

# Policy and legislative frameworks for co-management

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## **Policy and legislative frameworks for co-management**

**Paper prepared for the APFIC Regional Workshop on Mainstreaming Fisheries  
Co-management in Asia Pacific. Siem Reap, Cambodia, 9–12 August 2005**

*by*

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**Global Partnership for Responsible Fisheries (FishCode)**

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## **Foreword**

This paper was prepared by Poseidon Aquatic Resource Management Ltd and the FAO Development Law Service (LEGN) for the Asia-Pacific Fisheries Commission workshop on Mainstreaming Fisheries Co-management in Asia-Pacific, which was held in Siem Reap, Cambodia, from 9 to 12 August 2005. The workshop was organized with technical and financial support from the FAO Regional Office for Asian and the Pacific (RAP) and the FAO FishCode Programme, through the FishCode Trust (MTF/GLO/125/MUL). The paper examines the policy and legislative frameworks for co-management in thirteen countries in Asia and the Pacific, and the extent to which these frameworks hinder or support co-management practices.

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#### **ABSTRACT**

This paper was prepared to serve as background for a workshop on mainstreaming fisheries co-management, held in Cambodia in August 2005. The paper examines the policy and legislative frameworks for co-management in thirteen countries in Asia and the Pacific, and the extent to which these frameworks hinder or support co-management practices.

Political will is the key to the establishment of co-management mechanisms. It is a necessary prerequisite without which co-management initiatives are unlikely to succeed. It must be reflected in policy, legislation and action specific to the fisheries sector, as well as more generally in government policy and legislative support.

However, many current co-management initiatives remain pilot efforts only, and are strongly driven and supported by donor projects. The nature of policy and legislative frameworks is varied, as is commitment by governments to co-management – in some cases support is more rhetoric than reality, with insufficient real transfer of powers and financial resources to local levels.

Through an analysis of the different case studies, 'lessons learned' are presented and a number of conclusions are drawn about the key characteristics of a supportive policy and legislative framework based on some ideas about 'best practice'. The adoption of these characteristics by governments would demonstrate their commitment to co-management and increase the likelihood of co-management success.

***Keywords: Code of Conduct for Responsible Fisheries; fisheries co-management; community-based fisheries management; coastal fisheries; inland fisheries; Asia and the Pacific.***

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## ABBREVIATIONS AND ACRONYMS

AFDEC	Andaman Sea Fisheries Development Center
AFSSR	Asian Fisheries Social Science Research Network
APFIC	Asian Pacific Fisheries Commission
ASEAN	Association of Southeast Asian Nations
BRAC	Alleviation of poverty and empowerment of the poor
CAA	Community Aid Abroad
CBCRM	Community-based Coastal Resources Management Resource Center
CBFM	Community-based fisheries management
CCRF	Code of Conduct for Responsible Fisheries
CFC	Community Fisheries Committee
CFES	commercial fisheries extension service
CF-MAC	Commercial Fisheries Management Advisory Committee
CHARM	Coastal Habitat and Resources Management
CMP	cooperative movement policy
CMT	customary marine tenure
CPRGS	Comprehensive Poverty Reduction and Growth Strategy Paper
CRED	Center for Rural and Environment Development
CRM	Coastal Resource Management
CVRP	Central Visayas Regional Project
DANIDA	Danish International Development Agency
DMCR	Department of Marine and Coastal Resources
DOF	Department of Fisheries
EEZ	exclusive economic zone
FAD	fish aggregating devices
FAO	Food and Agriculture Organization of the United Nations
FAOLEX	FAO legislative database
FARMC	Fisheries and Aquatic Resources Management Council
FCA	Fishery Cooperative Association
FLLMA	Fiji Locally Managed Marine Areas network
FMO	Fishery Management Organization
FSPS	Fisheries Sector Programme Support
GEF	Global Environment Facility
ICLARM	International Center for Living Aquatic Resources Management (now WorldFish Center)
IFM	Institute for Fisheries Management and Coastal Community Development
IIFET	International Institute for Fisheries Economics and Trade
ITQ	individual transferable quota
LGU	Local Government Unit
LME	Large Marine Ecosystem
LMMA	Locally Managed Marine Area
MBRS	Mesoamerican Barrier Reef Systems Project
MMR	Ministry of Marine Resources

MMRF	Management of River and Reservoir Fisheries
MOFI	Ministry of Fisheries
MPA	Marine Protected Area
MRC	Mekong River Commission
MZI	Maritime Zone of India
NEP	National Environmental Policy
NGO	Non-governmental Organization
RAP	FAO Regional Office for Asia and the Pacific
RGC	Royal Government of Cambodia
SAM	Special Area Management
SAPA	Sustainable Aquaculture for Poverty Alleviation
SEAFDEC	South East Asian Fisheries Development Centre
SEDP	Socio-Economic Development Plan
TACAP	That-Australia Community Assistance Program
UNDP	United Nations Development Programme
UP	Union Parishad
USAID	United States of America Agency for International Development
AusAID	Australian Government Overseas Aid Program



## 1. INTRODUCTION

The document has been prepared by Poseidon Aquatic Resource Management Ltd<sup>1</sup>, with the support of FAO Development Law Service (LEGN)<sup>2</sup> and the FAO FishCode Programme, to serve as background paper for the Asia-Pacific Fisheries Commission workshop on Mainstreaming Fisheries Co-management in Asia-Pacific, held in Cambodia, from 9 to 12 August 2005.

Co-management can be defined as a partnership approach where government and resource users share the responsibility and authority for the management of a fishery or area, based on collaboration between themselves and with other stakeholders.

Co-management depends on four main pillars: i) supporting legislation and policies, ii) empowered communities, iii) good linkages between players and iv) finance and capacity. This paper focuses specifically on the first pillar and explores legislative and policy issues around co-management. In particular it attempts to draw out key lessons learned from experiences to date on an enabling policy and legislative environment for co-management. These lessons learned are generated from a case study review of different fisheries in Asia and the Pacific where co-management practices are known to exist. Case studies included in the review include:

- Bangladesh (inland)
- Cambodia (Tonle sap)
- India (Kerala and Tamil Nadu)
- Indonesia (Sasi Laut in Maluku)
- Japan
- Philippines Visayas
- Sri Lanka (marine)
- Southern Thailand
- Vietnamese reservoirs
- Pacific Island Countries (Fiji, Samoa, Cook Islands, and Vanuatu)

Information on different cases was collected through a desk study approach, using a standard table template of questions as agreed between the consultants and FAO at the beginning of the study. Questions focussed on:

- Background information on the case study area
- The policy and legislative setting/basis for co-management
- Implementation and enforcement of decisions made by co-management institutions
- The motivation/drivers of co-management
- General conclusions on the policy and legislative lessons learned, and issues of replicability

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<sup>1</sup> Poseidon is a UK-registered company working globally to provide advice on fisheries and aquaculture issues.

<sup>2</sup> Blaise Kuemlangan and Anniken Skonhoft, FAO Legal Officers.

Sources of information included government officials, the FAOLEX<sup>3</sup> database, specific pieces of national/local legislation, published sources of information on the internet<sup>4</sup>, and consultants/academics with knowledge of the case study fisheries concerned<sup>5</sup>. It should be noted that the purpose of the paper is not to provide a complete literature review on policy and legislation relating to co-management, but rather to access literature where it relates to the case studies. However, a range of more general literature on policy and legislative issues of co-management has also been reviewed, with references provided in Appendix 1.

At the outset it was acknowledged that certain problems would probably arise in terms of being able to answer all questions on all case study fisheries selected. For example, published information on the case study fisheries was not expected to be available in the form of the template developed, and some interpretation has therefore been necessary. In addition, for some case studies responses to the questions in the template are either not easily available, or have been provided from a limited number of sources and may therefore be a little subjective in nature. Nevertheless, while acknowledging these shortcomings, it was agreed to generate as much information as possible.

The contents of this report are structured so that following this Introduction, Section 2 presents a short summary of each of the case studies themselves. Section 3 then provides some conclusions and ideas about “best practice” – first in relation to policy, and then legislation.

In Appendix 2, a table is provided against which all countries in the Asia/Pacific region could benchmark the performance of their own policy and legislative framework in terms of its support for co-management.

## **2. PRESENTATION OF CASE STUDIES**

This section of the report provides a summary description of the policy and legislative issues relating to co-management in the case study fisheries concerned.

### **2.1 Bangladesh (inland)**

#### ***Background information***

This case study primarily examines the results of the community-based fisheries management (CBFM) project, which has been working in 19 rivers, open floodplain wetlands (beels) and closed permanent lakes (beels and baors), principally in the north east of the country, since 1995. Fishers in the area are predominantly part-time and seasonal in nature, but with some full-time/permanent fishing.

The Oxbow Lake Co-management Project (1988–1997), and a USAID aquatic ecosystems project supporting community-based resource management organizations, have also been active in supporting co-management.

#### ***Policy and legislative setting***

While sustainable management of aquatic resources forms an important part of the 1998 National Fisheries Policy, co-management is not provided for in policy. Important pieces of

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<sup>3</sup> A database of legislation from many countries that is maintained by FAO legal office in Rome. While FAOLEX is a reliable source of information for laws and regulations, it may not be up-to-date for all countries (<http://faolex.fao.org/faolex>).

<sup>4</sup> A list of useful websites and a bibliography by case study, is provided in Appendix 1.

<sup>5</sup> Individuals who contributed information or comment are acknowledged in Appendix 1, as a source of information (Pers. Comm.), and the authors would like to thank all those who assisted with this study.

fisheries legislation include: The Protection and Conservation of Fish Act, 1950 (amended 1982); The Tanks Improvement Act, 1939 (amended 1986); The Fish and Fish Products Ordinance, 1983; and The Marine Fisheries Ordinance, 1983. None of this legislation specifically deals with co-management issues. Legislation does not provide for community use rights, but the leasing system can be used for the benefit of “genuine fishers” (those whose livelihood depended on catching and selling the fish). Under the project agreement, groups of fishers have established exclusive rights in beels. But free access and a lack of revenue collection mean that in rivers there is now no formal basis for establishing territorial-use rights.

Decentralization is not explicitly addressed in fisheries policy documents and at present, the government system in Bangladesh is primarily “de-concentrated” rather than “devolved”. The Constitution provides for the creation of local government bodies at every administrative level, and the evolution of decentralization measures towards local governance in Bangladesh have been taking place at a non-sectoral level over many decades. However decentralization policies in Bangladesh have served primarily to create a sub-national political support base for successive regimes. Decentralization initiatives have suffered from a lack of genuine political commitment, and in neither non-sectoral legislation or policy on decentralization, is co-management recognized.

### ***Implementation and enforcement***

Beels and rivers are managed through Management Committees. In areas covered by the CBFM project, the following local regulations and policy have been adopted.

- ***Closed beels and baors:*** fingerling purchases, closed season, guarding, rotational harvesting, sharing of income, and taking of loans to meet collective costs.
- ***Open beels:*** sanctuary delineation and protection, habitat re-excavation, closed season, gear restrictions
- ***Rivers:*** sanctuaries, fish culture in pens, limited fishing grounds, rotation fishing, commitment not to use “harmful” gear.

Conflicts between user groups, and the capacity of local organizations, have been the main problems in developing and enforcing such local arrangements.

Under the project arrangements, revenue is collected by the fisher communities, with NGOs facilitating local administrative support to define and protect the fishers' use rights, and providing technical advice for sustainable and sound fishery management. At a more general non-project and non-sectoral level, Union Parishad (UPs) have the power to raise revenue from various local sources, although these are limited and generally collection rates are low.

### ***Drivers of co-management***

The Project has been driven by Worldfish Centre/ICLARM, Bangladesh Department of Fisheries (DOF) and five NGOs (Caritas, Proshika, BRAC, Banchte Shekha and CRED), principally to deal with resource over exploitation and inequity arising from the leasing system.

### ***General conclusions***

Community-based fisheries management, and/or co-management arrangements are not part of the formal current management tools adopted by Government, and there is not an especially supportive legal or policy framework for co-management in fisheries. Activities are currently thus strongly driven/supported by donors and NGOs.

In the CBFM project areas, there are some good examples of cooperation from local leaders that have helped to resolve problems. Significant changes in indicators of empowerment (participation and influence) and institutional efficiency (ease of decision-making) are reported in the beels (both closed and open), but the pattern of change has been less clear in the rivers.

There have been particularly high levels of conflict in rivers that Management Committees have not always been able to reduce. There are many examples of competition heightened by the lifting of leases and consequent open access. This has resulted in encroachment by landowners in open river areas, and locally influential people have also attempted to take control of rivers by having them declared closed waters (and thus leaseable).

## **2.2 Cambodia (Tonle sap)**

### ***Background information***

This case study covers the Tonle Sap Lake Basin, and a process of community/co-management that began in 2000. The Tonle Sap Lake covers an area of a quarter of a million hectares in the dry season, and during the wet season, floods into an area of 1.0 to 1.6 million hectares. The lakes resources support around 1.2 million people. Elsewhere in the country local coastal projects have been initiated by NGOs to organize fisheries communities for the management of coastal resources. In inland fisheries, experiments of co-management have also been started in local communities in the Mekong River Basin since 1994 under the framework of the Mekong River Commission Fisheries Programme.

### ***Policy and legislative setting***

Fisheries management of Tonle Sap has traditionally revolved around the separation between large-scale commercial exploitation of so-called fishing lots, and middle-scale and family fisheries based upon definitions of seasonality, spatial arrangements and the type of fishing gear used. In October 2000, Prime Minister Hun Sen initiated a reform of the fisheries sector, partly in response to an escalating level of conflict. The Prime Minister decided to release 56 percent of the fishing lots (from large-scale commercial exploitation), so that control of these areas reverted to local communities. The Prime Minister directed the government to devise a new fisheries management plan providing for the empowerment of local communities for managing fisheries resources at the local level. The draft five-year General Fisheries Plan (GFP) for Tonle Sap recognizes community management, and co-management as a strategy to achieve the Plan's objectives although has not yet been formally adopted by the Government of Cambodia.

The Fisheries and Administration Law (Fiat-Law No. 33 Kro chor of 1987), which is the principal fisheries legislation, does not provide for co-management arrangements or mechanisms. However, in early June 2005, the Government of Cambodia adopted the Sub-Decree on Community Fisheries Management. It is designed to promote co-management of fisheries resources. It provides the rules and procedures for establishing and managing community fisheries throughout the Kingdom of Cambodia. Each community fishery is to be led by a Community Fisheries Committee (CFC). No community fishery is allowed to manage fisheries in a designated area unless it has entered into an agreement, referred to as a community fisheries area agreement, with the Government of Cambodia through the Department of Fisheries (DOF). This agreement defines the extent of the designated area (a plan must be attached), provides the list of community fisheries and CFC members, local fisheries regulations and a statement setting forth management objectives. Community fisheries areas remain state public property, but community use rights are granted for a renewable three-year period.

The Royal Government of Cambodia (RGC)'s five-year Socio-Economic Development Plan (SEDP), 1996-2000, provided an initial policy experiment in local governance and the formulation and implementation of coherent local development programs and activities. It established a general framework for a decentralized and participatory approach to rural development through a new rural development and management structure consisting of successive levels. In addition, in March 2001, the King promulgated the Law on Administration of Communes (Khum/Sangkat) and the Commune Election Law, which provided the legal framework for the establishment of elected councils in Cambodia's 1 621 communes and sangkat in February 2002. The goal of commune administration is the promotion of good governance through the sustainable utilization of local resources to satisfy people's basic needs for present and future generations (article 41 of the Law on Administration of Communes).

### ***Implementation and enforcement***

Co-management is still in its infancy in Cambodia. Key difficulties in developing local rules/policy appear to be establishing a consensus amongst community members, and interference of local authorities and administrations (in order to maintain the status quo). It is the duty of the DOF, through its newly formed Community Fisheries Development Office, to assist community fisheries in drafting management plans and community fisheries area agreements. DOF should also be instrumental in helping community fisheries find financial resources. The Sub-Decree on Community Fisheries Management provides that community fisheries may derive monies from: contributions from community fisheries members (fees); donations from charity groups; grants from the Government of Cambodia; international organizations and NGOs; and any other legal sources of financing.

Community fisheries are required to report and provide information on any fisheries violation that takes place in the community fisheries area to the nearest competent fisheries officer. As a result, fisheries communities are not authorized to arrest alleged infringers or confiscate any illegal fishing gear used in the community fisheries area.

### ***Drivers of co-management***

Government and the international donor community and NGOs have been important drivers. The main motivations have been problems relating to resource sustainability, equity of access to fishing grounds, and conflict reduction between small-scale fishers and lot owners (large-scale fishing operations).

### ***General conclusions***

The introduction of co-management and a new policy and legislative environment marks a departure from the century long management system based on fishing lots, and decommissioning of fishing lots has permitted greater access to fishing grounds and reduced social tension. In addition, the legislative framework now formally recognizes the existence of community fisheries and empowers them through the CFC to manage fisheries activities within their area of jurisdiction. And there are laws relating to Communes, which could be beneficial as a framework for co-management. But in practical terms, there is no clear-cut procedure for the establishment of community fisheries, and the legislative framework does not address the issue of equitable representation of local community's interests in the community fisheries. In addition the Sub-Decree on Community Fisheries Management nicely sets out community fisheries sources of financing, but fails to make any provisions specifying where such monies should be deposited, the purposes for which they can be used, and the decision-making process to decide how acquired funds should be spent.

## 2.3 India (Kerala and Tamil Nadu)

### **Background information**

This case study considers the stake net fisheries in Vallarpadam Island, Cochin estuary, Kerala, and the mixed mechanized and traditional vessel fishery in Veerapandianpattinam, in Tamil Nadu. Both are community-management fisheries.

In many other areas, local level organizations and fisher representative institutions are well formed and are active in terms of both advocacy and engagement with government at different levels, and management of their own affairs. There are informal community management schemes in place in many parts of India.

### **Policy and legislative setting**

The federal nature of the political setting in India is important for fisheries management. Marine fisheries within the territorial waters (up to 12nm) are the subject of maritime states whereas fisheries beyond this limit within the EEZ fall in the jurisdiction of Central Government. Co-management and/or community management are not referred to in the national Comprehensive Marine Fishing Policy of 2004, except in so far as “Fish aggregating devices would be promoted as a community based activity”, and “Ornamental fish breeding and coastal cage aquaculture would be developed with a community orientation”. State policies have not been reviewed for all States for this paper, but informal web-based the Tamil Nadu fisheries policy makes no mention of either co-management or community management. It is thought that Kerala is the only State in India which has a formal fisheries policy, although all States have their yearly and 5-yearly planning processes.

The subject of fisheries is in the state list under article 21 of the Indian Constitution, so management and control of coastal fisheries is vested with the maritime states and union territories. At the same time the Union Government carries out management and control of the fishing activities beyond territorial limits in the EEZ (through the Maritime Zone of India (MZI) Act, 1981), but this legislation essentially relates just to foreign fishing vessel activity. Other Executive Orders relate to national vessels operating outside the 12nm zone. Specific legislation relating to co-management is not thought to be contained in national legislation, or in the Tamil Nadu Marine Fisheries Act, 1983, the Kerala Marine Fishing Regulation Act in 1980, or in the Travancore-Cochin Fisheries Act of 1950 used to regulate Cochin estuarine fisheries. The Coastal Regulation Zone Notification of 1991 specifically provides for fishers' rights to access to coastal land, and is the only group to supported in this manner.

Community use rights are afforded to certain castes of fishers, and non-fisheries specific legislation can also make provision community use rights. However, principal fisheries legislation is not thought to provide for community use rights.

### **Implementation and enforcement**

In Vallarpadam Island, three *padu* grounds operating with unlicensed fishers use a system of rotational access. Each of the three grounds has its own cooperative, called a *sangham*. There are three main areas that the *sangham* tries to support: equitable access, providing collective social responsibility, and mechanisms for conflict resolutions. *Sanghams* are registered with the state's registrar's office. Along with ensuring equitable access, the *padu* system also prohibits fishing during incoming tides when shrimp are migrating from the sea to the backwaters. There is no mechanism for the three groups of unlicensed fishers to coordinate with one another, and while each *sangham* is limited in its own membership, there is no overall control of fisher numbers as a whole, or on those who may want to fish the waters. The three *sanghams* do not interact with licensed fishers, or with various levels of the government.

In Veerapandianpattinam, there are rules for spatial distribution of the mechanized and traditional boats, seasonal restrictions (e.g. in November for mechanized boats) and certain activities e.g. pair trawling, that are not allowed under any circumstances. The boat owners' association and the fishers' association self-enforce these rules, supported by additional government surveillance.

### ***Drivers of co-management***

In both case study fisheries, the community themselves were original drivers of management arrangements. In Vallarpadam Island the main motivations were equitable access, providing collective social responsibility, and mechanisms for conflict resolution. In Veerapandianpattinam motivations included: damage caused by mechanized boats to fishing gear of traditional fishers and associated financial loss; the danger posed by mechanized boats to traditional fishers in the form of collisions and resulting injury; and degradation and damage to marine resources.

### ***General conclusions***

While the Constitution and national fisheries policy devolves legislative powers to States for fisheries management, national policy does not refer to co-management, and most State fisheries policies (where they exist) are also thought to be silent on the issue. Legislation is also not specifically supportive of provisions for co-management. Community management is thus far more common than full co-management in India, partly because of the large numbers of fisher organizations in the country.

Recognising the limitations of basing generalization on the two examples of community management considered above, it appears that compared to many other countries, there could be greater recognition of the role of established community management groups, and provision for the legal codification of traditional community management rules.

## **2.4 Indonesia (Sasi Laut in Maluku)**

### ***Background information***

This case study examines the *sasi laut* system of community management in Maluku. People believe *sasi* to be at least 400 yrs old, but the historical documentation is all post-colonial. The Maluku fishery can be divided into two basic groups: artisanal and commercial. A harvester who fishes from the shore or from a small *perahu* without a motor and uses a hand line, spear, trap or simple net, is considered artisanal. Operators of large pole and line vessels, seiners using deep-water fish aggregating devices (FADs) and floating lift nets, together with their crew, are in the commercial sector. In the middle are the gill netters and seiners using small, motorized craft. The majority of central Maluku fishers falls into the artisanal category and are, in fact, fisher-farmers.

Many traditional community based systems of resource management exist in Indonesia, such as *Sasi*, *Panglima Laut*, *Lubuk Larangan*, *Lebak Lubung*, *Maawu Danau*, *Ikan Larangan*, *Ikan Diniatkan*, *Suaka Perikanan* and others. Co-management is also now practised in some areas. For example, deployment of the artificial reefs in the Jemluk waters off the island of Bali, Indonesia, paved the way for the local fishers to establish a fishery co-management system. And Districts are now declaring their own Marine Protected Areas (MPAs), and already have community-based management areas, and traditional/indigenous MPAs.

### ***Policy and legislative setting***

Within the fisheries sector, government has historically been preoccupied with intensification of the fishery. Government policy has focussed strongly on the fisheries sector contributing to

national economic growth through an increase in fish production and sustainable fishery resources, and co-management is not an integral part of fisheries policy.

The concept of co-management is also not expressly mentioned in the Fisheries Act No. 31 of 2004, although reference is made to community participation. The Act promotes community participation in fisheries management and provides for the taking into account of *adat* law (customary law and tradition). It establishes new institutions such as the Council for the Assessment of National Fisheries Development, led by the President, which consists of representatives of the private sector in addition to relevant Ministers. Furthermore, it provides for the empowerment of small-scale fishers and fish farmers through access to credit, education and training, and development of small-scale fishers and fish farmers groups and fisheries cooperatives. It also makes provision for the delegation of “fisheries functions” from the central Government to regional Governments, and for community participation in law enforcement through reporting of violations of fisheries laws and regulations by local communities. The exact nature and extent of fisheries functions to be delegated to the regional level of government, and the nature of community participation in law enforcement, remain to be determined through regulation.

Legislation does not provide for community use rights, but village tenure over a defined area of both land and sea is strongly entrenched in the culture and recognized as legitimate by fishers even though it is not formally supported by law. Based on *adat* in Maluku province, coastal villages claim *de facto* rights over marine territory.

Regional legislation can be supportive of co-management, for example, the Provincial Decree of Nangroe Aceh Darrussalam No. 21/2002 on natural resources management, specifies in Article 15 that the management of natural resources in an area has to be implemented with recognition and protection of local customary community or local community rights, as well as recognition of customary laws.

There is a strong national government policy (non-sectoral) of decentralization. The 1999 Autonomy Act and its revision in the Law 32/2004 on “regional governance” devolve powers and responsibilities to provincial and district levels. The Law 32/2004 specifically covers natural resource utilization. Legislation establishes a control mechanism designed to ensure the conformity of regional regulations with higher-ranking legal norms whereby the central government is empowered to revoke regional regulations that are found to be conflicting with government regulations or laws. More than 10 percent of the Ministry of Marine Affairs and Fisheries now goes straight to the district level, the deconcentrated budget for marine and fisheries development and management has significantly increased in recent years. Eighty per cent of licence/fee revenue at province and district level can also be retained.

### ***Implementation and enforcement***

*Sasi* is a set of rules and regulations that govern resource use, but it also applies to social behaviour. With regard to marine resources, there are regulations on the use of poisonous plants and other chemicals, destructive nets and intensive gear. There are also regulations concerning access to the *sasi* area, activities allowed in the *sasi* area, and seasonal rules of entry and harvest. All these rules are guarded and enforced by an institution known as the *kewang*, which functions as a local police force. Their legitimacy, as well as that of the *sasi* institution itself, is based on “*adat*”. Other enforcers who may be involved in marine *sasi* are the police. Their role has increased since the 1979 law on village government left the *kewang* outside of the formal government structure.

In many cases, the character and legitimacy of the village head (*kepala desa*) is the key to successful marine *sasi*, and where deficient, problems can then occur. Other problems include: capacity for enforcement against poachers from outside the community; changing cultural/ethical/spiritual values with modernization and globalization; religious conflict; and competition and degradation of marine habitats and stocks.

### **Drivers of co-management**

Traditionally, the local communities themselves were the main drivers of this form of community management. However, more recently NGO and academic researchers, noting trends in resource degradation and the decline of *sasi*, have begun to encourage the government to look for ways to revive or establish local management, with *sasi* as the basis. At the village level, the incentive for considering local management is most often the potential for the village government to collect resource rents, which is already an established feature of *sasi* as currently practiced in Maluku. For fishers themselves, the incentives are more linked to culture than to a consciousness of the need for management.

### **General conclusions**

While fisheries sector policy is not supportive of co-management, the Fisheries Act No. 31 of 2004 and the 1999 Autonomy Act and its revision through the Law 32/2004, together provide an opportunity for local government to develop their own fishery resource management mechanisms, potentially in consultation with communities. Yet this task is not easy to perform, as provincial governments, represented by fishery services, have insufficient capacities to do so. For more than 30 years, fishery services were just a subordination of the central government, with their main task being to implement centrally-planned programmes and projects.

Under *sasi*, basic management concepts are internalized and legitimized, and the *sasi* institution has proved to have demonstrable social and environmental benefits, although the ability for enforcement is sometimes limited. However, the *sasi* institution is in decline and in many villages has disappeared, while the need for local management is in many areas more urgent than ever. *Sasi* provides an efficient and legitimate base through *adat* on which to build co-management structures. But such community-based and traditional management mechanisms, are increasingly under threat. Formal and legal recognition and support of local community rights, practices and responsibilities could help to ensure a solid base for building more competent local resource management institutions.

## **2.5 Japan**

### **Background information**

This case study considers the *sakuraebi* (small pink shrimp, *Sergia lucens*) fishery in Suruga Bay, Shizuoka Prefecture (west of Tokyo). There are 120 vessels operating mid-water pair trawls. Fishers from two neighbouring Fishery Cooperative Associations (FCAs) are involved; in 1968 they formed a single Fishery Management Organization (FMO). As with the other country studies, many comments on policy and legislative aspects of co-management linked to the specific cases examined relate to other national coastal fisheries in Japan. According to the latest Fishery Census (2003), there were 1 608 co-management regimes nationwide. Japanese coastal capture fisheries are virtually all managed on co-management principles. It should be noted that given the large number of co-management arrangements across Japan, there are many differences in the implementation of co-management practices, as well similarities. What can be generalized, is the fact that Japan demonstrates many of the ideal characteristics of a supportive policy and legislative framework for co-management.

### **Policy and legislative setting**

Fishery co-management arrangements formally became part of national fisheries policy in 1983. Fisheries law was recently modified in the Basic Law of Fisheries enacted in 2001, but for many decades has recognized co/community-management. "Meiji Fishery Law" was first established in 1901, and then revised in 1949 (Shouwa law). The Japanese fishery management regime utilizes fishery cooperatives, called Fishery Cooperative Associations, which are juridical persons and are granted territorial user rights (called common fishing

rights) established by law for capture fisheries within coastal waters of its jurisdiction. In 1948 the Fisheries Cooperative Association Law (Law No. 242, 1948) established the legal foundation of FCAs. By law, fishing rights are granted mainly to FCAs, and the FCA members are entitled to fish within that territory.

The Marine Fisheries Resource Development Promotion Law of 1971 was amended in 1990, establishing the Resource Management Agreement System, and is also of relevance. This system encourages autonomous agreements among fishers for the purpose of conducting resource management under more intensive and yet stricter rules than had previously been the case under prefectural fishery coordinating regulations, FCA regulations and FMO rules. When an agreement prevails at a certain level within the area, the government can affirm the agreement, and it becomes an official rule. It constitutes an official support system for autonomous resource management by fishers.

Decentralization is legislated for to devolve decision-making power to local areas and authorities/governments in the Constitution, and in the Local Autonomy Law 1947, which is the core legislation for dealing with local government organization and management supported by other laws. The Local Autonomy Law was amended by the Law Concerning the Provision of Related Laws for the Promotion of Decentralization of Power (Omnibus Decentralization Act).

Decentralization is also provided for under the Basic Fisheries Law, with co-ordinating organizations from the national to the local level being: Fishery Policy Council; Wide Area Fisheries Co-ordinating Committees; Area Fisheries Co-ordinating Committees; Local Fisheries Co-operative Associations; and more specialized FMOs. Coordination of fisheries' issues, such as rights/license distribution and local regulations, is achieved through these multilevel coordinating organizations. Government and/or research institutes provide support with planning, scientific advice. Both fisheries policy and legislation specifically recognize co-management within the scope of decentralization.

### ***Implementation and enforcement***

Implementation of co-management arrangements is mostly initiated by FCAs/FMOs, but assistance is available from government institutions, such as regional offices of the Ministry of Agriculture, Forestry and Fisheries, fisheries divisions of prefectural government, and Fisheries Experimental Stations. FCAs administer the use of fishing rights; that is, rules regarding who, how, where and when to fish are decided internally. In the *sakuraebi* fishery, its biological nature – it can be fished only during the night near the shore – makes poaching difficult. Penalty codes exist, but most enforcement among members is through peer-pressure. Management is considered a success overall; it is profitable and has endured for more than three decades. Resource management/conservation aspects are, however, not rigorously applied partly due to the lack of scientific information on stock level and its fluctuations. In other co-managed fisheries in Japan, social regulation is also said to be very important, and violation of rules is considered severe. Social sanctions are considered a serious punishment.

### ***Drivers of co-management***

Throughout Japan, government serves to codify and support co-management regimes rather than impose them. Declining catches in the face of ever-advancing technology, have led many fishers and fisher organizations to realize the need to manage and conserve resources.

### ***General conclusions***

In Japan, the fisheries policy and legislative framework is extremely supportive of co-management. Other non-fisheries specific pieces of legislation are also very important in

supporting such arrangements. Territorial use rights granted through legislation to FCAs and membership-control by FCAs, both supported by Fisheries Law, provide for well-defined geographical and membership boundaries. And since FCAs themselves are institutions for collective action with a long historical background, it is not surprising that they have established their own mechanisms of consensus building and handling disputes among fishers. Also, since many members of FCAs live in the same community, there is a sufficient accumulation of social capital among its members to facilitate co-management regimes. However, almost 40 percent of FCAs in Japan are now in financial deficit. The National Assembly of FCA Representatives has adopted a cooperative movement policy (CMP) for revamping business organization and management, and plans to amalgamate FCAs where necessary.

## **2.6 Philippines Visayas**

### ***Background information***

This case study is based on a variety of ongoing or planned co-management initiatives in the Visayas, including: Northeastern Iloilo Province (7 contiguous coastal municipalities); Pagapas Bay; the marine sanctuary in San Salvador Island; Bolinao; Danao Bay; Malalison Island; Caliling; and Cogtong Bay. Many other provinces in the country with a coastal, baywide or gulf domain have community management arrangements in place. In general co-management generally commenced from the 1980's onwards, as supported initially by local NGOs and later by development projects. One of the earliest initiatives of community management in coastal areas was the Central Visayas Regional Project (CVRP) implemented by the government and supported by the World Bank. The CVRP fostered new institutional arrangements for planning and implementing community-based rural development by applying participatory approaches at the barangay level. This was followed by other projects focused on community resource management. Among them were the Coastal Resource Management Programme and the Fisheries Sector Program (renamed Fisheries Resources Management Program in its second phase).

### ***Policy and legislative setting***

The policy environment in the Philippines now provides for the participation of community groups and other non-state actors in what have traditionally been considered state affairs. In addition, the 1987 Philippine Constitution contains important provisions that invoke general protection of the environment, although responsibility rests primarily with the State. Legislated policy in the form of the preamble of the Philippines Fisheries Code of 1998 (Sec. 2. Declaration of Policy) confirms and enhances the co-management policy of the Government.

The Philippine Fisheries Code is a complete departure from the previous policy/legislative direction of maximizing fishery utilization and pushing for fisheries as a preferred area for investment without the necessary social and environmental safety nets. The new law provides for the preferential rights of small-scale fishers and, requires that their participation in aquatic councils be established in all coastal areas in the country.

In 1991, the Local Government Code became the country's centrepiece legislation on devolution. Through its implementation, the transfer of political power and responsibility from national to local government units was pursued. In addition, the law requires local governments to have people's and NGOs as active partners in the pursuit of local autonomy. The Fisheries Code of 1998 supports the Local Government Code and enables the establishment of co-management units in the form of registered fisherfolk organizations and cooperatives. The Code provides for the establishment of Fisheries and Aquatic Resources Management Councils (FARMC) at national and municipal levels to carry out management advisory functions in collaboration with Local Government Units (LGUs).

### ***Implementation and enforcement***

Municipal Ordinances and Resolutions have been used to support locally agreed management rules. However, getting the support of the majority of the municipal councilors to approve the passage of an ordinance has not always been easy, and local fisheries organizations and initiatives have sometimes been co-opted by vested interests in government and business. And, some examples of inconsistent policy have been noted. For example, in Cogtown Bay in late 1980's locals were being encouraged to preserve mangrove areas, but the Government issued fish pond lease permits even though the Department of Environment and Natural Resources had not issued mangrove-cutting permits for outsiders in mangrove areas.

Financial and technical decentralization is in place even at the town level. The Local Government Code of 1991 delegates to the local government units and people's organizations the task of managing their own resources: "Municipalities have the exclusive authority to grant fishery privileges in the municipal waters (15 km from the coastline) and impose rentals, fees, or charges." But the technical and financial capability of municipalities and their field staff is often lacking to address or meet the demands of good management and conservation.

### ***Drivers of co-management***

Local NGOs and international donors have been the principal drivers of most co-management initiatives to date, despite the favourable steps taken by the government in amending policy and legislation in support of such arrangements.

Principal motivations have been an awareness of conflicts between subsistence and commercial fishers and resource depletion, in the context of a more "participatory" paradigm following the decline of the Marcos regime.

### ***General conclusions***

In summary, the government has established a favourable policy and legislative environment for co-management. However, while Municipal Ordinances have been used to support management measures, the ability of government and local level institutions to implement policy and fully engage with co-management initiatives is still lacking. As a result, the majority of initiatives have been NGO and donor driven, and remain pilot schemes. Communities have not always been that engaged in, and supportive of, the process, especially when activities are not immediately self-financing. This raises questions about sustainability in the long term, even though some initiatives have successfully run environmental awareness campaigns, and provided enterprise development/loans at the same time as resource management measures, with activities reported to have led to increased catches and greater species diversity.

Co-management has been shown to be strongly dependent on good relations with local political figures. Local leaders who withdraw support for a particular initiative can effectively wipe out any gains the initiative might otherwise have had under a more supportive political regime. Conflicts between small and commercial fishers continue, and illegal fishing remains common in many areas.

## **2.7 Sri Lanka (marine)**

### ***Background information***

This study reports on various community and co-management arrangements throughout coastal areas of the country. Community-management practices have been in place since

pre-1990 in: The *Jakottu* or fish kraal fishing in the Madu Ganga estuary in the Southern Province; the *Kattudel* (staked seine) net fishery in the Negombo Lagoon in the Western Province; the trawler and beach seine shrimp fishery in the North Western Province; the rotational beach seine fishery in the Western and Southern Provinces; the live bait fishery in Egodauyana, near Panadura; and Chilaw lagoon shrimp stake net fisheries. A more general example of co-management among different stakeholders is found in the Special Area Management (SAM) process, which is now being implemented in many parts of Sri Lanka. Two such management sites are the Hikkaduwa and the Rekawa coastal areas. Most co/community-management arrangements in marine, lagoon, estuarine and reservoir fisheries relate to small-scale multispecies fisheries with a mix of full-time and part-time/seasonal fishing activity, using a range of trap/pot, line, set/passive nets and active nets, brush piles, cast nets, scoop nets. There are 15 022 small traditional craft (48 % motorized) used in lagoons and coastal areas.

### ***Policy and legislative setting***

While fisheries policy is not specific about co-management, one of the overarching policies of the Department of Fisheries and Aquatic Resources is the requirement for transparency, consultation and involvement of stakeholders in management planning and implementation. And The Fisheries and Aquatic Resources Act (Act No. 2 of 1996) provides for the designation by the Minister responsible for fisheries of “prescribed areas of Sri Lanka Waters or land adjacent thereto or both such waters and land as fisheries management areas for the purposes of this Act” (Section 31 (1) (a)). Registered fishers residing or engaged in fishing in a fisheries management area or part thereof, or migrant fishers may form themselves into a fisheries committee (Section 32 (1) of Act No. 2 of 1996). Legislation is used to demarcate areas for different users/gear or fisheries committees.

In addition, an advisory body, known as the Fisheries and Aquatic Resources Advisory Council and headed by the Secretary to the Ministry responsible for fisheries, is established at the central level to advise the Minister responsible for fisheries on all matters relating to the management, regulation, conservation and development of fisheries and aquatic resources in Sri Lanka waters. Representatives of the fishers are among the membership (Section 3 and 4 of Act No. 2 of 1996).

The Coast Conservation Act, 1981 is also relevant and makes provision for the identification of special coastal areas needing management and the establishment of management committees with the participation of all stakeholders, including fishers. The SAM process deals with planning and conflict both within the fisheries sector, and between fisheries and other sectors. Areas are identified as areas needing Special Management Measures in the legislation.

Sri Lanka witnessed the transition of governance from a centralized to a decentralized form in 1987, after the Government enacted the Thirteenth Amendment to the Constitution. The Thirteenth Amendment provided for the establishment of a Provincial Council in each province, the membership of which is determined under the Provincial Council Act taking into account the area and the population.

### ***Implementation and enforcement***

Local Fisheries Management Authorities under the new Act have the power to make recommendations to the Minister on: the conduct of fishing operations and the use of different types of fishing gear in a particular local fishing management; closed seasons for fishing or closed seasons for catching of specified species of fish in the area; the times during which fish may be taken.

Disputes between user groups have been settled by government over a number of decades using a dispute resolution mechanism that has resulted in specific local regulations being made, and which can be thought of as a form of co-management. Fisheries Ordinance 1940

contains detailed provisions to deal with disputes. Sections 20 and 20A, provide regulations to appoint a Committee of Inquiry or a Commissioner to deal with fishing disputes. Many area-specific regulations have resulted from this process. The Chilaw Lagoon Fisheries Regulations of 1993 provide one such example. Stake net fishing is practiced with the main species caught being prawns. The fishing rights are shared between three clans, who together formed the Traditional *Kattudel* Owners Association. The three main groups, each closely associated with a particular church, are allocated different fishing days. Sub-groups are organized for fishing purposes. Since only male descendants of *Kattudel* fishers can become owners, entry to the fishery is limited, and any disputes are dealt with by the Association. The areas set aside by custom for the *Kattudel* fishing industry have, as a result of conflict with fishers using other methods, been demarcated by the courts. A Government commission was set up to settle a number of disputes and fix equitable fishing times and areas for fishers living on the lagoon.

### ***Drivers of co-management***

Communities have been main drivers of community management, while all parties are generally supportive of the Special Area Management process. The main motivations for co-management have been conflicts and resource depletion. But it should be noted that the devolution of power (and the establishment of Provincial Councils) in Sri Lanka was politically driven, largely as an alternative to the demand for a separate state by Tamil political parties and the militant separatist groups, rather than with resource management objectives in mind.

### ***General conclusions***

While fisheries policy is not specific about co-management, policy and legislation is generally supportive of co-management in Sri Lanka. General principles of transparency and participation are included in fisheries policy, and there is a Constitutional provision for decentralization. Fisheries legislation provides for the codification of many community management rules through local by-laws and regulations, the provision for management by fisheries committees, and a dispute resolution. Co-management is also fostered by important non-fisheries legislation relating to coastal conservation. Fishers' cooperative societies can provide the necessary focus within a community on which a management system could be based. The number of cooperative societies, their membership and financial resources (both internally generated and loans) have greatly increased since 1989, and this provides a growing base for possible co/community-based management. This coupled with the new Act providing for Local Fisheries Management Authorities provides for a strong basis for co-management.

## **2.8 Southern Thailand**

### ***Background information***

This case study examines management arrangements in two areas in southern Thailand: Phang-Nga Bay on the Andaman Sea coast since 1995; and Bang Saphan Bay, Prachuap Khiri Khan Province, in the Gulf of Thailand since 1999. Fisheries in Phang-Nga Bay have been traditionally conducted by small-scale fisherfolk employing artisanal fishing gear such as bamboo-stake traps, hook-and-line and fish traps, targeting multispecies fisheries. The majority of fishers in Bang Saphan Bay are characterized as small-scale multispecies fishers using the following gear: squid and anchovy cast nets; squid jigs; scoop nets; hook and line; anchovy purse seine; squid trap; fish and crab gill nets; some diving.

Other initiatives are reported in Sikao Bay, Songkhla Lake, Amphur Thalang of Phuket, and Pattani Bay and Amphur Pana Reh of Pattani. Also of note is the CHARM Project's National Co-management Initiative in Thailand; a five-year partnership (2002-2007) between the Government of Thailand and the EU. CHARM had adopted both a top-down and bottom-up

approach, with local and provincial level governments playing a key role in the decentralization and co-management approach.

### ***Policy and legislative setting***

The objectives for fisheries management evolve from the National Economic and Social Development Plans issued by the government. Thailand is currently guided by its 9th Plan (2002-2006). Fisheries policies are strongly focused on growth i.e. production orientated, as a means of poverty reduction. Community based resource management is included as a strategy for coastal fisheries resources management, and people participation in natural resource and environmental management has been increasingly recognized in recent Plans. Guidelines at the national policy level include:

- Providing opportunities of people and communities to participate in decision making, and monitoring and evaluation of public development projects likely to have an impact on natural resources and the environment; and
- Providing legal rights of local communities and small fishers to participate in coastal resource management, as well as the conservation, rehabilitation and maintenance of mangrove forests, sea grass and coral reefs.

Within the fisheries sector specifically, the DOF Fishery Policy for 2005 has as one of its mission statements “Rehabilitate fishery resources to retain their productivity through acquiring people’s participation by imbuing conscience”. And a recent action plan to deal with tsunami rehabilitation also involves co-management, community involvement and enhanced government capacity to respond to needs. Also of note is the Department of Marine and Coastal Resources (DMCR), established within the Ministry of Natural Resources and the Environment in late 2002. The DMCR published a national coastal management policy in 2004, and this formally makes provision for community and co-management.

Co-management is not specifically provided for under principal fisheries legislation, but Section 32 of the Fisheries Act 1947 allows the Minister/Governor to issue fishery regulations. Other relevant sections are Section 6 (on types of fishing grounds) and Section 7 (powers of authority for provincial committees), and combined with Section 32 could be considered a legal framework allowing for co-management, subject to associated regulations. Stakeholders and communities are not yet legally mandated to be involved in decision-making processes however, although the DOF has been increasing the scope of its consultation processes to include these groups, in accordance with the 1997 Constitution. (The 1997 Thai Constitution allows local people to participate in natural resource management through local institutions). Under the Thai Fisheries Act 1947, rights can be granted to individuals through licences to fish in a “reserved” area, or to individual leaseholders bidding for rights to a “leasable” area who then have total rights to that area for the assigned period. In general, at the present time there is no legal support for community use rights or group’s user rights. However, the draft New Fisheries Law B. E. 2545 provides for the involvement of stakeholders in decision making. Under a specific section on community-based management, it provides for “designated communities” to have rights to harvest aquatic resources within a designated community fishery area, or to be given the authority to manage and implement measures related to aquatic resources within a designated community fishery area. However, certain issues raised in the consideration of the draft law have to be clarified before it becomes law.

### ***Implementation and enforcement***

A range of regulations have been passed to control the type and nature of fishing activities in both Bays. In Phang Nga Bay, with the adoption by the government of the community-based fisheries management approach, some responsibilities for coastal resources management have been delegated to coastal villages along the Bay. Village committees, whose members

include fisherfolk and village leaders, have been established to implement resources management initiatives and decisions emanating from the villagers. In Bang Saphan Bay, project staff and local fishers (and sometimes policeman) do the monitoring and enforcement of illegal fishing operations. However, by law, only government officers can enforce illegal cases, not local fishers. Other concerns have arisen because fishing grounds by fishers from different villages may overlap, and so boundaries for resource use rights cannot be set in just one small area, for example, in front of each fisher community. In addition, fisher groups are most representative of fishers but more informal than “TAOs,” the local government organizations.

### ***Drivers of co-management***

In Phang Nga Bay as a whole there are several NGOs – for example, Wildlife Fund Thailand, TACAP, CAA, Small-Scale Fisheries Federation, and the Environmental Conservation Association – that have worked to protect coastal resources and environment. Koh Yao Noi was also an active group, and built their own patrol boat and worked with DOF on patrols to keep the Bay free of trawlers. The CBFM project in Phang-Nga Bay was set up by the Andaman Sea Fisheries Development Center (AFDEC) of the Department of Fisheries (DOF).

In Bang Saphan Bay, co-management was implemented by DOF in 1999 to test the rights-based approach to management. It also resulted from pressure by local fishers i.e. the Government had to do something to manage the conflict in the area.

In both bays, the main motivations for co-management were resource depletion and conflicts with trawlers.

### ***General conclusions***

Co-management is being increasingly recognized in Thai fisheries policy, although it is not yet specifically provided for under principal fisheries legislation. Co-management arrangements in both Phang-Nga Bay and Bang Saphan Bay have resulted in some successes as perceived by the stakeholders themselves.

However, to delegate fisheries management functions and authorities to any local community, it is necessary for government agencies to seek a formal or registered local organization to guarantee that they follow administrative regulations and formal procedures. Meanwhile fishers are seeking an institution that is properly representative of them and able to raise their concerns and interests. In most cases the local fishers’ representative institutions are informal or non-registered organizations. Nevertheless, despite some continued reticence, government is becoming increasingly receptive to working with local fisher organizations and NGOs.

## **2.9 Vietnamese reservoirs**

### ***Background information***

In the Province of Daklak in the central highlands of Viet Nam there are more than 200 reservoirs. Co-management arrangements have been initiated to manage fisheries resources in six reservoirs (Ea Soup, Lak, Yang Re, Krong Buk Ha, Nam Nung, and Buon Tria) under the Management of River and Reservoir Fisheries in the Lower Mekong Basin Project, sponsored by the Mekong River Commission (MRC). Management of River and Reservoir Fisheries (MMRF) Component, of the MRC Fisheries Programme began in 1995, and there are about 570 fishers in the six reservoirs.

There are also some forms of co-management and community management in lagoon fisheries (e.g. Tam Giang in Thua Thien Hue Province), and co-management arrangements have been introduced for improving management of coastal shrimp fisheries and coral reef

ecosystems (e.g. Tam Hai Commune – Nui Thanh district, Quang Nam province; Phuoc Dinh Commune – Ninh Phuoc district, Thuan province). The FAO project Integrated Management of Lagoon Activities in Thua Thien Hue Province is also supporting the establishment and implementation of co-management schemes for the fishery sector in the province.

### ***Policy and legislative setting***

In the final draft “National Strategy for Marine Fisheries Management and Development in Viet Nam,” which is expected to be adopted early 2006, one of the principles upon which the strategy is based provides for co-management in the following way:

The Ministry of Fisheries is responsible for overall policy objectives, monitoring the status of resources and implementing management actions through Provincial and local fisheries management agencies and others as appropriate. In undertaking this function, the Ministry of Fisheries will, wherever practicable, adopt a community-based management approach and work closely with, and strengthen the role of, local communities in fisheries management.

In addition, the government has approved a programme for aquatic resource protection and development to 2010, which adopts many of the same principles and refers to the FAO Code of Conduct for Responsible Fisheries and participatory approaches to fishery management. In addition the draft strategy for offshore fishing, the Sustainable Aquaculture in Poverty Alleviation (SAPA) Strategy and Implementation Programme, and the Fishery Sector Annex of the Comprehensive Poverty Reduction and Growth Strategy Paper (CPRGS), all emphasize the need for grass-roots level participation in decision-making processes with regards to management of the fishery sector and sometimes explicitly mention co-management or community based management.

The Fisheries Law of 2003 (Law No. 17/2003/qh 11) provides for co-management. Regarding the management of fishing grounds, the law provides that “The provincial People’s Committees (...) shall organize and promote the local residents to take part in monitoring, detection and prosecution of any violations committed to fisheries activities in fishing grounds”. (Art. 15.4). Furthermore, regarding the rights of organizations and individuals engaged in fishing operations, there is a provision stating that “They shall have other rights as provided for by legislation.” (Art. 20), which, in being so general, can point to any rights, including those associated with co-management. The concept of co-management is also provided for in the Draft Government Decree on the management of fishing operations conducted by Vietnamese organizations and individuals in all marine areas: “The People’s Committee of coastal provinces shall have the duties as follows:(...) Delegate the management power of coastal fisheries resources to district’s and ward’s People’s Committees; encourage the community-based management model for the management of coastal fisheries resources.” (Art. 19.4).

The Ordinance on the Tasks and Authority of People’s Councils and People’s Committees of 1996 details the functions of such councils and committees at all levels (provincial, district and communal). People’s Councils at all levels are granted authority on planning and policy lines. Among other things, they can decide on measures to develop fisheries in accordance with guidelines from upper echelons.

The Vietnamese leadership has promoted a number of political reform policies related to decentralization although there is no non-sectoral legislation dealing specifically with decentralization. So far, effort has focused on deconcentration. “Grassroots democracy” encourages popular participation in planning, management and supervision of local government’s projects. And the resolution of the Fifth Plenum of the Central Committee (IX Congress) March 2002 focuses on the commune level and provides, *inter alia*, for the promotion of grassroots democracy and the clarification of the functions of the commune, including its role in the budgetary process, land administration, and tax collection.

The Fisheries Law of 2003 also deals with decentralization, and provides that “the Government shall identify the border of coastal areas in order to decentralize management to local coastal authorities for integrated coastal areas management” (Article 5.4). With regard to inland areas, it stipulates that “the Government shall plan, establish, manage and decentralize the inland protected areas” (Article 9.2). It further specifies that “Provincial People’s Committee shall issue the management rule of protected areas to be decentralized to the local authorities for management in accordance with guidance provided by the Ministry of Fisheries” (Article 9.2). The Fisheries Law of 2003 also provides for the transfer of certain authority from the central Government to Provincial People’s Committees.

### ***Implementation and enforcement***

To be able to manage reservoir resources effectively, fishers have developed regulations to control fishing practices; in many cases these included prohibiting non-sustainable fishing methods. Penalties have included fines and confiscation of gear. Consistent enforcement against violators has been important. In practice, monitoring and enforcement has depended on the fishers’ unions, often with some support from local police forces. Some fishers’ groups have also stocked their reservoirs, as an additional way of increasing yields.

Theoretically implementation could be enhanced/supported under The Fisheries Law, which provides for the establishment of a fund for rehabilitation of fisheries resources (art.10) and allows for Government to make regulations for its usage, including for the purpose of for purposes of fisheries resources rehabilitation. Such regulations have to date not been adopted, but could potentially be used a source of revenue supporting decentralization and co-management within the scope of rehabilitation of fisheries resources.

### ***Drivers of co-management***

Co-management in the reservoirs covered in this case study was principally driven by donors and the MRC, but local fishers/stakeholders have been supportive. Elaboration of the National Strategy for Marine Fisheries Management and Development in Viet Nam, which provides for co-management, was largely driven by the Ministry of Fisheries (MOFI), with the Research Institute Marine Fisheries in particular leading the process. Backstopping for this initiative was provided at MOFI’s request by the FAO FishCode Programme and the DANIDA Fishery Sector Programme Support (FSPS).

### ***General conclusions***

Legislation provides a good framework for co-management. Its broad and flexible nature can be elaborated in subsidiary legislation. Up to the present time, however, there has been no elaboration of the Fisheries Law (i.e. there is no implementing subsidiary legislation) on the relevant aspects of how co-management is to be operationalized. Fisheries policy will also be supportive on approval of the new National Strategy for Marine Fisheries Management and Development.

Co-management schemes in Viet Nam are still in a trial/test phase. Developments have been strongly supported by external initiatives, and have not evolved sufficiently on their own. In the reservoir fisheries in this case study, while managing the fisheries was the initial focus for the fishers’ groups, the benefit from this was not sufficient to justify the time and money members invested in their organization; assurance of mutual welfare quickly became an equally important objective. The lack of funds to carry out planned activities was one issue that arose in fishers’ group meetings. All the groups had plans to finance their activities through taxation and/or various sorts of contributions from the members; however, these sources alone were insufficient to meet costs. If public agencies wish to promote co-management, they may therefore need to be ready to devolve reasonable funding.

## 2.10 Fiji

### **Background information**

Fiji consists of about 844 islands and islets. Most of Fiji's coastal waters are less than 70 m in inshore areas, and characterized by coral reefs. Water depth increases to 200-300 m outside the reef areas, then descends more gradually to the abyssal zone with waters deeper than 2 500 m. The main ecosystems are typical of those of other Pacific Islands: fringing reefs, barrier reefs, seagrass beds, mangroves, mud flats, estuaries, sandy areas, and areas of non-consolidated rubble. Main resources exploited by coastal communities are finfish, beche-de-mer, octopus, seaweed, lobster, mud crab, and various bivalve molluscs. Offshore tuna resources are exploited by industrial tuna vessels.

### **Policy and legislative setting**

Although commercial fishing has increased in Fiji, an increasing number of customary fishing owners are now restricting the number of licences issued for fishing in their *qoliqoli* (traditional fishing areas) due to growing awareness of the need to consider the interests of all members in the use of the *qoliqoli*. As a result of such concern, community-based fisheries management, which utilizes the communities' ownership over fishing rights areas, has begun to take root in Fiji. The movement has expanded through the initiatives of NGOs, institutions and other conservation agencies. Community-based management developed by NGOs and other institutions has been established in areas known as Locally Managed Marine Areas (LMMA). The recently established Fiji LMMA network (FLMMA), a collaborative effort among Government authorities, NGOs, learning institutions, conservation practitioners and communities has added impetus to the community-based fisheries movement in Fiji.

Recently, the Fisheries Department has pursued its objective of implementing LMMA's management plans at the national level to enable the community-based management initiatives to have a wider influence and impact. This initiative was incorporated into the strategies and policies of the Department of Fisheries for the 2002-2006 period. A new and encouraging development is that the Government has decided that it will grant ownership of the foreshore areas to indigenous Fijians through legislation, and has produced draft legislation to this effect. If this undertaking is implemented, it will remove the controversy over the ownership of the *qoliqoli* (see discussion below) and should give further impetus to the community management movement in Fiji. The recently completed registration of all claims over marine areas by *mataqali* and the LMMA system driven by the FLMMA, strengthens the movement for community fisheries management based on customary marine tenure in Fiji.

Compared with many Pacific Island countries, Fiji has had a longer history of dealing with and implementing customary marine tenure (CMT). The recognition of CMT rights in law dates back to the mid-1800s and the cessation of Fiji to Britain in 1874. The Deed of Cession promises that the rights and interests of the ceding parties, the High Chiefs, shall be recognized, in so far as they are consistent with British Sovereignty and the colonial form of government.

The Fisheries Act 1992 is the principle fisheries legislation for the management of marine resources in Fiji. Features of the Act relevant to community/co-management are:

- the recognition of traditional use rights in traditional fishing areas and their exclusive use to members of the *mataqali*.
- the provisions which establish a Native Fisheries Commission charged with the duty of ascertaining the customary fishing rights in each province of Fiji (The Commission has now determined and registered all traditional fishing areas (*qoliqoli*) totalling 410 parcels).

- Entry into fisheries is regulated primarily by the fishing license system.
- Pursuant to the legal situation established under the provisions of the Birds, Game and Fish Protection Ordinance as contained in the Fisheries Act, fishing in traditional fishing areas (the *qoliqolis*) is exclusive to the members of the *vanua* (the largest grouping of kinmanship) and *yavasu* (the next social group down the scale from the *vanua*). Any fishing that is to take place in the *qoliqolis* by non-members of the *vanua* and *yavusa* is possible only under permit granted by the District Commissioner, based on the approval of the Chief responsible for the *qoliqoli*. To obtain a permit, the person approaches the Chief, who will consider the request. Upon approval, the Chief grants a letter of consent which is taken to the District Commissioner, who then grants the permit upon verification of ownership.

The result of the legal framework is that Fiji's coastal waters and foreshore areas and use rights are shared under a dual ownership system. The ownership of the foreshore, including all land below the high-water mark (the seabed) and extending to its territorial limits and continental shelf, rests with the State. The State exercises sovereign rights in the area beyond its territorial limits in the exclusive economic zone. The rights of Fijians are confined to exclusive fishing rights in the recognized customary fishing grounds, including those fringing reefs on the coastal waters and around isolated islands. The Fisheries Act is interpreted to mean that the right of the *vanua* to fish in the traditional fishing area is exclusive (Fong 1994), and this is confirmed by current practice.

### **Implementation and enforcement**

Few funds are specifically allocated to the agencies responsible for the management of coastal resources, for the purpose of coastal resource management (most funding has been oriented to export-oriented resource development and infrastructure projects). Of the 117 staff in the Fisheries Division, none are assigned specifically to coastal resource management. Government support in terms of resource allocation to lower level initiatives in coastal resource management is also low. The Fisheries Division is however sympathetic to supporting lower level initiatives in coastal resource management, although officials indicate they do not have the human or financial resources to work easily at the village level.

Customary fishing areas and the right to regulate use and exploitation in that area belong to different, but closely related social groups, namely the *vanua*, and the *yavusa*. People within these groups are expected to use their own customary fishing area location. Those from outside the group who wish to use the customary fishing area of another group must obtain permission of the owners (see relevant features of the Fisheries Act 1992 above). Owners of customary fishing areas may establish closed areas to preserve the resources for an intended purpose. Decisions of a group are conveyed through social channels of communication, which ensures that all interested parties are made aware of such decisions. Enforcement of decisions and traditional management measures is ensured by traditional authority and through strict adherence to protocols. Compliance with management measures is normally assured through the combined effect of respect for the Fijian traditional authority system (the Chiefly system), respect for tradition, and reverence for sacred grounds or the supernatural, which require adherence to certain rules or practices. Contraventions of established management measures attract harsh punishments.

### **General conclusions**

Key strengths of the national policy and legislative framework include the following.

- There is legal recognition of community rights to manage coastal resources.

- Senior coastal resource managers have recently been sensitized to the needs and benefits of coastal resource management, and there has been a substantial amount of training of resource managers in the recent past.
- Substantial donor interest exists for supporting community-based coastal resource management.
- Legal incorporation of traditional decision-making institutions, and better still, the actual recognition of traditional fishing rights in legislation, indicates a continued relevance of and respect for culture and tradition in Fiji. This has largely contributed to the success of community-based fisheries management initiatives, based on customary marine tenure.
- Present moves to grant ownership over foreshore areas to indigenous Fijians, through policy and legislation, would further assure the continuation of traditional forms of fisheries management, through community based management.

Key weaknesses of the national policy and legislative framework are as follows.

- National agencies have failed either to allocate sufficient funds for, or place sufficient priority on, coastal resource management.
- There are indigenous institutions for local coastal resource management, but the national government agencies do not place much emphasis on supporting those institutions. In other words, the situation is still more one of community than co-management.
- Decisions by the Chief to grant access for commercial fishing operations to non-members of the *vanua* may not be in the long term interest of the members of the *vanua*.

## 2.11 Samoa

### ***Background information***

Samoa is an oceanic volcanic archipelago in the south-west Pacific. There are two main islands, Upolu and Savaii, seven smaller islands (two of which are inhabited), and several islets and rock outcrops. The country has a total land area of 2 839 km<sup>2</sup> and an exclusive economic zone (EEZ) of 120 000 km<sup>2</sup>, one of the smallest in the Pacific area. Fringing reefs and barrier reefs enclosing shallow lagoons surround most of the islands. There are approximately 23 100 ha of reef and lagoon area with depths of less than 50 m, as well as 1 000 ha of mangrove and swampy areas. Most coastal ecosystems found in other parts of the Pacific Islands are also found in Samoa. Finfish (especially surgeonfish, grouper, mullet, carangids, rabbit fish), octopus, giant clams, beche-de-mer, turbo, and crab are the main target species of coastal communities, and offshore tuna resources are exploited by industrial vessels.

### ***Policy and legislative setting***

Coastal resource management is covered in the national development plans and there is strong government support to community-based management in Samoa. Also of interest, and reflecting the Government's overall interest in co-management, are recent developments to co-manage commercial tuna fisheries. The remainder of this case study focuses on coastal/inshore community/co-management, but some information on co-management of commercial fisheries is provided in Box 1 below.

Under Article 104 of Samoa's Constitution, all land lying below the line of high water is vested in the State and all Samoans have equal access to these areas. This right is regulated by the Fisheries Act 1988 which is the principal legislative framework relating to

fisheries in Samoa and provides a system for distributing access rights to fishers guaranteed by the Constitution. Traditional law is still widely used in Samoa and can be the most effective way of conserving and managing coastal areas. Village Councils have principal control over the majority of coastal lands.

The Fisheries Act (1988) and the Local Fisheries Regulations (1995) facilitate the conservation and protection of marine breeding and feeding areas as well as integrating the sustainable development of marine resources into environmental planning and assessment. The Village *Fono* Act 1990 formally recognizes the Village *Fono* (council) by validating and empowering the exercise of power and authority by Village *Fono* in accordance with the custom and usage of their villages. Notably however, powers are only accorded to people living in the village. An important provision of the Fisheries Act 1988 is that the Director responsible for fisheries "...may, in consultation with fishermen, industry and village representatives, prepare and promulgate by-laws not inconsistent with this Act for the conservation and management of fisheries". The ingenious use of this provision, in connection with the Village *Fono* Act and the underlying relevance of indigenous socio-political and decision-making institutions, has allowed co-/community-based fisheries management to become well established in Samoa. Many villages now have by-laws to assist in managing village fishing grounds.

**Box 1. Co-management of Samoan commercial tuna fisheries**

***Characteristics of the fishery***

The commercial fishery in Samoa has expanded rapidly since 1995, when horizontal longline gear was introduced to capture large tunas, albacore, yellowfin and bigeye, for export. Exports of tuna have increased from 2 092 metric tonnes, valued at US\$4 million in 1996, to 4 505 metric tonnes, valued at US\$13 million, in 2000. The industry employs over 500 people and is the major export earner of the country.

***Problems***

However, although the tuna fishing industry has contributed substantially to the economy of Samoa, its rapid expansion created many problems for both the private and the public sectors. Thirty-three lives were lost at sea between 1997 and 2000 due to the lack of seamanship skills, lack of basic safety equipment, and poor vessel construction. Considerable quantities of fish were being rejected due to poor on-board handling of the catch and lack of adequate onshore facilities to process and store the catch properly, and the mooring facilities were inadequate to deal with the considerable increase in the number of fishing vessels.

***Solutions***

The Government of Samoa, in an attempt to address some of these problems, developed a national radio communications system for mariners and imposed regulations concerning construction, safety equipment and manning requirements for fishing vessels. But the government wanted to involve the industry in the process of making decisions towards managing the tuna fishery, as the fishers and other user groups had a better understanding of the needs and concerns. In September 1999, Samoa, with assistance from an AusAID-funded project, established a co-management system. The aim was to achieve closer consultation with the stakeholders and greater awareness of fisheries resource management issues, and to provide the opportunity for all stakeholders to have direct input into the fisheries management decision-making process. As a result of this interaction and consultation with the stakeholders, greater awareness, acceptance and ownership of fisheries management arrangements have been achieved. Perhaps most important has been the joint development of a tuna management plan, and the creation of a commercial fisheries extension service (CFES) in 1999 within the Fisheries Division of Samoa. To meet the needs of the fishing industry and government departments in Samoa, the CFES has: supported Samoa's Commercial Fisheries Management Advisory Committee (CF-MAC); promoted management strategies to ensure the sustainability of the tuna fishing industry; promoted the enforcement of the sea safety regulations for the tuna fishing industry; facilitated training for the fishing industry; identified infrastructure requirements and facilitated their implementation; and disseminated information concerning development and management of the fishing industry.

### **Implementation and enforcement**

Government officials state that there has been a recent move to channel more resources into the management of coastal fisheries. About 20 of the Fisheries Division's 40 staff and four of the Division of Environment and Conservation's 12 staff, work on coastal resource management issues. Much of the current government support to lower-level coastal resource management occurs through participation in partnership programmes, some of which are externally funded. The government also supports community-level initiatives through the assistance it provides in the formulation and approval of village by-laws.

In Samoa, many important decisions are made according to, or are influenced by, what is referred to as the Samoan way (Fa'a Samoa). Fa'a Samoa, founded on custom, is perpetuated by the continued relevance of the traditional forms of social groupings and decision-making institutions, particularly the Matai (Chiefly) system and the Village Fono (Council). The Village Fono decides on all matters pertaining to the village and its land and sea resources. Decisions are reached by consensus following a great deal of discussion by concerned parties. Fono decisions are based more on a sense of social justice, custom and usage than written laws and regulations, although as noted above many villages now have by-laws to assist in managing village fishing grounds.

In the mid-1980s, over-exploitation, use of destructive fishing methods and environmental disturbance caused serious declines in catches in the inshore fisheries. The situation was of concern not only to the Government, but also to a large number of the village communities. Village communities through their Village Fono took initiatives to make village rules and publicize these rules through media to prevent further decline of their fishery resources. Notices announced bans on the use of explosives, chemicals and other destructive fishing techniques and prohibited nearby villages to fish in their respective lagoon areas. The notices also indicated penalties to be paid to the Fono for any breach of their village rules by their own residents, and threats of legal action for breach of by-laws by outsiders.

The use of by-laws noted above has often been the direct result of problems with the enforcement of village rules for outsiders (and comes as no surprise as the jurisdiction of the Village Fono, according to Section 9, is to make laws that apply only to persons who ordinarily reside in the village). Problems of enforcement also arose owing to the inconsistency of some village rules to manage and conserve fishery resources with existing Government laws. This resulted in several Fono not being able to pursue court action against breaches by neighbouring villages.

The mechanism for introducing village by-laws under the Fisheries Act also ensures that the village rules apply equally to village residents and outsiders and no Samoans can be differentially excluded as was the case under the Village Fono Act. The advantage of village rules in the form of by-laws under the Fisheries Act is that they can now be enforced in a court of competent jurisdiction like any other national law of Samoa.

Current village by-laws are broad and cover any measure that assists the management and conservation of the fishery resources. These may include the restriction of the sizes of fish and shellfish (but not lower than the minimum limits in the Fisheries Regulations 1996), bans on certain types of fishing gear and methods, allocation of fish quotas, restriction of mesh sizes for nets and fish traps (but not lower than the minimum limits in the Fisheries Regulations 1996) and closure of fishing seasons or areas to allow fish to reproduce.

Monitoring and enforcement of the by-laws is largely undertaken by village communities. The communities normally put signboards along roadsides and beaches to inform the public of the areas only where their respective by-laws apply. Communities variously build watch houses, patrol using canoes and routinely use watchers to monitor illegal activities in their coastal zones and marine protected areas. Breaches by individuals from the village sponsoring the by-laws are dealt with by the Village Fono. Traditional fines such as provision of pigs, taro and others may be imposed by the Fono, and village Fono penalties imposed on law breakers can be more severe than those provided by national law and range from fines

to ostracism from the village in extreme cases. Breaches by an outsider are handled through the formal court system.

### **General conclusions**

Key strengths of the national policy and legislative framework include the following.

- Strong village government.
- Support from national government to lower level initiatives, especially through the by-law process.
- The involvement of communities ensures that by-laws concerning fisheries management are monitored more effectively than the monitoring and enforcement of regular national laws, which are severely compromised by limited resources and personnel of the Government. By-laws are initiated by villages and people with real interest in the management and conservation of the fishery resources in question.
- Village by-laws are now an important feature of village Fisheries Management Plans created under the community-based Fisheries Extension Programme operated in Samoa.
- Donor interest.
- Community-based management is now a permanent feature of fisheries management in Samoa supported by the Community Fisheries Support Section of the Fisheries Division of the Ministry of Agriculture, Forestry, Fisheries and Meteorology.

Key weaknesses of the national policy and legislative framework are:

- Conflict between village perceptions of limited access to marine areas and the Constitutional provision for open-access.
- Possible use of Fono-imposed sanctions on Fono members based on custom that may be effective but are unconstitutional.

## **2.12 Cook Islands**

### **Background information**

The Cook Islands is an archipelagic state comprising 15 widely scattered islands with a total land area of 237 sq. km., distributed in an EEZ of over 1.8 million sq. km. There are no major bodies of freshwater in the Cook Islands. Marine fishing and mariculture activities are therefore the dominant components of the fisheries sector.

The Cook Islands' marine fisheries include extensive subsistence and artisanal harvesting of a wide variety of coastal/inshore reef and lagoon fish and invertebrate species, as well as a small longline fishery for tuna, and the commercial collection of ornamental fish for the aquarium market. A total of over 400 species of bony fish are found on the reefs and lagoons, the majority of which are taken by various fishing techniques. According to the Pacific Forum Fisheries Agency, the important finfish families are Holocentridae, Mullidae, Mugilidae, Scaridae, Chaetodontidae, Acanthuridae, and Labridae. Also important are the gastropods (especially trochus and turbo), bivalves (especially giant clams and pearl oysters), echinoderms (especially beche-de-mer and sea urchins), one species of lobster, and seaweeds.

In the Northern Group and in the smaller islands of the Southern Group, fishing remains largely subsistence in nature and is mostly conducted from small outboard-powered craft and canoes in the lagoons and along the outer reef edge. Bottom handlining, spearing, gill

netting, scoop-netting of flying fish and reef gleaning for invertebrates are common activities throughout the group. In addition to subsistence harvesting, small-scale commercial fishing occurs in the more populated southern islands, particularly Rarotonga and Aitutaki where urban populations and tourism have created a strong demand for fresh fish and seafood. A fleet of 70 or more small craft, mostly wooden skiffs from 4.5 to 6 metres and powered by 40 to 80 horsepower outboard engines, conducts FAD-based fishing off Rarotonga. These vessels, most of which operate on a part-time or occasional basis, carry out a variety of fishing methods, including scoop-netting for flying fish, trolling, mid-water fishing with vertical longlines, and drop-stone fishing.

### ***Policy and legislative setting***

Although the formally instituted administrative and management framework enables the Ministry of Marine Resources (MMR) to be actively involved in managing coastal/inshore fisheries through the “Designated Fisheries” and “Local Fisheries Committee” mechanisms, the prevailing practice of MMR has been to allow coastal fisheries to be managed by Island Councils through promulgation of by-laws – a third pillar for coastal fisheries management recognized under the principal fisheries legislation. Island Councils therefore take initiatives in fisheries management while MMR plays a coordinating and supporting role particularly in providing technical assistance.

Decentralization or devolution of powers to outer islands has been central to the policy and strategy of the Cook Islands Government for years since 1966. Much of this policy or strategy is manifested in the planning process, practice, and the institutional framework established for implementing decentralization. The Government established three overarching goals under its national development policy: (i) maintaining macroeconomic stability to sustain private sector growth; (ii) empowering people of the outer islands by advancing the principles of good governance; and (iii) advancing social justice through equal access to basic services and reduction of national disparities. The Government also identified five strategic priorities: (i) economic sustainability; (ii) outer island empowerment; (iii) social cohesiveness; (iv) infrastructure advancement; and (v) good governance.

The role and functions of the formally recognized institutions representing the islands – the Island Councils - are stated in the Rarotonga Local Government Act (for the Island of Rarotonga) and the Outer Islands Local Government Act 1987. Many members of the Island Councils that are elected to hold offices are often traditional Chiefs and other titled persons. The significance and role of the Island Councils in local governance is consolidated by the establishment of the Ministry of Outer Islands Development in 1994. Consolidation in respect of fisheries management came in the form of the Marine Resources Act 1989.

The powers provided under the principal fisheries legislation for MMR to act in managing coastal fisheries particularly in form of Island Councils powers to enact by-laws for fisheries management and the decentralized powers of the Island Councils, provide a framework for cooperative management for coastal fisheries. Indeed, co-management in fisheries in the Cook Islands has been initiated by the Islands Councils and largely involves the use of *Ra’ui*, a traditional form of community-based resource management that has similarities to marine reserves whereby the harvesting of marine species in an area is prohibited for a designated period. In the context of this cooperative system, MMR’s role is to perform a facilitating, coordinating and support services to traditional conservation. The most important contribution of MMR to the Island Councils’ initiative is in providing technical and scientific data through research and surveys on resources in areas under *Ra’ui*. It is noted that the *Ra’ui* system in the Cook Islands has been successful because it received such support from MMR and that this relationship and support will continue in the future.

The Marine Resources Act 1989 (and its implementing regulations) is the principal act supporting co-management. The Act governs the management of fishing primarily through the mechanisms of designated fisheries and management plans, and the control of fishing by

both domestic and foreign fishing vessels through licensing. The relevant features of the Marine Resources Act are the provisions relating to designated fisheries, local fisheries committees and the establishment and functions of the Island Councils. The most significant provisions with respect to Island Councils are the powers of Island Councils to: recommend the promulgation of by-laws; declare seasons (which further reinforces the traditional conservation and management system of the Raui); and, issue licences. Complementary legislation that establishes the co-management units (Islands Councils) are the decentralization laws in the form of the Rarotonga Local Government Act and the Outer Islands Local Government Act mentioned above.

### **Implementation and enforcement**

Contravention of by-laws, the closed seasons declared, and the terms of the licences issued by the Island Councils, are criminal offences under the Marine Resources Act and can be enforced by the designated enforcement authority under the Act. However, as the principal form of community management initiated by the Island Councils is the traditional resource conservation and management tool the *Ra'ui*, it is not enforced through the formal law enforcement system. Compliance is achieved through community pressure and respect for customs which are perpetuated by legal recognition and continued role of traditional governance institutions. For example in the outer islands of Pukapuka, the village laws or village-imposed *Ra'ui* are endorsed by the legally established Island Council. The offenders of these laws and *Ra'ui* are subjected to traditional forms of sanctions. Opportunity exists to impose fines and other penalties under Island Council bylaws or national laws but it appears that it is often unnecessary to resort to this option due to a high incidence of compliance or effectiveness of traditional sanctions.

### **General conclusions**

Key strengths of the national policy and legislative framework include the following.

- National policies explicitly emphasize outer Island and people empowerment, social cohesiveness and good governance.
- Recognition and accommodation of traditional units of governance and Composition of Island Councils influenced by traditional systems of governance ensures relevance of formal systems of governance.
- Fisheries management laws establish clear relationships with pre-existing decentralized units of government, the Island Councils, and provide a clear role for them to play in fisheries management.
- Involvement of communities through Island Councils ensures that by-laws concerning fisheries management are monitored more effectively than the monitoring and enforcement of regular national laws.
- Formal sanctions act as a default enforcement mechanism should traditional sanctions fail.
- Traditional forms of management and other coastal management initiatives by the Island Councils are a permanent feature of fisheries management in the Cook Islands.

Key weaknesses of the national policy and legislative framework are:

- Possible over-reliance on the continued relevance of informal traditional management measures and sanctions.
- Reactionary rather than nonintrusive but proactive nature of the MMR policy for providing advice and assistance to Island Councils.

## 2.13 Vanuatu

### **Background information**

Vanuatu is a Y-shaped archipelago of about 80 islands, 67 of which are inhabited, and 12 of which are considered major. The islands, plus their associated reefs, lie between latitudes 13–21°S and longitudes 166–172°E in the western Pacific Ocean. The archipelago measures approximately 850 km in length. The undisputed portion on Vanuatu's exclusive economic zone covers 680 000 km<sup>2</sup>. Compared to other Pacific Island countries, inshore marine areas are not extensive. Inner reef areas are limited to narrow fringing reefs and the area covered by mangroves is quite small. Vanuatu's fisheries resources are exploited at the subsistence, artisanal and industrial levels.

Subsistence activities include coastal line and net fishing targeting demersal and small pelagic reef and lagoon fish, as well as reef gleaning and collection of shellfish and other invertebrates. Most of the catch is for home consumption or family distribution, but where markets or handling and distribution facilities exist some part of the catch may be sold. The subsistence fishery is becoming increasingly cash-oriented around urban areas, with varying portions of the catch being sold. Trochus and beche-de-mer are also collected in a low-technology, labour-intensive manner characteristic of subsistence fishing. However these species are sold and form a valuable portion of Vanuatu's marine export products.

Large scale fishing operations include a sporadic domestic tuna longline fishery operation and industrial tuna fishing by foreign fishing fleets under bilateral and multilateral arrangements. Inland fisheries in Vanuatu are limited and essentially carried out for subsistence purposes. They involve the occasional capture of small quantities of freshwater prawns and eels in Vanuatu's few rivers and streams. They are of little commercial significance.

### **Policy and legislative setting**

One of the main objectives underlying fisheries development and management in Vanuatu, paraphrased from the Third National Development Plan, is to maximize the economic returns and other benefits from the exploitation of marine resources to the people of Vanuatu, particularly the indigenous population.

The Department of Fisheries' 1997 draft Policy Statement contains a number of objectives, but none relate to community/co-management, except in a commitment "...to provide technical support to provincial and local government bodies, to the private sector, and to other agencies in the execution of fisheries projects." Nevertheless, the government's management strategy nominally consists of two major elements: for the commercial fisheries, the use of formal fisheries management plans; and, for the subsistence and village based fisheries, devolution of management responsibility to local communities.

The government's policies and strategies are consistent with the overarching legislated policies of Vanuatu enshrined in the Constitution and other fundamental laws as rights and principles. These are: "...all land in the Republic belongs to the indigenous custom owners and their descendents" ("... land extending to the seaside of any foreshore reef but no further"); and, "Customary law shall continue to have effect as a part of the law of the Republic."

The Fisheries Act 1982 is the principal fisheries legislation that establishes the administrative, management and enforcement framework for fisheries in Vanuatu. However, the foundation for decentralization and community or village-based management is found in the Constitution supported by the Land Reform Act, the Decentralization and Local Government Regions Act 1994. Other key legislation that impacts on community-based fisheries management are the Maritime Zones Act 1981 and the Environmental Management and Conservation Act 2002.

The Constitution of Vanuatu establishes a national government and decentralized and local governments. This decentralized system of government is elaborated in the Decentralization and Local Government Regions Act 1994 (the Decentralization Act). The Decentralization Act vests powers in regional governments to make laws within the provincial boundaries which may apply to areas that extend to and beyond the foreshore reef. The Act and its amendments are administered by the provincial councils and the Department of Local Authorities within the Ministry of Home Affairs.

The recently enacted Environmental Management and Conservation Act 2002 empowers the Director of the department responsible for environment to negotiate with custom land-owners to protect and register community conservation areas. The Fisheries Act empowers the Minister for Fisheries to establish marine reserves. This creates a situation where the national government (and between authorities within the national government), provincial governments and land owning groups have shared powers in respect of natural resources conservation and management. Under this situation, questions arise as to which laws apply and prevail over the others.

Although village-based management is an effective system and is now an important feature of the extension programme of the Department of Fisheries, the system and its custom-based measures have received *de facto* recognition only.

### ***Implementation and enforcement***

Co-management in Vanuatu is in the form of village-based marine resource management, which began in 1990. The initiative grew from a modest village-based trochus management programme of the Department of Fisheries to include the promotion of turtle conservation and as an entry point for dissemination of other socio-economic issues that impact on village lives. Villages that expressed an interest in village-based fisheries management were assisted by the Department of Fisheries to promulgate custom-based conservation taboos including closures for various species, restrictions on fishing methods, an awareness of the relationship between excessive fishing pressure and declining stocks, the benefits of recent regulations on fishing, and the rights to exclude outsiders from fishing. Such custom-based taboos are not only the foundation for all village-based marine resources management measures in Vanuatu but also contribute to the equitable distribution of the harvest and spreads fishing effort.

Enforcement of marine resource taboos imposed by the villages ranges from simple admonition to fines in the form of money, food and kava or a combination of the three. Where reverence of traditional authority is still high, compliance with taboos is achieved for fear of shame and embarrassment at being caught and fined in a village court.

In a 2001 a survey of the marine resource activities in 21 villages observed that village-based marine management measures more than doubled between 1993 and 2001. In addition to the continuation of the extension work of the Fisheries Department in the villages which ensured an increase in the marine resources management activities, the increase in awareness for better conservation and management of fisheries resources was also attributed to the spread of awareness by a traveling theatre group called Wan Smolbag.

While custom-based measures, perpetuated by legal recognition of custom owners' title over certain marine areas, is the foundation for the success of marine resources management activities in villages, it is not the only reason for the continued success. Cultural norms including respect for others and their areas, and respect for rural community organization leadership and collective behaviour, allows for non- intrusion into taboo areas. In addition, most of the taboo areas are small and located close to villages, which facilitates surveillance. Recently, support in enforcing traditional Chiefs' rulings has been provided by the police in cases where the Chief had exhausted other possibilities within the village.

## **General conclusions**

Key strengths of the national policy and legislative framework are:

- The Constitution as the foundation for decentralization, land ownership (including marine area ownership) and custom perpetuates decentralization and co-management.
- Recognition or accommodation of traditional units of governance is also guaranteed under the constitution.
- Traditional villages and leaders continue to be the basis for socio-political organization which contributes effective monitoring and enforcement of village based conservation and management measures.

Key weaknesses of the national policy and legislative framework include:

- Overlap and conflict of mandates for resource conservation between government agencies responsible for fisheries and the environment, and between the decentralized government units and the villages.
- No legal recognition for village-based management measures so as to ensure enforcement against non-members of the village.

## **3. SUMMARY OF MAJOR LESSONS LEARNED FROM CASE STUDIES**

### **3.1 Introduction**

The case studies presented in Section 2 cover a wide range of countries and types of fisheries, from small island States with small populations (e.g. Fiji and Samoa), through large countries with significant populations, (e.g. India, Indonesia). They examine both inland fisheries (Viet Nam, Cambodia), and marine fisheries (Sri Lanka, Thailand and others). The case studies mostly profile small-scale fisheries, although some mention of commercial co-management of tuna fisheries is made in Samoa. In other case studies (Thailand) co-management arrangements are predominantly motivated by a desire to restrict the activities of larger commercial trawlers in areas being fished by small-scale fishers.

In general, and with the notable exception of Japan, pilot/demonstration scale co-management programmes have been gathering pace since the 1980's and early 1990's. However, in many countries community management of fisheries resources, or informal co-management between government and resource users have been in practice for many decades/centuries. In almost all cases, primary motivations for co-/community-management have been resource conservation and conflict management.

Pomeroy and Berkes (1997) noted how much of the relevant literature has focused on the community level regarding issues of local organization, community-based management processes and development interventions, but that much less has been written about the role and activities of government. Our case studies suggest that co-management is still much less in evidence than is community management, although it is gathering momentum. For co-management in the wider sense to become more of a reality, governments in the region must establish appropriate legislation and policy frameworks, and more fully engage in the process. The establishment of appropriate government policies and enabling legal environments are essential in efforts to both sustain existing local level fisheries management systems and/or to develop new co-management systems.

The text below attempts to draw out some key conclusions and lessons learned from the case studies in Section 2, focusing specifically on an enabling policy and legislative framework for co-management. As such, the lessons learned are especially relevant to government given its primary role in establishing such frameworks, although of course they are also relevant to other stakeholders in terms advocacy and involvement in policy and legislative processes.

### **3.2 A policy framework supportive of fisheries co-management**

#### ***Decentralization***

The role of decentralization in economic development, poverty reduction and co-management has been widely championed in recent years, because it is thought to be a mechanism of “inclusion” and “empowerment.” By bringing government closer to the governed, it should encourage government to be more knowledgeable about, and hence more responsive to, the needs of the poorest and marginalized people.

Ostrom (1990, 1992) however considered it of only medium importance in terms of successful community management, and Bene and Nieland (2004) argue that its beneficial impacts on poverty reduction in common-pool resource management systems may be more questionable. They do however acknowledge that decentralization does appear to increase cooperation between government and non-government stakeholders. As such it can be considered to be an important pre-requisite for co-management, in the sense of a full partnership between government and non-governmental stakeholders. This is especially true given that co-management is usually introduced on a local level, which requires local communities to engage with local government, as well to receive national-level governmental support.

Our case studies show that processes of decentralization are underway in all countries reviewed (except perhaps Viet Nam), and are especially developed in Philippines, Indonesia, Cook Islands, Samoa, Vanuatu, and Japan. However, this has not led in all cases to successful co-management. Why might this be so?

For some countries it may just be taking time for governments to adjust to the idea of really relinquishing power, with support for decentralization still being more rhetoric than reality, even if formally provided for in legislation. Certainly the process of decentralization is likely to proceed over time from “deconcentration” (of administration) to devolution, as more knowledge and experience is gained by both government and civil society.

But perhaps more important is that in most countries (Bangladesh, Cambodia, Indonesia, Samoa, Vanuatu, Philippines, Sri Lanka, and Thailand), decentralization processes have occurred as part of national non-sectoral policy on government administration, but not as part of fisheries policy/legislation. Only in India (through the federal system), Japan, Cook Islands, Vanuatu and Viet Nam is decentralization supported specifically within fisheries policy/legislation.<sup>6</sup> In some cases (e.g. Thailand), this has raised questions about whether the local level government institutions that have been handed devolved power are in fact the right institutions to be engaged with fisheries co-management. In others, the motivation for decentralization has been political (Cambodia and Sri Lanka) rather than for more altruistic reasons of poverty reduction, good governance, or community participation. A number of case studies showed that, in support of the suggestion made by Bene and Nieland (2004), decentralization has enabled the strengthening of local elites, rather than the real empowerment of poor communities.

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<sup>6</sup> Viet Nam provides an anomalous case of a country which does not have a formal decentralization policy, but which has specific reference to decentralization within its fisheries legislation).

It would seem important therefore for decentralization to be included in fisheries policy and legislation, as is Japan, as well as in broader national level legislation. This would enable appropriate detail to be included on issues such as: the need for local level fisheries institutions (governmental and non-governmental) to generate and retain revenue to be subsequently used for co-management; institutional strengthening of fisheries institutions required at the local level; the distribution and limits to powers afforded to different groups; ensuring equitable involvement of all and fair distribution of benefits; deconcentration of fisheries budgets to the local level, etc.

***Policy Conclusion No. 1: Decentralization should be provided for in fisheries policy, not just in national non-sectoral policy/legislation, with references being specifically tied to a mention of its importance for co-management.***

Of our case studies, only in Japan and the Philippines, is co-management specifically dealt with in decentralization policy/legislation. Co-management and decentralization are vital to each other but initiatives for either one or the other are generally not undertaken conjointly or in a systematic way. It appears that within the fisheries context co-management is initiated first and decentralization of fisheries institutions is dealt with (if at all) as an after thought, with quick fix projects undertaken later to achieve some complementary effect between the two.

***Policy Conclusion No. 2: It is better to undertake legal/policy reviews of decentralization of fisheries management/administration and co-management at the same time to ensure a cohesive and complementary effect.***

### ***Fisheries policy and planning processes***

Fisheries policy serves as the overall framework for the broad development and management direction a country wishes to follow. It lays out the key goals for the sector, and while the level of detail varies from country to country, it may therefore be quite qualitative and broad in nature/scope. Fisheries policy documents differ hugely in shape and size between countries, but often contain a range of goals under sections in the document focusing on goals/ideals relating to, amongst other things: i) general principles; ii) fisheries management and enforcement; iii) post-harvest practices and trade; iv) technical and safety issues related to fishing operations; v) aquaculture development; vi) research; vii) human capacity development and institutional issues; viii) welfare and social issues; and ix) environmental issues. The policy framework is thus the first step in the planning process.

The second step in the policy and planning process is to specify strategies in support of overall policy goals/targets in each of the sections of the policy. These strategies are those which, if put into practice, should bring about and realize the overall policy goals. Finally, a detailed time-bound action plan, specifying responsibilities, should lay out the activities to be undertaken under each strategy, to ensure that they are realised. These latter two steps are not strictly “policy” but are an integral part of the policy and planning process in a wider sense, and are also considered in this discussion.

These three steps describe a “formal” policy and planning process and should form the basis for all subsequent implementation activities, subject of course to any unforeseen shocks/crisis to the sector or political necessities, which may also require a refocusing of activities. “Informal” policy is also therefore important; it is the evolving basis on which management and development actually takes place, and can differ substantially from formal policy. Informal policy can be reflected in written or spoken statements by policy actors, or may not be explicitly stated at all and only revealed through actions.

The way that policy content is defined (i.e. the policy process) may itself be very important. Including a wide range of stakeholders in the policy process (whether formal or informal),

especially at the local level, is likely to improve the potential for policy content that is supportive of co-management. Indeed wide stakeholder involvement in policy development can itself be considered a form (and perhaps the first requirement) of co-management.

Because stakeholders outside of government may have developed their own policies, and so engaging them in the policy process enhances the potential for the views of all to be aligned in some compatible form. Our case studies did not specifically examine the extent of participation in policy processes, but other work (Macfadyen, 2003) has shown that the extent/range of involvement by different groups in policy formation is very mixed in different countries.

However, what the case studies did reveal was that in some countries, governments have not been quick to recognize and support the role of traditional management groups and local institutions in co-management processes. This is true of India (in the case of the *sanghams*), Thailand (where government decentralization focuses on the role of the TAOs rather than local fisher groups), and Indonesia (where the *kewang* have been marginalized). In contrast, in Japan government policy and legislation recognizes the FCAs, in Samoa village Fonos are incorporated into the policy process through legislation, and in the Philippines and the Cook Islands, governments have also been working well with established local groups.

Policy processes, and a resulting policy environment supportive of co-management, can be improved through the following steps:

- more emphasis on analysis of policy stakeholders, i.e. who should be involved;
- legislation and/or formalization of policy processes to ensure appropriate involvement by all interests, and eventually, the protection of these interests;
- careful planning to allow sufficient time and budgets for wide stakeholder involvement to become a reality;
- working with fisher organizations to strengthen the ability of their representatives to participate meaningfully;
- adaptation of workshop tools to cater for different educational levels and experience of technical issues, and to encourage contributions to be made by all at policy meetings;
- making specific use of the different knowledge and experiences of different stakeholders;
- formalization of methods to ensure transparency – i.e. full disclosure of information on the extent of the involvement by different parties, and reasons for inclusion and exclusion of particular issues in policy documents, the selection of key priorities, and the processes used; and
- decentralization of policy development processes, which may increase both the potential for stakeholder involvement, but also accountability by bringing decision-making closer to the people.

***Policy Conclusion No. 3: An enabling policy environment supportive of co-management is more likely when a wide range of stakeholders are involved in the process to develop policy itself. Indeed this could be considered the first step in co-management.***

### ***Fisheries policy content***

Fisheries policy content can be supportive of co-management in a number of ways. In any general statements of principle, it can be supportive of participatory, consultative and transparent processes within the fisheries sector as discussed above (and as demonstrated by the Sri Lanka case study). General principles can also stress the need for cross-sectoral integration of policy, thereby bringing in other stakeholders to the process and even requiring

that management, for example of inland waters, be conducted in cooperation with other relevant line Ministries such as Water/Irrigation and Agriculture.

***Policy Conclusion No. 4: Fisheries policy content can be supportive of co-management through the inclusion of general statements of principle about the need for i) participatory, consultative and transparent management of the fisheries sector, and ii) cross-sectoral integration.***

In direct references to fisheries management, policy can highlight co-management as a strategy to be used to achieve goals of, for example, sustainable resource use. From our case studies it is evident that some countries in Asia and the Pacific (e.g., Bangladesh, Cambodia, India, Indonesia) do not yet have such references in their formal fisheries policy documents. Once such references are included, specific actions can then be declared as to how, and in what form, co-management should take place. Certainly it is true that in Asia and the Pacific as a whole, as policy is continually revised, issues relating to co-management are increasingly being incorporated into policy documents. In Pakistan (not covered as a case study in this report), for example, until the present time no formal national fisheries sector policy has been specified. However, a process<sup>7</sup> is now underway to agree a national policy. Draft text of the policy suggests that community-based fisheries management will be promoted in coastal and inland water bodies as a means of adopting better management practices. Likewise, in the new Vietnamese fisheries policy expected to be approved in early 2006, co-management is specifically mentioned.

***Policy Conclusion No. 5: Fisheries policy documents can highlight co-management as a strategy to be used to bring about fisheries management goals, or as an integral part of those goals – e.g., “fisheries will be managed to ensure the long-term sustainability of resources, using a co-management approach”.***

Even with a favourable policy and legislative framework, the success of co-management, in whichever one of its many forms, can be significantly affected by each particular social and cultural context. Nevertheless, given the work that has been conducted over the past couple of decades, some of the key determinants of success for co-/community-management arrangements are now becoming clearer. These have been nicely summarized by both Ostrom (1990, 1992) and Pomeroy *et al.* (2001).

Ostrom suggests that key factors in success are: clearly defined boundaries; membership that is clearly defined; benefits that exceed costs; inclusion of most individuals affected by the management arrangements in the group that makes and can change the arrangements; sharing of the responsibility for enforcement; and cooperation and good leadership at the community level.

Pomeroy *et al.* review and expand on these criteria of success, and propose 28 of their own. These are listed in Box 2.

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<sup>7</sup> This is being supported by an FAO Technical Cooperation Project, “Support to Fisheries Sector Policy and Strategy Formulation” (TCP/PAK/3005 (A)).

**Box 2. Criteria for successful co-/community management of fisheries  
(Pomeroy *et al.* 2001)**

- |  |  |
|--|--|
| 1) Individual incentive structure  | 15) Political and social stability   |
| 2) Recognition of resource management problems   | 16) Networking and advocacy  |
| 3) Leadership  | 17) Enabling policies and legislation  |
| 4) Stakeholder involvement   | 18) Provision of financial resources/budget  |
| 5) Empowerment   | 19) Government agency support  |
| 6) Trust between partners  | 20) Fit with existing and traditional social and cultural institutions and structures of the community |
| 7) Property rights over the resource   | 21) Partner sense of ownership of the co-management process  |
| 8) Local political support   | 22) Effective enforcement  |
| 9) Capability building   | 23) Partnerships and contractual agreements  |
| 10) Legitimate organizations that have a clearly defined membership                                    | 24) Overlap of interests   |
| 11) Conflict management  | 25) Flexibility  |
| 12) External agents (co-management often needs change agents from the outside to expedite the process) | 26) Appropriate scale of area under management   |
| 13) Clear objectives from a well-defined set of issues   | 27) Coordinating body  |
| 14) Effective communication  | 28) Social preparation and value formation   |

As mentioned at the beginning of this paper, the intention of the case studies and this concluding section is not to explore wider issues about implementation and requirements for successful co-management, except where they relate specifically to policy and legislation. However, our case studies support these general conclusions about success factors, and policy content can be supportive of the successful implementation of co-management either directly or indirectly, by including some mention of them.

In particular, the case studies in Section 2 re-affirm the importance of a number of issues which should be included in fisheries policy if it is to be supportive of co-management. Policy should provide support for and recognize the importance of the following.

- User rights (as is possible for communities in Cambodia, Japan, Fiji, Vanuatu, Philippines, and Sri Lanka, but not in Indonesia, Bangladesh, India, Viet Nam and Thailand (except in the form of individual licences or leasing systems to individuals)).
- Leadership and strengthening the ability of community-based institutions to engage in co-management through capacity development.
- Recognition of local groups and their importance in co-management. (As noted above, this has not always been the case in India, Thailand, and Indonesia, but has been successfully achieved in Japan, Philippines, Samoa and the Cook Islands).
- Local political support. (In both the Philippines and Cambodia the case studies showed how local political leaders can have a huge impact on co-management success, with interference or a lack of support by such leaders greatly hindering co-management).
- The need for strong incentives for stakeholders to participate based on the costs and benefits of doing so. (In Viet Nam for example, the case study raised questions about the costs of engaging in co-management actions in terms of time and money. Local groups found that incentives for group cohesion (important for

co-management) were provided by including additional welfare and social functions in addition to the co-management functions of the groups.)

- The need for formal legislation to back up/codify community rules and resolve disputes. (This has been successfully achieved in Japan, Fiji, Indonesia, Philippines, Samoa, the Cook Islands, and Sri Lanka.)

Directly, policy documents can therefore include statements to the effect that co-management will be supported through support for such success factors. For example, a statement might be included to the effect that: *“Co-management processes will be supported through an appropriate legislative environment providing for community use rights, through institutional strengthening of community-level organizations, through clear definition of management boundaries and responsibilities, etc”.*

Indirectly, policy content can also include support for co-management success factors, but in statements not directly related to co-management. For example, policy might provide for empowerment of local communities and institutions through the provision of support (financial and legislative) and capacity building. Such support, which may not be driven primarily with co-management in mind, would likely increase the chances that co-management initiatives would themselves be successful.

***Policy Conclusion No. 6: Policy content should either make specific reference to known success factors in connection with statements on co-management, or should indirectly be supportive of such success factors. Such factors include, but are not limited to:***

- ***User rights.***
- ***Institutional strength of local organizations and their leadership.***
- ***Recognition of existing local fisher community organizations as fundamental to the co-management process.***
- ***Local political support.***
- ***Appropriate incentives for local users to engage with co-management.***
- ***The need for formal legislation to back up/codify community rules and resolve disputes.***

Given the potential that co-management may provide for improved resource management, and the strong role of donors in supporting what have so far largely been pilot initiatives (e.g. in Thailand, Philippines, Viet Nam and Bangladesh), continued efforts need to be made to understand and research co-management. Recognising the need to move beyond just pilot approaches, sections of fisheries policy relating to research requirements could specifically mention the need to research co-management and mechanisms for its mainstreaming and sustainability. In addition, the literature is still rather short on empirical examples of the positive impacts of co-management, although in our case studies Japan, Bangladesh, Indonesia and Thailand demonstrated successes.

***Policy Conclusion No. 7: Policy should contain support for research on how to move beyond pilot approaches to mainstreaming co-management, and on assessing the positive impacts of co-management.***

### ***Consistent policy and the need to remain committed***

Our case studies (Philippines, Thailand, Cambodia, amongst others) have shown that developing effective co-management takes time, resources and commitment. In many countries (Bangladesh, Cambodia (after an initial push from political unrest), Fiji, Philippines, and Viet Nam), co-management has been supported strongly by donor initiatives, and there remain questions about capacity for sustainability (particularly in terms of the institutional strength of the different institutions involved). It is therefore crucial that both policy content and policy processes that are supportive of co-management remain in place, and that

practitioners realize that achieving meaningful results is a long-term process that requires institutional strengthening and building of trust between all relevant parties. This applies not just at the national level, but as noted above is also very important at the local level where the support of local political figures is extremely important.

***Policy Conclusion No. 8: A policy framework supportive of co-management must be kept in place for the long term so as to ensure gradual improvements and institutionalization of partnership arrangements, based on appropriate provision of financial resources and commitments to institutional strengthening.***

### **Co-management partners**

The case studies have revealed that almost all co-management initiatives have focussed on small-scale fishers and local NGOs as the government's main partners, often because of the need to change established community management practices into more formal co-management arrangements in the face of increasing competition for resources etc. In cases where the motivation for co-management has been conflict with industrial vessels (e.g. Thailand), it is not thought that these industrial vessels are generally included within the co-management arrangements. In addition, there is often much discussion in fisheries policy circles about conflicts between industrial and small-scale interests, the negative impacts that industrial activities can have on small-scale fisheries, and therefore the need to control the activities of industrial vessels so as to benefit small-scale fisheries. Furthermore, when one considers the large number of industrial vessels in many countries in Asia and the Pacific, and the quantity of catches they make, this raises a question as to whether co-management initiatives should be trying to engage more fully with larger industrial/commercial interests. Support for such an approach is also provided by the often-evident difficulties of managing/controlling huge numbers of small-scale fishers.

***Policy Conclusion No. 9. Co-management initiatives might do well to engage more fully with larger-scale commercial/industrial interests so as to co-opt them into co-management partnerships.***

On another level, in a number of countries, fisheries administrations do not conduct technical research on their own, but rely on specialized public research institutions. This allows for a clear distinction between enactment and enforcement of laws and regulations on the one hand, and technological developments on the other. The accumulation of such mandates at the national level, the failure of much research to respond to local level needs/requirements, and a breakdown in the research-policy linkage, all pose problems for decentralization, where requirements are very locally specific.

***Policy Conclusion No. 10. Co-management initiatives can be enhanced and supported through appropriate local level research and better linkages between researchers and policy makers at the local level.***

Finally in relation co-management partners, scale appears more and more to play a critical role in fishery co-management processes. "Community" itself can be defined at different scales based on kinship or religion in a village, business interests, housing locations, fishing areas, or geo-political boundaries. Fisheries managers and stock assessment scientists may have a totally different vision than both local political administrations and fishers/fishing communities regarding an appropriate area of co-management.

A compromise has therefore to be found between a scale/unit that is large enough to relate to ecosystem functions and fits in some way with local political/administrative boundaries, but which is small enough to be effective in coordinating among participants.

**Policy Conclusion No. 11. Great care must be taken to specify appropriate scales of co-management.**

### **3.3 A legal framework supportive of fisheries co-management**

As Pomeroy (2001) notes, the legal basis for resource users' participation in resource management is vital and must address fundamental concerns, which include: i) who has the right to use the resource? ii) who owns the resource? and iii) as arrangements may be undermined in the absence of a legal basis, what is the legal framework for implementing co-management? The role of the government in establishing conditions for co-management is therefore crucial. Having considered policy issues in the section above, we now turn to key legislative conclusions and lessons learned, as identified from the case studies.

#### ***Non-fisheries specific legislation (constitutions, decentralization and others)***

It is important to note that the legal framework in which fisheries operate, including legislation that facilitates co-management, is not restricted to fisheries-specific legislation.

While no fundamental laws (constitutions) deal with co-management *per se*, a principal consideration is to determine whether the fundamental law permits the establishment of participatory management. If the fundamental law stipulates that certain components of co-management are not possible, then co-management in its fullest sense may be hindered.

Provisions dealing with decentralization through, for instance the establishment of decentralized institutions, are often found either in the fundamental law, or in national legislation on decentralization, as shown by the case studies. It is on the basis of such provisions that the decentralization process is undertaken. Where decentralization laws exist, it should be ascertained by fisheries practitioners as to how co-management is facilitated through decentralization institutions such as regional, provincial or local governments/councils, and how such institutions fit with, and relate to, decentralized fisheries management structures.

Just as for the specific case of co-management and decentralization, other legislation relating to local government and other natural resources management e.g. land, water, environment etc. needs to be considered for its impact on, and support for, co-management in fisheries. In Sri Lanka for example, the case study noted how the Special Area Management process is primarily driven not by fisheries legislation, but through coastal conservation legislation.

The fact that fisheries are affected by legislation non-specific to the sector must be recognized when developing fisheries legislation to be supportive of co-management.

**Legislation Conclusion No. 1: Non-fisheries specific legislation should be considered for its support or hindrance to fisheries co-management, as well as for its relationship to specific fisheries legislation (either in place or being developed) that is supportive of co-management.**

#### ***Issues of process***

The statements made in Section 3.2 on the need for participatory policy processes also apply to the development of fisheries legislation. As with policy, it is important that a wide range of stakeholders are incorporated into the process of developing legislation. By doing so, legislation is more likely to be supportive of co-management, and where it impacts on co-management is then more likely to meet the needs and desires of different co-management partners, and to have a measure of legitimacy. Better compliance can be fostered by legislation that involves all stakeholders in its development as stakeholders can claim "ownership" over such laws.

**Legislation Conclusion No. 2: A legal framework supportive of co-management, and supported by stakeholders, is more likely when a wide range of stakeholders are involved in the process to develop legislation itself.**

In the policy section above, we suggested that it is important for co-management and decentralization to be dealt with at the same time when developing fisheries law. Case studies show that they are generally undertaken separately. In some instances, co-management experiences have been started locally, through a project, with an insufficient legal framework supporting such initiatives.

**Legislation Conclusion No. 3: Co-management initiatives should ideally ensure that fisheries legislation is supportive of them and of decentralization of fisheries management before commencing.**

In all our cases, local by-laws or regulations have been put in place to support co-management initiatives. But the studies (e.g. Indonesia and Thailand) also showed that local rules/legislation have not always agreed with national policy and legislation. In addition, it is noted how conflict resolution is a key driving factor of many co-management initiatives. Both factors point to the need for dispute resolution mechanisms. The Sri Lanka case study showed how such mechanisms have been successfully used to resolve conflicts and codify community management arrangements.

**Legislation Conclusion No. 4: Fisheries legislation should contain dispute resolution mechanisms to deal with user conflicts, and to ensure that local rules/regulations do not conflict with national-level legislation and policy.**

In relation to the point made above about conflicts between co-management rules and national legislation, it should be noted that the rules of a designated local management unit or community cannot define the limits of state power. Such a role is played by national legislation. Thus the extent to which the state will respect local autonomy and where and under what conditions it will retain the power to intervene should be spelled out in legislation.<sup>8</sup> For example, in Indonesia, The 1999 Autonomy Act establishes a control mechanism designed to ensure the conformity of regional regulations with higher-ranking legal norms whereby the central government is empowered to revoke regional regulations that are found to be conflicting with government regulations or laws. In the case of Bang Saphan Bay in Thailand, on the other hand, national legislation on activities within the 3km zone has not always reflected local views about appropriate management decisions on how manage the area under community/co-management.

**Legislation Conclusion No. 5: Fisheries legislation should specify the extent to which local autonomy in developing management rules/legislation will be accepted.**

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<sup>8</sup> From a property rights regime perspective, this touches upon the fundamental question of who owns the natural resources. Most fishing nations that implement a rights-based regime retain the power to allocate, and withdraw rights and change the regulations governing their administration. If the rules governing a rights-based regime are explicit in the form of legislation, it is less problematic in administering them and deflecting legal challenges.

### **Content of fisheries legislation**

National fisheries legislation should provide for a broad legislative framework that enables a choice over co-management arrangements and rules to suit local circumstances and to promote what works. An optimal legislative framework for co-management should also be flexible i.e. the legislation must enable the designated local group or community managers to exercise choices that reflect their unique needs, conditions and aspirations. Ultimately, a flexible co-management legislative framework must allow for changes in policy, and should preferably provide a framework law, which allows detailed mechanisms to be set out in regulations that can be easily amended.

**Legislation Conclusion No. 6: National fisheries legislation should provide for a broad and flexible legislative framework that enables a choice over co-management arrangements and rules, with detailed mechanisms set out in regulations that can be changed if necessary.**

As with the policy framework, to be supportive of co-management the legislative framework should either make specific recognition of co-management, or cover those success factors of co-management (as discussed in Section 3.2) that may need to be backed-up through their inclusion in fisheries legislation.

**Legislation Conclusion No. 7: National fisheries legislation should contain specific reference to co-management, or provide indirect support to key success factors that need legislative support.**

### **Decentralization**

As noted above, non-fisheries-specific decentralization legislation often determines the nature of the powers to be transferred to designated authorities (e.g. provinces, districts, communes), but only in general terms. Seldom, if at all, does such legislation make reference to co-management or to fisheries. Because decentralized institutions (fisheries-specific and non-fisheries) play a key role in facilitating (or interfering with) co-management, their role may need to be defined in specialized legislation (i.e. fisheries and other legislation e.g. natural resources) rather than in the decentralization law.

### **Definition of boundaries**

Deciding on and legislating for the boundaries of an area under co-management can be difficult (see Section 3.2). Nevertheless, the definition of the geographical boundaries of community/local government organizations and the process used to define them, seem from the case studies to be especially important.

### **Recognition of use rights and community-based rules**

The allocation of user rights to groups engaged in co-management initiatives is likely to increase the chance of co-management success. The Thai case study showed clearly how the failure to allocate use rights over the community management area prevented those engaged in the management exercise from stopping outsiders from entering the fishery, which in turn has led them to question the benefits of co-management. Situations such as these are likely to minimize the benefits of co-management for local stakeholders, and therefore to raise questions about sustainability in the long-term. While the recognition of such rights in formal law may on its own fail to achieve effective fisheries management, because of weak internal governance to provide a supportive framework, fisheries legislation should nevertheless contain provision for such use rights to be allocated in co-management areas.

Co-management legislation should also provide protection for local institutions from trespass and the criminal behaviour of outsiders. It should give legal recognition to community-based rules and command conformity by the public to those rules.

The case studies suggest that while community-based fisheries management is at one end of the spectrum of co-management, such community arrangements are coming increasingly under threat in the face of increasing competition of resources. A number of the studies (e.g. Sri Lanka, Samoa, Philippines, Japan, Fiji and the Cook Islands) have shown how government can – and indeed may need to – provide legitimacy and accountability to community arrangements through supportive legislation, thereby evolving the community arrangements into a more co-management approach involving government. Only government can legally establish and defend user rights and security of tenure.

### ***Specification of powers to co-management partners***

Co-management law must also provide protection for individuals against the abuse of local power. For example, in the Cambodia case study we saw how the legislative framework does not address the issue of equitable representation of the local community's interests in the community fisheries, and how this has the potential to lead to the "highjacking" of the community fisheries by a small group of well-organized individuals.

***Legislation Conclusion No. 8: In sum, fisheries legislation needs to ensure that the legal framework clearly states***

- ***roles and responsibilities under decentralization policy/legislation;***
- ***how co-management areas and co-management partners are to be defined;***
- ***security and enforceability of a right;***
- ***the ability and opportunity for rights holders to seek redress for violation of security and interests in the rights allocated;***
- ***the nature and extent of recognition of locally promulgated rules;***
- ***rules for interaction between stakeholders; and***
- ***rules for interaction with the state, including the limits and conditions for state intervention and protection of individuals against abuse of "local" power.***

### ***Legal conclusions***

The application of co-management is site-specific. Given this, any law that is enacted for establishing co-management should preferably be a "framework" law. The framework law must primarily enable the use of co-management through provisions that ensure security, exclusivity and permanence for any rights that may be allocated. However, the legal framework should also, as a minimum, ensure that powers are vested or entities are designated to invoke co-management when the need arises. The provisions of the framework law that provide for these must allow:

- the designation of groups or community unit that will be involved in co-management and that such groups may be allocated rights and responsibilities in fishing and fisheries management;
- choices in the manner in which designation of groups or community units will be effected;
- choice in demarcation of areas for co-management; and,
- choices in the institutional or organizational framework for co-management.

Above all, the legal framework for co-management must be practical and flexible to respond to changing needs and priorities.

### **3.4 Conclusion**

This paper has focussed on identifying the policy and legislative environment that is supportive of co-management, through a review of the status of the policy and legislative framework in 13 case study countries. It does not attempt to deal in any great detail with other success factors of co-management or with the implementation of policy and legislation, although the case studies do reveal a range of implementation problems, and highlight the fact that illegal fishing activity continues in many cases.

What is clear is that co-management is an emerging trend within the countries examined, although many forms of it may have been in existence for some time. This trend is driven by an awareness of resource depletion, conflicts both within the sector and between fisheries and other sectors, and the perceived benefits of co-management as an approach. In the face of increasing pressure on resources, the need to formally codify existing community management practices through greater government involvement and legislative support, has also been important. Furthermore, implementation of co-management is now being encouraged, or at least enabled, by decentralization policies in almost all of the case study countries.

The extent to which the policy and legislative frameworks of the case study countries are supportive of co-management varies greatly. All countries, with the possible exception of Japan, need to do more work particularly in the area of ensuring cohesion and compatibility between policy and legislation on the one hand, and between decentralization and fisheries management (co-management) on the other.

Many of the co-management practices currently being tried remain pilot studies only, and are strongly driven and supported by donor projects, and community management remains more common than full co-management. In addition, commitment by governments to co-management is varied, and in some cases based more in rhetoric than reality, with insufficient real transfer of powers and financial resources to local levels. This partly explains why policy, legislation and associated action, have not always been as supportive of co-management as they might be, despite on-going co-management initiatives. This study has suggested a number of policy and legislative conclusions and ideas about best practice, which could be adopted by governments to demonstrate their commitment for co-management.

The principal policy and legal implication for fisheries co-management is to determine whether national policy and legal environments provide a supportive framework for co-management or not, and if not, then to make necessary changes.

Political will is the key to the establishment of co-management mechanisms. It is a necessary pre-requisite without which co-management initiatives are unlikely to succeed. It must be reflected in policy, legislation and action specific to the fisheries sector, as well as more generally in government policy and legislative support.

## APPENDIX 1

### REFERENCES AND USEFUL WEB SITES

#### Web sites

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<http://www.iascp.org/cgi-bin/htsearch.cgi>

<http://www.mekonginfo.org>

<http://www.worldfishcenter.org/basicsearch.asp>

<http://oregonstate.edu/Dept/IIFET/Japan/proceedupdates/papers.html>

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## **APPENDIX 2**

### **STATUS OF ENABLING POLICY AND LEGISLATIVE ENVIRONMENT IN APFIC COUNTRIES**

The table on the following page attempts to highlight some of the key aspects of a policy and legislative framework that are considered to be supportive of co-management. The table could be completed for all APFIC countries. The table is divided into two sections, the first factual, and the second more subjective. For the more subjective questions, it is suggested that a coding system should be used with V (very), Q (quite) and N (not or little) used to determine the extent to which the supportive attribute is felt to be in place, or the extent to which the statement is true.

Factual information	Response/example
<ul style="list-style-type: none"> <li>What are the current fisheries policy (and planning) document(s)</li> </ul>	National Fisheries Policy, 2002 Fisheries Strategy 2005-2010
<ul style="list-style-type: none"> <li>Do fisheries policy documents specifically refer to co-management, and if so in what capacity</li> </ul>	Yes, in the context of being a method to be used for sustainable resource management
<ul style="list-style-type: none"> <li>If fisheries policy documents specifically refer to co-management, are such references focused on community management, or on wider co-management practices</li> </ul>	Strong emphasis on community management
<ul style="list-style-type: none"> <li>If fisheries policy documents specifically refer to co-management, how long has this been the case</li> </ul>	3 years
<ul style="list-style-type: none"> <li>If fisheries policy documents specifically refer to co-management, do such references apply to large/commercial fisheries as well as small-scale fisheries</li> </ul>	No. Emphasis is on community management of small-scale fisheries
<ul style="list-style-type: none"> <li>If fisheries policy documents specifically refer to co-management, do such references make any reference to the scale of co-management areas/arrangements.</li> </ul>	Yes in the form of local beach management units based on village location
<ul style="list-style-type: none"> <li>Do fisheries policy documents contain any general principles/requirements about participation, consultation and transparency</li> </ul>	No
<ul style="list-style-type: none"> <li>Do fisheries policy documents provide for the provision of community/group use rights</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Do fisheries policy documents state that legislation should provide support for co-management</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Do fisheries policy documents provide for institutional strengthening of local government and/or non-government organizations</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Do fisheries policy documents contain reference to, or provision for decentralization of fisheries management activities</li> </ul>	No
<ul style="list-style-type: none"> <li>Is decentralization provided for in the country's constitution or in specific national legislation on decentralization</li> </ul>	Yes. Government Decentralization Act of 2000
<ul style="list-style-type: none"> <li>What is the current national fisheries legislation</li> </ul>	Fishery Law of 2000
<ul style="list-style-type: none"> <li>Is there non-fisheries legislation which supports co-management, and if so what</li> </ul>	Yes. Integrated Coastal Zone Management Act, 2000
<ul style="list-style-type: none"> <li>Does national fisheries legislation make special provisions for co-management. If yes, what are they</li> </ul>	Yes. Sub-Decree on Community Fisheries Management; provides for establishment of co-management committees
<ul style="list-style-type: none"> <li>Are there any specific regulations or by-laws at the local level which help to codify and support community management rules</li> </ul>	Yes many. E.g. X Bay fishing regulations, 1999
<ul style="list-style-type: none"> <li>Does fisheries legislation contain dispute resolution mechanisms to deal with user conflicts</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Does fisheries legislation specify the extent to which local areas can impose regulations, so as to ensure that local rules/regulations do not conflict with national-level legislation and policy</li> </ul>	No
<ul style="list-style-type: none"> <li>Which of the following items are included in fisheries legislation: <ul style="list-style-type: none"> <li>roles and responsibilities under decentralization policy/legislation</li> <li>how co-management areas and co-management partners are to be defined</li> <li>security and enforceability of a right;</li> <li>the creation of ability and opportunity for rights holders to seek redress for violation of security and interests in the rights allocated;</li> <li>the nature and extent of recognition of locally promulgated rules;</li> <li>rules for interaction between stakeholders;</li> <li>rules for interaction with the state, including the limits and conditions for state intervention and protection of individuals against abuse of "local" power</li> </ul> </li> </ul>	How to define co-management areas. Group user rights. Processes of redress
Subjective opinion	Response/example
<ul style="list-style-type: none"> <li>To what extent are processes used to develop fisheries policy participatory</li> </ul>	Q. Large numbers of small-scale fishermen and poor representation makes full participation difficult, and Government not always keen to listen
<ul style="list-style-type: none"> <li>To what extent are processes used to develop fisheries legislation participatory</li> </ul>	N. No legislative participatory road show as is the case for policy development
<ul style="list-style-type: none"> <li>To what extent does national fisheries legislation provide a broad and flexible framework for co-management</li> </ul>	Q. Flexible and broad, but could have more mention of ...



## FAO FishCode Reviews

**1 Pintz, W.S. Tuna and bottom fishery licence management: Tonga. *FAO/FishCode Review*. No. 1. Rome, FAO. 2003. 35p.**

Fish are now the largest single export from the Kingdom of Tonga. However, expansion of the industry faces severe infrastructure constraints, and granting substantial numbers of new longline licences without resolving the constraints could seriously affect all Tongan commercial fisheries.

**2 Gillett, R. Aspects of fisheries management in the Maldives. *FAO/FishCode Review*. No. 2. Rome, FAO. 2003. 61p. (*Restricted distribution*)**

The inshore marine resources of the Maldives, an atoll environment, are being increasingly exploited for baitfishing, food for local residents, consumption by tourists, exports and non-extractive uses such as dive tourism. This situation must be reconciled with the limited nature of the resources.

**3 Die, D.L.; Alió, J.; Ferreira, L.; Marcano, L.; Soomai, S. Assessment of demersal stocks shared by Trinidad and Tobago and Venezuela. *FAO/FishCode Review*. No. 3. Rome, FAO. 2004. 32pp.**

The FAO/WECAFC Workshop on assessment of demersal stocks shared by Trinidad and Tobago and Venezuela (2002) initiated an assessment of the shrimp stocks shared by the two countries. The main conclusion of the assessment is that some shrimp stocks are being severely overfished and are suffering as a result.

**4 Gillett, R. The marine fisheries of Cambodia. *FAO/FishCode Review*. No. 4. Rome, FAO. 2004. 57p.**

Excess fishing effort and associated declines in abundance of target species are the most serious problems facing Cambodia's marine fisheries: resource sustainability will require restrictions on resource access.

**5EN FAO/FishCode. Seminar on responsible fisheries management in large rivers and reservoirs of Latin America. *FAO/FishCode Review*. No. 5. Rome, FAO. 2004. 72p. [En]**

This report of the Seminar on Responsible Fisheries Management in Large Rivers and Reservoirs in Latin America (2003), attended by experts from member countries of the Commission, observers from other regional bodies and representatives from local fishing communities in El Salvador, presents the principles of responsible fishery management in Latin America as well as a selection of national reports.

**5SP FAO/FishCode. Seminario sobre ordenación pesquera responsable en grandes ríos y embalses de América Latina. *FAO/FishCode Revista*. No. 5. Roma, FAO. 2004. 78 p. [Sp]**

El Seminario sobre Ordenación Pesquera Responsable en Grandes Ríos y Embalses de América Latina (2003) se efectuó en San Salvador en asociación con la novena reunión de la Comisión de Pesca Continental para América Latina (COPESCAL). Participaron expertos de países miembros de la Comisión; observadores de otros organismos regionales y representantes de comunidades pesqueras locales de El Salvador. Se presentaron dos documentos sobre los principios de la ordenación pesquera responsable en grandes ríos y embalses en América Latina y una selección de informes nacionales.

**6 Swan, J. National Plans to combat illegal, unreported and unregulated fishing: models for coastal and small island developing states. *FAO/FishCode Review*. No. 6. Rome, FAO. 2003. 76p.**

These case studies for use in FAO regional and subregional workshops were prepared in accordance with the FAO International Plan of Action to Prevent, Deter and Eliminate IUU Fishing. The "Republic of Galactia" and the "Alpha Islands" are fictitious, but the fisheries profiles presented draw on typical existing circumstances.

**7 Kuemlangan, B. Creating legal space for community-based fisheries and customary marine tenure in the Pacific: issues and opportunities. *FAO/FishCode Review*. No. 7. Rome, FAO. 2004. 65p.**

The laws of Pacific Island countries generally support traditional fisheries management with only modest efforts to encourage the use of customary marine tenure-based community fisheries management. Government commitment for the role of customary marine tenure in community-based fisheries management, with support from interested stakeholders, will complement efforts for promoting sustainable utilization of fisheries resources and improved livelihoods in the Pacific region.

**8 FAO/FishCode. Report of the Workshop on Development of a Management Plan for Tomini Bay Fisheries, Indonesia. *FAO/FishCode Review*. No. 8. Rome, FAO. 2004. 31p.**

Tomini Bay fishery resources are still considered to be underexploited, but annual catches have increased dramatically over the past ten years. In the absence of a fisheries management body, The FAO/Government of Indonesia Workshop on the Development of a Management Plan for Tomini Bay Fisheries (2003) provided a starting point for addressing responsible fisheries issues and laying the groundwork for a fisheries management plan.

**9** FAO/FishCode. Report of the National Conference on Responsible Fisheries in Viet Nam, Hanoi, Viet Nam, 29–30 September 2003. *FAO/FishCode Review*. No. 9. Rome, FAO. 2004. 94p.

This national conference was organized in the context of increasing problems faced by Vietnamese fishers in maintaining and improving their livelihoods through coastal and offshore fisheries; some coastal fish resources in particular are being heavily over-exploited.

**10** Stanley, J. Institutional review of the National Fishing Corporation and the Fisheries Department of Tuvalu. *FAO/FishCode Review*. No. 10. Rome, FAO. 2004. 47p. (*Restricted distribution*)

The economic growth and development of Tuvalu depend on its marine resources and especially its relatively rich tuna resources. Although the primary concern of the government is the sustainable economic development and management of tuna, there is also potential for the development of other marine products, particularly deep bottom fish.

**11** García Mesinas, A. Lineamientos para un Código de Ética de Pesca y Acuicultura para El Salvador. *FAO/FishCode Revista*. No. 11. Roma, FAO. 2004. 59p. [Sp] (*Restricted distribution*)

Este documento presenta los resultados de un proyecto llevado a cabo a través del Programa FishCode de la FAO a petición del Gobierno de El Salvador para desarrollar los lineamientos a nivel nacional del Código de Ética de la Pesca y Acuicultura. El trabajo se realizó coordinado a través de la Oficina Regional de América Latina (RLC) y la Representación de FAO de El Salvador.

**12** FAO/FishCode. Report of the National Workshop on the Code of Conduct for Responsible Fisheries and its practical application to coastal aquaculture development in Viet Nam. *FAO/FishCode Review*. No. 12. Rome, FAO. 2004. 47p.

The National Workshop on the Code of Conduct for Responsible Fisheries and its Practical Application to Coastal Aquaculture Development in Viet Nam took place in Hué from 3 to 4 October 2003. The Workshop aimed to build awareness among national and provincial stakeholders about the need to develop and implement an Aquaculture Code of Conduct for Viet Nam. Coastal aquaculture in Viet Nam, particularly shrimp culture, has developed rapidly in recent years. Although shrimp farming has brought many benefits to coastal communities, it is associated with high social and environmental risks.

**13** FAO/FishCode. Report of the National Seminar on the reduction and management of commercial fishing capacity in Thailand. *FAO/FishCode Review*. No. 13. Rome, FAO. 2005. 59p.

The marine capture fisheries sector is more capital intensive than is appropriate for Thailand's resource endowment, and there is an urgent need for fishing capacity reduction for improved fisheries management and protection and conservation of fish habitats and other threatened coastal resources. Failure to achieve this will have serious consequences for the most vulnerable people in coastal communities, fish consumers and society at large.

**14** FAO/FishCode. Reports of the regional vessel monitoring systems workshops: Southwest Indian Ocean, Central America, the Caribbean and Southeast Asia *FAO/FishCode Review*. No. 14. Rome, FAO. 2005. 91p.

Four regional workshops on vessel monitoring systems (VMS), respectively covering the South West Indian Ocean, Central America, the Caribbean and Southeast Asia, were organized and implemented in succession from September 2003 to October 2004. The workshops were intended to promote the use of VMS as an additional instrument for the management of fisheries, both at a national level and in cooperation with regional fisheries bodies. They comprise one aspect of FAO's larger set of activities to implement the International Plan of Action (IPOA) to Prevent Deter or Eliminate Illegal, Unreported and Unregulated (IUU) Fishing. The document includes a CD-ROM.

**15** FAO/FishCode. Fishery policy in the Marshall Islands. *FAO/FishCode Review*. No. 15. Rome, FAO. 2005. 33p.

Fisheries play a key role in the economy of the Republic of the Marshall Islands (RMI) and in the lives of its people. Substantial tuna resources are exploited from the country's vast exclusive economic zone, largely by foreign fishing vessels operating under licence. Coastal fisheries are important for subsistence purposes, and also generate income for atoll communities. RMI's well-recognized remote and pristine outer atoll lagoons are considered suitable for targeted commercial mariculture development. The Marshall Islands Marine Resources Authority is investing heavily in formulating its outer island work programmes, involving both coastal fisheries and mariculture research and development. A cautious and transparent approach is needed, with attention to partnerships between communities and private business concerns and the use of incentives involving seed funding, technical assistance, transport facilitation, and other support activities.

**16 FAO/FishCode. Report of the Conference on the National Strategy for Marine Fisheries Management and Development in Viet Nam. *FAO/FishCode Review*. No. 16. Rome, FAO. 2005. 64p.**

The Conference on the Strategy for Marine Fisheries Management and Development in Viet Nam, (Hanoi, 26 – 27 April 2005) was organized by the Ministry of Fisheries of Viet Nam (MOFI) in close collaboration with the Research Institute Marine Fisheries, the DANIDA Fisheries Sector Programme Support (FSPS) and the FAO FishCode Programme. It represented the culmination of a process that started in 2003

with the Conference on Responsible Fisheries in Viet Nam and that included a number of local level consultations as well as a senior expert meeting in 2004. The 2005 Strategy Conference was attended by a wide range of sectoral stakeholders, representing local and commercial fisheries interests, national and provincial government bodies, bilateral development assistance agencies and international organizations. Observations and recommendations received from the Conference have provided a basis for MOFI to finalize the Strategy for official Government approval.

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This paper was prepared for the Asia-Pacific Fisheries Commission workshop on mainstreaming fisheries co-management, held in Cambodia in August 2005. It examines the policy and legislative frameworks for co-management in thirteen countries in Asia and the Pacific, and the extent to which these frameworks hinder or support co-management practices. The nature of policy and legislative frameworks is varied, as is commitment by governments to co-management – in some cases support is more rhetoric than reality, with insufficient real transfer of powers and financial resources to local levels. Through an analysis of the different case studies, “lessons learned” are presented and a number of conclusions drawn about the key characteristics of a supportive policy and legislative frameworks based on some ideas about “best practice”. The adoption of these characteristics by governments would demonstrate their commitment to co-management and increase the likelihood of co-management success.



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