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## Managing International Fisheries: Improving Fisheries Governance by Strengthening Regional Fisheries Management Organizations

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### Summary

- Regional fisheries management organizations (RFMOs) are central to solving the international fisheries crisis. By bringing together coastal states and fishing nations, RFMOs now manage the majority of the world's marine fish resources.
- However, RFMOs have so far failed to live up to their promise – there are very few examples of RFMOs sustainably managing their target stocks. They need to be strengthened so that they can manage whole ecosystems, allocate quotas fairly and responsibly, and engage developing countries to allow their equitable participation in fisheries
- RFMO members need to tackle several challenges affecting RFMOs' performance, including lack of compliance with international rules, lack of enforcement capability, excess capacity and inappropriate subsidy of fishing fleets, and lack of political leadership to engage effectively in multilateral cooperation.
- RFMO reform needs to be considered in the context of wider discussions around global governance of fisheries, which include new strategies to manage and conserve biodiversity and a new paradigm for allocating fishing rights.

## Introduction

There is increasing recognition of the need for regional fisheries management organizations (RFMOs) to improve their performance in accordance with the demands of international fishery instruments. Such calls have come from, *inter alia*, the 2006 United Nations Fish Stocks Review Conference, the FAO Committee on Fisheries, the St John's Conference on the Governance of High Seas Fisheries and the ministerially led Task Force on IUU Fishing on the High Seas. The most recent UN General Assembly resolution on sustainable fisheries<sup>1</sup> urged RFMOs to strengthen their mandates and modernize their measures and approaches to fisheries management. It called upon states to make further efforts to strengthen and enhance cooperation among existing and developing RFMOs, to develop and apply best-practice guidelines for RFMOs and to undertake performance reviews of RFMOs, based on transparent criteria.

A number of international efforts are under way to give effect to these proposals, including the establishment of an independent high-level panel, hosted by Chatham House, aimed at developing a model for improved governance by RFMOs. Nevertheless, despite broad consensus that RFMOs need to be strengthened, the process to reach that goal presents a significant challenge to the international community for a number of reasons:

- There is as yet no consensus on how objective and transparent criteria might be applied to evaluate the performance of RFMOs. There are some in favour of a systematic approach which would ensure consistency and recognize the fact that RFMOs are an integral part of the global system of oceans governance. Others have adopted a more fragmented approach, arguing that RFMOs are autonomous bodies answerable to different political constituencies and governed by different constituent instruments.
- In general terms, it seems that the best starting point for the development of evaluation criteria or performance benchmarks is to be found in the provisions of international fisheries instruments and best practice in their application. All RFMOs do some things well and others less well.
- Initial leverage in improving RFMO performance is likely to be found in inducing greater coordination and cooperation between RFMOs, especially those dealing with similar species. Practical steps such as shared or consolidated vessel lists, better coordination of port and market measures (such as catch documentation schemes) and vessel monitoring systems would bring about significant improvements in compliance.
- There are some issues that are likely to remain very difficult for RFMOs to deal with. These will be made more difficult unless a more systematic approach is taken to dealing with them. Such issues include dealing with excess capacity in the world's fishing fleets, allocation of high seas fishing opportunities on an equitable and sustainable

basis, and the adoption of ecosystem-based management approaches. A significant danger for RFMOs is that, as the perception grows that conventional fisheries management has failed, the conservationist approach increases in appeal as a means of forcing tough decisions to be taken.

## The role of RFMOs in the global ocean governance system

RFMOs play a critical role in the global system of fisheries governance. They are the primary mechanism for achieving the cooperation between and among coastal states and fishing nations that is essential for the effective management of international fisheries. The main multilateral treaty that elaborates the basic rights, duties and obligations of states in this respect – the 1995 United Nations Fish Stocks Agreement – relies almost exclusively on a diverse network of RFMOs to implement its provisions.

One of the most important contributions of the Fish Stocks Agreement was to confirm and elaborate on the pivotal role of RFMOs in the global governance system. The essential purpose of an RFMO is to provide an effective forum for international cooperation to enable states to agree on conservation and management measures in respect of high seas fish stocks. In the absence of such cooperation, experience has shown that in the case of common pool resources, open to exploitation by all, the objectives of long-term sustainability and optimum utilization become extremely difficult, if not impossible, to achieve. The more likely scenario is severe over-exploitation of the resources and their sub-optimal utilization. A recent study, undertaken for the FAO and the World Bank, estimated that the loss to the world economy of this sub-optimal utilization is in the order of US\$50 billion per annum.<sup>2</sup>

Formal cooperation between states through RFMOs dates back to the early twentieth century, but increased more rapidly from the 1960s. There are 38 regional fishery bodies worldwide: 20 advisory bodies and 18 RFMOs (see Box 1). The FAO defines RFMOs as 'intergovernmental fisheries organisations or arrangements, as appropriate, that have the competence to establish fisheries conservation and management measures'.<sup>3</sup> Some of these, such as the International Whaling Commission (IWC) and the North Atlantic Salmon Conservation Organisation (NASCO) have very specific mandates or deal with single species. Others have broader mandates. Since 2003, new RFMOs have been established for the Western and Central Pacific Ocean (WCPFC), South-East Atlantic (SEAFO) and South Indian Ocean (SIOFA). A process is also under way to establish an RFMO for the Southern Pacific Ocean. Thus, while some important gaps remain, both in terms of species and area coverage, the majority of the world's marine fish resources are now under management by one or more RFMOs.

<sup>2</sup> R. Arnason, "The Rent Drain": Towards an estimate of the loss of resources rents in the world's fisheries', paper prepared for the FAO/World Bank workshop on 'The Rent Drain', Washington, DC, 17–18 January 2006.

<sup>3</sup> FAO, IPOA-IUU, 2001.

<sup>1</sup> UN Doc. A/RES/61/105, 6 December 2006.

## BOX 1: REGIONAL FISHERIES MANAGEMENT ORGANIZATIONS

		Year established
CCAMLR	Convention on the Conservation of Antarctic Marine Living Resources	1982
CCBSP	Convention on the Conservation and Management of the Pollock Resources in the Central Bering Sea	1996
CCSBT	Convention for the Conservation of Southern Bluefin Tuna	1994
GFCM	General Fisheries Council for the Mediterranean	1952
IATTC	Inter-American Tropical Tuna Commission	1950
IBSFC	International Baltic Sea Fisheries Commission	1973
ICCAT	International Convention for the Conservation of Atlantic Tunas	1969
IOTC	Indian Ocean Tuna Commission	1996
IPHC	International Pacific Halibut Commission	1923
IWC	International Whaling Commission	1946
NAFO	Northwest Atlantic Fisheries Organization	1979
NASCO	North Atlantic Salmon Conservation Organization	1983
NEAFC	North-East Atlantic Fisheries Commission	1982
NPAFC	North Pacific Anadromous Fish Commission	1993
PSC	Pacific Salmon Commission	1985
SEAFO	South East Atlantic Fisheries Organization	2003
SIOFA	South Indian Ocean Fisheries Agreement	2006
WCPFC	Western and Central Pacific Fisheries Commission	2004

## International developments

The United Nations Fish Stocks Agreement significantly strengthened the position of RFMOs as the paradigm for the adoption of fisheries conservation and management measures. The Agreement represents a progressive development of concepts of cooperation, compatibility and responsibility that are inherent in the 1982 United Nations Convention on the Law of the Sea. The primary objective of the Agreement is to seek compatible conservation and management regimes both inside and outside areas of national jurisdiction. Conservation and management measures should be established on the basis of a precautionary approach and should use reference points for establishing the level of utilization of stocks. They should be based on the best scientific information available. For this purpose an essential element in the management procedures is the requirement for the

collection and exchange of data and information.

Most importantly, the Fish Stocks Agreement accords a key role to RMFOs as the appropriate medium through which states are to cooperate to achieve and enforce conservation objectives both on the high seas and in areas under national jurisdiction. The main contribution of the Agreement in this regard is to define the desirable institutional characteristics of an effective RFMO by listing, in a legally binding form, the matters upon which states are expected to agree in order to achieve sustainable management of fisheries. These include agreement on conservation and management measures to ensure long-term sustainability; agreement on participatory rights such as allocations of allowable catch or levels of fishing effort; agreement on decision-making procedures which facilitate the adoption of conservation and management measures in a timely and effective manner; and agreement on mechanisms for obtaining scientific advice and ensuring compliance with and enforcement of conservation and management measures.

The Agreement provides that where no RFMO exists for a particular fishery, states must cooperate to establish one. Where an RFMO does exist, states that wish to fish for the resource are obliged to join the RFMO or, at the very least, to conduct themselves in accordance with its rules. At the same time, the Agreement emphasizes that states with a 'real interest' in the fisheries concerned are entitled to become members of a relevant RFMO. This important and difficult provision is designed to ensure that, on the one hand, the Agreement cannot be used to protect the position of states currently fishing on the high seas by freezing out potential new participants, while, on the other hand, RFMOs should not be open to all states regardless of the extent of their interest. The theory is that only those states which are members of the relevant RFMO, or which agree to apply the conservation and management measures established by the RFMO, may have access to the fishery resources to which those measures apply.

In addition, various non-binding instruments have assigned specific responsibilities to RFMOs. The most comprehensive such instrument that has been adopted is the Food and Agriculture Organization (FAO) Code of Conduct for Responsible Fisheries, which is itself made up of a number of separate, but linked, documents, and which continues to evolve through the formulation of international plans of action on specific issues of immediate concern. In particular, the importance of the role to be played by RFMOs is emphasized in the International Plan of Action on Illegal, Unreported and Unregulated Fishing (IPOA-IUU).

## Obstacles to effective governance

The causes of gross unsustainability in international fisheries are many and complex. They include the presence of IUU fishing, excess capacity and inappropriate subsidies as well as poor management and poor domestic governance at the national level. One of the key

difficulties has been to gather the necessary political leadership needed to carry internationally agreed targets and declarations into effect. This has been reflected in a lack of willingness on the part of some states to participate in multilateral arrangements or, when they do, to participate effectively. The reasons for these failures range from simple lack of capacity (in the case of some developing countries) to more complex practical problems such as the need to accommodate excess capacity in the world's fishing fleets. A major inhibitor of cooperation is that each government seeks ensure that the impact of catch reductions do not disadvantage their industry *vis-à-vis* those of competitors.

One of the major factors that persists in undermining current governance arrangements is the prevalence of IUU fishing on the high seas (see Box 2). IUU fishing is a global phenomenon, affecting both domestic waters and the high seas, and all types of fishing vessels. It has a direct effect on target stocks, but also undermines the effectiveness of measures adopted nationally, regionally and globally to rebuild stocks for the future. Governments have recognized the negative effects of IUU fishing on resource sustainability, biodiversity and economic and social sustainability and the issue has been at the forefront of the policy agenda for a number of years. In 2001, for example, the FAO adopted a comprehensive (but voluntary) international plan of action to reduce, eliminate and deter IUU fishing, which was adopted by all FAO member states. More recent work by OECD has recognized the fundamental point that IUU fishing is primarily an economic activity, guided by profitability, and has been aimed at identifying the economic drivers of IUU fishing activity.<sup>4</sup> The ministerially led Task Force on IUU Fishing on the High Seas, in its final report of March 2006, identified a number of ways of tackling these perverse incentives and drivers.

#### BOX 2: ILLEGAL, UNREPORTED AND UNREGULATED (IUU) FISHING

The value of IUU fishing worldwide is estimated to lie somewhere between \$4.2bn and \$9.5bn.<sup>5</sup> The portion of this directly attributable to IUU fishing on the high seas amounts to some \$1.25bn. These statistics do not tell the whole story, however. They do not, for instance, take into account the indirect effects of high seas IUU activities on the waters of coastal states, particularly developing countries, in terms of lost fishing opportunities. In Tanzania, for example, it is estimated that in 2001 illegal incursions into the EEZ by high seas tuna longliners resulted in lost revenue of some \$20m. In Guinea, it is estimated that between 20 and 60 per cent of vessels fishing within the EEZ are unlicensed. Losses from illegal activities were estimated at \$81m in catches of shrimp, octopus and discarded demersal fish. This may be compared with income from the bilateral fisheries access agreement with the EU of around \$9m. Guinea is by no means the only developing country so affected and in fact is rather typical of sub-Saharan Africa, where the cost of illegal fishing as a whole is estimated at about \$900m (about 19 per cent of current landed value).

At the same time, the failure to deal adequately with the domestic oversupply of fishing inputs in the form of vessels and labour, and the fact that fish catching resources have little, if any, alternative use, has resulted in excess capacity being pushed onto the high seas in search of new opportunities. It also provides a ready supply of these inputs for IUU fishing on the high seas. The problem is exacerbated by the closure of some exclusive economic zones (EEZs) to other nations' fleets and in some cases by policies aimed at assisting the transition of fishers out of over-exploited domestic fisheries, as well as inaction by other states which provide operational bases and a freeing up of investment and trade arrangements. There is growing concern, especially on the part of developing states, that the excess capacity problems of developed states and entities are being exported into IUU fishing activities. Subsidies which facilitate the supply of these inputs, such as subsidies for vessel construction and modernization which contribute to excess capacity, naturally exacerbate this problem, as do other subsidies aimed at facilitating the recovery of in-zone stocks.<sup>6</sup>

A particularly egregious problem is that of so-called 'free riders' – states which fail to join RFMOs, but continue to fish, thus undermining the conservation measures put in place by the RFMOs. In some cases it is clear that states deliberately remain outside the regime in order to provide opportunities for illegal fishers to operate outside the international governance framework. These fishers register or reflag their fishing vessels in states that are not members of the RFMO concerned so that they can fish on the high seas unrestrained by the conservation measures set by the RFMO. The Fish Stocks Agreement explicitly allows States Parties to take 'measures consistent with [the Agreement] and international law' to deter non-parties from undermining the effectiveness of conservation and management measures adopted by an RFMO. The sort of measures that might be invoked include market measures, such as catch documentation schemes, as well as more rigorous supervision in ports, such as inspections. These measures are beginning to bite, but need to be implemented more widely and more consistently. In reality the enforcement action that may be taken by coastal states against vessels suspected of illegal fishing on the high seas is quite limited. This leads to an obvious weakness in governance arrangements where irresponsible flag states are unable (through lack of resources, as in the case of some developing countries) or unwilling (because they offer a safe haven to illegal fishers and organized crime) to enforce compliance.

RFMOs are under increased scrutiny in other areas as well. Heightened interest by organizations not traditionally associated with fisheries has led to increased

<sup>4</sup> OECD, *Why Fish Piracy Persists: The Economics of Illegal, Unreported and Unregulated Fishing*, OECD, Paris, 2005.

<sup>5</sup> MRAG, *The Impacts of IUU Fishing on Developing Countries*, Marine Resources Assessment Group, London, 2005.

<sup>6</sup> A. Cox, *Subsidies and Deep Sea Fisheries Management*, OECD, Paris, 2004.

criticism of fisheries management methods and calls for the use of an ecosystem approach to fisheries management. Although the Fish Stocks Agreement seeks to operationalize the precautionary approach in the context of fisheries management, there has been little evidence of its application in the management action taken by most RFMOs to date. Most RFMOs continue to apply single species models for fisheries management that focus on the effects of fishing on the target species and seek to identify harvest levels (either in terms of tonnes caught or effort to be expended) that are intended to allow a single stock to maintain over time a sustainable level on average. This approach to fisheries management falls short of meeting the obligations explicitly spelt out in the Fish Stocks Agreement with respect to species associated with or dependent upon the target species, such as birds, seals, sharks, cetaceans and turtles. It ignores the fact that the target species does not exist in isolation and that changes in stock size of a top predator such as tuna may affect the growth rates of other predators through reduced competition for food as well as affecting prey species abundance. It has to be recognized that overfishing in general (not just illegal fishing) has an impact not only on target species, but also on the wider ocean ecosystem.

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### Improving RFMO performance

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Some RFMOs have already taken steps to critically assess their performance and make the necessary adjustments to their mandates or their practices to better meet their objectives. IATTC, for example, has reviewed its constituent instrument and in 2003 adopted the Antigua Convention (not yet in force) which aims to strengthen the mandate of the organization in line with modern fisheries instruments. NEAFC, NAFO and, most recently, ICCAT, have taken steps to review their mandates and performance. In January 2007, the first ever joint meeting of all five tuna RFMOs was held in Kobe, Japan to consider ways of improving coordination and cooperation between these bodies.

As a related initiative, following on from the work of the ministerially led Task Force on IUU Fishing on the High Seas, an independent high-level panel to develop a model for improved governance by RFMOs was established in August 2006. The work of the panel, which is financed by the governments of Australia, Canada, New Zealand and the United Kingdom and WWF International, is hosted by the Energy, Environment and Development Programme at Chatham House. The mandate of the panel is to develop a model for improved governance based on an analysis of the requirements of international fisheries instruments and best practice in their application. Ultimately, it is intended that the model should be capable of providing guidance for the assessment of RFMO performance in relation to international fishery instruments, but it should also address important new and emerging issues of concern.

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### Core challenges and priorities for reform

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The panel's preliminary analysis indicates that there is clearly scope for more effective cooperation between members of RFMOs and between RFMOs themselves, particularly in the area of compliance and enforcement. Practical steps that could be taken without the need for any change to existing paradigms include, for example, standardizing and sharing or consolidating vessel registers and information from vessel monitoring systems. Implementation of the FAO port state model scheme on a regional basis, combined with a standardized approach to catch documentation schemes, would also reduce the opportunities for IUU fishing. The introduction of alternative dispute resolution procedures, such as technical panels of experts, would help to promote more effective decision-making. And a more systematic approach to the problem of non-members would help to reduce the scope for RFMO measures to be undermined.

Nevertheless, there are some issues that are likely to prove very difficult for RFMOs to deal with.

#### ***Ecosystem-based management and the precautionary approach***

Ecosystem-based management acknowledges that fishing and other activities take place within complex communities of organisms and habitats and that fishing is only one of many human activities which impact on these marine environments. The main goal of ecosystem-based management with respect to fisheries management is to ensure the sustainability of catches without compromising the inherent structure and functioning of the marine ecosystem. Although defining best-practice approaches may be relatively straightforward, these new approaches pose significant implementation challenges. Managing complex marine ecosystems requires considerably more data and information about ecological relationships and the impact of human activities than single-species management regimes. External factors such as poverty alleviation, food security, profit motives and lack of political will are likely to hinder progress in achieving effective management of marine resources under these new schemes just as they did under single-species regimes. One approach for RFMOs may be to incorporate more active management rules for species of particular conservation concern. This would ensure not only that reference points were set for the take of the target species (which are usually dominant species) in a single-species context, but also that these reference points were linked to the sustainability of associated or dependent species of special concern.

#### ***Allocation***

The greatest threat to the stability of management regimes introduced by RFMOs is the failure to allocate fishing opportunities on an equitable basis. It is therefore essential to address the allocation problem if a

breakdown in the cooperative management of the resource is to be averted. The allocation problem cannot, however, be addressed until the problems of intra-RFMO compliance, unregulated fishing and accommodating new members have first been resolved. Simply closing the door to new members at the regional level is likely to prove ineffective on a global scale. RFMOs should be empowered to consider the use of a wide range of mechanisms for achieving acceptable economic benefits to all parties from cooperation and compliance, including access arrangements, quota trading and leasing.

### ***Moving towards an operational basis for introducing developing countries to high seas resources***

Greater and more decisive, coordinated and coherent engagement with developing countries is essential if the problems of international fisheries governance are to be resolved. IUU fishing has a devastating impact on the economies and livelihoods of developing countries. However, the other side of the coin is that one of the key drivers of the same IUU fishing is the presence of non-compliant fishing vessels flagged to open registries, many of which are based in developing countries. At the same time, developing countries want access to high seas resources (e.g. tuna), but existing fishing countries are loath to reduce their holdings in already fully subscribed fisheries. The result is that allowed catch levels are effectively pushed higher to accommodate both, in the hope of a later mutual phasedown being agreed, and stocks are put at risk.

These issues are foreseen in the UN Fish Stocks Agreement, which provides general guidance as to the forms of assistance that are to be given to developing countries and the objectives of that assistance. This general guidance needs to be operationalized in a more coherent and effective manner. Assistance to developing countries should be directed at creating the institutional, management and technical capacity for effective control of their own vessels throughout the world as well as foreign vessels within their own waters, and at fostering the active cooperation of developing countries with regional management arrangements. Novel operational solutions need to be found to accommodate the legitimate fishing aspirations of developing countries (general principles are inadequate): for example attrition,

whereby a small percentage of all existing holdings reverts to a central pool each year for redistribution, should be considered.

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## Conclusion

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The expectations placed on RFMOs have grown exponentially in recent years. The last twenty years in particular have seen a plethora of hard and soft law instruments aimed at addressing the problems of international fisheries governance. However, despite the proliferation of RFMOs and the development and evolution of instruments aimed at empowering them, RFMOs have generally failed to prevent over-exploitation of straddling and highly migratory fish stocks and degradation of the marine ecosystems in which they occur. Not only have broader expectations not been met, but RFMOs have largely failed to meet the objectives of their own constituent instruments, generally characterized as the conservation and sustainable utilization of target stocks under their mandate. It is difficult to identify examples of sustainable management of target stocks by RFMOs.

Ongoing discussions concerning improvements to the global system of oceans governance have canvassed a wide range of institutional and legal reforms, including the establishment of an overarching global oceans governance commission, new implementing agreements for the management of discrete high seas fish stocks and biodiversity on the high seas, and a new paradigm for the allocation of high seas fishing rights. At the same time, however, and in response to growing concern about the gravity of the global fisheries problem, significant efforts are being made to strengthen RFMOs and improve their performance. Achieving this goal presents a serious challenge to the international community, not least because there remains in practice great divergence in the mandates and effectiveness of implementation of regulations by RFMOs. In part this is because many RFMOs were established prior to the Fish Stocks Agreement and do not necessarily possess the mandates to carry out all the functions ascribed to them. But it is also because of the lack of any systematic approach to the implementation of the Agreement by RFMOs, including effective means for cross-learning among RFMOs about best practices.

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## Energy, Environment and Development Programme

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