

Introduction

Open access is widely seen as the single most important cause of overfishing, resulting in the widespread decline and degradation of fish stocks and marine resources in the Southeast Asian region. Acknowledging this, ASEAN-SEAFDEC Member Countries have committed themselves to gradually introduce rights-based fisheries management systems for regulating access to coastal and marine resources. This process is supposed to go hand-in-hand with the decentralization of fisheries management authority and functions to sub-national administrative levels. It is assumed that the closer small-scale coastal fisheries management authorities are to resource users, the better they can accommodate specific socio-economic, political and ecological local characteristics into their particular management systems. This commitment is the result of the ASEAN-SEAFDEC Millennium Conference, as expressed in the Resolution and Plan of Action formulated during this conference.

This article presents a brief overview of the current status of decentralization and rights-based fisheries management in ASEAN-SEAFDEC Member Countries and is based on a paper presented at the SEAFDEC Regional Workshop on Innovative Fisheries Management Approaches in Southeast Asia: Rights-Based Fisheries and Decentralization, held in Phuket, Thailand, from 6 to 9 May, 2003.

As a snapshot of the current situation in these countries, the article is more descriptive than analytical in nature. The underlying assumption is that all countries are serious in their efforts to improve their respective fisheries management systems. The statements in this article are intended to be neutral; no judgments are presented as to whether some countries' efforts and fisheries management approaches are more effective or advanced than others'. However, the article will highlight key issues and problems that pose obstacles to the

establishment of responsible fisheries management systems. Potential approaches and actions to promote such fisheries management systems, characterized by functioning fishing and user rights arrangements, and governed by a decentralized management structure, will also be put forward.

If this article can somehow contribute to a better common understanding among stakeholders on the concepts of decentralization and rights-based fisheries in the region, it will achieve one of its major goals.

"ASEAN-SEAFDEC Member Countries have committed themselves to gradually introducing rights-based fisheries management systems"

This article is based on individual country reviews prepared by members of the SEAFDEC Working Group on Regional Fishery Policy (WGRFP). Thus, only those ASEAN-SEAFDEC Member Countries represented in the WGRFP are included in this review (Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Thailand and Vietnam). Taking the recommendations of the Millennium Conference as the framework for the review, working group members developed a list of guiding questions, which were used for interviews with key informants in their respective countries during a twoweek study tour. Each working group member interviewed senior-level fisheries policymakers and managers as well as resource-user representatives to draw a picture of the current situation of decentralization and rights-based fisheries in their respective countries.

Small-scale coastal fisheries: a case for decentralization

The fisheries sector in almost all ASEAN-SEAFDEC Member Countries is dominated by small-scale, coastal fishing operations, with more than 75 percent of the total fish catch attributed to these fisheries. While the term 'small-scale' needs to be defined within the particular socio-economic context of each country, it is usually used to distinguish between capital-intensive commercial and industrial fishing operations on the one hand, and labor-intensive fishing activities, usually carried out as one of several income-

generating activities, on the other. It is characterized by a wide range of fishing gear and target species. It is the multi-gear, multi-species nature of such fisheries that poses one of the greatest challenges to fisheries managers using 'traditional' management tools.

Such tools were developed for single-species fisheries and are unsuitable for Southeast Asia's small-scale fisheries. Fishing operations in this sub-sector are usually carried out from a wide range of landing points, often distributed widely along shorelines, with few clearly defined landing sites. This "decentralized" nature of small-scale fisheries and its high level of diversity require a management structure that is closer to local socio-economic, cultural and biophysical conditions. A fisheries management system unable to adapt to often-unique local characteristics is assumed to be less effective than a decentralized system, in which the management authority is more familiar with the local conditions.

The tragedy of open access: the case for rights-based fisheries

In ASEAN-SEAFDEC Member Countries, the fisheries sector is widely considered to be open access in nature, which means that anybody who wants to engage in fishing can do so. Usually this means fishers have freedom to decide where to fish, how many hours to fish, how to fish and what to fish. The impacts of such open-access regimes on natural resources are well known, and have been discussed extensively in the literature since Garrett Hardin published his famous article on "The Tragedy of the Commons" in 1968. The continuing debate makes clear that the inherent danger of resource degradation and over-exploitation under an open-access regime requires the introduction of user and property rights to restrict and regulate access to the resources.

For further reading, see for example:

- 1. Baden, John A., Douglas S. Noonan and William D. Ruckelshaus (eds.) (1998). Managing the Commons. Indiana University Press, Bloomington.
- 2. Hanna, Susan S., Carl Folke and Karl-Göran Mäler (1996).

Rights to Nature: Ecological Economic Cultural and Political Principles of Institutions for the Environment. Island Press, Washington DC.

There is general agreement that a management system for small-scale fisheries has to:

- Clearly define users (individuals or groups) with rights to harvest (coastal) marine resources
- Clearly specify limits on the amount of harvest or catch allowed under local conditions
- Clearly define the "total allowable effort" in terms of technical and labor inputs
- Have affordable mechanisms for monitoring user behavior and the condition of resources, and
- Have enforceable sanctions against violation of rules.

Rights-based fisheries, decentralization and SEAFDEC

The need to improve fisheries management through the introduction of rights-based fisheries and the decentralization of fisheries management is generally understood. This is reflected in the outcomes of the Millennium Conference. In the Resolution on Sustainable Fisheries for Food Security for the ASEAN Region, Ministers responsible for fisheries in ASEAN-SEAFDEC Member Countries agreed "...to progressively replace 'open access' to fisheries resources with 'limited access regimes', through the introduction of rights-based fisheries which may also facilitate the management of fishing capacity...," and to "encourage effective management of fisheries through delegation of selected management functions to the local level." Following this resolution, the Conference formulated a Plan of Action, one aim of which is to "establish and implement comprehensive policies for innovative fisheries management, such as the decentralization of selected fisheries management functions to the local level, the progressive introduction of rights-based fisheries management through licensing and community fishing rights...."

"SEAFDEC has developed Regional Guidelines for the Code of **Conduct for Responsible Fisheries** in Southeast Asia which further develop and promote these two concepts of innovative fisheries management"

Given the mandate to promote these concepts in the region, SEAFDEC, in close cooperation with its Member Countries, has developed Regional Guidelines for the Code of Conduct for Responsible Fisheries in Southeast Asia: Fisheries Management, which further develop and promote these two concepts of innovative fisheries management. In an effort to promote a common understanding of 'decentralization' and 'rightsbased' fisheries, these Regional Guidelines include some broad definitions of important terms (see Box). The definitions are necessarily broad, since they try to accommodate the different interpretations and understandings of these terms in the various countries of the region. They are seen as a starting point from which the regional understanding of the concepts can develop further, enabling all ASEAN-SEAFDEC Member Countries to pursue appropriate fisheries



management policies within their respective political, cultural and economic frameworks.

This diversity in understanding and interpreting the concepts of rights-based fisheries and decentralization makes it difficult, if not impossible, to compare the progress and success of different fisheries management approaches employed in the region. Achievements and accomplishments in the implementation of decentralized and rights-based fisheries management systems have to be assessed on the basis of each country's understanding and interpretation of the concepts. Each national fishery agency has to ask itself what progress has been made towards the implementation of these fisheries management approaches.



Definitions according to the Regional Guidelines for the Code of Conduct for Responsible Fisheries in Southeast Asia

- Coastal fisheries Fisheries by fishing ground or area. Some countries, such as Indonesia (12nm), Malaysia (30nm), Philippines (15km), and Thailand (12nm), set a wider fishing range. Others use different definitions, such as water depth (Cambodia; 20m).
- **Co-management** (*CM*) An approach to management in which the government shares certain authority, responsibilities and functions of managing fisheries with resource users as partners.
- **Decentralization** involves the delegation and sharing of selected fisheries management authority to the local level, either to the local government institution or local people.
- **Fishing license** is an authorization given to individuals or companies to enable them to do fishing.
- **Fishing right** A kind of right, by which fishers may have exclusive use of a designated area or resources. It is an authorization given to fishing communities to enable them to do fishing.
- Innovative Fisheries Management –
 Decentralization of selected fisheries management
 functions to the local level and progressive
 introduction of rights-based fisheries management
 through licensing and community fishing rights, the
 improvement of vessel registration systems and the
 development of supporting legal and institutional
 frameworks.
- **Rights-based** fisheries Fisheries where the right to fish or use the fisheries resources is licensed or permitted by the competent government authority, giving licensed fishers access and rights to use a fishing ground. Such rights are accompanied by obligations to comply with the rules and regulations of the right-based regime.

Review framework

For a regional review and assessment of moves to improve small-scale fisheries management in the region, the outcomes and the recommendations of the Millennium Conference can be used as a general framework. For both concepts, the conference identified a number of key issues and formulated recommendations on how ASEAN-SEAFDEC Member Countries should proceed in their efforts to establish sustainable and responsible fisheries management systems. Using this framework, each country will have to answer the question: "Which recommendations of

the Millennium Conference have been taken up and promoted within the national fisheries management framework?"

In seeking answers to this question, we can identify factors and issues that either support or hinder fisheries management changes towards decentralization and rights-based fisheries.

These recommendations are aimed at providing ASEAN-SEAFDEC Member Countries with broad initial guidance for the establishment of small-scale fisheries management systems. The recommendations are governed by efforts to regulate and limit access to resources through a decentralized management system, in which local fisheries management authorities formulate management measures, establish mechanisms

to limit the number of resource users and identify sustainable levels of resource use.

For a better understanding of the underlying principles of these recommendations, the flowchart below is used to visualize them. This chart represents a generic model for small-scale fisheries management suitable and recommended for all ASEAN-SEAFDEC Member Countries.

Key Questions

Following this broad framework and the recommendations of the Millennium Conference, the review seeks to address certain key questions. These were used as guidelines in compiling the individual country reports and formed the basis for this article:

RIGHTS-BASED FISHERIES

Key issues

The will to phase out open access and gradually limit access for all fisheries

'Ownership' of fish resources and water bodies

Nature and conditions of fishing rights

Criteria for allocating fishing rights among communities and individuals

Administration and control of fishing rights

Licensing and vessel registration.

Recommendations

Introduce gradual input control management systems to replace open access

Formulate appropriate policy and fisheries management framework for industrial and coastal fisheries

Formulate guidelines to promote rights-based fisheries

Formulate appropriate legal framework and provisions

Identify appropriate system of user rights, and try them out in pilot projects.

DECENTRALIZATION

Key issues

Policy implications

Level of decentralization

Decentralization process

Recommendations

Formulate national policy on decentralization in collaboration with relevant agencies

Determine management functions, authority and functions to be delegated to local level

Determine appropriate local institutions that can be authorized and can accept management mandate

Determine the need for human resource development at the local level

Develop local consensus through coordination

Develop comprehensive national fisheries program with detailed Terms of Reference for all institutions involved in fisheries management

Develop appropriate legal frameworks.

- Do ASEAN-SEAFDEC Member Countries have comprehensive national fisheries management programs?
- Do national fisheries programs address the issues of decentralization and rights-based fisheries?
- Do existing legal frameworks support or hinder decentralization and fishing rights systems?
- What progress has been made towards the decentralization of fisheries management and the introduction of rights-based management systems?
- What mechanisms exist to limit entry into fisheries and marine/aquatic resource use?



Community planning and the establishement of local institutions are important aspect of innovative fisheries management systems

On Decentralization

- What administrative levels are considered appropriate for the management of different types of fishing?
- Which management functions and authorities have been delegated to local levels of administration?
- Which institutions have mandates and authority in local fisheries management?
- How do these institutions cooperate?

On Rights-based Fisheries

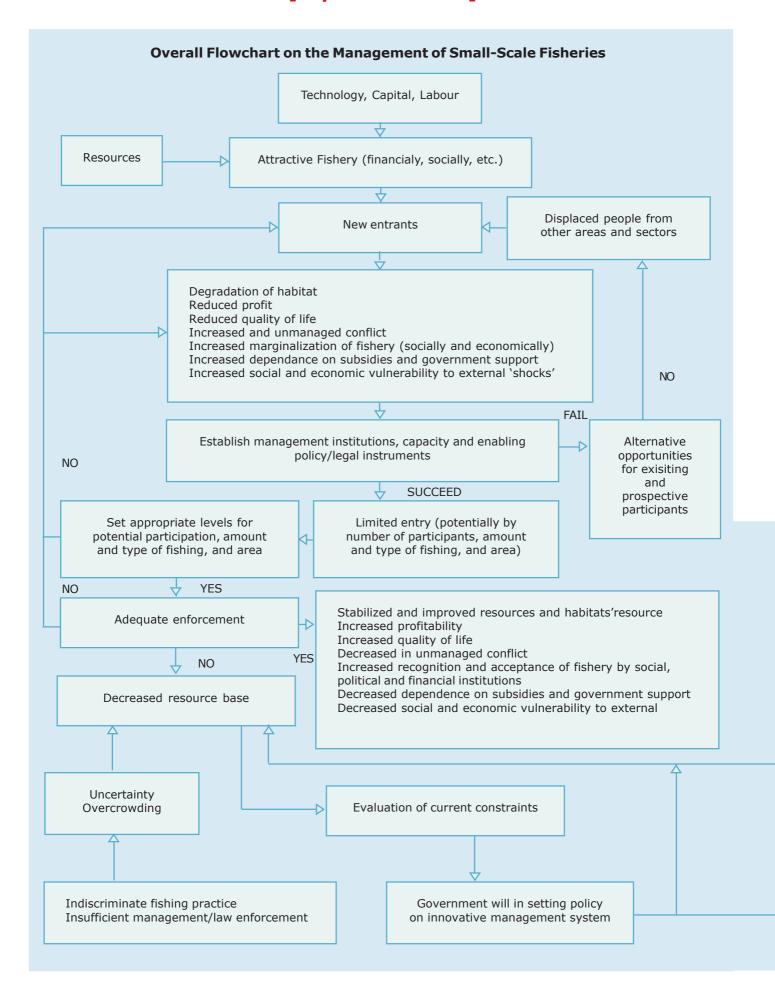
- Who has the right to fish?
- Who has the authority to allocate this right?
- Is it possible to exclude some from the right to fish?
- How are rights specified, what are the rules under which rights are exercised, and what are the duties and responsibilities that accompany those rights?
- How are rights allocated among different user groups?
- What processes and criteria are used to determine the optimal number of resource users?

Fisheries Policies

The Millennium Conference recommended that Member Countries formulate national policies on fisheries management decentralization and rights-based fisheries management systems. A brief look at the national fisheries policies as cited in the individual country papers shows that, in most countries, the focus of fisheries management and development is on offshore and deep-sea fisheries.

As coastal fisheries are seen as not having much growth potential, most fisheries development and management agencies focus their attention on the exploitation of off-shore fisheries resources, which generally are considered to be under-exploited. Typical expressions used in individual country review papers to describe national policy priorities are "developing deep-sea fisheries progressively," "deep-sea fisheries, aquaculture and inland fisheries would be encouraged," "off-shore fishing will be stepped up," "the development of the fishing industry towards a modern and fully commercialized industry," "increase fish production," "more foreign exchange earnings," "contribute to national food security at all times," and "optimize utilization of off-shore fisheries and deep-sea resources."

"The Millennium Conference recommended that Member Countries formulate national policies on fisheries management decentralization and rights-based fisheries management systems"





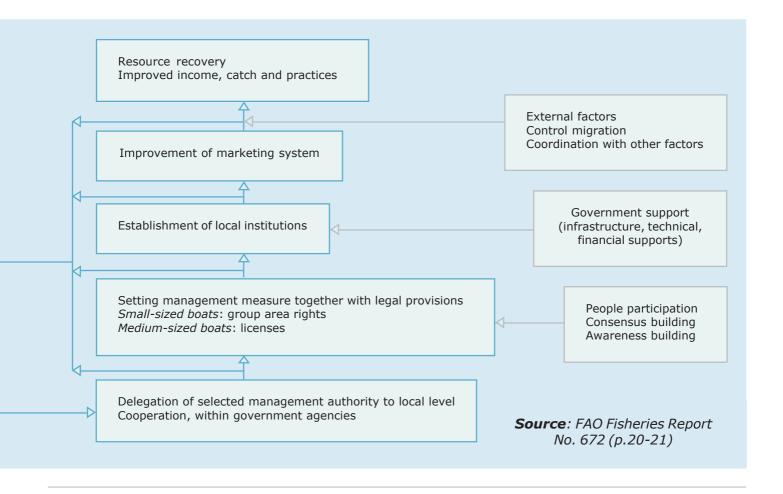
This does not mean that there are no mentions to rights-based fisheries and decentralization in national fisheries policies and strategies as described in the individual country papers. They are refered to "promoting fisherfolk and fisherfolk's organizations," "achieve sustainable coastal fisheries," "protect the rights of fisherfolk, especially local communities" and "empower local government." However, such references are scarce, and mentioned as priority areas only by the Philippines, and, with restrictions, by Thailand.

All national policies, as described in the individual papers, include access limitations to the country's fisheries resources and restrictions on the number of resource users. Strict implementation and enforcement of licensing and vessel registration systems are seen as priority areas to achieve such access control. As will be seen later, small-scale fisheries are exempted from such regulations in almost all countries in the region.

With regards to decentralization, meaning the delegation of management functions and authorities to local level institutions or resource-user communities, only few countries, notably the Philippines, Thailand and Cambodia, seem to have included these in their national policies.

Legal Frameworks for Fisheries Management

No country under review has a unified, integrated legal framework for fisheries management. All countries have a multitude of laws, ordinances and regulations, addressing different aspects of fisheries management and development. Malaysia, for example, lists 14 laws and regulations that address fisheries issues; Myanmar lists four main fisheries laws, and two amendments;



Country-wise fishery policy focus area

Country	Policy Goals	Strategies
Cambodia	 Reduction of conflicts between commercial and small-scale fisherfolk Protection and conservation of fish resources Improving living standards of fisherfolk 	 Revision of fishing lot system and fishing domain system Organization and support of fishing communities Co-management, and strengthening of local government
Indonesia	Foreign exchange earningsEmployment generationIncreasing incomes of fisherfolkResource sustainability.	 Co-management Local government involvement Regulation of access Strengthening of MCS, law enforcement
Malaysia	Full commercialization of sector, with emphasis on deep-sea fishing and aquaculture	 Limitation of fishing rights through licensing Identification and protection of nursery areas Increase in research efforts Strict enforcement Resource rehabilitation through artificial reefs (ARs) and coral replanting
Myanmar	 'All-round' development of fisheries sector Increase fish production Expansion of aquaculture Increase socio-economic status of fishing communities 	 Access control through licensing Promotion of responsible fishing technology Enforcement of regulations
Philippines	 Safeguarding national food security Sustainable development, conservation of fish and aquatic resources Poverty alleviation in coastal areas People's empowerment Protection of rights of local fisherfolk Optimized utilization of offshore and deepsea fisheries resources Increased investment in the sector and its global competitiveness 	 Development of broodstock, seeds and fingerlings Increased productivity within ecological limits Local government empowerment Conservation and protection Trade and fiscal incentives
Thailand	 Promotion of fisherfolk and fisherfolk's organizations Resource sustainability Increased fishery production for income generation for fisherfolk and processors Development of deep sea-fisheries 	 Public awareness creation Public participation in fisheries and environmental management Resource rehabilitation Protection of bio-diversity Technology development
Vietnam	 Protection of fisheries resources Promotion of community-based coastal management Effort control Promotion of aquaculture Promotion of off-shore fisheries Export-promotion 	

Indonesia has at least four laws addressing rights-based fisheries and decentralization issues. These include only those laws that directly address fisheries management issues, but not other sectoral laws that impact on fisheries management issues. For example, in the context of decentralization and rights-based fisheries, these could include laws affecting property rights, laws and regulations on establishing community organizations

and cooperatives, and laws regarding coastal development.

Laws and regulations concerning fisheries management, as quoted by WGRFP-members in their individual country paper reports, support the regulation of fisheries through licensing; all include some form of gear regulation, provisions for closed seasons and areas,

and the delineation of fishing grounds by respective management authorities. Each country has legal provisions prohibiting fishing gear and methods considered destructive and harmful to the marine environment.

"No country under review has a unified, integrated legal framework for fisheries management"

Countries that actively pursue a general decentralization policy and aim to strengthen subnational administrative units at provincial, state or district levels, usually try to harmonize their fisheries management with these efforts by formulating relevant legal provisions.

A few countries actively pursue a policy of strengthening fisheries management institutions at subnational levels by "delegating selected management functions to the local level," but no existing legal framework supports the devolution or delegation of management authority to local communities or resource users, as formulated in the regional definition of the term 'decentralization.' However, two countries – Cambodia and Thailand – at least are in the process of preparing such legislation, with provisions to enable fishing communities to take an active part in the management of fisheries resources.

share the responsibilities for law enforcement; conservation issues and environmental protection are addressed by the ministry or department for environment or natural resources; economic development, employment generation, community development and other issues are entrusted to respective government institutions and agencies, which usually have their own agenda and do not concern themselves with fishery management issues. Usually no formal mechanisms exist to coordinate the activities of these different agencies.

Rights-based fisheries

All countries reviewed have a system of state ownership of fish and aquatic resources and marine water bodies. All states reserve the right to allocate fishing rights to individuals, corporations or (rarely) communities through the appropriate authority; in all countries, this is the ministry or department in charge of fisheries. These fishing rights are usually given through licensing systems of varying degrees of complexity, which often include vessel and gear licensing in combination with the delineation of fishing areas and Exclusive Economic Zones (EEZ). Usually an EEZ is divided into several fishing zones, allocated to specific boat classes or sizes. Zones closer to the coastline are usually reserved for smaller vessels, to which larger fishing boats have no access. Variations of this system can be found in all countries under review.

Management Institutions

Currently, in all countries, the state alone is responsible for fisheries management. The lead agency for fisheries management is usually the department or ministry of fisheries (the Bureau of Fisheries and Aquatic Resources, or BFAR, in the Philippines) and their respective departments and divisions. However, responsibilities for different aspects of fisheries management are usually divided between other departments or ministries, often without a clear demarcation of responsibilities and authorities. Often the Navy, Coast Guard and Marine Police





Individual country reviews, prepared by members of the SEAFDEC Working Group on Regional Fishery Policy, have provided first hand information on the status of innovative fisheries management in the ASEAN, such as here in Cambodia

"Thailand and Cambodia are currently experimenting with community user-rights systems"

Licensing is usually required only for fishing vessels which exceed a specified size, with smaller boats being exempted. Only two countries (Myanmar and Malaysia) require licensing for all vessels, regardless of size and fishing capacity. In all other countries, small-scale, coastal fisheries are largely unregulated. Generally, licensing is seen as the best and most effective way to allocate fishing rights. Present fisheries laws generally do not provide for common or communal property rights, in which resource user groups and communities hold the right to use fishery resources. Thailand and Cambodia are currently experimenting with community user-rights systems, but have yet to put in place the necessary legal frameworks.

Every country in the region has realized the need to limit entry into their fisheries, as seen from each country's licensing efforts. However, most have yet to develop mechanisms to determine the total number of vessels and fishers to be allowed to fish in delineated zones. Countries like Indonesia and Myanmar are trying to apply systems for determining something like Maximum Sustainable Yield as criteria for limiting the number of fishing boats in specified areas.

The effectiveness of existing licensing and permit systems needs to be assessed, as all countries, without

exception, report a high degree of illegal fishing and violations of fishing regulations.

Decentralization of Fisheries Management

Most countries have a national policy of decentralization. These generally aim to give more responsibilities to provincial, district or municipality administrative levels. These efforts at establishing decentralized administrative government structures are usually reflected in the organization of fisheries management, though in most countries these processes are still so recent that relevant legal frameworks have yet to be put in place.

"...efforts at establishing decentralized administrative government structures are usually reflected in the organization of fisheries management"

Not even the most centralized forms of government can function without administrative structures at the local level, and all countries have organized their respective fisheries management agencies according to the general administrative structure, with fisheries officers assigned to districts, provinces or even townships. The mandate of these local offices is usually to issue licenses in their respective areas, to implement extension programs for technology transfer, and to monitor the status of fish resources in their area of iurisdiction.

"Rules and regulations for coastal resources and habitats, when formulated by resource users, usually cannot be enforced, as the national legal frameworks do not recognize such community rules and regulations as legally binding"

There is only one country – the Philippines – in which the national fisheries management institution does not have any management mandate and function at the local level, and in which the local administration is responsible for formulating and implementing its own fisheries management policies and plans, within the legal framework set by the national government. In only one

other country – Cambodia – can local communities make and formulate their own rules and regulations for the use and exploitation of fisheries resources, although the relevant legal framework for this has not yet been passed.

In all countries, efforts are under way to involve local communities in the protection and conservation of critical coastal habitats like coral reefs and mangrove forests. However, usually these are not self-regulated management efforts by the community, but rather the community acting as an implementing agency on behalf of the government.

Rules and regulations for the use, conservation, and rehabilitation of fishery and other coastal resources and

Overview of licensing and fishing-rights

Country	Medium- and large-scale (commercial) fisheries	Small-scale fisheries
Cambodia	Licensing; Fishing Lot and Marine Fishery Domain systems; DOF delineates fishing areas, for which commercial users have to bid (inland) or get licenses (marine)	No licenses needed; permitted all year, in all areas, but have to follow by-laws of Community Fisheries (CF)
	 Small and medium scale: DOF can assign fishing lots or domains to CF; CF formulates by- laws for fishing rules 	
Indonesia	Licensing, based on boat sizes and engine power; three fishing zones, depending on boat sizes	 No licenses for boats < 5 GT / without engines Traditional systems like SASI still practiced in some places
Malaysia	 Licensing, combined with zoning; currently no issue of new licenses except deep sea fishing (>30nm); 4 zones and respective boat categories 	• Licensing
	All fishing vessels and fishing gear must be registered and licensed to operate in Malaysian waters	
Myanmar	 Licensing, combined with zoning Off-shore fisheries > 5 nm or 10nm, depending on region 	In-shore fisheries: Boats < 30 ft, in waters < 5 or 10 nm from the shore, depending on region
	 Everybody who want to take part in fishing or fish processing needs to obtain licenses Fishing gear needs to be licensed by DOF Fishing vessels have to be registered with the nautical authority 	
Philippines	 Licensing for vessels > 3GT (commercial fisheries) 	 Municipal fisheries: vessels < 3GT, within 15km of shore need municipal license
	No fishing by commercial fishing vessels in municipal waters	
Thailand	 Licensing for oversea fishing fleet Licensing for fishing gears Licensing for large fishing vessels Licensing for aquaculture (shrimp farming) 	
Vietnam	 All fishing vessels need a license Everybody engaged in fishing activities needs a license 	Boats < 0.5 GT are exempted from licenses
	Government delineates fishing grounds to be used by licensed fishers	

habitats, when formulated by resource users themselves, usually cannot be enforced, as the national legal frameworks do not recognize such community rules and regulations as legally binding. Violators usually therefore cannot be prosecuted. There are, for example, many projects to manage and protect mangrove forests through community involvement, often called community-based forest management. In other projects, fishing communities try to establish zoning systems for coastal resource use. But unless rules and regulations formulated by the community for this purpose are backed up by national law, such projects are not legally enforceable. Within the context and frameworks of such projects, fisheries management agencies claim to share management functions with resource users, but the ultimate management authority and responsibility is retained by the owner of the resources, namely, the state.

On the other hand, each country has developed and established some form of dialogue with fisher organizations or associations. Although in most countries such dialogues are limited to commercial and industrial fisher organizations, in some cases associations and organizations of small-scale fisherfolk are also included. Such formal and informal modes of communication and consultation provide an opportunity for both government and fisherfolk to express their concerns and to minimize conflicts about different management options.

Issues and problems

A wide range of understandings and interpretations of the concepts of decentralization and rights-based fisheries is evident. But even so, similarities between countries' approaches to regulate and manage fisheries,



and the perceived issues and problems in the implementation of respective management systems are apparent. The rules and regulations that make up legal frameworks for fishery management are usually seen as sufficient for an effective and sustainable use of fishery resources. Problems within the fisheries sector are rarely seen as the results of flaws in the design of fishery management systems, institutions and their respective legal frameworks, but rather in their actual implementation.

"...weaknesses in monitoring, control and surveillance, or law enforcement are the main reasons for shortcomings in the implementation of existing rules and regulations"

All country reports suggest that weaknesses in monitoring, control and surveillance(MCS), or law enforcement are the main reasons for shortcomings in the implementation of existing rules and regulations. There is general agreement that because of insufficient MCS and law enforcement, access to coastal and marine resources in each country is still open to anybody who would like to use and exploit these resources. Increased efforts in law enforcement and MCS would no doubt significantly improve existing fishery management systems throughout the region.

"...extensive information and education campaigns are usually suggested by responsible fisheries managers, aimed at awareness creation for the resource users"

To overcome the lack of compliance with existing rules and regulations, which is seen as the other important factor for the failure of existing fishery management systems, extensive information and education campaigns are usually suggested by responsible fisheries managers, aimed at awareness creation for the resource users. These suggestions assume that fishermen would voluntarily change their fishing practices once they are aware of the need for these rules and regulations.

Overview of Administrative Levels in Fisheries Management

Country	Administrative Level	Mandate and Authority
Cambodia	Currently three levels of fisheries administration:	 The Department of Fisheries (DOF) and the Ministry of Agriculture, Fisheries and Forestry (MAFF) maintain full authority and right to regulate access to fishing grounds Community fisheries can formulate own fishing rules and regulations, known as 'bylaws', within and under national fisheries law Communes formulate rules and regulation under by-laws
Indonesia	 Central government Provinces Districts Each level is responsible for corresponding fishing zone 	 Licensing for fishing zone > 12 miles: EEZ Licensing for fishing zone 4 -12 miles: through provincial governor Licensing of coastal waters up to 4 miles
Malaysia	 Central level: Department of Fisheries State-level fisheries offices District and provincial offices 	 Full authority, but co-management through concepts of Fishermen association and Fishermen Economic Groups Issuance of licenses and technical assistance to license holders
Myanmar	 Central level: Department of Fisheries State and Divisional Fisheries Offices District Fisheries Officers Township Fisheries Officers 	 Access control through licensing Promotion of responsible fishing technology Enforcement of regulations
Philippines	 Central level: BFAR Regional level: BFAR Local government (provinces and municipalities) 	 Management of commercial fisheries Full responsibility and authority for management of municipal fisheries
Thailand	Central level: Department of FisheriesProvincial fisheries offices	Provincial and local authorities are supposed to work together to create local fishery committees responsible for managing coastal fisheries resources
Vietnam	 Central level: Ministry of Fisheries Provincial fisheries offices in 25 provinces; in three other coastal provinces, fisheries offices are under Department of Agriculture and Rural Development Provincial People's committees 	 Ministry is responsible for nationwide fisheries management People's Committees monitor and organize the implementation of fisheries legislation

Conclusion

This overview of fisheries management practices in selected ASEAN-SEAFDEC Member Countries is too brief to allow comprehensive and analytical conclusions about the root causes of shortcomings in current fisheries management systems in the region. Further and detailed studies on specific aspects of fisheries management, especially of small-scale fisheries, are needed to deepen our understanding of the issues and problems of the fisheries sector.

Assuming that there is a general consensus that the mandates arising from the Recommendations and Plan of Action of the Millennium Conference envisage, *inter alia*, improving local-level fisheries management through decentralization and the establishment of rights-based fisheries, the current situation in ASEAN-SEAFDEC Member Countries might be summarized as follows:

1. The *de facto* continuation of open-access regimes in Southeast Asian fisheries has meant that no country has yet established a functioning national system to govern a truly localized fisheries management, in which

local authorities have full responsibility for fisheries management.

The Philippines is the only country in the region that has an existing legal and institutional framework for such local-level fisheries management; but even there, small-scale fisheries management remains widely unregulated. The case of the Philippines clearly demonstrates that the effectiveness and success of decentralization policies requires not only the transfer of powers to the local level, but also the provision of human, financial and technical resources needed for local authorities to exercise these powers.

Thailand and Cambodia are in the process of passing fisheries laws that give groups and communities of small-scale fishermen greater responsibility in managing their fisheries resources. Time will show whether these new legal and institutional frameworks will actually improve local fisheries management, can prevent overfishing and overexploitation of coastal resources, and can lead to improved living standards for small-scale fisherfolk.

Existing licensing and user-rights systems fail to change the open-access nature of fisheries, because everybody who wants a license usually gets one. Problems in changing the open-access nature of the region's fisheries and effectively enforcing existing licensing and user-rights systems arise not only from resource users, but also from the public as they consider marine aquatic resources as public property and, therefore, open to everybody. Education and awareness creation campaigns therefore need to be directed not only at resource users and fishermen, but also at the general public and those who make policy and political decisions.

"Hardly ever is the question asked whether existing rules and regulations are enforceable, and if so, at what cost"

3. Licensing systems can only function if the maximum number of resource users is defined and clear criteria exist as to who is entitled to a license and who is not entitled. Some countries try to address this issue by determining the number of licenses to be issued by estimating Maximum Sustainable Yield (MSY); one country has a policy of freezing the number of licenseholders in small-scale fisheries at current levels.

Individual country reports identify shortcomings 4. in monitoring, control and surveillance and law enforcement as the main cause of the failure of current fisheries management systems to limit fisheries effort and regulate fisheries activities. None of the submitted country reports sees flaws in the design of user-rights and licensing systems, or the general design of the fisheries management system in a country as responsible for current problems in coastal fisheries.

Hardly ever is the question asked whether existing rules and regulations are enforceable, and if so, at what cost. Consequently, individual country papers do not consider modifications of existing management systems towards greater fisherfolk participation and greater local



autonomy in fisheries management, nor do they consider simplifications of legal frameworks. The formulation of integrated, unified laws that encompass all aspects of fisheries management, and clearly demarcate mandates and authorities of different government agencies at different administrative levels are not recommended as potential ways to reverse the decline in coastal fisheries.

Challenges

Going beyond the immediate, descriptive scope of this overview of decentralization and rights-based fisheries in selected ASEAN-SEAFDEC Member Countries, several propositions can be made. These will hopefully encourage further studies and discussion on these concepts, which may eventually lead to a deeper common understanding of how decentralization and



rights-based fisheries can contribute to responsible small-scale fisheries management systems in the region:

- 1. The problem of effectively managing numbers of resource users through the introduction of userrights systems for small-scale fisheries is a direct result of the policies pursued by fisheries management agencies and institutions. In the majority of countries in the region, the focus of these agencies is on fostering the growth of the sector through commercialization, export promotion and increased production, thereby attempting to maintain the fisheries sector as an attractive economic alternative and creating incentives for people to take up fishing as a livelihood, either as a full-time or a supplementary occupation. While fishing should be economically viable for those already engaged in the sector, the challenge lies in creating attractive economic alternatives outside the fisheries sector. These must have greater appeal to people looking for livelihood opportunities. This certainly goes beyond the mandate of present fisheries management institutions and agencies. The challenge lies in linking local fisheries management with overall local development efforts, by improving coordination among agencies and stakeholders involved in fisheries management and local development.
- Absolute numbers are impressive and feed the notion of the fisheries sector as being of great economic importance: Annually, the fisheries sector generates billions of US dollars of revenues, involving hundreds of thousands of people, and providing a most important source of animal protein to the general population. But looking at relative numbers reveals why the fisheries sector usually has such low priority in national development agendas and is often neglected by policy makers: on an ASEAN-wide average, the sector contributes not even two percent of regional GDP. The nature of capture fisheries, with their dependence on the biological productivity of aquatic ecosystems, limits the growth potential of the capture fisheries sector. These aquatic resources therefore do not constitute a valuable asset for their 'owners', the state, which accordingly gives the sector too little political attention and protection from irresponsible and unsustainable usage. The challenge lies in drawing more political and public attention to marine and aquatic ecosystems and the fisheries sector, without increasing its attractiveness as an economic opportunity.

- 3. Many regions and coastal areas are characterized by fishing and related activities. Local economies are often dependent on and centered around the fisheries sector. The challenge lies in balancing national and local development efforts by giving the fisheries sector its due attention, and at the same time, pursuing structural adjustment policies, which reduce local dependencies on the fisheries sector.
- 4. Countless individual projects and programs are presently being conducted in the ASEAN region. These are generally aimed at responsible small-scale fisheries and coastal resources management. As individual projects, such efforts may be successful in achieving their respective goals and mobilizing different government agencies and resource users for establishing sustainable resource management systems. Often funded by external donor agencies, these initiatives are frequently implemented without any real coordination between them. The lack of clearly specified national policy frameworks and fisheries development plans may lead to confusion and inconsistencies between individual fisheries management initiatives, legal support activities and institutional approaches to local fisheries management enterprises. Establishing coordinating mechanisms between different initiatives at the local level is an important first step in harmonizing such efforts. But the challenge lies in moving beyond thinking in terms of individual projects, and creating consistent national frameworks conducive to locallybased small-scale fisheries management systems.

All this implies that fisheries management agencies have to play a much more pro-active role in local development efforts. Currently, fisheries management agencies withdraw from many important areas that are important for the establishment of responsible fisheries systems, by limiting their mandates to what they consider as 'core' fisheries management tasks, like regulating and monitoring fishing activities and practices. Other equally important mandates and tasks for comprehensive fisheries management are left to non-fisheries agencies and institutions, which often have more political clout than fisheries management agencies. Such important responsibilities include issues such as environmental policies, conservation, trade and fiscal policies. To establish sustainable fisheries regimes in the region, fisheries management agencies need to more actively engage in the public and political dialogues on environmental and development issues affecting the fisheries sector.

About the author

Dr. Theo Ebbers is currently working with SEAFDEC-TD as training advisor on coastal management and extension methodologies, and with SEAFDEC Secretariat as expert on innovative approaches for the management of small-scale fisheries. His field of expertise is with Integrated Coastal Area Management and Development, and Participatory Planning Approaches.



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