



## Regulating Access to Fisheries Freezing the Fishing Fleets

*by Olivier Delahaye Gamucci*

### Introduction

Excess fishing capacity in world fisheries is of increasing concern, as it contributes considerably to overfishing, the degradation of marine fisheries resources and habitats, and can be considered as a significant economic misuse. Without action, fishing pressure and fishing conflicts are likely to increase, and will lead to resource depletion through overfishing. These issues call for strong collaborative efforts to curb escalation.

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On 1 July 2004, 84 Member Countries of the UN Food and Agriculture Organization (FAO) concluded a technical consultation to review the progress and implementation of the International Plan of Action

for the Management of Fishing Capacity (IPOA-Capacity) and issues related to illegal, unreported, and unregulated fishing. Importantly for the region, the meeting required the FAO to provide further support to developing countries struggling with problems of capacity management and illegal fishing. Similarly, fishing capacity has been a burning issue at the World Trade Organization (WTO), where subsidies encouraging overcapitalization are increasingly seen as unacceptable.

The FAO Code of Conduct for Responsible Fisheries (CCRF) specifies that states should take measures to prevent or eliminate excess fishing capacity and ensure that levels of fishing effort are commensurate with sustainable use of fishery resources. In order to address the issue of excess fishing capacity through fisheries management, FAO prepared the IPOA-Capacity,

which was endorsed in June 1999. Subsequently, the Johannesburg Plan of Implementation adopted by the World Summit on Sustainable Development in 2002, specified implementation of the IPOA-Capacity as a time-bound goal, calling for developing and implementing national and, where appropriate, regional plans of action by 2005.

## ‘The tragedy of open access’

The main reason behind the worldwide overcapitalization in fisheries is unlimited access to the resources. Participation in a fishery managed under an open access regime is restricted only by required skills and investment. In an extreme market economy approach and understanding of fishing, on which most solutions currently tried out are based, the tragedy unfolds as follow.

Early entrants to an open access fishery generally reap substantial profits, which in turn attracts other fishers. Eventually, the fishery reaches a level where no additional fishing pressure is needed to capture available fishery resources. Yet, fishers often continue to invest capital in the fishery beyond that level, creating an excess of fishing capacity through what is known as ‘capital stuffing’ in order to catch the fish before a competitor does, a phenomenon also known as the ‘race for the fish’.

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Once total catch exceeds the maximum biological productivity of the stocks, the fishers have to invest even more capital in the fishery just to maintain the same level of catch. This cycle of increasing investments and decreasing returns ultimately reduces profits to a level where fishing become unprofitable, causing the fishery to

collapse. Where subsidies are provided, fishing activities may even continue beyond that point, possibly leading to a near-complete exhaustion of resources.

## Controlling fishing capacity

In the past, fishery managers have attempted to control fishing capacity through regulation of inputs (such as numbers of vessels, time spent fishing, or gear restrictions) or outputs (total allowable catch, possibly divided into individual quotas). More recently, managers have begun to implement limited access regimes to fisheries and resources, relying on rights-based management schemes. Yet, none of these measures effectively removes incentives towards capital stuffing in the race for the fish.

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A recent FAO review of progress towards implementation of the IPOA-Capacity showed that

most countries deal with the management of fishing capacity by limiting new boats entering fishing fleets, at least for commercial fisheries, together with measures aimed at limiting the use of existing capacity. In practice, they directly incorporate capacity considerations into their fisheries management regimes. In general, countries worldwide seem to have been rather successful at stabilizing the size of their commercial fishing fleet, although new technologies and improvements to vessels’ ability to catch fish may counterbalance these trends. More importantly, smaller-scale fisheries are still largely unchecked, and continue to expand.

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### What is fishing capacity?

In the simplest of terms, fishing capacity is the ability of a vessel or fleet of vessels to catch fish. This ability is based on four components:

1. The number of fishing vessels in the fleet
2. The size of each vessel
3. The technical efficiency of each vessel, determined by factors such as on-board gear and equipment, fishers’ knowledge and techniques, and the size of the crew, and
4. The time spent fishing.

The term “overcapacity” indicates a level of catching power that exceeds what is needed to catch available fishery resources. When a fishery is described as “overcapitalised,” it means that the industry has invested more in fishing capacity than is needed to catch fish at the least cost.

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Controlling capacity in the less developed regions of the world does not consist in removing the poor from fishing to make way for the richer commercial vessels. The poor are competing for a resource for their basic survival and livelihoods; commercial vessels aim to make a substantial profit from the same resource. Yet any attempt to control capacity by focusing only on the larger fishing operations is doomed to failure in developing countries since mounting overcapacity there is often caused primarily by a growing number of fishers rather than by new technologies or capital stuffing.

Thus any reduction of fishing capacity must be accompanied with alternative or supplementary livelihoods, as these people often depend on fishing for their very survival. In many ways, fisheries is seen by the poorest as their last alternative for employment. The dominance of small-scale fisheries also renders the

management of capacity difficult to implement as it requires well developed and effective monitoring, control and surveillance (MCS) schemes. Yet, in these countries, there is usually a lack of institutional and technical capacity for research and policy development as well as for implementation.

### **The case of tropical coastal fisheries**

During the FAO Technical Consultation in July 2004, it was recognized that the nature of fisheries is so diversified in the various regions of the world that more should be expected from regional fisheries management organizations (RFMOs) and states. The global initiatives promoted mainly by the more developed nations, although useful to raise awareness of the issues, might not be valid for less privileged countries. The international framework promoted by FAO through the IPOA-Capacity might be appropriate for high seas fisheries, but when working with issues related to resources and fisheries in EEZ or for transboundary fish stock, practical



approaches should be left to more local authorities such as RFMOs or individual states.

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In the ASEAN region, overcapacity is seen as the largest fisheries management problem threatening sustainability. In many places, catches by coastal fisheries are (estimated to be) in excess of sustainable levels, but with little alternative source of employment, reducing fishing capacity is difficult. The relevant fisheries management agency in each ASEAN Member Country is considered the most appropriate body to address such a task.

Although one may reject such an assertion, it is important to generalize and recognize that the fisheries situation in the region is in a state of overcapacity. Some may argue, correctly in some cases, that a particular fishery has not yet reached that status, but nonetheless it is imperative that each Member Country first recognizes that fisheries resources that are not fully regulated are likely to be overexploited as a basis for future actions. There lies the assumption that the current number of fishing boats in the region should be frozen at its current level before proceeding with further management based on reliable statistical information.

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As discussed above, reducing fishing capacity in the region has important socio-economic consequences for some of the poorest segments of the population. Although these consequences must be considered, and as far as possible addressed, policy formulation for achieving sustainable fisheries would be impossible if such concerns were to be fully accommodated.

## **Addressing the issues in Southeast Asia**

Shortly after the adoption of the IPOA-Capacity, SEAFDEC and its Member Countries organized

a workshop jointly with FAO on overcapacity in Penang in November 2000. The workshop explicitly recognized problems of excess fishing capacity in the region, and that the mechanisms proposed by FAO might not be appropriate for the region considering its specific fisheries. With this in mind, the meeting also came out with initial guidelines for the management of fishing capacity in the region. Amongst these, the meeting recognized the importance of developing indicators that could be used for helping to understand the status and trend of individual fisheries, as a first step towards addressing the problem of overcapacity.

**“ The progressive decentralization of fisheries management and the introduction of rights-based fisheries are seen as a solution to the issue of excess capacity of small-scale fisheries.”**

If ASEAN governments are to take management action to stabilize and even reduce excess fishing capacity, it is imperative for the scientific basis and facts that support such policy to be explained to the various stakeholders for their compliance. This is particularly so for political stakeholders. The progressive decentralization of fisheries management and the introduction of rights-based fisheries are seen as providing





a two-pronged solution to the issue of excess capacity of small-scale fisheries. First, they build awareness and a sense of responsibility amongst the local stakeholders. Second, such schemes reorient the incentives influencing fishing communities so that instead of racing for the fish, fishers tend to adjust their efforts toward levels ensuring longer-term sustainable resource use.

**“Local communities are progressively being empowered to make the difficult decisions”**

### **Closing the commons**

Following this line, the ASEAN-SEAFDEC Member Countries recognized the importance of community participation in limiting access to fisheries resources. Local communities are progressively being empowered to make the difficult decisions concerning fishery capacity and the sharing of incomes from coastal fisheries.

The Millennium Conference placed the first piece in the process of promoting decentralization and introduction of rights-based fisheries in the region. The adopted Resolution pledged to encourage effective management of fisheries through delegation of selected management functions to the local level, and recognized the need to progressively replace open access to fisheries resources

### **Managing the fishing capacity of commercial fleets in Southeast Asia**

The Millennium Conference encouraged measures to improve the registration of fishing vessels together with the reduction of their number and level of fishing effort. Larger vessels are managed under a rights-based fisheries system, through each national licensing scheme, which usually encourages the freezing of their number to their current level. Most commercial vessels are excluded from fishing in coastal waters.

with limited access regimes through the introduction of rights-based fisheries, which may also facilitate the management of fishing capacity and promote the use of responsible fishing gears and practices. Moreover, the Plan of Action adopted during the Conference includes the review of issues of fishing capacity at the national level, and to recommend, where appropriate, the introduction of rights-based fisheries and the reduction of the number of fishing boats and level of fishing effort using government incentives.

The implementation of limited access regimes and the delegation of management authority to the local level were extensively discussed during the Regional Workshop on Innovative Fisheries Management Approaches in Southeast Asia: Rights-Based Fisheries and Decentralization, held in Phuket in May 2003. Serious efforts were made to clarify possible ways to implement these issues at the regional and national level. The workshop recognized the need for individual countries to review their existing legal frameworks with regards to fishing rights, with a view to how existing legal provisions relate to capacity management and regulation of access to fisheries.

### **Policy consideration: where to start?**

In the recent Regional Technical Consultation on Human Resource Development for Fisheries Management, held in Phnom Penh in June 2004, clarification was sought as to what policy change was required to achieve sustainable fisheries, especially in the light of possible human resource development needs. In this context, issues of overcapacity were raised again, and were addressed in specific group discussions. Outcomes mostly confirmed that alleviating issues of excess fishing

capacity in the region could be achieved by following three main tracks:

1. To gradually introduce rights-based fisheries management regimes
2. To understand the state and trends of fisheries using indicators, and
3. To control the number of fishing boats.

These form a basis to consider changes in policy. While the first two tracks are relatively well accepted by stakeholders in the various Member Countries, controlling the numbers of fishing boats, especially for small-scale fisheries is a far more sensitive issue. If one consults with fishing communities in each Member Country, most fishers may immediately agree with the concept of not allowing any additional fishing boat to enter the local fisheries. In other words, the concept of freezing the number of fishing boats is relatively well accepted, as fishers feel this will to an extent guarantee the stability of their income in the future. It also provides them with a basic sense of ownership and responsibility toward the resources. Most are very concerned that the ever increasing numbers of fishers and boats will eventually reduce their portion of catch. Member Countries therefore need to start to discuss with their fishers on how to freeze the numbers of boats or fishers, as a first step toward the management of fishing capacity on a case by case, fishery by fishery basis.

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## The way out

Such an approach would require each government fishery management agency to introduce appropriate registration of all large-scale and small-scale fishing boats as well as fishers, followed by a complete halt to any new registration after a certain period of time. The agency must reach an agreement with the fishers, stating that from now on only registered boats and fishers can fish, and encouraging fishers to collaborate with existing MCS enforcement authorities in reporting illegal fishing. In the course of freezing existing capacity, a framework must be set by each government in direct consultation with the fishers and other stakeholders, notably addressing the following important questions:

1. Who are the “professional fishers” to whom a fishing right would be granted? What are the criteria to be used for identifying them (such as a minimum percentage of income from fisheries, or a minimum number of fishing days per year)?
2. How can we deal with part-time fishers?
3. What are the benefits for fishers of registering, and thus supporting such as registration system?
4. What kind of registration system? And at what level – national, provincial or district level?
5. Which are the registration agencies? Who



decides which individuals are entitled to be registered?

6. How frequently should registration be revised?
7. What are the obligations of fishers who register? Should they include monitoring, and the provision of basic fisheries statistics?
8. What are the enforcement mechanisms for conditions agreed through the registration system?
9. What are the penalties for registered users violating agreed conditions? Termination of the user's right to registration? What about for unregistered users?

The framework will incorporate all national fishing activities into a rights-based fisheries management approach. Fishing rights will therefore have to be clarified through further discussion with fishers and other stakeholders:

1. To whom does the government provide the right? If fishers individually, can those rights be transferred to others, such as entrepreneurs? A small numbers of local entrepreneurs, such as traditional middlemen, could conceivably come to monopolize a large portion of the fishing rights. Then the question may go to providing responsibilities and mandates to appropriate local institutions such as fisher groups or

communities.

2. How will the government encourage and support local institutions, including financial and technical assistance?
3. What kind of right can be provided? Based on areas, types of fishing gears, period of time?
4. What are the conditions for implementation of these fishing rights? In particular, what measures will be taken against illegal fishing?

Once simple but enforceable conditions to access fishing rights at the community level are established, compliance can be left to the community to manage, with proper support from the government.

**“The framework will incorporate all national fishing activities into a rights-based fisheries management approach.”**

## Conclusion

The need to freeze the number of fishing boats and fishers and the rights of fishers to fish to their current capacity are realities that must be recognized by all fisheries stakeholders. Although registration and freezing of larger-scale commercial fishers has been initiated, this must be extended to include all fishers, counting in small-scale operations that altogether catch far more fish in the region than their commercial counterparts.



Control of fishing rights for these dominantly impoverished subsistence fishers can only be achieved through collaboration and consultation with local communities, and possibly later on the devolution of some management authority. Local communities and fishers must be at the heart of registration, freezing, management and reporting measures for proper compliance and enforcement.

Although only a small first step toward the serious management of fishing capacity, the freezing fishing capacity is urgently required to avoid further acceleration of the depletion of resources. Provided that both the relevant governmental agencies and local communities get proper assistance, and that the use of indicators to understand the status of each fishery on a case by case basis is promoted, these future management actions will definitely help to match fishing capacity with sustainable yields. This may mean further reducing fishing capacity in some cases, while allowing new entrants in others. This must be judged on a case-by-case basis, on the base of sound scientific evidence. In all, it will put into place the foundation of a robust policy framework for the management of fishing capacity and fisheries in general in Southeast Asia.

#### **About the author**

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