (FCs), which are regulated by the Cooperative Society Act, 1. extend their membership over a district (Amphure) and conduct economic activities. In actuality, they function as occupational groups whose members share the same interests, consisting of particular types and classes of fisheries. The cooperatives do not affiliate many fishers within the district. Cooperative membership accounts for a tiny portion of the total number of fishers, estimated at less than 10% of those engaged in marine capture fisheries and aquaculture in 1994. The number of FCs has gradually increased.

Agriculturist groups for fisheries (AGFs) ,2. are distinct in nature from FCs. Membership of AGFs extend over an administrative village (Tambol). It is ideal that they should play a key role in village development programs supported by government. The number of AGFs have rapidly increased after the mid-1970s, and

surpassed that of FCs. From then onward, AGFs importantly acted as conduits of government subsidies and financing to fishers.

There are some reasons why government does not pay much attention to the rebuilding of the present system of cooperative organizations for the creation of new management regimes in coastal fisheries. First, both FCs and AGFs are designed to conduct economic activities such as provision of credit, supply of production materials, and marketing fisheries produce. It is not clear whether these two categories will be applicable to co-management and community-based management. Loosely defined, the category of cooperatives refers to an economic organ through which members would be able to grow into maturity as commercial producers. In contrast, the category of AGFs may be defined as social relief work of government (Yamao, M., 1996). In addition, BAAC's clients groups are to function with joint and several liabilities among a small number of clients.

Secondly, not much success has been achieved in the operation of business activities. Many of AGFs fell into dormancy which could have provided meaningful service. Depending heavily on the support of government, they failed to encourage people's participation on a voluntary basis. Fisheries cooperatives are not in a very critical condition, nevertheless they are not capable of the challenge of new assigned work in coastal fisheries management. Moreover, the administrative lines registering and supervising the cooperatives are separated from the implementation of fisheries policies. Without rearrangement of the administrative system, cooperatives can hardly adapt themselves to the management of coastal fisheries.

Thirdly, Thai government has still continued to investigate the enactment of the fisheries laws and regulations that do not include any framework of fishing rights (Karnjanakesorn, C. & Yen-eng, S., 1995). In a draft, the fishing right system means a decentralized system that transfers part of responsibilities for fisheries management to local levels. However, clear-cut outlines of the new regimes are not yet proclaimed. The government devotes itself to investigating fishers' attitudes toward fishing right systems and preparing for pilot projects in several provinces.

Therefore, the present system of cooperative organizations will not be integrated with new management regimes of coastal fisheries.

3.3 New Approaches toward Community-based Organizations

After the mid-1980, the DOF began an enthusiastic involvement in the development programs of small-scale fishing communities. While increasing the capacity of extension services, it rapidly enlarged the amount of budget earmarked for the investment of infrastructures such as small landing places, marketing places, retaining walls, meeting halls, storage and other facilities for the improvement of production and living conditions. These are located in fishing communities, termed Moo Baans and/or Tambols. As Table 1 indicates, the number of projects was more than five hundred in coastal fisheries up to 1995. In aquaculture, fishers obtain new

technology and knowledge of fish, shrimp, oyster, cockles and others with some production materials. In coastal fisheries, except for gear demonstrations, the DOF concentrated mainly on the construction of piers throughout the country, especially in Chantaburi, Trad, Surat Thani, Chumpon, Trang, and Satun. It is estimated that this work accounted for more than 70 % of the total budget for the development programs of small-scale fisheries. There were 92 piers in 1993, this then increased to 151 by 1995. The scale of a pier is not large, being in a ratio of one to 20 or 30 fishing boats. The number of projects for building retaining walls increased. A great deal of budget was invested in the establishment of artificial reefs, also.

Such active involvement in the development of small-scale fishing communities may provide great incentives for fishers to improve their production and living conditions. No analytical data indicates how effectively community-based infrastructures are used. Roughly speaking, a considerable number of piers have not yet achieved full utilization by fishers due to unsuitable location and the inappropriate design of structures. The piers privately owned by fish traders may be more convenient for fishers to have a business link with them. As long as the traders diversify their economic function on these piers, they have little motivation to move toward the new public facilities. Meanwhile, artificial reefs are very useful not only for aggregating fish but also for reducing resource damage caused by trawlers. Fishers much appreciate the installation of artificial reefs and the creation of a new fishing order in their immediate fishing grounds (Shinanuwong, K., 1993).

In the process of implementing development programs, a concerted effort has been made to establish a particular type of fishers organization since 1987. This is called "Klun Khong Tuns Pramong (group of funds for fisheries, GFF), which is distinguished in nature from FCs and AGFs. There existed 99 groups in 1993: at present, the total number of groups is more than 170. The membership of a GFF tends to extend mainly over Moo Baans which are primary units of an administrative village (Tambol). It is designed to work as an agent of the fisheries extension service and to undertake the task of managing community-based infrastructures. Those fishers joining the membership can have access to training courses organized by the extension service and gain some economic benefit. In cases where fishers do not organize themselves into a group, they set up a committee for the collective use of the infrastructures only.

Depending on the concessive support of government, GFFs perform some economic activities, especially the supply of fishing gears on credit. In a Moo Baan, Klongyai District, Trad Province, fishers are engaged mainly in small-scale trawl fisheries, gill net and trap fisheries. In 1991, 41 fishers (40% of the total number of fishing households) joined together to set up a GFF. The DOF constructed a small pier while the district administration replaced the wooden walkway along the canal by the concrete one. The GFF began with the supply of nets on credit while it was assigned to manage the pier. At the outset, the DOF subsidized a great portion of the operating funds. A share capital is one hundred Baht. Interest is charged 2 Baht per one hundred Baht for short-term credit, on a monthly basis (Yamao, M., 1995).

Table 1 Development Programs for Small-scale Fisheries (1987-1995)

	Chachoengsao	Chon Buri	Rayong	Chanthaburi	Trat	Phetchaburi	Prachuab Khiri Khan	Samut Songkhram	Samut Sakhon	Phuket	Krabi	Nakhon Si Thammarat	Surat Thani	Chumphon	Ranong	Phangnga	Songkhla	Phattalung	Trang	Satun	Naratiwat	Pattani	Total
Aquaculture 1)	0	0	0	1	0	0	О	0	1	0	5	8	2	6	1	1	11	18	8	13	9	2	86
Coastal Fisheries 2)	2	1	15	23	26	16	40	11	11	10	26	28	28	48	17	30	51	0	50	30	11	31	505
Pier	2	1	5	10	11	5	8	6	6	3	9	7	12	11	8	9	7	0	13	13	1	4	151
Retaining Wall	0	0	1	4	3	3	6	2	2	2	4	4	2	5	2	5	2	0	6	8	2	3	66
Storage	0	0	1	0	1	0	1	0	1	0	3	2	2	3	0	2	6	0	3	2	2	1	30
Processing Plants	0	0	0	1	1	1	0	0	1	0	0	1	1	0	0	0	1	0	1	0	2	2	12
Water Tank	0	0	0	0	1	0	1	0	0	0	1	0	0	2	0	1	2	0	3	3	1	0	15
Winch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Artificial Reef	0	0	6	0	1	0	11	0	0	2	1	2	0	12	7	5	5	0	7	9	0	9	77
Gear Demonstration	0	1	2	8	8	7	13	3	1	3	8	12	11	15	17	8	27	0	17	15	3	12	191
Processing 3)	0	0	3	3	7	2	3	2	0	1	2	7	5	5	1	1	12	6	9	14	7	6	96

Note

This is promotion for aquaculture of fish, shrimp, oyster, cockle, mussel and so on.
 These are mainly construction projects.
 These are for extension of technology, training, and marketing.
 (Source) DOF Phun Thi Dam Naan Kan Khlongkan Phattana Pramong Tale Chai Phan Phun Baan Phi 2530-2538

In another fishing community of the Klongyai District, a GFF supplies gill nets on credit. Fishers are engaged mainly in gill net fishing for crab, shrimp and giant queen fish. The upper limit of credit is 4,000 Baht per person. Duration of repayment is ten months. The members require two persons to stand joint and several security. As the amount of credit is not enough, they have to provide a certain portion of the money for purchasing gill nets. This GFF has not accumulated their own capital, so that the members have to wait for their turn to obtain credit. Interest payments of borrowers are the major source of profit. It would appear that the scarcity of operating funds has become an impediment to a further encouragement of fishers' participation.

Table 2 shows some indicative figures of GFFs' activities in Trang Province: no available data indicates the whole aspect of GFFs throughout the country. Compared with other provinces bordering the Gulf of Thailand, the establishment of GFFs was started at a much slower pace. For the last few years, fishers have increasingly participated in GFFs' activities. The scale of membership per group is very small, being 40 fishers on average. Such a meager scale results from the fact that GFFs are established mainly within a Moo Baan(s). The membership of GFFs do not include all fishers in their immediate vicinity, although there is a great difference in percentage of members to all fishers between GFFs. It ranges from 20 to 90 %, but many groups are at a level of 30 %. A GFF is characterized as a community-based institution. However, membership is not open to any fishers on account of a lack of operating funds. As a result, GFFs do not always represent communal interests. They follow the motivation of individual benefits among particular interest groups.

GFFs concentrate mainly on the provision of fishing gear on credit in the operation of business activities, not diversifying their function. This is not only because they are not regarded as economic organizations, but also because they have not yet accumulated their own assets. The total value of assets is 112,817 Baht per group. The funds subsidized by the DOF account for 92.5 % of the total on average. GFFs would hardly conduct any economic activities without government support. Some groups decrease the amount of supply year by year. They mediate government subsidies to members as intermediaries. Further development of business activities is very difficult work.

The figures of Table 2 prove that GFFs are of no great use for managing and maintaining community-based infrastructures, nor are they helpful to the DOF to expand new technology and ideas that are conducive to a rapid improvement of fisheries production. However, many attempts and experiences gained in the operation of GFFs are highly suggestive to the perspective and direction of fishers organizations. The next section will focus on what viable models are desirable for attaining a participatory approach in coastal fisheries management.

Table 2 Organization and Operation of Groups of Funds for Fisheries (GFFs) in Trang Province

										Unit: No., %,	Baht	
	Year of	No. of	No. of		Total	Subsidies	Shares	Savings	Profit	Supply of	Budget for	Infrastructure
	Establishment	Househol	Members	%	Assets 2)	from DOF				Materials 3)	Pier	Others 4)
Paliam District												
1	1993	138	101	73.20%	147,955	136,384			11,571	20,634	2,143,200	
2	1995	114	24	21.10%	71,630	68,630			700	68,630		
3	1995	74	28	37.80%	95,790	83,030	2,000	32,400	5,065	83,030		
Sikao District]										
1	1994	112	38	33.90%	133,894	116,050	4,400	8,130	3,982	48,230		
2	1989	119	31	26.10%	92,878	92,878						500,000
3	1994	40	35	87.50%	113,092	107,231				38,391	1,098,400	
Kantan District	•											
1	1993	73	66	90.40%	140,223	129,831			5,213	22,200		
2	1993	167	37	22.20%	131,200	125,424	1,700		2,499	21,450		
3	1994	200	38	19.00%	133,894	116,050	4,400	8,130	3,982	48,230	4,114,000	
4	1994	151	32	21.20%	91,580	84,280	2,800		4,500	84,280		576,000
5	1995	63	25	39.70%	125,972	117,449		7,570	95	43,470		278,000
Khosanene Su	ıb-district											
1	1995	170	20	11.80%	75,700	74,500	500		600	74,500		
(Per Group)		118	40	33.90%	112,817	104,311			3,184	46,087		

Note 1) Total of GFFs is 18 which does not include the groups with numbers of members.

(Source) Kijkaam Khong Kan Phatana Pramong Tale Chai Phang Phun Baan Yokuen Kan Jat San Leng Asai Sat Tale Khon Changwat Trang DOF, 1995

²⁾ Figures are as of 1995.

³⁾ Amount of supply is almost equivalent that of credits.

⁴⁾ These are the budgets of the DOF.

4. The Creation of Fishers Organizations as Management Bodies

4.1 Lessons from Past and Present Experience

Three types of cooperative organizations in Thai fisheries have their own profiles, shown in Table 3. FCs would hardly evolve into a management body for coastal fisheries without any coordination with fisheries agencies. The organization and membership of some fisheries cooperatives are fitted to highly commercialized fisheries. These cooperatives always have a strong will to expand their scale of business. They are likely to expand business scale and integrate those fishers who have the same economic interests into cooperative membership beyond their immediate vicinity. Economic inducement is obviously an essential element in enhancing cooperation among members. Some cooperatives are affiliated mainly with small-scale fishers, in the same way as other types of FOs. They are local-based organizations. However, membership and operation are flexible, and distinct from AGFs and GFFs. To grow into adequate institutions involved in coastal fisheries management, FCs must be divided into new categories in the regulations. In addition, FCs have been alienated from favor in fisheries policies.

In principle, AGFs have adequate profiles and principles as community-based organizations. They are established within Tambols, consisting of several fishing communities (Moo Baans). A Tambol is a primary unit of Thai local administration with some budgetary and administrative powers, under the authority of the district and takes a key role in recent rural development projects. Standing between the district directly authorized by government and the Moo Baans managed by local residents, Tambol administration has a function of coordinating people and government. It is a formal institution in which the residents participate in the decision-making process of administration. AGFs (and whatever the type of agriculturist groups) are designed to entail social intimacy among members within the Tambol. The organizational structure of AGFs may be more attuned to the importance of sustaining a sense of political unity than that of attaining economic efficiency in business operation. Such Tambol-based organizations might have taken an initiative in co-management regimes. In actuality, a number of AGFs have fallen into dormancy sine the mid-1980s.

Generally speaking, GFFs extend their membership within a very narrow locality. The scale of membership is not large. Probably, the meager scale of membership may be better suited to the implementation of extension services, but not to the operation of any economic activities. It is regarded as primary unit of coastal management. Small-scale fishers normally cover a wider area of fishing ground beyond their immediate vicinity. As seen in a pilot project for community-based management in Tambol Khaomaikeew, Trang Province, fishers living in six Moo Baans set up an area federation a few years ago. The federation has responsibility for coordinating among Moo Baans and creating a self-governance regime in certain fishing grounds. Interlocking relationships between the Moo Baans have enabled a restriction on destructive fishing methods and gear such as trawl and push nets and

Table 3 Distinct Profiles of Three Types of Fishers Organizations in Thailand

	Laws & Regulations	Under Authority	Government Audit 1)	Area of Mem- bership	Main Activities	Nature of organization	Status	Flexibility	Conditions for participating in management
Fisheries Cooperatives (FCs)	Cooperative Society Act (in 1968)	Cooperative Promotion Department (Ministry of Agriculture & Cooperatives)	Yes	District	Supply, Credits, Deposit, Marketin	Economic orga- nization	Active	Yes	Yes Expansion of membership. Rearrangement of primary units. Creation of new categories according to members' fisheries. Coordination with DOF.
for Fisheries	Revolutionary Proclamation No. 140 & No. 141 (in 1972)	Department of Fisheries (Ministry of Agriculture & Cooperatives)	Yes		Supply, Credits, Deposit, Marketin	Economic orga- nization Agents of govern- ment agencies	Not active (many are dormant)		No Some active groups may be transformed into management bodies.
	Notification of Department of Fisheries	Department of Fisheries (Ministry of Agriculture & Cooperatives)	No	Baan	Supply of gears Management of Infrastructures Extension of tech- nology	Conduits of extension servie	Active	Yes	Yes Expansion of membership. Encouragement of fishers autonomy. Reduction of dependence on supports. Rebuilt organizational strucuture. Establishment of regional federations.

Notes 1) Government audit is conducted by the Department of Cooperative Auditing (Ministry of Agriculture & Cooperatives).

preserves the marine environment in their fishing grounds. It is obvious that individual GFFs will join the membership of an area federation which has a comanagement function at local level.

Meanwhile, as long as GFFs are engaged in some economic activities, a considerable proportion of fishers are excluded from their membership. They limit newcomers. A shortage of operating funds becomes an obstacle. GFFs are more economic organizations in nature than generally thought, although the scale of activities is meager. Some fishers can access government support, while others are alienated from it. Community-based organizations such as GFFs do not always have communal and majority benefits. Therefore, administrative organs of Moo Baans or Tambols may be more applicable to the establishment of co-management and community-based fisheries management having special attention to equality and people's participation.

4.2 Equality Democratic Control and Competition

As Table 3 indicates, there should be some preconditions for transforming the fishers organizations as they currently prevail into management bodies in coastal fisheries. It seems that FOs would be better if they specialized their function on a fisheries management aspect, not diversifying into economic fields, especially in cases where TURFs are given to communities or organizations whose membership is open to any fishers. They must avoid any rules of exclusivity within their own territory. Otherwise, the operation of FOs will cause social conflicts in fishing communities. Given the conditions where coastal fisheries still provide plenty of employment opportunities, any policy for coastal fisheries management will hardly bring a sense of hopelessness to fishers.

Cooperative organizations engaged in economic activities tend to adopt "scale of economy"-based principles in business operation under relaxation and structural adjustment of the national economy. These principles are not always acceptable by FOs with a management function in coastal fisheries. Organization and operation principles that the cooperative organizations currently prevailing adopt are more suitable to the enhancing of the market-oriented ability of members. There may be still the recommendation that FOs are to feature both economic unity and a management body. Probably, this has derived from unique experiences gained in Japanese fisheries cooperatives. In actuality, they have successfully developed an interlocking relationship between market-oriented and fisheries management functions. Such a relationship is, however, a very sophisticated arrangement based on customary fishing behavior. It will take time for Thai small-scale fishers to organize FOs in the same manner. In this sense, the promotion policy for GFFs is rational to some extent.

According to past experiences, very few cooperative organizations could avoid severe competition among members and between themselves and non-members. A particular class of members often made a monopoly of cooperative

benefits. Any system and rule of FOs must be under democratic control. In Thai rural society, local powers and elite can more easily access development benefits than others, by taking the initiatives in the decision-making process of village administrations. Without an institutional framework of democratic control in FOs, coastal fisheries resources may again be monopolized by a minority group of fishers. FOs have to develop a democratic structure of organization and operation. This must be strictly guided by central and local governments. New regimes such as comanagement and community-based fisheries management cannot tolerate arbitrary fishing behavior of minority groups. The ideal and practical procedures of cooperative organizations are built into the new regimes. Essential elements of cooperative principles are self-reliance, equality and democratic control. They become the elements of the new regimes in coastal fisheries management.

5. Conclusions

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It seems that co-management and community-based management regimes reduce severe competition among small-scale fisheries which in turn reduces the depletion of coastal fisheries resources. Locally-based and formal institutional frameworks have to develop resource users' participation in the decision-making process of fisheries management. A cooperative system is applicable to these new frameworks. At the outset, the principle of organization and operation in the system will adopt the communal elements newly created which exclude a rigidly structured relationship in fishing communities. Probably, this is only a transitional stage of coastal fisheries management.

In Thailand, structural changes have occurred in fishing communities and fisheries-based industries. In developed areas, some of small-scale fishers have become mature enough to conduct highly commercialized fisheries, while residents tend to migrate to urban centers to obtain jobs outside fisheries. Fishing becomes one of the alternative employment opportunities. In the future, a locally-based management system may consist of an assembly of units of individual fishers with the possession of particular fishing rights such as an individual transferable quota. Naturally, the principle of operation and organization that a cooperative system adopts will be modified into that of particular occupational groups, diminishing the communal elements. It is attuned to the importance of economic efficiency in individual fisheries. As shown in the case of some developing countries, territorial use rights in fishing would be given to any fishers organizations that are competent to effectively use the resources and to preserve them. This is possibly one direction of a cooperative resource management through economic efficiency.

For the establishment of effective coastal fisheries management, FOs will pass through phased stages of development. Clearly, Thai small-scale fishers have to create and develop their own models of FOs. There will be a wide variety of models according to different patterns of small-scale fisheries development at local levels. Comparative case studies on the ongoing pilot projects will provide an insight into

what viable model of FOs will be more useful not only for people's participation and but also for sustainable use of coastal fisheries resources.

(Notes)

- 1 Department of Cooperative Promotion has the authority to register and supervise fisheries cooperatives. This department covers all types of cooperatives.
- ² They are called as fishermen's groups. They are not registered according to the Cooperative Society Act. The Department of Fisheries regulates groups. There is much difference between fisheries cooperatives and groups.

6. References

- Akimichi, T. 1995 Kaiyou Minzokugaku Tokyo University Press, Tokyo.
- Bailey, C. & Zerner, C. 1991 Role of the Traditional Fisheries Resource Management Systems Fisheries Forum II, Indonesia.
- Chong, K. 1994 "Labour Absorption in Fisheries: Inevitable Trends and Prospects in Employment Creation" Socio-economic Issues in Coastal Fisheries Management: Proceeding of the IPFC Symposium pp 49-63. FAO Regional Office For Asia and the Pacific, Bangkok.
- Christy, F. T. 1992 Enhancement, Efficiency & Equity Turfs: Experiences in Management FAO/JAPAN Expert Consultation on the Development of Community-based Coastal Fishery Management Systems for Asia and the Pacific, pp.15, Kobe.
- Jentoft, S. and Kistoffersen, T. 1989 "Fishermen's Co-management: The Case of the Lofoten Fishery" Human Organization, Vol.48., No. 4.
- Kisaya, E. 1993 "Sasi Aman Haru-Ukui, Tradusu Kelola Sumberdaya Alarm Lestari di Karuku" Penerbt sajati, Bangdung.
- Karnjanakesorn, C. & Yen-eng, S. 1995 Revision of Thai Fisheries Law and Opportunities for Community Based Management, pp.11, Department of Fisheries, Bangkok.
- Mantjoro, E. & Akimichi, T. 1994 "Sistem Pemikiran Tradisional Terhadap Sumberdaya Perikanan di Pulau Para dan Kahakitang" Jurnal Fakultas Perikanan Vol. II, No. 1, Sam Raturangi University, Menado.

- Mantjoro, E. & Akimichi, T. 1995 "Sea Tenure and Its Transformation in the Sangile Island of North Sulawesi, Indonesia: The Seke Purse-Seine Fishery" Coastal Foragers in Transition Sneri Ethonological Studies No. 42., pp.121-146, Osaka.
- McCay, B.J. 1993 Management Regimes Beijer Discussion Paper Series No. 38, pp.12 The Royal Swedish Academy of Science, Stockholm.
- Nielse, R. N., Vedsmand, T. and et al 1995 Framework for Addressing Fisheries Co-management Arrangements pp.14
- Pomeroy, R. S. 1991 "Small-scale fisheries management and development: Towards a community-based approach" Marine Policy, Vol. 15., No.1 pp.39-48
- Pomeroy, R. S. & Williams, M.J. 1994 "Fisheries Co-management and Small-scale* Fisheries: A Policy Brief" ICLARM, pp.15, Manila.
- Shinanuwong, K., 1993 Evaluation of Artificial Reefs Installed in Pechaburi Province, pp.13, Department of Fisheries, Bangkok.
- Townsend, R.E. 1995 "Fisheries Self-governance: corporate or cooperative structure?" Marine Policy Vol. 19, No. 1. pp.39-45,
- Yamao, M. 1993 Political Economy of Agricultural Cooperatives in Southeast Asia South Pacific Study Vo.14. No. 1 pp.119-136, Japan.
- Yamao, M. 1995 Promotion Policy for Coastal Fisheries and Development of Fisheries Organization in Thailand, Bulletin of Fisheries Economy Vol. 36 No. 1, pp.101-117
- Yamao, M. 1996 Transitional Stage Towards Structural Reforms of Agricultural Cooperatives in Thailand South Pacific Study Vol. 16. No.2., pp.175-197, Japan.