

International Organizations and Fisheries Governance

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36.1. INTRODUCTION

Sustainable use of marine resources requires an adaptive governance framework¹ that aligns incentives coherently to deliver responsible outcomes; balances the needs of governments, communities, industry, and civil society, among others; and responds to resource variability in a timely way. This implies that the knowledge, interests, and strengths of a broad array of players need to be brought together to inform legal, policy, and program options and encourage decisive, responsive choices.

What is the role and contribution of international institutions and organizations in helping to create frameworks to ensure that fisheries are sustainable and coherent with desired outcomes for broader oceans and biodiversity objectives? Institutions help to structure relationships among sectors in society, influence their preferences, and channel how ideas are brought into decision making processes (Kanie 2004). International institutions assist states in building appropriately integrated and iterative systems of governance both nationally and internationally, and to operate these systems with appropriate scope and scale.

Fragmented or incoherent operations by international organizations may impede their contributions to effective outcomes, and the outcomes themselves. The landscape of international environmental governance, including fisheries institutions, is indeed widely considered as fragmented and complex (see, e.g.,

Chambers and Green 2005; Kanie and Haas 2004). International fisheries arrangements often operate in a “siloe,” or isolated way, and often inappropriately disconnected from wider environmental governance.

This discussion

- Identifies the facets of integration that are important for fisheries and the parameters of an integrated system that require contributions from international organizations
- Identifies key types of international organizations implicated and roles they play
- Shows how the policy landscape in fisheries extends beyond agreements among fisheries agencies alone
- Argues that, despite current risks of fragmentation, other forces should help increase coherence and alignment if institutions are flexible enough to adapt

36.2. SETTING THE FRAMEWORK

36.2.1. The Role and Need for Integrated Approaches

In essence, *integration* is the creation of complete system(s) of interdependent components, embodying unity, wholeness, and soundness.² It emphasizes mutual dependence and synergy, i.e., systems where

“the whole is greater than the sum of the parts.” Integration is a higher standard of coherence than merely *cooperation* (working together, or “associating”) or *coordination*, where definitions reflect “relational” values (how to work together smoothly to greater effect).³ Notwithstanding the contributions that increased cooperation can make to fisheries outcomes (i.e., as described in game theory), from a systems point of view, if individual parts remain independent, then rather than adding value, alignment may simply ensure that the “total is not less than the sum of the parts.” *Collaboration*, with its focus on mutual buy-in and gain, is necessary for more integrated outcomes—the thesis of this chapter.

What drives the need for integrated management and governance in relation to fisheries? We consider three illustrative current contexts, among many possible examples.

36.2.1.1. Globalization

The challenges of globalization underlie many current heated policy discussions in fisheries. Globalization implies complex linkages among international participants, including states, which must work effectively and responsibly.

This increasing global interdependence includes, among other things,

- Increased integration and *interdependence of markets* (e.g., intraregionally/globally/between developed and developing countries)
- *Globalized value chain* of goods, services, and investment (e.g., outsourcing, reexports, and reimports)
- Increased *mobility of inputs* (e.g., labor, capital, including vessels)
- Increased “reach” of sophisticated *integrated transportation and logistic* (e.g., enabling trade among more diverse fishery producers)
- Increased *transfer of technology and knowledge* (e.g., to meet international import standards, developing country capacity-building);
- Increased *linkages among activities and issues* (benefits and risks) needing *regional and global institutions and norms* (e.g., illegal, unreported and unregulated [IUU] fishing)
- *Shared global threats needing cooperative solutions* (e.g., fisheries sustainability, environmental threats, climate change)

A coherent and effective governance system for fisheries would ensure that globalization would

yield net benefits rather than the often-feared net costs for fisheries and fisheries interests.⁴

36.2.1.2. Ecosystem Approach and Biodiversity

The relationship between fishing and biodiversity is dealt with at length in chapter 10, which examines joint obligations, the integrated nature of fishing and biodiversity threats, and solutions through application of ecosystem approaches to fisheries and spatially integrated management in a unified system of management.⁵ Looking at this same issue from the point of view of *institutions*, an ecosystem approach to fisheries (EAF) (Food and Agriculture Organization of the United Nations [FAO] 2003; Garcia and Cochrane 2005) acknowledges that the success of fisheries management and policy is affected by the following:

- *Environmental factors over which management can exert little control, but to which management must respond appropriately*: management must have the flexibility to be adaptive, with low transaction costs and rapid mechanisms.
- *Policy and management activities outside the geographic jurisdiction of the management agency*: efforts of adjoining agencies must be collaborative and complementary.
- *Activities of other industry sectors*, which can affect the fisheries resources or habitats for which the fisheries agencies are responsible: efforts of sectoral agencies must also be collaborative, complementary and reciprocal.

This implies greater integration among institutions and players that may not have a history of close collaboration.

36.2.1.3. The Domestic/International Nexus

International and domestic fisheries are inextricably linked in both the threats they face and the solutions available to them. For instance,

- Overcapacity arising from poor domestic fisheries management regimes (including incentives mechanisms) can migrate into illegal high-seas fisheries.
- Preoccupations with international resource allocations for domestic fleets can interfere in international cooperation on high seas fisheries.

- High-seas illegal fisheries can displace domestic fisheries directly or through price impacts.⁶
- International norms are important to domestic policy and regulation.⁷
- Domestic priorities and challenges will affect the international norms that can be achieved.⁸
- Fisheries on straddling or highly migratory stocks require compatible management within and outside exclusive economic zones (EEZs).
- Global demand for accountability is slowly driving integrated national and international reporting on progress in meeting international standards.

These three examples alone show why policy and institutional coherence is essential to properly operating fisheries governance systems. Rarely will any single institution achieve its objectives independent of objectives and strategies adopted by other institutions. Achieving coherence needs timely and directed effort. Explicit planning is essential because differing scopes, mandates, and objectives inhibit natural incentives for convergence on options among institutions. Integration too late in the planning process (i.e., after buy-in by participants to individual institutional approaches) can focus attention on presumed costs—rather than advantages—of integration and joint planning.

36.2.2. Some Dimensions of the Integration Challenge in Fisheries

A well-functioning fisheries system needs integration across the following dimensions:

- “Horizontal” integration: across different participants (e.g., international institutions/organizations, states, and stakeholders).
- “Vertical” integration: the local–regional–international continuum (Kanie 2004; Strand 2004) or, alternately, a continuum of technical knowledge through policy and management, to political decision making (e.g., science–policy linkages). Failures in accountability at one level can cause confusion or adaptation of accountabilities, which weakens the management system.⁹
- Integrated “tool kit”: many disciplines are needed: legal frameworks and norms, “soft law” guidelines and policy frameworks, technical management tools, enforcement, economic instruments to align incentives for compliance and stewardship, and integrated knowledge systems supporting all.

- Spatial integration: ocean threats and biodiversity loss can be addressed, in part, through integrated spatial management at a variety of scales from watershed, through coastal zones, and through EEZs to areas beyond national jurisdiction. New approaches to protecting resources and ecosystems implies moving from fisheries management approaches that are inherently population-based toward ones that are inherently place-based (Rice 2005, 2009).
- Domestic/ international integration (described above).
- Sustainable development: integration of ecological/environmental, economic and social interests into shared objectives, through effective integrated decision making and reporting.
- “Mainstreaming” of widespread threats coherently across a range of issues (e.g., interaction of climatic change with oceans and fisheries).

Both capture fisheries and aquaculture are deeply implicated in all of the above. Moreover, these dimensions are interdependent, yet they involve international institutions and organizations and other relevant players in different ways. Interdependence means that intended improvements in one dimension will have consequences for performance on others, yet too often with no assurance that consequences will be considered during planning—or expected by the participants across—diverse forums.

36.2.3. How Do International Organizations Play a Role in Helping or Hindering Such Aspects of Integration?

What are the governance roles that institutions and organizations play across the dimensions above, and what opportunities (or impediments) do they present for improved integration?

Collaboration is needed across the planning cycle, for example, knowledge generation, problem identification/diagnosis, awareness raising, priority setting, analysis and options, implementation, compliance and enforcement, monitoring, and review. Associated with these stages are enabling functions such as capacity building (through financial, technological, and knowledge transfer). (See Haas et al. [2004] for alternate taxonomies¹⁰ and Dotinga and Molenaar [2007] for perspectives on practical integrated roles for various institutions in particular regions.)

Whatever the opportunities for collaboration, international organizations make contributions through their key activities and strengths, for example,

- Their convening power, i.e., debates they sponsor and encourage.
- Direct integration, which they foster through involvement of diverse players/institutions.
- Research and knowledge creation that they sponsor and diffuse.
- The conceptual, legal, regulatory, and operational frameworks they develop.
- The legal and technical tools they help build.
- The partnerships they encourage.
- Monitoring and review that they encourage or undertake.
- Accountability mechanisms that they help build, such as for states and agencies.

All of these provide opportunities for integration, but if done poorly also pose potential risks, by impeding debate on key issues, excluding key players from planning processes and failing to support key types of research.

When organizations reach out to interact on shared topics, they can be pulled into subjects where they realistically lack some appropriate expertise. This can encourage true collaboration and liaisons among institutions with complementary expertise (e.g., through co-management partnerships, memoranda of understanding [MOUs] between management bodies and expert science organizations). However, interference and blockage can occur if organizations dismiss others' expertise as biased or irrelevant, or use "homegrown expertise" not credible outside the originating organizations.

International organizations play these roles among different communities and disciplines, at different scales, across different but related issues (e.g., fisheries and biodiversity), sometimes collaboratively and sometimes territorially. Appropriate interinstitutional tension can motivate policy and program innovation, but—if extreme or inappropriate—can sometimes lead to bureaucratic overload for states (especially for developing countries) and create unhelpful public and stakeholder confusion and backlash.

Several disciplines are involved in international rule making and management across activities sponsored by international organizations:

- *Scientific experts* (e.g., stock assessment scientists, ecosystem scientists, oceanographers)

- *Technical experts* (e.g., fisheries managers, enforcement experts, economists and social scientists)
- Domestic and international *legal experts*
- *Policy experts* and *diplomats* across relevant fields
- *Industry* participants (e.g., harvesters, processors, buyers)
- Media and *communications* experts

Different institutional settings will offer different perspectives of particular disciplinary expertise. A balanced selection of experts from various settings can bring different interpretational perspectives together for more complete debate and more integrated conclusions. Institutional settings include:

- National (or subnational) governments
- Academia
- Nongovernmental organizations (NGOs; including environmental)
- International organizations and bodies at various local regional and global scales
- The private sector, including the fishing industry itself

The diversification of expertise within institutions is creating greater opportunity for both integration and competition. This can be seen, for example, in fishing industry members participating in expert science advisory processes and co-management bodies, or their industry organizations hiring natural and social scientists and management experts. Fisheries-oriented departments and intergovernmental organizations (IGOs) are hiring a wider range of social scientists.

The framework of this section has provided a perspective to examine the institutional interactions in fisheries and evaluate whether international institutions are reaching their collective potential. The following sections describe the activities of international organizations in this light.

36.3. INTERNATIONAL ORGANIZATIONS LINKED TO THE FISHERIES AGENDA

36.3.1. Who Are the Institutional Players?

The detailed landscape of international organizations, agencies, and bodies in fisheries and oceans

TABLE 36.1 Mapping of multilateral and regional forums^a

Managing International Fisheries Sustainably	Supporting Environmental Sustainability and Healthy Marine Ecosystems	Science: Building Understanding of Fisheries and Oceans Resources	Select Programs, Subcommittees, and Working Groups (illustrative)
States Parties to Law of the Sea Convention			International Seabed Authority (ISA), International Tribunal of the Law of the Sea, Commission on the Limit of the Continental Shelves
U.N. Informal Consultative Process on Oceans and Law of the Sea (UNICPOLOS)			
U.N. Fish Stocks Agreement			Committee on Fisheries, Subcommittees on Aquaculture and Trade
U.N. Food and Agriculture Organization (FAO)			
U.N. Marine Biodiversity Working Group Beyond Areas of National Jurisdiction (BBNJ)			Subsidiary Body on Scientific, Technical, and Technological Advice, Working Groups on Access and Benefits Sharing of Genetic Resources and Protected Areas
Convention on Biological Diversity (CBD)			
World Conservation Union (IUCN)			Working Group on High Seas Governance
Global Oceans Forum (GOF)			
Regional fisheries management organizations (RFMOs)			NAFO, NEAFC, WCPFC, NASCO, IATTC, ICCAT, IPHC, CCAMLR
Asia Pacific Economic Cooperation (APEC)			Marine Resource Conservation Working Group, Fisheries Working Group
Commission on Environmental Cooperation			Programs on conservation of biodiversity, etc.
International Council for Exploration of the Sea (ICES)			Advisory Committee on Fish Management, Advisory Committee on Ecosystems
WorldFish Center			Various research activities on small-scale fisheries and aquaculture
U.N. General Assembly Resolutions (UNGA)			Sustainable Fisheries Resolution, Omnibus Law of the Sea Resolution
Informal Consultation of States Parties (ICSP) to UNFSA (ICSP)			Fisheries Committee, Environmental Policy Committee, etc.
Organization for Economic Cooperation and Development (OECD)			
International Maritime Organization (IMO)			Marine Environment Protection Committee
	International Seabed Authority (ISA)		Programs on Oceans Sciences, Ecosystem Integrators, ABLOS Protection of the Arctic Marine Environment Working Group
	U.N. Environment Program (UNEP) Global Program of Action		
	Intergovernmental Oceanographic Commission (IOC)		
	Arctic Council		
	North Pacific Marine Science Organization (PICES)		Fishery Science Committee, Marine Environmental Quality Committee
		CITES	Animals Committee (Science), Conference of Parties, etc.
Convention on International Trade of Endangered Species of Fauna and Flora (CITES)			

(continued)

TABLE 36.1 Continued

	Global Marine Assessment International Hydrographic Organization	Assessments of scientific assessments
World Trade Organization (WTO)		Ongoing fish subsidies negotiations under Doha Round, nonagricultural market access negotiations for fish/seafood, trade policy review mechanism, multicountry negotiations to access to WTO, general agreement on trade in services
International Labor Organization (ILO)		Work in Fishing Convention, adopted June 2007
International Institute for Fisheries, Economics, and Trade		
High Seas Task Force		
World Bank Profish		Supports sustainable fisheries and ecosystem sustainability initiatives
Global Environmental Facility (GEF)		Supports ecosystems and protected areas initiatives, etc.

^aFor abbreviations that are not defined in this table, please see table 36.2.

globally is too complex to describe fully here. However, one can lay out an illustrative list of organizations (or collections of bodies) across three key indicative functions¹¹ linked to overall fisheries sustainability:

1. Building an understanding of fisheries and oceans
2. Managing for sustainable fisheries
3. Managing for broader marine environment and ecosystem sustainability

This is a deliberately narrow framework for illustrating the roles of fisheries-related institutions. A broader sustainable development framework could encompass more social and economic functions for fisheries-oriented institutions (including maintenance of coastal livelihoods, uniting fisheries economics with, among other things, trade and other activities in the value chain and community and coastal zone management).¹² For simplicity, these are not addressed here, but would make the need for coherence across policies and thus, institutions even greater.

Table 36.1 illustrates how global and regional institutions operate in combination across these three key illustrative functions. Whether mandates or “reach”

are narrow or broad, these institutions contribute to the collective outcome of these combined functions. Moreover, diverse government interlocutors with these agencies are part of the institutional landscape.

Tables 36.1 and 36.2 implicate more than two dozen types of institutions as engaged in direct activities of “fishing.”¹³ Some of these are themselves collectives of individual organizations or bodies (e.g., regional fisheries management organizations [RFMOs]).¹⁴ Some are intergovernmental, while others are more informal. These institutions illustrate the potential spectrum of policy, management, research, and science bodies, with ecological, economic, and social mandates.

Fishing-specific policy forums sponsoring formal state-to-state dialogue at a “global” level include, for example, the Food and Agriculture Organization of the United Nations (FAO; global) and Organization for Economic Cooperation and Development (OECD; mainly developed countries) and their sponsored fisheries-related committees, and the U.N. Informal Consultation of States Parties (ICSP) to the U.N. Fish Stocks Agreement (UNFSA). Broader policy bodies include, for instance, some fisheries-related meetings of the U.N. Informal Consultative Process on Oceans and the Law of the Sea (UNICPOLOS). Regional approaches rely on,

TABLE 36.2 List of acronyms of international organizations

Acronym	Organization
ABLOS	IHO/IAG Advisory Board on the Law of the Sea
APEC	Asia Pacific Economic Cooperation
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CPLP	Community of Portuguese Speaking Countries
CODEX	Codex Alimentarius Commission
EJF	Environmental Justice Foundation
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environment Facility
GEOSS	Global Earth Observation System of Systems
GRAME	Global Reporting and Assessment of the State of the Marine Environment
GOF	Global Forum on Oceans, Coasts, and Islands ("Global Oceans Forum")
GOOS	Global Ocean Observing System
IAG	International Association of Geodesy
ICES	International Council for the Exploration of the Sea
IGO	Intergovernmental Organization
IHO	International Hydrographic Organization
ILO	International Labor Organization
IMO	International Maritime Organization
ISA	International Seabed Authority
IPHC	International Pacific Halibut Commission
IUCN	The World Conservation Union (International Union for Conservation of Nature and Natural Resources)
IWC	International Whaling Commission
LME	Large Marine Ecosystem
MCS Network	International Monitoring, Control and Surveillance Network for Fisheries Related Activities
MOU	Memorandum of Understanding
MSC	Marine Stewardship Council
MSR	Measurement Science Review
NASCO	North Atlantic Salmon Conservation Organization
NEPAD	New Partnership for Africa's Development
OECD	Organization for Economic Cooperation and Development
PEMSEA	Partnerships in Environmental Management for the Seas of East Asia
PICES	North Pacific Marine Science Organization
PIF	Pacific Islands Forum
SEAFDEC	Southeast Asian Fisheries Development Center
U.N.	United Nations
BBNJ	U.N. ad hoc open-ended informal working group on Marine Biodiversity Beyond National Jurisdiction
UN-CSD	U.N. Commission on Sustainable Development
UNDP	U.N. Development Program
UNEP	U.N. Environment Program
UNESCO-IOC	U.N. Educational, Scientific and Cultural Organization—Intergovernmental Oceanic Commission
UNFSA Review	U.N. Fish Stocks Agreement Review
UNGA	U.N. General Assembly
UNICPOLOS	U.N. Open-ended Informal Consultative Process on Oceans and the Law of the Sea (also known as UN-ICP)
WTO	World Trade Organization

for example, management bodies of RFMOs, the Asia Pacific Economic Cooperation (APEC) Fisheries Working Group, and some aspects of the Marine Conservation Working Group, and other regional fishing-related forums, such as the Southeast Asian Fisheries Development Center (SEAFDEC). Science

bodies include appropriate expert groups of the International Council for Exploration of the Sea (ICES), North Pacific Marine Science Organization (PICES), RFMOs, and the WorldFish Center (focusing on small scale fisheries and aquaculture for developing countries).

These organizations, and others like them, engage fisheries experts in a variety of ways, with both strength and weaknesses. For example, the FAO, OECD, and APEC engage international fisheries policy experts, who may be relatively weaker themselves on technical aspects of fishing. Scientists, operational fisheries managers and, control and enforcement experts are engaged most directly in the RFMOs but may have little connection to international policy priorities driving RFMO accountability. Science bodies, especially within RFMOs, engage the science community, although not necessarily in an integrated way.¹⁵ While consultations among UNFSA states parties could lever comprehensive and integrative debate among international fisheries policy experts at the United Nations, some delegations consist of foreign affairs or U.N. legal experts, who may have different preoccupations. Considerable synergy could be realized if collaboration of expert fishing views were brought together more consistently.

State delegations to the nonfisheries forums in table 36.1 include various mixes of foreign affairs, environment departments, maritime industry and labor departments, and other (nonfisheries) disciplines in marine sciences. Such forums are also attended by fisheries experts, but inconsistently across issues and states, depending on diverse governmental approaches. All forums in table 36.1 include different mandates for, and mixes of, stakeholders. Stakeholders also choose the forums they wish to engage in strategically, according to focal themes of the forums, participatory rights they are given, and the receptivity of the forums to their inputs.¹⁶

36.3.2. Are International Organizations/Institutions Fulfilling Their Potential to Contribute to Integrated Governance?

Points of potential institutional collaboration can be identified across specific key functions described earlier (e.g., across the planning cycle, for specific regions). Table 36.3 applies an adapted Kanie-Haas framework (Haas et al. 2004) to illustrate examples of how greater collaboration could be achieved in these key functions.

36.3.2.1. Agenda and Priority Setting

At the level of agenda and priority setting *within fisheries*, there is fairly *high coherence*. The function sits

mainly in multilateral policy institutions, and their strong networks of interlinked players, sometimes themselves convened in informal processes, such as the Global Forum on Oceans, Coasts, and Islands (GOF). The U.N. General Assembly, through its Sustainable Fisheries Resolution, consolidates and signals comprehensive emerging priorities, even directing work to specific bodies and sometimes explicitly outlining collaboration needs. As the resolution is generally adopted by consensus, the commitments are robust. The United Nations also hosts discussions, such as the United Nations' ICSP to UNFSA, as well as an ad hoc open-ended informal working group on Biological Diversity beyond Areas of National Jurisdiction (BBNJ).¹⁷ Importantly, through the U.N. Convention on the Law of the Sea (UNCLOS), the United Nations has the key international mandate for governance in areas beyond national jurisdiction. The fisheries community generally prefers to avoid broad U.N. politics altogether in favor of working within both the specialized U.N. fisheries agency (FAO) and RFMOs (see table 36.4). But for broader issues such as high-seas biodiversity, the fishing sector overcomes this reticence and prefers a close association with the United Nations, whereas the biodiversity conservation community prefers the Convention on Biological Diversity (CBD) and related forums. UNCLOS facilitates the fisheries preference for the United Nations by being interpretable as a sectorally based convention, further enabled and detailed by its main implementing agreement UNFSA for straddling and highly migratory fish stocks. Provisions of UNCLOS itself are also used by the biodiversity community to support their preference for the CBD to address the same issues.

The FAO, a U.N. specialized agency, hosts various bodies, such as the Committee on Fisheries (COFI) and its two subcommittees (Trade, Aquaculture). It is the only global fisheries-related institution sponsoring state-to-state debate and negotiations on norms and tools, even though that mandate is nested in a broader food and agriculture/fisheries/forestry mandate. Its secretariat is one of the major international contributors to technical fisheries research and analysis. It has led innovation in new obligations now enshrined in international law (UNFSA), such as the use of the precautionary approach (FAO 1996a, 1996b) and ecosystem approach (FAO 2003). As a global institution with an extensive secretariat, states expect FAO to be the representative "voice" of the fisheries sector in

TABLE 36.3 Illustrative functions of key international organizations active in fisheries^a

Function	Within Fisheries	Priority Areas Linked to Fisheries
Issues linkage, e.g., across issues, institutions or projects	FAO, OECD, regional forums/treaties (e.g., APEC, Arctic Council, Antarctic, PIF), U.N. (various), IUCN, national governments, WorldFish Center	CBD, U.N., UNEP, UNDP, IMO, WTO, LMEs, Regional Seas-type organizations, GOF, national governments
Agenda setting, e.g., including generating political buy-in	UNGA resolutions, UNFSA Review, BBNJ, UNICPOLOS, FAO, APEC, arctic and other regional forums, ad hoc high-level conferences, IUCN, some NGOs/ENGOS	GOF, CBD, CITES, IMO, UNEP, WTO, UNICPOLOS,
Developing usable knowledge, e.g., information for decision-making	OECD, FAO, ICES, PICES, other scientific bodies, RFMO scientific bodies, academics, UNEP, UNESCO-IOC, IUCN, NGOs/ENGOS, WorldFish Center, PEMSEA, SEAFDEC, national governments	IMO, ISA, LMEs, Regional Seas-like bodies, UNEP, RFMO scientific bodies, national governments, UNESCO-IOC, GOOS, GEOSS, Census of Marine Life
Monitoring, e.g., scanning, threats detection, implementation successes and failures	FAO, OECD, RFMOs, NGOs/ENGOS, UNEP, WorldFish Center, national governments	CBD, GOF, IMO, ISA, UNEP, science bodies, UNESCO-IOC, future Global Marine Assessment, U.N. Atlas, NGOs/ENGOS, regional forums, national governments
Norm development, e.g., guidelines, codes, best practice delineation	FAO, OECD, industry-led codes of conduct CODEX, ILO, IUCN, private codes (e.g., MSC), ENGOS, EJF, Chatham House	IMO, ILO, CBD, scientific codes (i.e., MSR)
Rule making, outcomes of negotiations, can be with sanctions or dispute resolution mechanisms	U.N., FAO, WTO, CITES, state unilateral actions (e.g., technical requirements for trade), RFMOs, IWC	IMO, ILO, London Convention, IWC
Policy verification, e.g., verifying state and others' compliance	FAO, OECD, U.N. Reviews, IUCN, RFMOs, national governments	CBD, UN-CSD, GOF, national governments
Enforcement, e.g., sanctions, liability, shaming	RFMOs, WTO, CITES, NGOs/ENGOS, national governments	National government RFMOs, WTO, CITES, NGOs/ENGOS, national governments
Capacity building and technology transfer, e.g., education, technical training, tech assistance	Official development assistance, partnerships across and within IGOs, regional bodies (e.g., APEC, PIF), NGOs/ENGOS, bilateral and regional MOUs, RFMOs, UNDP, NEPAD, CPLP, MCS Network, WorldFish Center	Official development assistance, partnerships across and within IGOs, regional bodies (e.g. APEC, PIF), NGOs/ENGOS, bilateral and regional MOUs, GOF
Promoting vertical linkages, e.g., interorganizationally or among decision makers	FAO, OECD, NGOs/ENGOS, UNEP, UNESCO-IOC	GOF, UNICPOLOS, UNEP, CBD, UNESCO-IOC
Financing, e.g., financing institutions	Official development assistance, World Bank, regional development banks, FAO, U.N. trust funds, GEF, multilateral bodies	Official development assistance, World Bank, regional development banks, FAO, U.N. trust funds, multilateral bodies

^aFor abbreviations that are not defined in this table, please see table 36.2.

broader international debates, as well as advance the complex normative agenda with respect to fisheries governance and management. The FAO is deeply engaged in capacity-building fieldwork for developing countries—often on a regional basis—and is the

definitive source of the most important integrated fishing data and monitoring globally.

The OECD COFI plays a key role as an analytical/research body for emerging economic issues of importance to member governments and international

debate. The OECD concerns itself with international cooperation among mainly developed countries, although it increasingly includes major developing states in its activities through various cooperative mechanisms. While its membership is not global, its work has increasing global reach through analysis of topics with high international resonance, and through workshops drawing on broad expertise globally (in fisheries, often in partnership with FAO). Its work is inherently integrating, as its focus is on analytical frameworks and practice that holistically situate current management changes and debates (see chapter 23).

At the regional level, various regional umbrella organizations translate global priorities into regional action (e.g., APEC, SEAFDEC, Partnerships in Environmental Management for the Seas of East Asia [PEMSEA]). Ad hoc regional processes are also powerful, such as a recent initiative on IUU fishing among states involved in the newly formed “Coral Triangle Initiative.”

When progress lags on key issues in a manner that cannot be solved by officials alone, high-level ministerial meetings may cement priorities at the political level. For example, the ministerially led High Seas Task Force in IUU fishing (2006), launched by the OECD Roundtable on Sustainable Development, helped set in train an IUU agenda that still frames present actions. The St. John’s Conference in Canada, held in 2005,¹⁸ is widely credited with having launched an RFMO reform agenda. Initiatives in the South Pacific Islands with Australia on IUU fishing are providing similar leadership and high-level commitment.

There is much less coherence in how fisheries are addressed in the broad marine, or oceans “agenda setting,” despite key bodies in the broader debate having “integrative” roles by definition (see chapter 10). As relates the United Nations, the U.N. Omnibus Resolution on Oceans and the Law of the Sea makes political linkages and cross-references to fishing as appropriate, but this and the Sustainable Fisheries Resolution address quite different constituencies. The CBD is rooted in an international convention with nearly universal ratification that lays out principles for conservation and sustainable use of biodiversity, and for sharing of benefits from use. It does not differentiate among marine or terrestrial biodiversity, although it does have a marine program called the Jakarta Mandate. Theoretically, the CBD could be a logical central forum for marine “agenda setting,” necessarily

linked closely with fisheries institutions given that CBD has no jurisdiction for direct management of fisheries (or other activities) in the high seas. Its mandate is for provision of scientific and technical advice (including on conservation norms) for use beyond national or management jurisdictions, and by states if and as they choose. However, the mutual lack of trust between CBD stakeholders and fisheries critically weakens this integrative role. Delegations to CBD rarely include fisheries experts and fishing stakeholders, whereas environmental NGOs (ENGOs) are numerous. Recommendations unsympathetic—and sometimes contrary—to international fisheries policy direction can find greater support in CBD debates. Similarly, delegations to FAO COFI rarely include biodiversity experts, whereas fishing organizations are active. The coherence in policy dialogue within these two settings also can suffer because many states send entirely different government interlocutors (with different views) to the two forums. Such state incoherence confuses other states and the international organizations themselves. It can lead to unhelpful “forum hopping,” where interest groups seek out the forums that will be most sympathetic to their perspective.¹⁹ Ideally, coherent national state viewpoints would help allow like issues to play coherently across organizations according to their strengths, and contribute to coherence and closer collaboration among institutions.

Similar lack of coherence has occurred in respect of Convention on International Trade of Endangered Species of Fauna and Flora (CITES), when examining whether trade contributes to endangerment of commercial marine species, and should be restricted. Confusion over actual and proposed mandate expansion of CITES (e.g., into management issues themselves) and incoherent national positions (i.e., between fisheries and environmental agencies within governments) have made some debates very difficult. There have also been strains among secretariats (e.g., between CITES and the FAO) with respect to the use of FAO expert advice as relates fisheries, but these differences are under resolution.

Informal forums can be useful in uniting diverse interests and players, as they suffer fewer institutional constraints, including “official” delegations and institutional roles that may inhibit open and free debate. The Global Oceans Forum (GOF) meets approximately every three years to monitor progress on World Summit on Sustainable Development (WSSD) commitments, but is trying to reorient

itself as a major integrator and agenda-setter across fisheries, oceans, and biodiversity issues. Notably, it explicitly encourages integration of management from watershed to coastal zone to the high seas. Some fishing policy experts are engaged in the GOF, less so technical fisheries experts, and rarer still, fishing industry interests, unlike other oceans sectors. (Meanwhile, the International Coalition of Fishing Associations is making strategic linkages to new forums outside immediate fishing organizations, and a new multisector industry coalition called the World Oceans Council is under early development. Both are intended to promote an industry voice in agenda setting). The Congress of the International Union for the Conservation of Nature (IUCN) plays a similar role but is much larger and involves state delegations among the various tables, featuring also significant ENGO presence.

In the absence of interagency MOUs and formal collaborative processes, some of these efforts may not achieve the systematic collaboration needed to ensure efficient leverage of knowledge, experience and resources. Some coordination and information sharing happens through coordinating bodies (UN-Oceans), and informal arrangements among secretariats of international organizations. When structural arrangements fall short of integration and coherence, drawing linkages among broader initiatives can fall to individuals from states, secretariats, or NGOs/IGOs with personal connections across issues, ministries, and international forums, relying on the individual influence they bring to international debate.

NGOs/ENGOS with a global reach can—and sometimes do—play an important integrating role. However when some advocate positions or use language hostile to fishing interests, they foster distrust by the fishing sector, reducing their effectiveness as potential bridge builders.

36.3.2.2. *Norms and Rules*

Generally the same institutions and players engaged in agenda-setting develop fisheries global norms and rules. Within fisheries, coherence is high. However challenges still arise, for instance, from alternate views among states and stakeholders of principles and approaches, such as precautionary and ecosystem-based approaches. With a few exceptions (e.g., flag and port state norms under development), sufficient rules are deemed to be in place within the traditional scope of fisheries to manage well. Key

shortcomings are, rather, weak implementation and impediments to reform. This has put emphasis on mechanisms for capacity building for developing countries and research in implementing reform. The FAO's Code of Conduct of Responsible Fishing (CCRF) is a key unifying framework for norms and rules taking into account both technical fisheries issues and developments of UNCLOS, the United Nations Conference on Environment and Development (UNCED), and the CBD, and providing key guidelines to assist implementation. However, as operational linkages to the broader biodiversity, oceans trade and development agendas gain priority, FAO members are beginning to demand that the FAO's active role become more integrative. If, within its current mandate, the FAO is de facto a preexisting "fishing equivalent" of a "World Environmental Organization" supported by a resilient policy framework—deemed by some as a necessary to effective international governance—then FAO needs to ensure it has integrative guidelines and tools that are contemporary, adaptive and sound. The FAO may need to periodically review and update its Guidelines, as international practice continuously adapts to global norms.

The World Trade Organization (WTO) is a critical institution supporting rules-based, nondiscriminatory trade across many dimensions. A new set of government trade-related norms is under negotiation, including for subsidies that create pressure for overcapacity and overfishing. If the Doha Round is ultimately successful and such subsidy discussions succeed (both highly uncertain at the time of writing), then ongoing collaboration between the WTO and FAO may be mandated (regarding definitions of certain subsidy types, international "standards" for fisheries management that might justify certain kinds of payments, review, or dispute processes). This need for potential institutional collaboration derives from OECD COFI clarification of conditions under which subsidies had negative impacts on fisheries. This example shows the potential for horizontal synergies at the sectoral policy level across three global institutions.

Private norms and standards driven by market demand for sustainable products (e.g., ecocertification) challenge the coherence of the overall governance system. Such norms and standards normally lie outside the formal state/rules-based global system, offering states little recourse to normal routes of trade recourse and dispute settlement, should market access be blocked by buyers' refusal of

nonecolabeled product. The risk is compounded if private standards compete with the current state of practice implied by negotiated global norms.²⁰ This is emerging as a significant policy debate as major markets increase demand for such standards-based market measures.

The biggest governance controversy regarding norms for biodiversity and integrated oceans use, with implications for fisheries governance, is whether a new implementing agreement under UNCLOS is needed to provide principles and regulatory and institutional vision for high-seas biodiversity outcomes (see Gjerde et al. 2008). Those who advocate such an Agreement argue for a clear legal basis of cooperation for conservation for biodiversity outside national jurisdiction. Widely used fishery-related sectoral tools such as area and time-based closures are already supported by the existing legal and regulatory frameworks in fisheries. Proponents of an implementing agreement argue that no similar mechanisms or principles exist to support state cooperation in achieving *nonfisheries* objectives through integrated management, marine protected areas (MPAs), and so forth, in the high seas.

The international community is divided on this option, especially given important implementation gaps for already existing obligations, but the issue arises in international policy debate across a range of forums. Despite the potential implications of this debate for high-seas fishing governance, few in the fishing community seem aware of it. For example, if a new regime mandated a “multisector global or regional convenor” to support high-seas MPAs or set standards for impact assessments on the high seas, RFMO discretion might be affected.

36.3.2.3. Usable Knowledge for Decision Making and Monitoring

Both fisheries and environmental policies are science based, providing a potential common foundation on which build integrated policies and strategies. In practice this has too rarely occurred. Although RFMOs and national fisheries management agencies have formal science advisory councils, these councils generally are dominated by fisheries scientists from national laboratories. Likewise experts used by U.N. Environment Program (UNEP), CBD, and related biodiversity/conservation organizations tend to come exclusively from academia and nature or environment ministries. Even working from the

same data, these groups of experts can arrive at different evaluations of risks, and advice on policy and management options. Some differences arise from differential credibility given to different types of data (particularly fishery-dependent and fishery-independent sources; Department of Fisheries and Oceans Canada [DFO] 2007). However, much of the difference arises from different treatment of uncertainty. Biodiversity interests are highly risk averse to “misses” (not acting when there may be a conservation issue and accept a high-false alarm rate (e.g., advising restrictions, which may turn out to have been unnecessary (IUCN 2006). However, fisheries advisors may seek less imbalance between Misses and False Alarms when applying precaution (Rice and Legacé 2007).

Recently, these streams of scientific support are becoming more integrated. Many science advisory processes of RFMOs now include ecologists and participants from academia or civil society. The FAO expert consultation for scientific and technical guidelines for deep-sea fisheries included experts from conservation IGOs and ENGOs; a recent CBD workshop on ecologically significant areas in the high seas had an observer from FAO. ICES has merged three separate advisory committees on fisheries management, marine environmental quality, and ecosystems into a single integrated advisory process.

Consistent science is a precursor for coherent policy, so such initiatives must be replicated. Sometimes expert work independent of institutions has a higher chance of being seen as “neutral,” such as the international strategic workshops on criteria for ecologically and biologically significant areas (EBSAs) and exercises on bio-geographic mapping. Products are then available to multiple policy communities with the EBSA report taken up by both FAO and CBD high-seas initiatives. Future work applying these criteria is also being planned so the work of science groups of RFMOs and conservation IGOs is complementary rather than competitive.

36.3.2.4. Management and Enforcement: The Weakest Links?

The weak links in domestic and international fisheries are both *implementation* and *weak vertical links between technical experts and the policy frameworks* that are setting the accountabilities for management. Environment critics argue that RFMOs do not adequately discuss developments in the overall

agenda, to which their actions may be accountable (see Meltzer 2005). The international marine conservation community is especially focused on weak RFMO performance, including incomplete coverage across areas and species (especially non-tuna species), and the existence of both institutionalized overfishing and illegal fishing within and outside RFMOs. Some key states express concern about lack of accountability of RFMOs to any specific authority. Although there is no consensus on this concern, there is an appetite and an expectation internationally that RFMOs will both form a more strategic network of fisheries governance, and will address, within their mandates, the impacts of fisheries on biodiversity and not just on the target stocks of fisheries.

RFMOs (table 36.4) are products of their contracting parties and face numerous cooperation challenges, including weak scope for independent functioning of their secretariats by capacity or by design. But many have committed to independent review and reform, and tuna RFMOs are collaborating under a 2006 Kobe Action Plan (Anonymous 2006). Innovations include integrated vessels lists (e.g., illegal tuna vessels in one RFMO become illegal vessel in all tuna RFMOs), and similar cooperation occurs between the North West Atlantic Fisheries Organization (NAFO) and North East Atlantic Fisheries Organization (NEAFC) in the north Atlantic. Although, most agree that RFMOs are strengthening their regimes,²¹ many argue that there remains weak oversight and public

TABLE 36.4 RFMOs and overview maps

Overviews	Overviews of straddling fish stocks http://www.dfo-mpo.gc.ca/fgc-cgp/documents/meltzer/maps/OverviewStraddling.pdf Overview of highly migratory fish stocks http://www.dfo-mpo.gc.ca/fgc-cgp/documents/meltzer/maps/OverviewTuna.pdf
ICCAT	International Commission for the Conservation of Atlantic Tuna http://www.iccat.int/
GFCM	General Fisheries Commission for the Mediterranean http://www.gfcm.org/gfc
WCPFC	Western and Central Pacific Fisheries Commission http://www.wcpfc.int/
IATTC	Inter-American Tropical Tuna Commission http://www.iatcc.org/HomeENG.htm
CCSBT	Commission for the Conservation of Southern Bluefin Tuna http://www.ccsbt.org/
IOTC	Indian Ocean Tuna Commission http://www.iotc.org/English/index.php
NAFO	North West Atlantic Fisheries Organization http://www.nafo.int/
NEAFC	North East Atlantic Fisheries Organization http://www.neafc.org
SEAFO	South East Atlantic Fisheries Organization http://www.seafo.org/
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources http://www.ccamlr.org/
South Pacific RFMO	South Pacific Regional Fisheries Management Organization http://www.southpacificrfmo.org/
Donut Hole	Central Bering Sea “Donut Hole” http://www.dfo-mpo.gc.ca/fgc-cgp/documents/meltzer/DONUTHOLEfinal.pdf
Peanut Hole	Sea of Okhotsk “Peanut Hole” http://www.dfo-mpo.gc.ca/fgc-cgp/documents/meltzer/maps/PeanutHole.pdf
Loophole	Barents Sea Loophole http://www.dfo-mpo.gc.ca/fgc-cgp/documents/meltzer/maps/LoopHole.pdf
South Tasman Rise Arrangement	South Tasman Rise Arrangement http://www.dfo-mpo.gc.ca/fgc-cgp/documents/meltzer/maps/TasmanRise.pdf
SIOFA	Southern Indian Ocean Fisheries Arrangement (proposed) ftp://ftp.fao.org/fi/DOCUMENT/safr/swiofc_1_2005/inf4e.pdf

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accountability. Some argue that FAO should assume this role, beyond current meetings with secretariats on administrative than management issues.²² However FAO seems not to be keen on a broader supervisory role, and some states oppose any centralized oversight, preferring regional accountability to relevant governments and stakeholders.

Thus, there are both *horizontal and vertical integration challenges within the RFMO regime*. Moreover, failures in domestic policy affect RFMO success, for example, migration of overcapacity in the high seas, and lack of incentives for states to turn from allocation issues to conservation issues. As for the role of RFMOs in broader regional oceans governance, *even improved integration among RFMOs is currently inadequate to form a strong management net in the high seas*. Unfortunately, the gap cannot be filled easily. Moreover, currently there are few examples of high-seas multisectoral integrated management mechanisms—thus little experience on how these would accommodate autonomous RFMOs.²³

36.3.2.5. Capacity Building and Financing

Policy coherence for development is a weakness in fisheries. A key issue undermining incentives for effective fishing and oceans governance is lack of developing-country access to value added from oceans, sometimes including to resources in their own EEZs (e.g., lack of capacity, gear conflicts with foreign vessels, or realizing broad benefits from access agreements with distant water fleets). New players have difficulty accessing fully allocated fisheries under RFMO management, or to enhance capacity by using chartered foreign vessels. Some states seek new allocations even from depleted fisheries and can block conservation measures in order to keep allocations higher. These challenges are amplified under capacity reduction priorities of RFMOs and arguments about who should bear the costs of capacity reduction.²⁴ All high-seas fishing states are expected to join RFMOs or fish in compliance with RFMO rules; membership in some tuna RFMOs has jumped to possibly unmanageable levels and with large capacity-building needs. Some RFMOs, such as the International Commission for the Conservation of Atlantic Tuna (ICCAT), have few members that have ratified UNFSA, making reform to UNFSA standards more difficult.

Addressing and managing the inevitable transition to more inclusive high-seas allocations—and

thus improved incentives for conservation—may be one of the most important analytical questions for high-seas fisheries. The OECD COFI is looking at lessons learned from allocation reforms in other sectors, including market-based approaches to both reduction of greenhouse gases and water reform, but they may be most applicable to new RFMOs without entrenched fishing allocations. Analytical advice is also needed for change management in this charged issue.

Capacity building (institutionally and otherwise) for developing states is a difficult issue. Often specific needs are unclear and funding inadequate. There is already too much global overcapacity, and some developing states already have large or too-large high seas fleets. Other than large trust funds, such as the UNFSA Part VII Fund, there is little transparency in sources of financing for management capacity building.²⁵ The World Bank and regional development banks are playing an increasing role. Official development assistance in many states is demand driven and often out of the hands of fisheries ministries to use strategically, unless partnering with aid agencies is high. Often aid, including NGO-delivered programming is used more to create jobs and income than for public institution building, amplifying the problems posed by governance gaps. Large funding sources like the Global Environmental Facility (GEF) tend to finance large integrative oceans and climate/oceans projects, which may or may not deal with fisheries issues directly. In 2009, UNFSA states parties engaged non-states parties (many of which are developing states) in detail on reasons inhibiting ratification of the UNFSA agreement, including policy differences and weak awareness and capacity gaps.

Meanwhile, developing states are being asked to share in higher conservation standards and related mechanisms while they face uncertain access to the gains from fisheries recovery; misalignment of incentives is interfering in priority setting and norm setting in international organizations, as well as in adopting precautionary RFMO conservation measures. Legal fishing opportunities would play a role in aligning incentives among *all* players for conservation.

Institutionally, developing countries seem to favor the CBD as the international organization of choice, given its commitment to principles of equity in use of biodiversity, as opposed to the UNCLOS/UNFSA principles of “freedom of the high seas.” Developing countries also see the CBD featuring

issues that they argue are inadequately addressed in UNCLOS (e.g., regulatory regime for use and sharing of biodiversity, including marine genetic resources). Developing states may also favor environmental forums possibly because environmental tools like MPAs are easier to implement than complicated EAF systems and possibly given the propensity of such forums to favor small-scale and lower-tech fisheries exploitation. Consequently, while fisheries are often formally delegated to agriculture, rural, or development ministries, environmental institutions and their preferred tools may be, *de facto*, the most influential in determining the conservation measures facing fisheries in developing states.

36.4. ACHIEVING GREATER INTEGRATION

36.4.1. Forces Acting for Increased Integration

While aspects of the picture for coherence in fisheries policy may seem bleak, many factors are promoting increased integration, including through the contributions of international organizations. The intensifying oceans and fisheries agenda is stretching the capacities of all states, putting a premium on policy efficiency and the seeming lack of policy coherence among international institutions is gaining attention. Consequently, the two oceans-related U.N. resolutions are being used proactively to promote coherence in the international agenda, and they may be a major constructive force in future.

The increasing prevalence of integrative oceans policies and strategies (and accountabilities) is exposing states to a broader set of institutions and how they work together. The increasing adoption of ecosystem approaches to fisheries (EAF) and to oceans management is forcing greater integration as well, as agencies confront their inability to achieve broader ecosystem objectives without working in harmony with other diverse institutions. Maturation of informal international governance processes such as UNICPOLOS facilitates open, exploratory dialogue on opportunities for greater integration on sensitive and complex horizontal policy issues related to UNCLOS. Finally, growing public demand for change in marine policy is encouraging a greater political will and industry receptivity to change.

Provisions in the highest level agreements, such as in paragraph 83 of the 2006 Sustainable Fisheries

Resolution, to protect vulnerable marine ecosystems from serious adverse impacts of fishing, are forcing diverse expert communities together. This paragraph gives RFMOs broader responsibilities for biodiversity protection within their fisheries mandates. They must plan their activities in an integrated way, both to use the limited technical expertise of fisheries experts and oceans ecologists efficiently and to ensure that various agencies adopt work constructively rather than antagonistically. These activities, in turn, are building new regional networks of interaction, both among RFMOs, and between RFMOs and regional seas-type organizations (e.g., Convention for the Protection of the Marine Environment of the Northeast Atlantic [OSPAR]). As these networks begin to deliver collaborative operational products, some of the distrust between traditional fisheries and biodiversity interests may diminish.

These factors are being augmented by acceptance of more “inclusive governance,” which first brought fisheries stakeholders into larger roles in fisheries assessment and management, and is now bringing the ENGO community into the same settings. (The European Regional Advisory Councils, for example, are directed to have up to one-third “environmental” members.) Accountability for consistent policies and practices domestically and internationally is growing, facilitating better vertical integration, and exposing progress on reform to scrutiny from diverse perspectives domestically and internationally.

There is cause for continuing caution as well as optimism, however. Few of the *underlying* factors that made sustainability of fisheries elusive in older frameworks have disappeared, perpetuating the risk of ongoing sustainability issues in fisheries and continued broader distrust of sectoral solutions. If underlying counterincentives to conservation have not been addressed, no amount of international integrated management can fix the issues. Overcapacity of fleets and undercapacity of many states for science and management continue to be realities. Where compliance and enforcement are weak for fisheries, they will also undermine biodiversity. And decades of distrust between fisheries stakeholders and others will not be overcome quickly, especially if fisheries continue on stocks not showing definitive signs of recovery.

Often the international debate on oceans health is hostile to sectoral issues (including fishing and shipping). Increased calls for “suppression” of fisheries governance in relation to “preferred” oceans or biodiversity tools (e.g., MPAs) as the “only” ways to meet

societal objectives, creates stakeholder, policy and institutional conflict and an inability to emphasize a win-win agenda. Resultant distrust, resistance, and partisan stakeholder pressure ultimately constrain the ability of governments themselves to work across various forums. Further, confronting the “north/south divide” on conservation—and especially use and sharing benefits—of biodiversity (including regarding “common heritage” issues playing through U.N. and CBD debates) can aggravate rather than reduce challenges in related issues such as fisheries, where agendas converge.

Lastly, differences of views remain internationally—and are playing out through a number of institutions—on whether fisheries and other biodiversity shortcomings are mainly related to “implementation gaps” regarding existing international obligations, or whether a lack of international rule making and governance is the root of the problem. Sometimes these two approaches are treated as alternate paths to improved governance. Rather they represent a continuum of integrated tools and approaches from “top-down” governance (a unifying law, and unifying “world [marine] environmental organization to manage all aspects of oceans use, popular with the conservation community), to bottom-up (building up from existing approaches—including sectoral—and using less formal methods where implementation gaps are present; supported by most fishing interests).²⁶ Bioregionalization and unified regional planning provide opportunities for the latter, but both require an effective and integrated international governance as a foundation for implementing their results. This is more likely to bear fruit, as it is, in any case, necessary for better outcomes irrespective of broader governance options, and is more widely supported by states, especially fishing states.

Overall, the most practical examples of integrated governance are occurring at the regional level (see section 36.2), to meet specific regional challenges of local significance, and where incentives to cooperate are strongest. Much of this work is supported and funded by international organizations—the challenge now is to integrate the lessons for broader application.

36.4.2. Recommendations for Change

It is clear that opportunities for synergies among institutions are huge, but they will not fall into

place without action. Some specific steps are both warranted and feasible. First of all, there is room for more coherence and integration *within* fisheries institutions and interests. This needs a completed and robust legal and regulatory framework, including increased adherence and finalization of specific supporting regimes: port and flag state measures and extending UNFSA principles into a regime for discrete (as opposed to straddling and highly migratory) fish stocks. Dialogue is needed among those who have not ratified international instruments; distinctions need to be made among lack of awareness, lack of capacity to adhere to commitments, policy differences with their obligations, or simple political difficulties. Solutions to encourage ratifications can then be targeted. Progress on other gaps above is necessary, and in some cases is under way.

The ecosystem approach to fisheries is a key integrating framework between fisheries and biodiversity, fully within the existing mandates of national and regional fisheries institutions so controversial mandate changes are not implied, and implementation needs to be strengthened urgently. Without definitive implementation of ecosystem approaches to fisheries, the common goals and objectives of integrated oceans management cannot find delivery in fisheries-related institutions and outcomes. Simple oceans tools such as closures or MPAs are not a full solution to the need for a rigorous ecosystem-based approach to fisheries that includes assessment, prediction, and regulation of impacts on nontarget species and habitats, for example. Indeed, overreliance on MPAs as an all-purpose ecosystem tool impedes institutional development of truly effective spatial tools nested in broader fisheries management approaches to avoid displacing effort into even more vulnerable situations (Cochrane 2007).

While arguments regarding top-down governance are most familiar in terms of environmental governance (advocating global legal regimes and global institutions to knit agendas together), and remain highly controversial, *the fisheries sector already has a global institution that could, within its current mandate, better help integrate the diverse agenda within fisheries*. There is scope—possibly a critical need—for FAO to increase its *strategic and normative* role in international fisheries governance. It should be the integrator of other agendas to the fisheries sector—and vice versa. It does not yet play this role with uniform strength in debates it convenes, although individual experts in

the secretariat can have quite extensive professional ties across issues.

The FAO may need to continually examine the guidelines implementing the CCRF to ensure the CCRF remains sufficiently integrating in its guidance, and the FAO itself remains up-to-date. The FAO needs to reach out to different organizations as the *proactive* global fisheries voice, particularly for marine biodiversity issues, and it needs to challenge the coherence and outcomes of fishing management and governance more aggressively. More active and integrated assessment of fisheries impacts is needed—especially to help fisheries states understand the various facets of the planning environment of which they have not demonstrated full awareness. Additionally, despite strong engagement of certain individuals, more active systematic leadership in collaboration across forums is needed. A major step forward, however, has been a strategic MOU with CITES to collaborate on the provision of expert advice in the possible listing of fisheries on CITES annexes.

There is room to improve regional fisheries governance as well. RFMO reform, already under way, is an increasing priority for states and stakeholders, as is greater horizontal collaboration across states and regions. Aside from tuna RFMOs, the global reach of RFMOs is incomplete, with gaps in nontuna coverage. RFMOs need to be brought together more regularly and strategically, preferably under the auspices of the FAO in the absence of any other formal or accountable mechanism, moving to include those from commissions that can be engaged in strategic discussions.

Informal processes for dialogue on fisheries and biodiversity interests should be strengthened where they exist, and should be created where needed. The informal processes must ensure that players in all the roles referenced in section 36.2.3 have forums when candid but serious dialogue identifies opportunities for greater integration and actions take advantage of them, and barriers to integration and means to overcome them. As progress is made on opportunities for integration across sectoral agencies or among regional agencies within sectors, additional strategic MOUs should be developed to institutionalize cooperation.

The science advice relied on by fisheries management and biodiversity conservation agencies should come from common bodies and processes where the different scientific disciplines are fully integrated and interact through all stages in development of the advice.

Capacity building remains a priority, especially to address the “north/south” differences in capacity, focused on the opportunities for greatest integration at ecologically meaningful regional scales.

Policy research and analysis needs to continue and deepen, to provide coherent frameworks under which to understand needs, roles, standards, and best practices. Improvements in fishing are needed, as is analysis of the needs and options for better integrated oceans governance and tools, often currently based on weak analysis and diagnostics. Strategies for integration of fisheries into broader oceans debates should focus on mutual gain to all participants, including improving implementation of existing obligations, before launching into new global negotiations when global views are so diverse. If a vision of mutual gain is not forthcoming, then neither will be trust and buy-in, such as between fisheries and others linked to the oceans and biodiversity agenda.

For states, advances on these recommendations will mean greater coherence of policy and management both domestically and internationally, greater accountability for the consequences of all the activities being managed in the seas, and greater benefits from investments in science, management, monitoring, and review.

Coherence starts at home. While states may complain about the lack of coherence among multiple players, institutional secretariats cite the lack of coherence among national delegations as a clear impediment to their decision making. National integration vertically and horizontally should be a priority for states, and where entrenched local interests form barriers to integration, full use of the progress at international forums should be brought to bear on these interests.

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Notes

1. Benedict (2001), as cited in Haas (2008), offers a useful definition of “governance”: “A purposeful order that emerges from institutions, processes, norms, formal agreements, and informal mechanisms that regulate action for a common good. Global governance encompasses activity at the international, transnational and regional levels

and refers to activities in the public and private sectors that transcend national boundaries.”

2. For instance, to combine parts into a whole; complete an imperfect thing through the addition of parts; form, or blend into a functioning or unified whole.

3. Working in a concerted way, arranging things in a sequence, alignment, rank, and harmonization.

4. “Globalization and Fisheries” is part of the just-completed work program of the Organization for Economic Cooperation and Development (OECD) Fisheries Committee, to be published in 2009. See OECD (2006) for proceedings of a preparatory workshop on these issues.

5. See Gjerde et al. (2008) for a useful compendium of regulations, institutions, and gaps in relation to fishing and biodiversity.

6. For example, the devastating impact of illegal sea urchin fisheries in Asia on viability of legal North American fisheries.

7. In fact, the seeming ineffectiveness of “soft law” is leading to a renewed interest in binding international minimum “standards to tighten of global norms.”

8. Unwillingness or inability to implement measures domestically may cause opposition to measures when needed in international contexts.

9. For example, unwillingness of the political system to declare its risk tolerances for fisheries, forces management to make choices rather than delineate management options, and may require scientists to take accountability for risks rather than describing them. It can also lead one party in the process to try to usurp the responsibilities of other parties, illustrated by the growth of “advocacy science” as scientific and technical experts in fisheries and environmental issue try to predetermine the choices among options that are the domain of the policy sector.

10. Which include functions such as issue linkage, agenda setting, developing usable knowledge, monitoring, norm development, rule making, policy verification, enforcement, capacity building and technology transfer, promoting vertical linkages, and financing.

11. The functions are indicative, and form part of some existing integrating frameworks, such as the Asia Pacific Economic Cooperation (APEC) Bali Plan Action (which unites the Fisheries and Marine Conservation Working Groups) and the Canadian International Governance Strategy.

12. In fact, this has been done in the APEC Bali Plan of Action, adopted by fisheries and oceans-related ministers in 2004, which unites key fisheries and oceans activities into a single sustainable development framework.

13. See Gjerde et al. (2008) for a list of key institutions that match these fairly closely.

14. Table 36.3 provides lists of RFMOs and links to maps and mandates.

15. The Scientific Council of North West Atlantic Fisheries Organization, for example, has been mainly composed of stock-assessment scientists, not ecosystem experts, limiting its ability to deal with some ecosystem issues.

16. Some environmental nongovernmental organizations (ENGOS) have admitted reluctance to raise some issues in the FAO, in order to avoid inducing a contrary on-the-record “sectoral” view.

17. The BBNJ is an ad hoc open-ended informal working group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction.

18. Conference on Governance of High Seas Fisheries and the U.N. Fish Agreement (DFO 2005).

19. For example, an ENGO coalition-led promotion of a proposal to declare more than 40 percent of the world’s oceans—including most historical fishing banks—as no-take marine protected areas was promoted first at the 8th Conference of the Parties of the CBD.

20. However for wild fisheries the negotiation of ecolabeling guidelines within the FAO was intended by states to reduce this risk, by indicating a standard against which private labels might be judged as more or less legitimate.

21. Assisted in part by the Chatham House, an independent standard developed as part of the High Seas Task Force. See Chatham House (2007).

22. For a detailed review of current mandates, strengths and weakness of RFMOs, see Meltzer (2008).

23. However, it appears that in June 2008, the Commission for the Protection of the Marine Environment of the Northeast Atlantic (OSPAR) committed to a high-seas MPA, a breakthrough in regional high-seas integrated management. D. VanderZwaag (2008) describes the relationship between the North East Atlantic Fisheries Commission (NEAFC) and OSPAR. However, NEAFC remains generally autonomous under this Arrangement, although NEAFC is takes ecosystem measures consistent with OSPAR priorities.

24. And what it means for states—especially developing coastal states—that aspire to build fleets and access high-seas resources.

25. The Department of Oceans and the Law of the Sea was asked to provide a report in 2009, on behalf of the Secretary General of the United Nations, on the various sources of financing available for capacity building, to anchor discussions in the ICSP in 2009.

26. Gjerde et al. (2008) also offer a specific and practical agenda for increased integration institutionally and across the regulatory framework,

globally, trying to bridge such debates into a practical work plan.

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