

Community-based and co-management institutions for sustainable coastal fisheries management in Southeast Asia

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ABSTRACT

Fisheries experts now recognize that resource conflicts can be diminished and resources better managed when fishers and other resource stakeholders are more involved in management, and access rights are distributed more effectively and equitably. There is an increasing commitment by governments in Southeast Asia to policies and programs of decentralization and community-based management and co-management. The planning and implementation of these management systems will require the development of new legal, administrative and institutional arrangements at both national and community levels to complement contemporary political, economic, social and cultural structures.

1. INTRODUCTION

1.1. The search for better fisheries management methods

Fisheries management experts recognize that the underlying causes of fisheries resource over-exploitation and coastal environmental degradation are often of social, economic, institutional and/or political origins. The primary concerns of fisheries management, therefore, should address the relationship of fisheries resources to human welfare and the conservation of the resources for use by future generations. That is, the main focus of fisheries management should be people, not fish per se. Policy interventions, if they are to bring about lasting solutions, must address these concerns.

Fisheries management in many Southeast Asian countries has been heavily influenced by the temperate scientific model of calculating maximum sustainable yield of a few key fish species and of the need for centralized administrative authority. This model has been shown to have limited applicability in multi-species tropical/sub-tropical fisheries. It also provides for little or no effective consultation with, or participation from, fishers.^{1,2} Fisher participation in management can provide a wealth of local or indigenous knowledge to supplement scientific information, to help monitor the resource, and to improve overall management.

Fisheries experts in Southeast Asia now recognize that a fishery cannot be managed effectively without the cooperation of fishers to make laws and regulations work.^{3,4} Fisheries management abounds with laws, rules and regulations in most countries and many of them are quite specific and well intentioned. However, the effective capacity of many fisheries agencies to regulate what goes on in widely scattered, often isolated fishing grounds, is distinctly limited. Under these conditions, the delegation of fisheries management and allocation of decisions to the local level may be more effective than the management efforts which distant, under-staffed and under-funded national government fisheries agencies can provide.

The trend in many Southeast Asian countries during the last four decades has been to increase the role of national governments in the management of coastal fisheries. The role of local level control, through traditional and informal management and control, where present, has correspondingly diminished. In their attempts to control coastal fisheries management, national government has often under-estimated the capacities of experience- and knowledge-based traditional and informal management systems. In many instances, national governments have over-estimated their abilities to manage these same resources.

Recent investigations on coastal fisheries management around the world and in the Southeast Asian region have shown that when left to their own devices, communities of fishers, under certain conditions, can regulate access and enforce rules through community institutions and social practices to use fisheries resources sustainably.⁵⁻⁷ Without denying that traditional and informal systems of fisheries management can often be inequitable and ineffective, state interventions that have chosen to ignore them have seldom fared better. For the most part, national governments have failed to develop adequate substitutes for, or complements to, these traditional resource management systems. The promotion of nationalization or privatization as a routine policy

solution has not solved the problem of resource degradation and over-exploitation and, in many instances, has deprived large portions of the population of their livelihood.⁸

The growing realization of the need for increased participation by resource users in fisheries management and greater localized control over access to the resource can be seen in a wide range of policies and programs throughout the Southeast Asian region.⁹ Community-based resource management has re-emerged as a way to involve resource users and to utilize indigenous institutional arrangements and knowledge in fisheries management. In virtually all cases, however, the future of community-based resource management seems to lie in a form of co-management, a sharing of responsibility and authority for resource management between the government and the local resource users/community.

This paper discusses current approaches of community-based resource management (CBRM) and co-management for the sustainable governance of coastal fisheries in Southeast Asia. Opportunities and problems for revitalizing community-based fisheries management systems and integrating these systems into contemporary fisheries management are discussed, including the role of co-management. Specific approaches taken in a number of Southeast Asian countries to develop and implement community-based management and co-management systems, and systems of fisheries rights, are discussed.

1.2. Revitalizing community-based fisheries management institutions in Southeast Asia

A strong 'traditional base' for revitalization of community-based fisheries management systems does not widely exist in Southeast Asia. While traditional or local community-based management systems have a long history of existence in Southeast Asia, the majority of these systems have been weakened or have disappeared, due partly to institutional restructuring under colonial administrations, technological modernization, the rise of the nation-state, and socio-economic stratification and unequal concentration of power and wealth within coastal communities.

Only a few localized long enduring community-based management systems still exist in the region.⁶ While many fishing communities still maintain some level of informal or traditional management system, by-and-large fisheries management is a governmental function. Many would argue that there is no effective fisheries management at all, since government efforts in fisheries management in many Southeast Asian

countries have been poor.² In most countries, there is often little or no role for fishers or fisher organizations in the planning and management process.

In certain areas of the region, such as specific locations in Indonesia, traditional community-based resource management systems have endured, seem to perform well and are being supported by the government for expansion. In most areas, however, revitalization involves the establishment of new community-based resource management organizations and systems. These new initiatives are being undertaken by government and/or non-governmental organizations (NGOs). The implementation of these new systems will require the development of new legal, administrative and institutional arrangements to complement contemporary fisheries management and contemporary political, economic, social and cultural structures.

The revitalization of community-based resource management systems in Southeast Asia will not be easy and must be viewed in the context of several factors which are unique to the region. First, Southeast Asia is one of the most politically and economically dynamic regions of the world. Political and economic restructuring can be expected to have significant implications for community-based resource management.¹⁰

Processes of restructuring that involve integrating local production more fully into broader economic structures, intensified capitalization of rural production and attendant co-modification of the rural economy, programs of decollectivization, and external influences on the local resource base, are all crucial in shaping local resource management options. While it is important to understand the potential of community-based resource management as the basis for resource management initiatives, it is also vital to understand the implications of broader political and economic processes.

A second factor is that resource management in Southeast Asia is based on the need to obtain maximum sustainable rent, yet ensure equitable distribution of the rent. Governments are seeking ways to maximize economic benefits from the resource, while protecting the interests of small-scale producers.¹¹ Community-based management systems and associated fisheries rights and tenure arrangements have been shown to provide an efficient and equitable system for extracting and distributing resource rents.

A third factor is that among many policy-makers and development specialists in Southeast Asia, community-based resource management and community participation are not only seen as ways to improve

resource management but as ways to alleviate poverty. It is felt that only an empowered community can address both the need for economic development and the conservation of natural resources.

Fourth, the role of NGOs in facilitating the revitalization of community-based resource management is important in the region, especially in the Philippines. The NGOs have taken over many of the service delivery functions of government and serve as a countervailing force to the power structures of society and government. The number of NGOs in a country, however, does not correlate directly with success in governance. Success of NGOs at the micro-level needs to be translated into success at larger levels, and this has not happened largely because of the lack of orientation, resources and existing capabilities.

Fifth, sustainable food security is an increasing concern of governments in Southeast Asia. It is not achieved through any single, simple solution but needs stable, sustainable and predictable supply and access to food. The capture fisheries supply in the region is static at best but demand continues to rise. To improve this situation, the resource base for production of living aquatic resources must be kept in healthy, functioning order through improved management. In addition, food security requires access to the means of food production and/or purchasing power through adequate income. Community-based management can provide a means for government to allocate and protect access rights, empower fishers by giving them a greater level of organization, and give greater say in the way the resources are managed to achieve sustainable food security.¹²

Sixth, the overall political system under which revitalization occurs is critical for success. Local action in countries where the national government has not devolved its powers makes it almost impossible for local bodies to undertake separate initiatives. In Malaysia, this situation has prevailed since the cancellation of local elections in the 1970s. Certain laws and regulations, such as the National Security Act, militate against popular participation, whether in political matters or in issues of resource management. Freedom of assembly, regarded as indispensable to authentic participation, is highly constrained in Malaysia.³ Thus, community-based resource management becomes a matter of political resolution.

Seventh, there is an increasing emphasis in Southeast Asia on more integrated resource management strategies; a comprehensive, multi-sectoral and strategic approach linking resolution of multiple resource use conflicts and economic development. This approach, of which

community-based resource management is seen as an element, recognizes that solutions to the current problems in the fisheries sector rest outside its traditional realm. The solutions lie in creating an economic environment in which the problems will be solved by people acting in what they perceive to be their own best interest.¹³

Eighth, revitalization will be dependent on two inter-related factors related to the problems of decentralization: (1) the establishment of local and government respected fishers' organizations; and (2) clear commitment on the part of the government to a program of decentralized community-based resource management. Increasingly, government programs and projects stress the development of local organizations to handle some aspect of local resource management. Seldom, however, is adequate attention given to the development of an administrative and institutional framework that defines the legal status, rights and authorities essential to the local organization's effective performance. This has resulted in the formation of numerous officially recognized but ineffective organizations. The many 'on paper only' fishers' organizations are, but one example.¹⁴ While in the past the institutional framework for the operation of an organization was determined by local custom and authority, currently that framework is increasingly determined by national law and administrative policies.

Initiatives in community-based resource management in Asia are not new. On the contrary, community management programs and policies have been popular throughout most of this century under different names. Korten¹⁵ provides a valuable perspective on what he refers to as 'past experiments with government-led local development'. Beginning in the 1920s in India, community development programs were introduced throughout the region until they were largely abandoned in the mid 1960s for a number of reasons. These reasons included centrally-based -rather than people-based program formulation and limited local self-help organizational development. In the late 1960s and early 1970s popular participation attempted to make development more participatory. Centrally planned and implemented, and utilizing blueprinted project designs, the popular participation strategy led in reality to limited actual participation.¹⁶ Decentralization of administrative functions has been attempted throughout Asia under a number of programs. However, central control and local dependence of central funding has not led to self-managed local communities.

Korten¹⁵ states that:

'None of these approaches to stimulating local initiatives provided a fundamental challenge to the idea that the government does

development for the people, who are expected to respond with grateful acceptance of whatever guidance and assistance government chooses to offer. None challenged the nature of the government's role or the appropriateness of the structures and procedures through which government conducts its business. None confronted basic issues of local social structures and resource control'.

If new fisheries community-based resource management initiatives are to be successful, these basic issues of government policy to establish a supportive legal rights and authority framework must be recognized. Effective community-based resource management is dependent upon the strength of the local organization and its ability to command respect from its members and enforce institutional arrangements. Success is often simply due to the leadership of the local organization. One important question for revitalization of community-based resource management systems is whether leadership qualities can be transferred to other locations, individuals and organizations.

While governments may be willing to call for more community involvement and fisher participation, they must also establish commensurate rights and authorities and devolve some of their own powers. The delegation of significant authority to manage the fisheries may be one of the most difficult tasks in revitalizing community-based management systems. Fisheries administrators may be reluctant to relinquish their authority or parts of it. They may fear infringement by local fishers and their representatives upon what they consider their professional and scientific turf.

The issues are not easily resolved. Each policy bearing on decentralization and community-based management is embedded in a broader network of laws, policies and administrative procedures, at both national and local government levels, and consequently will be difficult to change. Government administrative and institutional structures and fisheries laws and policies will, in most cases, require restructuring to support these initiatives.

Community-based resource management systems cannot be revitalized in isolation. As mentioned above, successful revitalization in Southeast Asia will require the development of legal, administrative and institutional arrangements for defining legal status, rights and authorities. While governments may be willing to call for more community involvement, they must also establish commensurate rights and authorities and devolve some of their own powers. Thus a more dynamic partnership is needed, using the capacities and interests of the local fishers and community, complemented by the ability of the state

to provide enabling legislation, enforcement and other assistance, specifically co-management. Co-management aims to achieve joint responsibility and authority for resource management through cooperation between the government and local resource users. The amounts of responsibility and authority that the state and local levels have will differ and will depend upon country- and site-specific conditions. Determining what kind and how much responsibility and authority should be allocated to the local level is a political decision. In all cases of co-management, the ultimate authority is held by the government.

Co-management involves various degrees of delegation of management responsibility and authority between the local level (resource user/community) and the state level (national, provincial/state, municipal). There is a hierarchy of co-management arrangements (Fig. 1). Co-management is a middle course between state level concerns in fisheries management for efficiency and equity, and local level concerns for self-governance, self-regulation and active participation. Co-management can serve as a mechanism for both fisheries management and for community and economic development by promoting participation of fishers and the community in actively solving problems and addressing needs.¹⁸⁻²¹

The actual form of co-management will depend upon the form of government and the political will for decentralization. If the need, is recognized, and a strong case can be made for a strengthening of local

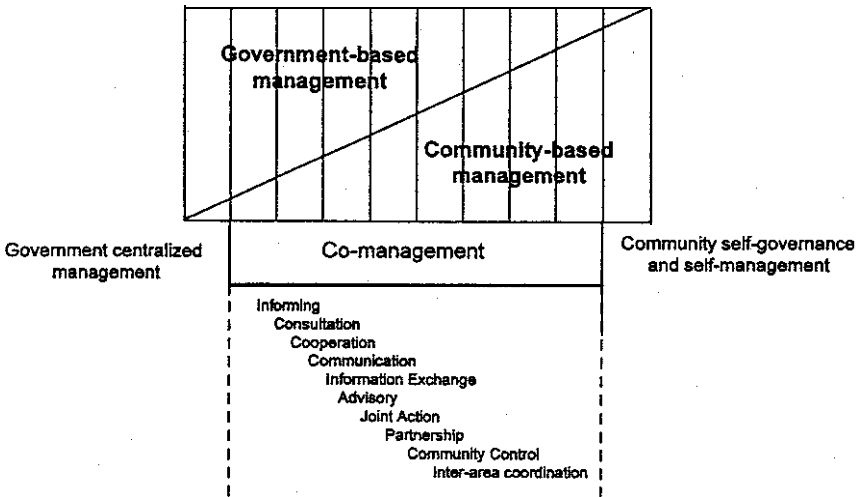


Fig. 1. A hierarchy of co-management arrangements (based in part on Berkes¹⁷).

authority, a gradual process of change can be instituted.²² In many Southeast Asian countries this process of change is now underway.

2. CURRENT APPROACHES TO FISHERIES COMMUNITY-BASED MANAGEMENT AND CO-MANAGEMENT IN SOUTHEAST ASIA

Several countries in Southeast Asia are now recognizing the important potential role that community-based management and co-management systems can play in contemporary fisheries management. Each country is taking a different approach to the revitalization of these systems. In this section, the approaches being taken in the Philippines, Thailand, Malaysia, Indonesia and Vietnam will be discussed.

2.1. Philippines

The Philippines has a long history of traditional fisheries rights and allocation.^{23,24} However, under both the Spanish and American colonization of the country, community authority and rights were superseded by municipal government control of local fishing grounds. This administrative structure of municipal authority remains in place today.

Since 1975, fisheries management in the Philippines has been guided by Presidential Decree (PD) 704, otherwise known as the Fisheries Act of 1975. Under PD 704, fisheries management is the responsibility of the government, both national and municipal. The management measures (mainly through regulatory instruments) undertaken by 'the government during this time, however, have been ineffective in promoting the sustainable development and management of the country's fisheries.

In 1991, the government recognized the need to increase participation in management and to devolve control over resource access to local levels through policy and institutional reforms. Among these are the decentralization of the management of nearshore fisheries to municipalities and local fishing communities under the Local Government Code (LGC) of 1991. Through the LGC and several other initiatives, the government now actively promotes community-based resource management to conserve the coastal resources and diversify the income sources of the low-income small-scale fishers under the Fisheries Sector Program (FSP) of the Department of Agriculture (DA).

The FSP is a comprehensive and integrated five year strategy to address the basic problems confronting the fisheries sector nationwide.

The FSP acts as the conduit through which the government, with the help of the private sector, can effectively rehabilitate and secure the sustained economic growth of the fisheries sector. Among the policy and institutional reforms instituted through the FSP are: (1) decentralization of authority and simplification of procedures for clearance of local fisheries management ordinances subject to national laws and/or policies; (2) strengthening the enforcement of fisheries laws through municipal-based inter-agency law enforcement teams; (3) promoting community-based initiatives to rehabilitate, conserve and protect the coastal resources and to diversify the sources of income of small-scale fishers; (4) engaging NGOs to assist and undertake community organizing; and (5) shifting to limited access in concerned fishing areas. At the core of the resource and rehabilitation thrust of the FSP is coastal resource management. Fishers, local government units and other concerned agencies in the area are given the opportunity to determine the specific problems in their areas and to identify the management strategies to counteract these problems.

The FSP is supported by other national initiatives that promote the co-management of coastal fisheries. These efforts emanate from both the government and NGOs. The past administration provided some impetus when in 1989 President Aquino created a Presidential Commission on Anti-Illegal Fishing and Marine Conservation, or the Bantay Dagat Committee, which called for increased coordination among government agencies in enforcement of fisheries laws and increased participation of fishers in management.²³

Foremost among the current initiatives, however, is the LGC. The basic tenet of the LGC is decentralization. A general operative principle is a provision that the local government units (LGU) may group themselves, and consolidate or coordinate their efforts, services and resources, for purposes commonly beneficial to them. Section 35 specifically states that LGUs may enter into joint ventures and other such cooperative arrangements with people's organizations (PO) and NGOs to engage in the delivery of certain basic services, capability building and livelihood projects, and to develop local enterprises designed to diversify fisheries, among others. The LGUs and local communities are also given certain privileges and/or preferential rights. Municipalities have the exclusive authority to grant fishery privileges in municipal waters, up to 15 km from shore, and impose rentals, fees or charges. In terms of fishery rights, the organizations or cooperatives of marginal fishers shall have preferential rights to fishery privileges within the municipal waters, such as the erection of fish corrals and gathering of fish fry free of any rental, fee or charge.^{25,26}

These initiatives for fisheries co-management are also embodied in the current 1993-1998 Medium-Term Philippine Development Plan (MTPDP). Among its strategies are: to implement a community-based fishery management strategy; regulate fishing effort within maximum sustainable yields; promote territorial use rights for small fishers; intensify aquaculture and optimize utilization of offshore, deep sea resources; and provide diversified occupational opportunities among marginal fishers.²⁷

The legislative branch of Philippine government (through the Senate) has also made substantial contributions towards co-management. Since 1988, six bills and one resolution dealing with fisheries management have been filed and presented to the Senate Committee on Agriculture and Food. There is now a proposed consolidated fisheries code to arrest the declining state of the fisheries sector by providing guidelines for a balanced ecological and economic use of the resources. Fisheries community-based management and fisheries rights are included among the provisions of the fisheries code.²⁸

In the case of NGOs, the National Coalition for Aquatic Reform (NACFAR) has proposed the concept of establishing resource management councils (RMC) for each coastal municipality. The RMC forms part of the Unity Bill (also a proposed fisheries code) formulated by the organized fishers in culmination of the First National Congress held in January 1990. RMCs shall be composed mainly of representative fishers together with other concerned sectors in the coastal community. The RMC is envisioned to provide a mechanism for the small-scale fishers to manage, care and develop the fisheries resources.²⁹

2.2. Thailand

No historical record exists to show that there were ever traditional community-based management systems in Thailand. Hinton³⁰ speculates that such systems once existed but no firm evidence exists. Since Thailand historically exploited freshwater and not marine waters, it is possible that CBCRM systems may have existed for Thai freshwater fisheries. A centralized fisheries management system currently exists in Thailand and this system has, in general, not been effective in addressing problems of biological over-exploitation and conflicts between small-scale and commercial fishers.³¹

To address these issues, the Department of Fisheries (DOF) has formulated a fisheries development plan for small-scale fisheries with a view toward improving both livelihood and quality of life in the sector. The plan includes both short- and long-term objectives. The short-term

objectives aim to upgrade the socio-economic status of the small-scale fisher, develop the coastal fishing ground to be more productive, and promote and develop the fishing occupation. The long-term objectives aim to allocate the existing resource to achieve most benefit, lessen the conflict between the small-scale and commercial fishers, and decrease migration of local labor to more economically developed areas.

Several small-scale fisheries development projects have been implemented to meet the short-term objectives, including construction of artificial reefs, provision of basic infra-structure for fishing and community activities such as fish processing and fish landing, and institutional support such as credit and fishery information.

A DOF review of past experiences in the fisheries sector revealed that government development programs alone cannot achieve the long-term objectives as long as the fisheries are left as an open-access resource and the enforcement of fisheries regulations is ineffective. Recognizing the benefits of 'bottom-up' rather than 'top-down' fisheries planning and management, the Thai government has initiated a new program which advocates the involvement of the fisher in the planning, management and implementation process. In the Seventh Five Year National Economic, and Social Development Plan (1991-1996) it has been stated that improved small-scale fisheries management and development will be achieved through the establishment of a fishing rights system.

In 1993 the DOF, with the collaboration of the Department of Fisheries Management, Faculty of Fisheries, Kasetsart University, established a community-based fishery management program to evaluate development of a fishing rights system. In early 1994, the DOF set up several committees to establish the fishing rights system, prepare for the pilot project and draft a new fishery law.

The fishing rights over specific areas will be granted by the DOF at the community level. Local fishers' organizations or cooperatives are awarded exclusive fishing rights over a designated sea area. The fishers who are members of the organization have a right to fish in the area. The organization will designate the number of fishing vessels and types of fishing gear allowed to operate in the fishing ground. The fishers' organizations are accountable to their members and their respective governing bodies are responsible to the government for the administration and implementation of their respective fishery rights. Fishery rights are, therefore, the bond between fisher and government in the implementation of fishery management and development policies and programs. Credit funds will be provided to facilitate development of fishers' organizations at the community level. Other support measures

include environmental protection with the emphasis on water quality control, stock assessment, promotion of small-scale fisheries through provision of necessary infrastructure at the village level, and dissemination of fisheries information.

The exclusive user rights currently in use in Thailand for stationary gear and coastal aquaculture will provide a basis for the establishment of the fishing rights system. In principle, the fishing rights system must not conflict with the constitutional law. According to the Fisheries Act BE 2490 of 1947, the country's basic fishery law, several sections are valid for the enactment of a law or a ministerial decree with regards to fishing rights.³²⁻³⁴

The fishing rights program began in 1994 and will be implemented in two five-year phases. The first phase will be implemented at several pilot sites, and if successful the program will be expanded across the whole country.

In addition to the fishing rights program, work is underway to develop a new fishery law in Thailand. The present fishery law was enacted in 1947 with some minor amendments in the 1980s. In the 1940s inland fisheries were the core of the Thai fishery sector. Therefore, there is an urgent need to revise the law to address current management and development priorities. The law will address fisheries management, distant water fisheries, fishers' organizations, fisheries production means such as licensing of fishing boats and permitting shrimp ponds, fishing ports, conservation of mangroves, and marine parks. The fishing rights system and fishing license system will be the most important components of the new fishery law.³⁵

The direct benefits of the fishing rights program are expected to be recovery of coastal fisheries resources, improved supply of fish, improved standard of living of fishing households, and reduced conflicts. It is recognized that this will be a long process.

2.3. Malaysia

The political and legal framework in Malaysia strongly favors central control of fisheries management. This structure has removed almost all forms of traditional community-based management that have any serious support from fishing communities. Bailey³⁶ concluded that in fishing communities, moral economy values have long been relegated to the 'cultural dustbin.' He found that fishing communities did not have pre-existing organizational capacity around which to build cooperatives, which are often seen as important institutions for CBRM. Yahaya & Yamamoto³⁷ conclude that in general Malaysian fishers are not familiar

with the self-management concept. Although generally supporting the fishing right principle, the fishers were not willing to accept the roles of guardian of the fishery resources or of enforcer of laws and regulations. Education is needed for fishers to accept self-management. Under the Malaysian fishery management policy, four fishing zones were established through a limited licensing scheme whereby rights and rules in each zone were designated for specific fishing methods, classes of vessels, species caught and ownership patterns.³⁸ Although the policy has produced progress towards meeting its stated objectives of achieving optimum yield, eliminating conflict between small-scale and commercial fishers, and a more equitable distribution of catches, enforcement problems still exist. While the political system in Malaysia does not fully support the possibility of decentralization of management, an alternative monitoring, control and surveillance (MCS) system has been proposed which would allow for sharing of responsibility with the community. Under the proposed MCS system, the community (fishers' organizations and NGOs) would have increased responsibility for monitoring and surveillance and the federal government would maintain responsibility for control and enforcement.³⁹

2.4. Indonesia

Community-based management systems have a long history in Indonesia and are the most long-enduring in the region. These systems are by-and-large localized practices found in geographical pockets throughout the country. The traditional fishing rights and community-based management systems are based on 'restriction' which closely parallels the modern management concepts of closed areas and seasons. Like other such traditional systems around the world they have adapted to change over time.⁴⁰⁻⁴²

Current national laws in Indonesia do not recognize local community-based resource management systems in coastal fisheries. Fisheries administration and governance is centralized. Explicit recognition of local authorities and the concepts of customary law and local territorial rights would require amendments to both the National Fisheries Law No. 9/1985 and the National Administrative Law No. 5/1979, the law which authorizes the structure of village government.⁴¹ It is not expected that amendments to these laws or the passage of new laws will happen soon, but there are positive signs for the effective development of community management institutions.

Indonesia's long-term (25 year) development plan was completed in early 1994. Policy and strategy in the form of the State's Main

Guidelines (Garis-Garis Besar Haluan Negara) for the first five-year development plan (1993-1998) was laid down by the People's Consultative Council. The State's Main Guidelines of 1993-1998 stressed the need to alleviate poverty. In 1994, a new program of poverty alleviation, called Inpres Desa Tertinggal (IDT, Presidential Instruction on the Less Developed Village), was initiated. This program aims to promote economic growth in fishing and farming villages through decentralization and active participation of the local community. Existing social and economic institutions, such as cooperatives, will be utilized at the village level as vehicles for greater participation of target groups and the community. The program will focus on generation of income and employment opportunities and improvements in the social structure. The program objectives stress a reformulation of the basic approaches to fisheries and agricultural development, from a production approach to one of enhancing fisher and farmer income and welfare. This will lead to more sustainable resource management.⁴³

2.5. Vietnam

Historically, fishers in Vietnam established associations called *vân* similar to those in agriculture, to preserve village or community social structures and to provide mutual assistance related to the fishing activity. These associations, headed by an elected fisher, performed several functions including conflict resolution, establishment of the method of sharing catches, and, to a lesser extent, establishment of rules to manage fishing activities. Like other organizations in Vietnam, the *vân* was banned in the 1970s. It is now slowly re-emerging in fishing communities throughout the country.

In the light of recent political and economic reforms in Vietnam, the government is currently developing new policies for the fisheries sector. There is recognition that coastal or nearshore fisheries are over-exploited due to the high levels of fishing activity, destructive fishing practices, and lack of enforcement which occurs in these waters. The new policies will constrain fishing activities in nearshore waters, emphasize aquaculture as an alternative to nearshore fishing and encourage offshore fishing. The state enterprises and collectives through which fisheries were developed under the critically planned economic system will be replaced with an emphasis on private business enterprises and the household and fishers organization. The Ministry of Fisheries, at the central level, will have overall responsibility for formulation of policies, planning and regulation for the sector, registration of large vessels and foreign fishing activities. Provincial fisheries

departments will have responsibility related to capture and culture fisheries within their own jurisdiction including planning, collection of statistics, guidance to fishers on government policies, registration of smaller vessels, control and inspection of fisheries activities, protection of the resources, and control of local fisheries enterprises. Thus, the province is given a great deal of autonomy for management and development of fisheries. Provincial officials will consult with district officials and fishing households and groups for planning, management and development. Coastal areas may be privatized, in essence a fishing right, and managed by the household or fishers' organization for fishing and aquaculture.⁴⁴

The Ministry of Fisheries has endorsed fisheries co-management as a strategy for managing nearshore and estuarine areas. Recognizing the diversity of the coastal zone and regions in the country and the difficulty for effective monitoring and enforcement, the Ministry will undertake a program to delegate resource management functions to local institutions, including fishers' organizations. This program will be implemented in several steps beginning with pilot sites to develop models and gain practical experience in co-management. The lessons learned from these pilot sites will be integrated into national policies and laws to support co-management. Pilot site activities are currently underway.^{45,46}

3. CONCLUSIONS

Global-scale changes in the supply, demand, value, management and uses of fisheries resources could threaten progress towards sustainable food security and resource development in many parts of Southeast Asia, but they could also stimulate improved management and use of the resources. Decision-makers are searching for better ways of managing all fisheries. To prevent further degradation and over-exploitation of fisheries resources, there is an imperative for better management. Many present fisheries resource management arrangements in Southeast Asia have failed to coordinate and restrain the many users, leading to depleted resources and conflict. Resource conflicts may be diminished, management better implemented and resources better managed when fishers and other resource stakeholders are more involved in the management of resources and access rights are distributed more effectively and equitably.

The idea of active participation of local resource users and communities in development and management is not a new one; it has been part of the development process in Southeast Asia since the 1960s.

What is different is the increasing commitment of governments to policies and programs of decentralization and community-based resource management. This can be seen in a variety of policies and programs in the Philippines, Thailand, Malaysia, Indonesia and Vietnam.

Community-based resource management systems cannot be revitalized in isolation. The planning and implementation of these systems will require the development of new legal, administrative and institutional arrangements to complement contemporary political, economic, social and cultural structures. Revitalization of community-based fisheries management will occur and is occurring in Southeast Asia in a form of co-management. This new management philosophy once again makes the fisher a part of the resource management team, balancing rights and responsibilities, and working in a cooperative, rather than antagonistic, mode with government managers. Such co-management is a rational extension of evolutionary trends in fisheries management over the past decades.

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