



# Bellagio Framework for Sustainable Tuna Fisheries:

## Capacity controls, rights-based management, and effective MCS

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# 1. INTRODUCTION

The Bellagio Conference on Sustainable Tuna Fisheries was held to develop an analysis of key issues that are vital for the management of tuna fisheries to ensure sustainable fish stocks and healthy ecosystems, while providing fair access to the fisheries for all participants, and retaining profitability of the industry.

The international fisheries for tunas, billfish and other highly migratory species are at a critical juncture. Excluding bluefin tuna and some yellowfin and bigeye stocks, most tuna stocks are in reasonably good health. However, high demand provides an incentive for excess harvesting, which has led to excess fleet capacity. This is currently contributing to overfishing of some stocks of tuna, inhibiting the taking of appropriate management measures, and creating economic inefficiencies and unless controlled, poses a serious threat to the health of most of the world's tuna stocks as well as causing erosion of economic benefits, waste of capital, and heightened conflict among states over a fixed or steadily declining resource base.

Urgent action is required. Simply put, the global growth in fishing capacity must be curtailed and fleets reduced. The time is ripe to address these problems and their root causes. Success will require the use of new approaches including rights-based management.

The Conference addressed the following key issues:

1. Causes of overcapacity;
2. Controlling capacity;
3. Shifting to rights-based management and allocation; and
4. Effective monitoring, compliance and enforcement.

Sample management options, included in this report, were developed to illustrate discussion points. The conference assembled a global group of distinguished academic, government, industry and NGO participants to engage in debate and discussion in a collaborative and neutral venue. The Conference participants took part in their personal capacity, and are listed in Annex 1.

This report covers the range of ideas presented at the conference but does not necessarily represent a consensus on all issues.

This conference was inspired by the late James Joseph and reflects the passion he brought to improving the management of tuna fisheries through the application of rights-based management.

## 2. ANALYSIS OF KEY ISSUES

### 2.1 CAUSES OF OVERCAPACITY

Open access leads to overcapacity. Under open access, fishing increases until profits disappear, catches are taken with higher costs than needed, and eventually catches diminish. As profits are eroded pressure on management mounts to weaken restraints in an effort by industry to avoid financial losses. Overcapacity, once developed, takes a long time to disappear, as boat owners continue fishing as long as variable costs are covered. Endemic overcapacity in tuna fisheries leads to overexploitation and wastes resources.







## 2.2 CONTROLLING CAPACITY

The basic problem of fisheries management is how to achieve optimal fishing mortality, a goal that is threatened by overcapacity. Effective fisheries management requires limiting fish catches and/or fishing effort. The choice of basing management on catch or fishing effort controls depends on the ability to monitor either accurately, and which of them is the better proxy for fishing mortality in the circumstances.

Large-scale tuna fishing vessels are highly mobile. Success in limiting fishing mortality and overcapacity in one area could easily redirect capacity to another area. This does not mean that capacity reduction should not be undertaken, but that global success requires coordination among RFMOs. Who should participate in a capacity reduction program, and to what extent, is likely to be a controversial issue. There will be differences among participants' ambitions and abilities to partake in and to fund reduction programs. Ideally, allocation of fishing rights should be made first, but reducing capacity among the participants is necessary in any event.

The first step towards controlling capacity is to establish limited entry, as might be set up via a closed vessel registry, after which reductions in the number of vessels can be negotiated. Technological advances need to be taken into account to avoid effort creep. The goal in principle is that new vessels would only be allowed as replacement for equivalent or greater capacity. In a fully exploited fishery, coastal states' rights to expand their participation in a tuna fishery must be accommodated by mechanisms for reducing the participation of others.

Buybacks are a potential second step to voluntarily reduce excessive capacity and can be an important catalyst to rights-based management. This requires a coherent reduction program within a RFMO. Buybacks can be financed by governments, non-governmental organizations, or the industry itself. In any case, governments and/or international organizations will likely be necessary to facilitate the process.

Further, rights based-management, which is addressed in the next section, can be used to address overcapacity, as well as conservation and management issues and social goals.

## 2.3 SHIFTING TO RIGHTS-BASED MANAGEMENT AND ALLOCATION

The establishment of exclusive rights to fish is essential for RFMOs to prevent overfishing, achieve sustainability and to realize maximum economic benefits of the fisheries. Open access creates perverse incentives for the "race to fish" whereas exclusive rights provide a positive incentive to preserve and conserve the fish stock which enhances the future value of the right. A right can be an exclusive use or a property right and allocated rights may be based on measures of catch, effort, or licenses. Similar systems could also be used for fulfilling obligations such as bycatch limits.

Under international law, nations hold the rights to fish and would receive the allocation. Individual nations would distribute use rights to vessels, gear types or sectors. Systems for the creation and transferability of the consequent rights to participate in the fishery can accommodate diversity in national legal systems. However, some domestic legislation may need additional interpretation and/or amendments to allow this management.





International law is not an impediment to developing a strong mechanism to rights-based management in global tuna fisheries. The principle of open access on the high seas is qualified by the broadly recognized duties upon nations to maintain and conserve stocks, cooperate, coordinate and implement obligations in the management of shared fisheries resources. Also, there is a clear UNFSA (article 25:1) obligation to assist developing nations. The discharge of the obligations of both the broadly recognized duties and the requirement to assist developing countries can be facilitated with the use of rights-based management methods.

All those with a real interest in a fishery should be involved in RFMO allocation decisions, irrespective of whether the membership practices of the RFMO are inclusive or exclusive. New entrants in fisheries may require adjustments in the allocations.

Allocations that support sustainable cooperation must:

- Benefit all participants;
- Be perceived as fair or equitable by all participants; and
- Reflect both the role of historical participation in the fishery and position of developing countries and coastal states.

Allocation in excess of optimal levels may sometimes—especially initially—be used as a means to achieve agreement, although it will reduce the overall efficiency of the allocation and reduce the benefit of the allocation in the future. Compensatory arrangements are generally preferable alternatives to over-allocation.

Rights allocations, to the maximum extent possible, should be transferrable—that is, rights holders should be free to transfer their rights, or merely their use of the right, to others. Full transferability is required for economic efficiency, and provides for flexibility to adapt to changing circumstances. Transferability also allows for new entrants, and can assist in achieving social goals such as developing states' aspirations. Even without full transferability throughout an RFMO, a group of member countries may agree to allow trading amongst themselves. The RFMO would need to develop rules and notification procedures to provide for and govern transfer of rights.

## 2.4 EFFECTIVE MONITORING, COMPLIANCE AND ENFORCEMENT

Key to successful capacity controls and rights-based management is an effective and transparent monitoring, compliance and enforcement system. RFMO governance procedures requiring consensus for most decisions are not appropriate for matters of compliance and sanctions. In principle, imposing appropriate sanctions for failure to abide by the allocated right should not present a legal problem.

Available sanctions may include but, are not limited to, (1) port closures and bans on transshipment; (2) reduction of allocated quota; (3) trade or other commercial sanctions; (4) removal of vessel officers' licenses or eligibility to fish; (5) inclusion in IUU vessel lists; and (6) the possibility of an agreement of the RFMO members to permit enforcement in an international legal tribunal or other form of dispute resolution. Monitoring and enforcement are important factors to be considered in determining whether rights-based management is based on effort or catch. Many mechanisms for monitoring are available, both technical and human, and a suite of such measures should be implemented.



If use rights are transferred, the responsibility for compliance needs to be thoroughly specified—i.e. does this responsibility adhere to the property right owner or the use right owner, or both?

There are a number of compliance, monitoring and enforcement measures that must be tailored to each situation when shifting to rights-based management. These measures are in keeping with the trends toward greater transparent accountability emerging within fisheries management today.

### 3. MANAGEMENT BASED ON TRANSFERABLE PROPERTY OR USE RIGHTS

The group recognized the application of rights-based management systems, including transferability, to address the problems of over harvesting and overcapacity as a viable management option. A legal framework for transfers of rights should be developed to provide legal security and investment risk coverage. There might be different ways of establishing such a system, depending of the characteristics of each RFMO's special circumstances.

### 4. SAMPLE MANAGEMENT OPTIONS

Some of the benefits of a full rights-based management system can be captured by making smaller steps. Below is a non-exhaustive list of brief individual examples of rights-based management and capacity reduction methods. The examples include ones that could be carried out without a full RFMO rights-based management system, while others demonstrate how an RFMO rights-based management system could be used to achieve particular goals.

- Two or more countries that implement an individual catch quota program for their country allocations can cooperate and arrange for international trade between companies owning the quotas. The trades would only be for one year, and would not imply that the countries are decreasing or increasing their allocation.
- Subsets of RFMO members could take action in support of conservation and management objectives with measures that go beyond those of the RFMO.
- Transferrable bigeye bycatch limits could be used as a bigeye bycatch mitigation tool in purse seine fisheries. Within a nation, allocated limits could be transferred among individual purse seine vessels. In circumstances when there are multiple gear types catching bigeye, with allocations, transfers might be permissible between gear types.
- Buybacks can address situations of over capacity as long as there is limited entry. A RFMO, a group of countries, or an individual country may purchase vessels to scrap. Governments, non-governmental organizations, or a public loan repaid over time by the industry can finance the buyback. Any industry portion of repayment can be financed through some combination of fees and landing taxes.
- Transferrable allocations can be used for either continued use of the right, or its retirement.

- Transfers of vessels and/or quotas, provide a way of accommodating coastal states' rights to develop their tuna fisheries, including on the high seas in this respect.
- Developing States, in particular small island developing states and states with small and vulnerable economies should be assisted in the development of their fisheries. Potential methods of transfer include:
  - > Issuing time-limited rights to current users that upon expiration revert to developing
  - > Landings taxes or annual fees on current fishers used to fund the developing states' ability to develop their fisheries; and
  - > Property rights on the high seas allocated to developing coastal states where the corresponding use rights can be rented, leased or fished.
- The member countries of a RFMO could establish a "Tuna Corporation" (similar to the "Enterprise" established in UNCLOS for deep-sea mining) in which individual countries hold shares. The corporation would contract with fishing fleets to capture the tuna quotas and distribute the rents among its "shareholders."

## 5. KEY POINTS FROM THE BELLAGIO FRAMEWORK FOR SUSTAINABLE TUNA FISHERIES

- The time is ripe to address the problems of overcapacity and over exploitation; without action the present situation with respect to tuna stocks will steadily deteriorate.
- The first step towards controlling capacity is to establish limited entry, as might be set up via a closed vessel registry, after which reductions in the number of vessels can be negotiated. In a fully exploited fishery, coastal states' rights to expand their participation in a tuna fishery must be accommodated by mechanisms for reducing the participation of others.
- Buybacks are a potential second step to voluntarily reduce excessive capacity.
- Rights-based management is an effective way to address overcapacity, over exploitation, conservation, create sustainable economic and social benefits, and employment.
- Implementing rights-based management in an international arena would involve allocation of property rights over catch or effort to nations, who in turn can further distribute use rights.
- Transferability of rights is essential to realize the full benefits of rights-based management and create flexibility in adapting to changing circumstances.
- Rights-based management also provides an effective means to address the rights of developing coastal states.



## ANNEX I

### Bellagio Conference for Sustainable Tuna Fisheries List of Attendees

Robin Allen, Chair★  
Hugo Alsina  
Alejandro Anganuzzi  
Scott Barrett  
Antonio Fernandez Aguirre  
Theodore Groves  
Rognvaldur Hannesson  
Fabio Hazin  
Peter Ho  
Susan Jackson★  
Yongil Jeon  
Rebecca Lent  
Xiaobing Liu  
Lara Manarangi-Trott★  
Peter Miyake  
Julio Moron  
Chris Reid  
Victor Restrepo★  
Dale Squires★  
Chris Stone  
Rafael Trujillo★

★ Steering Committee Member

