

***Artisanal and Small-scale Fisheries Management Regimes in Asia: Possible Options towards Responsible Fisheries***

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Mr/Ms Chairperson, distinguished workshop participants, colleagues, ladies and gentlemen,

It is a great honour and pleasure for me to be among you at this important event and to have the opportunity of sharing some information and thoughts on fisheries management and poverty alleviation in small-scale fishing communities in Asia. It is a great tribute to ICSF and the Royal Government of Cambodia to have organized this workshop and the subsequent symposium focusing on this important theme. The improvement of the livelihoods of coastal communities and the sustainability of the fishery resources on which they depend are issues that require increased attention, strong commitment and collective efforts.

In recent years, the issue of fisheries as an important contributor to food security and poverty alleviation has been receiving growing attention. The importance and complexity of the small-scale fisheries sector in this context are increasingly recognized. One of the objectives of the FAO Code of Conduct for Responsible fisheries is to “promote the contribution of fisheries to food security and food quality, giving priority to the nutritional needs of local communities” (Article 2 (f)). The Code also makes direct reference to fishers and fish workers in the “subsistence, small-scale and artisanal fisheries” and their right to “a secure and just livelihood, as well as preferential access, where appropriate, to traditional fishing grounds and resources in the waters under their national jurisdiction” (Article 6.18).

FAO attributes high priority to the small-scale fisheries sector. In our Committee on Fisheries (COFI) meeting earlier this year, I was very pleased to note the importance that FAO's Member States continue to award the sector. The Committee gave its support to a strategy of action for bringing together responsible fisheries and social development. The FAO Fisheries and Aquaculture Department is also examining the convening of an international conference on these issues in 2008.

Based on this background, in my presentation here today I would like to talk to you about some of the core issues involved. First, I will give a brief general overview of the role and characteristics of the small-scale fisheries sector. This will be followed by a look at fisheries management, both with regard to the international context and the basic features of existing fisheries management systems. The next part of my presentation will bring these two components together and I will give some suggestions for what a pro-poor fisheries management strategy should contain. Lastly, I will share some of my thoughts with regard to the future.

I am certain that most of us here today are aware of the role of the small-scale fisheries sector in food security and poverty alleviation. However, considering its tremendous importance, I believe some of the facts merit being repeated.

Fish plays an important direct role in food security as a source of food. It is well known that fish has a highly desirable nutrient profile and provides an excellent source of quality animal protein. While fish globally contributes some 16 percent of the total animal protein intake, this share is above one third – or even more than half – in many Asian countries. The contribution of small-scale fisheries to food supplies is particularly important. Moreover, production by the sector has the advantage of often being more directly available and affordable to poorer population groups than fish from industrial fisheries.

During the last decades, employment in the fisheries sector has grown faster than employment in traditional agriculture. Globally, the small-scale fisheries sector today employs some 37 million fishers and fish farmers. Close to 90% of these people live in Asia. In addition, there is likely to be more than 100 million people employed in fisheries associated activities. Fish processing and trading are generally important economic activities for women.

Considering that each fish worker is likely to support a certain number of household members, it can be assumed that perhaps as many as 250 million people depend primarily on the small-scale fisheries sector for their livelihoods. Moreover, there are a large number of subsistence fishers or rural dwellers involved in seasonal and occasional fisheries activities that are not recorded in official statistics. It is thus likely that there are many more people directly dependent on fisheries for a significant part of their livelihoods than reported.

In addition to its role in local incomes, the small-scale fisheries sector contributes to economic growth at the national level. The importance of international trade has grown rapidly in recent years and fish and fishery products provide foreign exchange earnings. It is noteworthy that while the industrial fisheries have been the main contributors historically, a significant proportion of current increases in exports from developing countries is being provided by small-scale operators.

The small-scale fisheries also often play an important role in poverty prevention and can constitute a 'safety net' for members of rural communities. If access to fishing grounds is relatively free, poor people can turn to the common fishery resources for their livelihoods as and when needed. Also, in situations where the normal means of income generation have been disrupted, for example due to a natural disaster, fishing may provide a safety-net function to vulnerable population groups who were not previously poor. These poverty prevention mechanisms are socially important and provide a "welfare" system that may not be available otherwise.

Fishing related coastal communities, in particular in developing countries, often demonstrate high levels of vulnerability. This situation is due to a variety of factors including the unpredictable nature of fishing, high occupational risk, dependence on a natural resource, sensitivity to macro-economic changes, high prevalence of HIV/AIDS, exposure to natural disasters, land tenure issues and social, economic and political marginalization.

Although the importance of inter-sectoral linkages in coastal communities should not be underestimated, fishers are often highly dependent on fishing for their livelihoods with weak possibilities to find alternative employment. They are thus sensitive to threats to the resource base and habitats. Reduced fish stocks due to overfishing lead not only to lower production but also increases the competition for fewer resources and triggers conflicts between different users. Small-scale fishers are often the weaker party in such conflicts with the industrial sector.

In several Asian countries, several aspects of the vulnerability of coastal communities were sadly demonstrated by the tsunami in 2004. In addition to the loss of lives, houses, livelihood assets and other infrastructure and equipment, the tsunami also highlighted the issue of land rights. Unclear land tenure is common in small-scale fisheries communities. In the wake of the tsunami, land tenure issues slowed down the resettlement of coastal communities. In a more general context, insecure land tenures and unofficial settlements is one reason for the marginalization of fishing communities.

In spite of the high level of vulnerability, the small-scale fisheries sector also shows notable dynamism and coping capacity. Technological shifts and efficiency gains in many places taken place at a remarkable speed. The use of equipment such as GPS and fish-finders is being adopted promptly. The utilization of ice has increased and better fish handling methods are used on shore.

Coping strategies are often complex and diverse and encompass measures and mechanisms both within the fisheries sector and outside. The diversified livelihoods of many fisherfolk indicate their capability to make use of the varied resources and skills available to them.

Optimism can also be seen in the current contribution of small-scale fisheries to food security and poverty alleviation. It suggests that the sector has a social and economic potential that still needs to be realized. Traditional knowledge, informal rules and customs, and self-organizing and self-help capacities of small-scale fishing communities combined with development support offer opportunities for fisheries restoration and management.

After this brief overview of the important role and characteristics of the small-scale fisheries sector, I would now like to turn my attention to the issue of fisheries management. Starting by looking at the international context of fisheries management, we can note that the last decade has seen increased awareness of the dire consequences of overfishing, habitat degradation and loss of biodiversity. Today, there is global recognition of not only the necessity to improve fisheries management but also to control the effects of human activities on the environment in a wider perspective. The understanding of the link between a sustainable environment and sustainable livelihoods has become more widespread. Moreover, it is recognized that poor, vulnerable and food insecure people need to be targeted especially in order to eradicate poverty and that economic growth by itself is not enough.

The international framework for the management of fisheries and related ecosystems has made great advances during the last decades, starting with the adoption of the 1982 UN Law of the Sea. I have already mentioned – and you are all familiar with – the 1995 Code of Conduct for Responsible Fisheries and the related International Plans of Action. There are also the 1992 Rio Declaration and Agenda 21 of the United Nations Conference on Environment and Development (UNCED), the 1995 Agreement on the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UN Fish Stocks Agreement), the 2001 FAO Reykjavik Conference on Responsible Fisheries in the Marine Ecosystem and the 2002 Johannesburg Political Declaration on Sustainable Development and Plan of Implementation of the World Summit on Sustainable Development (WSSD-POI). These international instruments and commitments have created a solid foundation for countries and regional fisheries bodies to improve fisheries management. This has allowed for some progress in a number of countries and fisheries. But the state of many of the world fisheries continues to be in a precarious situation. There are manifold reasons for this less than desirable state of affairs. These include the continuation of de facto open access in many fisheries and the continuation of large overcapacities in the world's fishing fleets. These overcapacities, in turn, are an important contributing factor for the widespread and growing incidence of IUU fishing.

With the creation of exclusive economic zones (EEZs), it was hoped that countries would be able to introduce effective management regimes. However, effective management of fisheries has proven to be much more complex and difficult to achieve than had been anticipated upon the adoption of the 1982 UN Convention. Various factors have been identified for weak fisheries management performance. A main reason relates to over-reliance on centralized command and control regimes and not enough emphasis on approaches that could curtail or entirely remove the incentive of fishers to race for fish. These require the creation or recognition of some form of right in the use of the fishery resources. I will come back to these aspects shortly.

The increased recognition of ecosystem interactions and the importance of biodiversity have widened the focus of fisheries management to also consider broader habitat and ecosystem considerations. The Ecosystem Approach to Fisheries (EAF) is an important instrument in this respect. EAF entails the recognition of the wider economic, social and cultural benefits that can be derived from fisheries resources and the ecosystems in

which they occur. FAO strongly supports the implementation of the EAF, which is an integral part of the Code of Conduct.

While the discussion in international fora sometimes tend to focus more on the problems of large-scale and industrial fisheries, we know that dwindling resources due to overfishing is a reality also in the small-scale sector. Even if hard data on the resource status and fisheries are not always available, there are clear indications that many inshore areas in Asia are suffering from overexploitation.

If management of single-species fisheries in northern and sub-tropical waters is considered difficult, the task is even more daunting for the multi-species and multi-gear fisheries of the tropics. In areas where centralized management has been applied, it has proved no more effective than in industrialized countries. Traditional management regimes that may have been effective in the past have shown difficulties in adapting to the pressure from increased competition for resources, technological progress and globalization. There is a growing trend towards more decentralization in fisheries management and co-management systems have been successfully implemented in some areas. However, many small-scale fisheries are characterized by a de facto situation of 'open access' and this situation is the root cause of uncontrolled growth in fishing capacity and effort which ultimately result in overfishing and great economic waste. To obtain sustainability, access needs to be limited and the development of fishing effort needs to be controlled.

As background to a discussion on how this can be achieved, I would like to briefly sketch the current basic fisheries management models giving particular reference to their potential applicability in the small-scale fisheries sector.

Let me start with the centralized 'conventional' fisheries management approach already referred to. It implies the efforts by governments to control fish harvests based on biological models and implemented through command and control based management. Measures include limit licensing and catch quotas, often combined with technical measures such as gear regulations and subsidy schemes to provide incentives for certain desirable behaviours.

Unfortunately, as I mentioned earlier, this widely implemented system has in many cases been unable to cope with the complexities of fisheries resource use. In particular it did not effectively curtail the growth in fishing capacity and effort and the race for fish. Hence, it often failed to deliver reasonable social, economic and even biological outcomes.

However, in spite of the frequent failure of centralized fisheries management, governments will continue to have a role also in alternative management systems. Functions such as research, monitoring, control and surveillance, and enforcement, in particular with regard to legal sanctions, will generally remain with state authorities. One should not either completely outrule centralized management. For example, licensing systems and incentive schemes, such as vessel buyback programmes, may be valid management options under certain conditions and depending on their design.

The disappointing experience with management systems based on direct state control led to increased focus on management systems based on property rights. The term

rights-based fisheries management covers a number of different approaches, including individual, group or community ownership.

The topic of fishing rights has been discussed in a somewhat controversial manner since individual transferable quotas (ITQs) were first suggested as a possible management regime in the early 1970s. However, the concept of fishing rights is much older than that. In the Asia and Pacific region, rights to fishing grounds and specific fishery resources have a long history in traditional systems that I will talk more about shortly.

The topic of allocation of access and benefits is at the heart of all efforts to manage fisheries. Allocating fishing rights is contentious because it means making explicit social, economic, legal and political decisions. These decisions will have an impact on people. However, NOT making these decisions will also have consequences. The challenge is therefore to make the right decisions and to get fishing rights to the right people.

An ITQ system implies that catch quotas are privatized and allocated to individuals or companies but they could also be allocated to communities. The system has been fairly widely implemented in a number of fisheries in industrialized countries, notably Canada, Australia, New Zealand and Iceland. ITQs have proved effective in curbing overcapacity and in achieving the goal of improved sustainability of resource utilization in many of the fisheries to which they have been applied. However, there are situations where they have entailed important social consequences, by excluding resource users, and equity concerns have arisen, in particular with regard to small-scale fishers. The setting-up and administration of an ITQ system can be demanding not least because the catch taken by each of the participants in such a system needs to be strictly recorded and monitored. And mind you, not only the total catch of each participant but the catch of each species falling under the ITQ management system. It does not take a lot of imagination to realize the difficulties to apply ITQs in tropical small-scale fisheries.

As I mentioned just a little while ago, fishing rights come in several forms, and I would now like to turn the attention to traditional fisheries management systems. Traditionally, decentralized self-government systems have existed in many parts of the world and not only in relation to fishery resources but also forests, water and land. Communities generally recognized the need for rules for the exploitation of 'their' natural resources and ensure that processes were in place for appropriate exploitation and conservation.

In a community-based system, community membership and legitimacy are important issues in relation to access and allocation of rights. This type of system does not automatically guarantee equity. However, traditional systems can be quite complex and include provisions for people in need and temporary support to community members.

Some of the customary marine tenures continue today although they are often not formally and legally recognized. They tend to be fragile to external influences and other pressures, for example the increased competition for resources, depletion of stocks, population growth and immigration, globalization and environmental degradation. There are, however, examples of management structures that have survived and flourished. One important factor for the continued functioning, or revival, of traditional systems is their recognition by the national government and other relevant authorities.

There has been a growing trend towards increased decentralization of governance in general as well as in fisheries management. Management responsibilities are

increasingly shared among the government, communities and other stakeholders. This type of co-management system is gaining in popularity, in particular in the small-scale fisheries sector.

Like community-based systems, co-management is disposed to create a more equitable distribution of benefits and be more effective in limiting access than centralized systems.

Lessons learnt from co-management experience point at four main elements necessary for making it successful:

- An enabling policy and legal framework;
- The participation and empowerment of resource users;
- Effective linkages and institutions; and
- Resources – an asset worth managing.

It is worth noting that a co-management system can evolve without legally enshrined fishing rights. However, the co-management system is likely to become more effective if the community or co-management group will have ultimately legally protected exclusive rights.

Co-management – together with community-based management approaches – have strong support from several prominent regional organizations. APFIC has undertaken important work on how to mainstream co-management in the fisheries of the region. SEAFDEC has carried out substantial work on responsible fisheries practices and has published Regional Guidelines for Responsible Fisheries Management and for co-management and user group rights. WorldFish Centre has also been active in the field of co-management in the region.

As I have mentioned, the small-scale fisheries sector plays a vital role in food security, for poverty alleviation and as a ‘safety net’ in many developing countries – in Asia and elsewhere. This role brings a dimension to fisheries management that is outside the sector itself. Governance of small-scale fisheries cannot be viewed by itself. It has to be considered in the context of poverty as defined in a broader sense and encompassing social development.

So, when designing policies and strategies for small-scale fisheries management in developing countries, pro-poor criteria and principles need to be used. I would like to make some suggestions for what should be included in a pro-poor fisheries management policy.

- Small-scale fishers should be given preferential access to fishery resources

Small-scale fisheries are more efficient generators of local income, employment and food for direct human consumption than large-scale fisheries. With limited resources, there is increased competition between the two sectors. As a pro-poor policy, a redistribution of access from the industrial fleets to small-scale fishers should be considered. This should be combined with improved protection of inshore areas, some of which have already been made exclusive to artisanal fisheries. I recognize, though, that such a redistribution would not be an easy task considering the large number of

vessels in Asia, the existing access rights and the potential effects on employment in the industrial sector.

- Management responsibilities should be decentralized and shared

Small-scale fisheries are diverse and the livelihoods of coastal community households are often complex. This diversified and decentralized structure requires diversified and decentralized policies and plans. Such plan can only be effectively implemented at the local level. For poor people's needs to be taken into consideration, devolution of management responsibilities to the local level is needed.

Considering the experience to date, co-management of fisheries is likely to be the best option for many small-scale fisheries. The system should be based on power sharing and partnership. Real power must be vested in the co-management authority at the local level. Based on this fundamental principles, the system can take different forms according to local conditions and objectives.

- Rights-based management is needed

I believe the merits of effective and enforceable use rights for attaining economic and biological sustainability objectives is recognized beyond doubt. What we have to ensure is that they also meet social objectives. Fishing rights can take many different forms. In the small-scale fisheries sector, allocating rights to a defined group or a community is likely to be the best option for meeting conservation and economic objectives. Communal or group rights also have the potential to ensure a certain level of equity by allowing all members of the group or community to access fishing grounds or benefit from the income generated by the resource. Having said this, it should be recognized that community fishing rights do not automatically lead to effective and equitable responsible fisheries. A number of factors will influence the development. If the system develops without satisfactory community control, it may create new inequalities and power structures that could well worsen the plight of small-scale fishers and poor people. Issues of community membership and legitimacy are central in decisions on how rights are allocated and defended. Institutional arrangements, the distribution of benefits, and external relationships and pressures are other influencing factors. The practical difficulties in defining, assigning and enforcing fishing rights are significant and the time and effort required should not be underestimated.

- Diversification of livelihoods and improved post-harvesting should be promoted

The diversification of livelihoods and alternative employment constitute important poverty alleviation strategies in coastal communities. This can involve approaches for reducing the dependence on fishing through complementary income generating activities. It can also mean searching for alternative livelihood opportunities as exit strategies from the fisheries sector.

Additional incomes can be created from within the sector by improved post-harvesting and production of value-added products. Since women are often involved in fish processing, such strategies could have positive effects on gender income equality. Better utilization of fish catches can increase incomes for coastal communities without having to catch more fish. Hence, improving post-harvest fish handling is an important strategy supporting sustainable fisheries management.

- Integration and linkages with other sectors should be improved

The fisheries sector does not exist in a vacuum but is closely linked with other sectors. International trade and other effects of globalization combined with population growth have brought small-scale fisheries into wider economic systems. The aquatic resources and coastal areas are shared with other sectors. Competition from non-fisheries interests for access and use of these resources is increasing. This development calls for enhanced integrated planning and cross-sectoral interaction in coastal areas to ensure the rights of fisherfolk. Zones need to be legally designated for fishing households to settle and their land tenure ensured. Traditional landing sites need to be protected from alternative development. Settlement areas should be made permanent to allow for improved living conditions.

The fishers and fishing communities themselves often have multi-sectoral livelihoods. Linkages with other sectors need to be recognized when developing strategies for fisheries management and poverty alleviation. These linkages are also needed for the creation of alternative employment opportunities. The small-scale fisheries sector should be seen in the overall context of rural development strategies. It should be explicitly included in Poverty Reduction Strategy Papers (PRSP) and other pro-poor plans and policies. In order to achieve this integration, the awareness of the importance and potential of the small-scale fisheries sector needs to be further improved. This will require better data and information on the sector and on its role that is effectively disseminated and communicated.

- Additional financing is required for the transition to responsible fisheries

Any management system – whether a centralized system, property rights or co-management – requires considerable human and financial resources to be set up and then run effectively. Fisheries that are well managed and generate resource rents can finance the costs for management. However, the transition period before arriving at this point is costly. To restore and establish improved management in the small-scale fisheries sector will require considerable financial support. Funds are needed not only for fisheries management functions but also for complementary and interrelated activities supporting poverty alleviation. There is a need for strong political and financial commitment for achieving responsible fisheries and sustainability of livelihoods in the small-scale sector.

Now I am coming to the end of my presentation and after having talked to you about the current situation and different options, I would like to attempt to draw some conclusions with regard to the future.

I think we all agree that there is an urgent need to restore and improve the management of small-scale fisheries. The question is how to do this: what management regimes are compatible with the social and economic role of the small-scale fisheries and under what conditions can an equitable distribution of benefits be achieved?

There is no doubt that pro-poor fisheries management represents a complex issue. I strongly believe though, that we have the knowledge to outline the key approaches. To achieve responsible and equitable small-scale fisheries we need a combination of:

- Decentralization of management responsibilities

- A rights-based approach to fisheries management
- Strong support to social development and poverty alleviation

However, these are only the basic building blocks. We need much more detailed plans. There are many questions still to be answered. It is a positive sign that the small-scale fisheries sector is given a more prominent role in international fisheries management discussions. FAO, together with other international and regional organizations are strongly committed to the issues at stake. We need to build on lessons learnt from past experiences to enhance our knowledge on what works under what conditions and what is required to achieve our objectives. The current symposium and workshop, organized by ICSF and the Royal Government of Cambodia, represent an excellent opportunity to discuss these issues, exchange experiences and improve our understanding of the core issues with regard to fisheries management in the small-scale sector.

Thank you very much for your attention!