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## Editor's note

This issue contains two articles. The first, "Appropriate management for small-scale tropical fisheries", is by Yasuhisa Kato, now a professor at Kagoshima University in Japan. The second article "Massaging the misery: Recent approaches to fisheries governance and the betrayal of small-scale fisheries", by Anthony Davis and Kenneth Ruddle, appeared a few months ago in *Human Organization* (vol. 71, no. 3: 244–254, 2012). It is reprinted verbatim here because it enlarges on one of the themes running through the preceding article.

Dr Yasuhisa Kato, the author of the first article, served as Director of the Fisheries Operation Service (1989–1994) and then as Director of the Fisheries Policy and Planning Division (1994–1997) at the Food and Agriculture Organization of the United Nations (FAO). In these positions, he was involved closely in the preparation and global promotion of the Code of Conduct for Responsible Fisheries (CCRF). Although the CCRF was intended as a global instrument to promote sustainable fisheries, based on Agenda 21 adopted at the United Nations Conference on Environment and Development (UNCED 1992), and was developed during four years of technical work involving many people from FAO member countries, no appropriate focus on the specific nature of tropical fisheries was provided. Along with others, Kato believed that such a serious shortcoming would handicap the global promotion of sustainable fisheries, and that it had originated from a temperate zone bias in conventional approaches to fisheries education and management that was caused by a relative lack of understanding of tropical conditions. Such a bias and focus, he believed, could never lead to sustainable fisheries worldwide, because developing countries contribute more than 60% of world fisheries production and account for 90% of the people involved in fisheries worldwide. His strongly held belief about this eventually led in 1997 to a move from FAO to the Southeast Asia Fisheries Development Center (SEAFDEC) as a special advisor. There, during an 11-year term, and in close collaboration with Southeast Asian countries and the Association of Southeast Asian Nations (ASEAN), Kato initiated various regional fisheries policies to replace a blind application of global policy that ignored various different environments. He was responsible for organizing in 2001 the ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security in the New Millennium, Fish for the People. His other contributions that elaborated on the basic idea include the development of the Resolution and Plan of Action for Sustainable Fisheries for Food Security, that was

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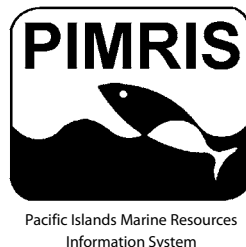
adopted in 2002 by fisheries-related ministers at the conference, and later accepted by ASEAN's Asian Ministers of Agriculture and Forestry, and the development of a series of regional guidelines of CCRF that accommodate Southeast Asian regional specifics into CCRF.

The increasing recognition over the last two decades of the contributions of small-scale fisheries has led to the vigorous promotion of alternative approaches for their governance, in particular co-management. Among the widely asserted benefits of co-management are a more inclusive and equitable form of resource governance that directly engages and thereby empowers "users" and "stakeholders." It is implicitly assumed, but never convincingly demonstrated, that this would enhance ecological and livelihood sustainability while fostering "user/stakeholder" regulatory compliance. Focusing on co-management and treating briefly the "human rights" approach, which they examine in greater depth in an article in *Marine Policy* (39:87–93), Davis and Ruddle analyze the key concepts and presumptions from a selection of recent governance approaches. Their core argument is that co-management is not aimed at "power-sharing", but at shifting the burdens and responsibilities to citizen-users as a means of rationalizing fisheries. Davis and Ruddle examine the central topic of the relationship between neoliberalism and co-management using examples from Nova Scotia, Canada. They believe this analysis can be applied to small-scale fisheries management in the developing world, where it has been asserted that managers need to exert more control over access (i.e. property rights). The authors' intent in this article is to provide a first step toward isolating and illustrating central ways that "recent approaches" in governance actually betray both small-scale fisheries and the promise of social research, and in that way to stimulate a deeper analysis of the intents and impacts of introduced management approaches in the Pacific Islands region.

### **Kenneth Ruddle**

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PIMRIS is a joint project of five international organisations concerned with fisheries and marine resource development in the Pacific Islands region. The project is executed by the Secretariat of the Pacific Community (SPC), the Pacific Islands Forum Fisheries Agency (FFA), the University of the South Pacific (USP) and the Pacific Regional Environment Programme (SPREP). This bulletin is produced by SPC as part of its commitment to PIMRIS. The aim of PIMRIS is to improve the availability of information



on marine resources to users in the region, so as to support their rational development and management. PIMRIS activities include: the active collection, cataloguing and archiving of technical documents, especially ephemera ('grey literature'); evaluation, repackaging and dissemination of information; provision of literature searches, question-and-answer services and bibliographic support; and assistance with the development of in-country reference collections and databases on marine resources.

## Appropriate management for small-scale tropical fisheries

Yasuhisa Kato<sup>1</sup>

### Abstract

Overinvestment in fishing capacity, followed by an inevitable decline in global capture fish catches, is widely interpreted as having demonstrated the need for international fisheries management instruments. These instruments began to be developed in the early 1990s, initially within the framework for addressing environmental concerns, and later directly from the drive toward the Food and Agriculture Organization of the United Nations' Code of Conduct for Responsible Fisheries (FAO 1995), its related international plans of action, and other conventions. In general, however, the resultant flood of legislation has not been implemented in tropical countries, partly because the number of instruments overwhelmed the capacity of national fisheries administrations, but also because of "implementation fatigue", priority being given to other sectors, and a lack of political will. Further, these international instruments have failed to adequately address tropical, small-scale fisheries because they were formulated based on Western scientific methodologies.

### Introduction

A major characteristic of global fisheries management since the mid-1990s has been the move toward international governance of fisheries, mainly under various United Nations (UN) initiatives. At first glance it would seem reasonable to conclude that international governance would likely comprise a major change that national fisheries administrations would have to contend with. But so far, at least, this has not occurred, largely because most such international fisheries initiatives have not been implemented and probably will not be. As such, these initiatives remain largely theoretical statements, long on lofty principles but short on practical guidance for a huge range of tropical fisheries realities.

This article examines the principal elements of the fisheries management systems that the international community has attempted to enact. These are not likely to become a major element of change that will have to be considered for management and adaptation in tropical small-scale fisheries in the foreseeable future.

### Origins of globalized fisheries management

Overinvestment in fishing capacity during the 1950s and 1960s in many industrialized nations caused world fisheries to change from being about 60% underexploited in the early 1950s to 60% overexploited 40 years later. As a result, most marine capture fisheries began to decline (FAO 1997, 2007b), destroying the illusion that aquatic resources are infinite, and making it apparent that

changes within the fishing industry would eventually demand significant adaptation and management. This recognition stimulated research regarding sustainable fisheries, and eventually resulted in international agreements on a "precautionary approach" (FAO 1996).

Preambles to the UN Convention on the Law of the Sea (1982) and the Convention on the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (1995) demonstrate that concern over fisheries resources and the need for their sustainable management increased greatly during the intervening 13 years; the latter convention was based specifically on international concerns over highly migratory fish stocks, as highlighted in Agenda 21 of the UN Conference on Environment and Development (UNCED 1992). Driven by increasing concern over the deterioration of the global environment, Agenda 21 identified actions to reconcile human activities affecting the environment with the presumed requirements of sustainable development. Protection of marine and coastal areas, together with the conservation and rational use and development of the living resources of these areas, was included in Chapter 17 of Agenda 21.

Although not highlighted in 1982, the importance of fisheries management was gradually recognized, and in 1984 the UN Food and Agriculture Organization (FAO) organized the World Conference on Fisheries Management and Development, which was the first such international conference. In general,

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however, recognition of global fisheries problems was masked by the rapid development of the industry and the economic benefits being derived from it. As a consequence, until relatively recently, fisheries management was promoted only gradually, and in an *ad hoc* manner. The globalization of fisheries administrations has developed in particular since 1992, when the UN Conference on Environment and Development (UNCED) addressed increasing concerns about the state of the global environment.

The reference point for all subsequent international fisheries instruments is the UN Convention on the Law of the Sea (UNCLOS) 1982. This convention entered into force in 1994, and is the fundamental legal framework governing the use of marine areas. This was specified in the UNCED's Programme of Action for Sustainable Development, which adopted Agenda 21. Chapter 17 of Agenda 21 specifies that implementation of UNCLOS must involve integrated approaches and a "precautionary approach". The UN Framework Convention on Climate Change and the Convention on Biological Diversity (CBD) were also adopted in 1992. State control in high-seas fisheries was enhanced by FAO's Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, which stipulates that it is the special responsibility of flag States to enable more effective management and contribute to reducing illegal, unreported and unregulated (IUU) fishing activities, and ensure a good exchange of information.

A turning point for the global promotion of sustainable fisheries occurred in 1992, when the Cancun Declaration was adopted at the International Conference on Responsible Fisheries. The declaration captured the spirit of FAO's Code of Conduct for Responsible Fisheries (CCRF), reflecting concern over the urgent need to establish a sustainable global fisheries management system. The declaration was followed by Agenda 21, which drove development of CCRF initiatives during 1992–1995. Based mainly on UNCLOS, Agenda 21 and the Cancun Declaration, CCRF deals comprehensively with six thematic areas: Fisheries Management, Fishing Operations, Aquaculture Development, Integration of Fisheries into Integrated Coastal Area Management, Post-harvest Practices and Trade, and Fisheries Research.

Together with its four related International Plans of Action<sup>1</sup> (IPOA), the comprehensive but voluntary CCRF, adopted in 1995, covered the principal aspects of fisheries. Other important instruments

followed (FAO 1999, 2001c). The UN Agreement for the Implementation of the Provisions of UNCLOS relating to the Conservation of Straddling Fish Stocks and Highly Migratory Fish Stocks (UN Fish Stock Agreement) entered into force in November 2001. Its main objective is the long-term conservation of straddling and migratory fish stocks, and it includes provisions to avoid adverse environmental impacts, preserve marine biodiversity, and maintain the integrity of marine ecosystems. The 2001 Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem focused on the ecosystem approach to fisheries management (EAF) (FAO 2001a), and mandated FAO to prepare technical guidelines for EAF within the context of the 1995 CCRF (FAO 2003a). The 2002 Plan of Implementation of the World Summit of Sustainable Development consolidated and reinforced the implementation of existing fisheries-related instruments by setting a 2010 deadline for the application of EAF and the maintenance or restoration of stocks to levels that can produce maximum sustainable yield (MSY).

In addition, the moratorium on the use of large-scale drifting gill nets became UN General Assembly Resolution 44/225 (1989). This was the first time a fisheries issue was discussed in a non-fisheries arena such as the UN General Assembly, bypassing FAO, the UN agency that specializes in fisheries. This approach demonstrated that fisheries issues were becoming increasingly regarded as an integral part of environmental issues. The Convention for the Prohibition of Fishing with Long Drift Nets in the South Pacific, agreed at the UN General Assembly in 1989, together with the start of negotiations on the UN Fish Stock Agreement in 1993, were indicators of a new era focusing on high-seas fisheries. Various binding or voluntary international and regional agreements relate to the fishery sector, either specifically or indirectly through biodiversity, environment, labor or other issues. Because binding agreements usually pertain to the global level, most are deposited in a UN organization.

### Consequences of "globalized fisheries management"

Efforts undertaken by international fisheries institutions since the early 1990s have resulted in ongoing international momentum regarding sustainable management of global fisheries. However, those global instruments, including CCRF, have slanted the focus toward large-scale commercial fisheries, specifically those operating on the high seas. This occurred because management issues relating to

<sup>2</sup> These four plans are: 1) Conservation and Management of Sharks (2000), 2) Reducing Incidental Catch of Seabirds in Longline Fisheries (2000), 3) Management of Fishing Capacity (2000), and 4) Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fisheries (2001).

high-seas fisheries required urgent clarification, and the preparation of two important instruments — CCRF (1992–1995) and the UN Fish Stock Agreement (1993–1995) — was conducted simultaneously by FAO (CCRF) and the UN (the Fish Stock Agreement). Further, in the mid-1990s, FAO responded to decreased funding (resulting from donor policy changes) by drastically reorienting its focus on global food security and the sustainable development of primary industries. Thus, FAO shifted from supporting developing countries to promoting globalization, a direction that followed the interests of developed nations. The focus of the Committee on Fisheries (COFI) also changed after work had begun on CCRF in 1992. COFI paid particular attention to the global agenda, and downplayed small-scale fisheries, and henceforth focused mainly on achieving sustainability in developed-country, high-seas industrial fisheries (FAO 2007a).

This reorientation of priorities by FAO undercut national management initiatives by withdrawing guidance on rationale and methodology from agencies struggling to develop an appropriate management system, and then implementing it on national fishing industries that were concurrently expanding. In addition, many simply underestimated the effort required, and when it became apparent that designing and implementing a fisheries management system would require massive amounts of work and investment, in addition to structural adjustments, many governments gave up and took no action.

That situation has been compounded since the 1990s by an enormous flood of global and regional instruments dealing with environmental and renewable resource issues that have either been related directly to or have had an impact on fisheries. In poorer tropical countries this has put fisheries administrations under severe and often overwhelming pressure, commonly resulting in “implementation fatigue”. Further, implementation of the many ambitious instruments prepared by the international community is generally beyond the technical, financial and institutional capacity of economically poor countries, such that little progress has been made in using them. The poor status of world fish stocks is widely acknowledged (e.g. Christensen et al. 2003; FAO 1994, 2007b), and the number of stocks ranked as overexploited, depleted and recovering has increased in recent decades (FAO 2002). Other major problems include the lack of sound national statistical data (FAO 2001b), and the absence of money and trained manpower to rectify the situation (FAO 2001b). Much is still needed, especially in economically poorer countries, to implement CCRF, which is hampered by a lack of capacity (FAO 2003). Cochrane and Douman (2005) also demonstrated that little had been done to implement IPOAs; only

the IPOA to prevent, deter and eliminate IUU fishing has been substantially implemented nationally, but even then implementation remains inadequate (FAO 2003b).

The lack of progress has been widely examined, with Cochrane (2000) suggesting that poor implementation has resulted from: 1) poor or inappropriate management decisions resulting from biological and ecological uncertainty; 2) priority being given to short-term economic and social objectives and not to longer-term sustainability objectives; 3) poorly defined fisheries policy and management objectives, resulting in poor decisions based on immediate problems; and 4) institutional weaknesses stemming from top-down management, a lack of user rights and stakeholder participation. Douman (2003) identified the following principal problems: open-access; politicians’ avoidance of unpopular decisions; social and economic issues being downplayed, with priority given to fisheries science in management; low national management capacity; conflicting objectives, and inadequate penalties.

The problems associated with developing sustainable and responsible fisheries are reflected in the factors constraining implementation of the 1995 FAO CCRF (FAO 2003d, 2003e). Constraints are generally identifiable as:

- a lack of capacity or political will;
- a lack of resources and general management capacity, funding limitations, and scientific knowledge;
- low formal education levels;
- limited stakeholder and public participation
- inadequate policy and legal framework;
- open access fisheries;
- political interference; and
- short-term focus.

Fisheries policy-makers everywhere lack the resources needed to provide alternative livelihoods when reductions in fishing effort result in fishers becoming unemployed, and this fact could undermine efforts to implement EAF (FAO 2003a). The lack of capacity and financial resources has been recognized in some international fisheries instruments, such as CCRF (FAO 1995); IPOAs on IUU, seabirds and fishing, and sharks (FAO 1999, 2001c); the UN Fish Stocks Agreement; the CBD; and the WSSD Declaration on Sustainable Development and the Plan of Implementation (WSSD 2002). Unfortunately, these documents have not been supported by action, and assistance falls far short of meeting needs (FAO 2003c; UNDP 2003). As Cochrane and Douman (2010:87) observed, “... it seems evident that society as a whole is unable

or unwilling to pay the costs required". Further, Cochrane (2000) pointed out that a key underlying constraint is that social and economic pressures favor short-term benefits, with long-term costs.

Cochrane and Doulman (2005) favor a scientific and technological solution to this situation, in tandem with "good governance".

Undoubtedly, much can be achieved by addressing the important constraints in improving the biological and ecological aspects of fisheries management. Overcoming some of the scientific problems facing fisheries would, in conjunction with good governance, contribute to improved management. The establishment of better systems of data collection and monitoring, improving the biological and ecological knowledge relevant to fisheries management, improved methods of stock assessment that take better account of uncertainties, especially in multispecies and data-poor fisheries, the development of fishing methods and gear that reduce or eliminate unwanted by-catch (SEAFDEC 2000) and damage to the substrate will all contribute within an appropriate governance environment to more responsible and productive fisheries. Ultimately, such improvements will be essential for effective management for sustainable use of fishery resources.

The authors (Cochrane and Doulman 2005) further note that none of that will happen unless:

...the attitudes of society can be changed to place appropriate value on sustained ecosystem goods and services, leading to changes in political will and governance, the benefits of such scientific and technological improvements will be swept aside as society and the practices and policies of the governments that serve society continue to focus on the short-term.

Nothing will be realized in the absence of political will and a willingness to endure short-term sacrifice in favor of potential — but not assured — long-term gains. More affluent (but still small) segments of populations are in a position to make such a decision, but the poor are not. Regardless of the Western emphasis on ecosystems and a neoliberal philosophy (Davis and Ruddle 2012), eradicating poverty remains the greatest global challenge (WSSD 2002), and each nation is primarily responsible for making political decisions regarding its own sustainable development and poverty eradication.

### Drawbacks of the globalization process

Considering that an estimated 80.5% of total fisheries production is harvested by tropical developing countries (FAO 2003f: 9; FAO 2010), most of which are characterized by small-scale and coastal fisheries with little or no involvement in high-seas fisheries, more attention should be given to formulating policies that include appropriate methodologies to achieve sustainable coastal fisheries production. However, international development assistance for fisheries has decreased drastically. Unless that situation is reversed, particularly for projects that seek to establish appropriate fisheries management, the momentum and accomplishments of international global sustainable fisheries efforts over the last two decades could be dissipated.

Efforts since the early-1990s have raised global awareness and driven consensus-building to achieve sustainable fisheries. However, the globalization of fisheries governance demands that issues promoted by internationally recognized authorities and the various activities implemented to popularize them be verified technically. The concept of a "resource management system" has also been disseminated globally. For example, the use of the MSY model has been promoted via Article 7.2.1 of CCRF. It is generally understood that the MSY model can be applied in principle for the management of target species where a long-lived single species dominates in a specific fishing ground and ecosystem. It is also widely understood that the ecological structure of the world's fisheries resources varies greatly, ranging from a large population of a dominant single species in temperate waters to the multi-species composition with varying productivity characteristic of diversified tropical ecosystems. It has become common knowledge that fish catches in temperate areas have a very simple species composition compared with multi-species composition of catches from tropical waters. In other words, the MSY model has been widely popularized based on an erroneous assumption: that the ecological structure of fisheries resources worldwide is similar to that found in temperate waters, where the MSY model and resource management system were initiated and developed.

Under a conventional or Western system, three main elements are required for management actions: 1) determination of the total allowable catch (TAC), or more particularly the individual transferable quota (ITQ) used for estimating fisheries stock sizes; 2) allocation of the estimated available resource to an appropriate number of users; and 3) monitoring of compliance by resource users with the rules. However, such a system was developed in accordance with the characteristics of temperate zone fisheries resources, where the catch is composed primarily of a single or a few commercial species. As a

consequence, temperate zone fisheries are commonly defined by the species caught (e.g. cod, crab, herring, salmon or halibut fisheries). In contrast, tropical fisheries are commonly denoted by the gear used, such as trawl or purse-seine fisheries, rather than by the predominant species caught, reflecting the multi-species composition of most tropical catches. In a similar manner, the TAC concept has been promoted by Article 61.1 of UNCLOS, which relates to the conservation of living resources.

The sustainability of nearshore fisheries in tropical developing countries is handicapped by two principal interlocking factors. The first is the large number and general poverty of fishing households. Second is the ineffectiveness of conventional or Western models of fisheries administrations. Poverty combined with a lack of alternative sources of income is the principal reason that small-scale fishermen are forced to operate in ways not conducive to the sustainability of fisheries. For this reason, the sub-sector must be addressed in comprehensive rural programmes that include fisheries administrations within the broad framework of regional and local economic development and management.

### **Tropical countries fisheries context**

Fisheries management and development assistance programmes in tropical countries are usually bureaucratic, centralized, top-down, and science-based. However, such management has been roundly criticized, and is now usually seen as a failure (Satria et al. 2002). Limited financial resources and low professional capacity typically constrain development of resource and environmental policies and their implementation throughout tropical developing countries, where national fisheries administrations are small and have little operational capacity, unlike those for agriculture. In fact, national fisheries administrations in most tropical developing countries are small and were established during 1950–1970 as technical institutions to support the rapidly modernizing commercial fishing sector. National fisheries administrations have been dominated by biologists and engineers, and while most staff are capable as scientific advisors supporting modern fishing industries, they are less suited to the fisheries management tasks recently mandated in response to global initiatives.

Although fisheries management in tropical developing countries has been promoted gradually over the last 30 years, it has generally proven difficult to provide the technical and financial inputs required to restructure fisheries agencies to meet international dictates. Management activities in most countries focus on solving local resource conflicts, with government intervention akin to little more than fire fighting. Preventive management to avoid overcapacity or overexploitation has not developed.

Recent approaches to fisheries management recognize that fisheries management problems have social and economic roots, and it is widely understood that government intervention is most effective if initiated at the local level. But under their current structure, national fisheries administrations in tropical developing countries are poorly positioned to perform local management, and therefore have attempted to delegate management authority through decentralization.

However, decentralization has not been conspicuously successful, mainly because of a lack of clear policy directives to support attempted innovation, possibly because centralized resource management systems continue to predominate, while newer approaches have yet to gain wide acceptance by fisheries bureaucrats. This is demonstrated by a lack of confidence in national management formulations and the continual seeking of approval from the international community and Western sources that have promoted newer approaches. Although some countries attempted to accommodate MSY-based resource management into their national systems, it has not been well accepted locally.

Unfortunately, the illusion of “resource management” remains too influential for tropical developing nations to commit to establishing their own system. Most senior scientists and researchers at government institutions in tropical countries received their tertiary education in fisheries-related institutes or universities in temperate zone nations, where resource management has been promoted. The model-based, stock assessment-driven resource management concept reflects their educational background, and this constitutes an important source of inertia.

Although the concept of and the areas under “open access” for aquatic resources have been modified according to the understanding of ocean governance, in principle aquatic resources are still considered to be open access resources. Further, although the current regime is dysfunctional, it may not be feasible to convert to a limited access regime because open access developed historically within wider civil society, and it may be difficult to modify as a convenience for fisheries.

The term “co-management” has been increasingly adopted, in part because the theoretical ideas have been widely popularized, but mainly because the term’s simple image has been accepted by national fisheries administrations staff responsible for management issues (Ruddle and Hickey 2008). The term co-management can now be used more readily by government officers who feared losing their administrative powers based on their control of rights and authority when co-management was first promoted, even if they understand the need for change

only hazily and just at a technical level. When the term co-management is used, government officers may retain the belief that they can still wield management authority, even though some responsibilities have already been transferred to the local level (Davis and Ruddle 2012).

### **Appropriate small-scale fisheries management systems in tropical developing countries**

#### ***Why small-scale coastal fisheries have to be managed***

Although Cochrane (2000) suggested four reasons for weak implementation of the international approach to fisheries management, other reasons can be considered in the context of small-scale tropical fisheries. There is debate over the need to manage small-scale coastal fisheries, based in part on the assumption that top-down management is burdensome, and thus should not be imposed on already powerless and financially weak small-scale fishers. It is also argued that catches by small-scale fishermen are negligible compared with those of commercial fisheries. That may be correct for a single fishing unit, but an estimated 80.5% of total fisheries production is harvested in tropical developing countries, where a large portion of the catch is harvested by small-scale fishermen operating a huge number of units. The impact of small-scale fishermen is by no means negligible in terms of achieving global sustainable fisheries.

Large-scale commercial fisheries have a built-in “profitability mechanism” that halts their operation when operational costs exceed income because of declining resources. Compared with commercial fisheries, small-scale fisheries apparently lack such a mechanism, owing to their low operating costs, and so continue fisheries beyond the levels where commercial fishermen cease operations. However, many small-scale fishermen in Southeast Asia use illegal fishing techniques that include small net mesh size and dynamite fishing, because they try desperately to improve their income as resources decline. The impact of such activities can be tremendous when conducted in spawning and nursing areas for commercially important species.

Western fisheries management methodologies are narrowly focused on fisheries resources, while the social welfare of fishing communities and other social problems have been relatively neglected (see below). Under the compartmentalized structure of government, issues relating to the social welfare of fishing communities do not fall squarely under the mandate of either national fisheries

administrations or ministries of welfare. If national fisheries administrations stop seeking to improve fisheries management and stop contacting small-scale fishermen owing to various difficulties, support for the social welfare of fishing communities will be completely disregarded. In the meantime, it is unlikely that social welfare support by other agencies will increase. Poor fishing communities could eventually be abandoned by the national welfare system.

Despite international concerns about sustainable fisheries — which began in the early 1990s — most governments have never given a high priority to implementing innovative approaches to fisheries management. In fact, fisheries management issues have only been actively discussed at either regional or national levels since 2006.<sup>3</sup> Instead, countries have continued to focus on increasing their participation in expanded international markets for fish and fishery products, based mainly on aquaculture development. In contrast, the most valuable species from their commercial marine fisheries have been declining.

In addition, so-called market-driven measures for sustainable fisheries developed in accordance with global concerns about aquatic environments have become increasingly burdensome external pressures in countries where fish and fishery products are major export commodities. Fisheries officials became concerned about the impacts of market-driven measures such as “traceability” — especially related to the increased activities on sustainability such as eco-labeling — on their increasing international fish trade, and began to show renewed interest in sustainable fisheries through the implementation of management systems.

Despite widespread criticism of the resource management system and promotion of ecosystem-based management, policy-makers are still greatly influenced by the former. Thus, it must be ascertained if management measures and actions can be successfully implemented without knowing the size of the resource, and whether non-technical or scientific people can successfully implement the management actions (see below). No scientific approach or models correctly assess fisheries resources with multi-species composition, meaning that fisheries management systems must be designed so as not to rely on stock size. One way to do this may be to use practical indicators instead of stock size, which would enable the monitoring of trends in resource status and income level of the fisheries (Kato 2004a; SEAFDEC 2006).

<sup>3</sup> For example, in Southeast Asian countries (SEAFDEC: Establishment of Regional Scientific Advisory Committee on Fisheries Management in Southeast Asian Region. ASEAN/SEAFDEC: Regional Investigation on the Establishment of ASEAN Mechanism on Fisheries Management).



Most tropical developing countries wish to strengthen their research capacity, especially to conduct resource surveys aimed at identifying data and information to improve fisheries management, and this may be justified as scientific work that seeks to understand resource status and related factors. Although most scientists now understand that temperate zone models are inappropriate for tropical ecosystems, such models and the concept of MSY are frequently referred to in national and regional fisheries management planning exercises. However, obtaining an absolute value for resource status, such as MSY, is difficult considering the multi-species composition of the resources, and although research results contribute to scientific findings, most have not been put to direct practical use as management inputs. Instead of an absolute resource value, relative evaluation — using catch per unit of effort (CPUE), change of species composition, and catch length-frequency data — can provide useful indicators that could be used in an input control system for fisheries management in multi-species tropical fisheries. Government fisheries agencies need clear policies on the type of fisheries management system to be developed and the type of data and information required from scientific research. In the absence of such policies, and compromising with familiar output control systems, scarce government funds are wasted, and do not serve to increase the sustainability of fisheries.

### ***Designing appropriate systems***

A serious constraint to good governance is the lack of appropriate fisheries management systems for coastal and small-scale fisheries. An alternative fisheries management system is urgently needed, based on the practical prerequisites discussed below.

Fisheries management systems are usually designed as a compromise with existing systems and international instruments. This may simplify the design, but the resultant system is not closely adapted to the many varied local social and economic conditions, as this process requires careful analysis. Accommodating various internationally agreed upon instruments into an alternate system can ensure consistency with global management, and may imbue a sense of international political security, but it must be recalled that some global instruments fail to accommodate local cultural, social and economic conditions, as well as the ecosystem characteristics of developing countries. Some internationally developed texts and guidelines (FAO 2007a) are too generic and ambitious, and commonly overlook local factors, such that there no internationally recognized system that is particularly applicable to tropical coastal, small-scale fisheries exists. This makes it difficult for

scientists to recommend a system to evaluate when developing countries and their policy-makers are seeking options for planning innovative fisheries management systems. If several theoretical ideas are recommended the common result is implementation of various uncoordinated pilot projects by different donors and government agencies, in an effort to verify different ideas and identify a “best practice”. This time-consuming and unsystematic approach is unlikely to reveal the best alternate fisheries management system. It is important to begin with a clear policy regarding the promotion of alternate fisheries management systems; this allows governments to create an enabling environment before implementing pilot projects and testing methodologies in a coordinated manner.

Further, the ill-defined use of different terms such as “co-management”, “community-based fisheries management”, or “integrated fisheries management”, to denote alternate systems, is an unwarranted complication and source of confusion (Davis and Ruddle 2012), mainly because of the lack of policy directives on fisheries management. Unfortunately, efforts to develop an alternate system have never been coordinated at the national level, because the approach has been to promote individual pilot projects. Work undertaken directly with communities — particularly by non-governmental organizations in an effort to sidestep the unconstructive involvement of central governments and their often distracting interventions — also complicates coordination among projects. Fisheries management should be a national issue, supported by and consistent with national policies. It should not be implemented in a fragmented manner at the community level, particularly under the direction of foreign organizations.

### **Developing a long-term policy for sustainable fisheries**

A backlash sometimes occurs when governments attempt to implement *ad hoc* management measures without elaborating long-term policies. Such measures are most often implemented in response to increasing pressure, including foreign pressure, and are normally intended to have visible effects. However, in most cases the envisaged positive effects are not realized, and sometimes the results are negative. For example, in response to overcapacity, some countries encouraged their fishing fleets to move offshore in order to alleviate fishing pressure in coastal waters. However, the unintended result was that most boats returned to coastal waters when the offshore resources proved to be less abundant than expected, and the operation not financially viable. Such results should have been anticipated, given the absence of appropriate legislative arrangements and feasibility studies for each fishery.

Buy-back (subsidy) schemes have sometimes been initiated to tackle overcapacity, but such subsidies proved ineffective in the absence of alternative livelihoods, and a system to support a fixed number of vessels. To alleviate poverty and overcapacity in fishing communities, some countries initiated an exit plan and non-systematic poverty alleviation programmes. However, national fisheries administrations are generally not technically competent to implement such social programmes, and “off-the-shelf packages” launched without modification to fit the circumstances of specific communities did not minimize competition in fisheries; instead, when people failed to receive financial benefits they returned to fishing. The programmes have not fulfilled the envisaged objectives because they have not addressed the overriding problem: the lack of alternate livelihood opportunities in rural communities.

Although monitoring, control and surveillance systems, including such sophisticated equipment as a vessel tracking system, have been introduced to improve enforcement, success has been limited because many patrol boats are not fully operational owing to the absence of management regulations, a basis for law enforcement, and the lack of government funds for operations. Further, lacking clear management objectives, most monitoring, control and surveillance activities in tropical developing countries focus on illegal fishing. A further problem is that there is no unambiguous definition of “illegal fishing”.

#### **Alternative management system for tropical coastal and small-scale fisheries**

Compared with agriculture, the need to manage fisheries has only recently been recognized. Further, MSY-based resource management is the only widely recognized fisheries management method. However, the short history and uncertain nature of aquatic resources and ecosystems have inhibited the understanding of the status of fisheries and fisheries resources. The understanding is gradually building that stock assessment-driven “resource management” may not be appropriate for small-scale and coastal tropical fisheries.

Global sustainable fisheries have been promoted according to a single scenario applied for fisheries worldwide. However, the applicability of such a single approach, especially for highly diverse small-scale and coastal tropical fisheries, is debatable. The specific characteristics of tropical fisheries, in addition to ecological differences such as multi-species composition, are important factors when considering appropriate scenarios for sustainable fisheries. One issue concerns the size of fishing units. The majority of tropical fisheries are small in scale. In Southeast Asia, for example, 95% of fishing boats

are less than 5 gross registered tons. When Western management approaches are discussed, fishing units targeting particular dominant species to be managed may number in the hundreds at most. However, in Southeast Asia, fishing units targeting dominant species barely exist. Instead, management must focus on a multi-species resource situation. Further, in small-scale coastal fisheries, the numbers of fishermen can be huge, ranging from several hundred thousand in Malaysia, Myanmar, the Philippines, Thailand and Vietnam to a few million in Indonesia. Further, small-scale tropical fisheries are conducted mainly as daily operations, using fishing communities as their base. Thus, their social linkages and reliance on fishing communities is high. This may be one reason why the Western system refers to “resource management” and not to “fisheries management, as the latter focuses on fisheries resources and not fishing communities. For these reasons, it can be an almost impossible challenge for national fisheries administrations in tropical countries to follow a Western methodology. Although fisheries management systems can be designed as a compromise between existing systems and international instruments, it may be impossible to modify existing systems and apply them to such totally different fisheries.

Southeast Asian countries struggled to develop appropriate fisheries management methodologies and concluded their regional fisheries policy under the Association of Southeast Asian Nations (ASEAN) umbrella in a Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN region. Regional fisheries policy documents were adopted by fisheries-related ministers of ASEAN countries at the ASEAN-Southeast Asian Fisheries Development Center (SEAFDEC) Conference on Sustainable Fisheries for Food Security in the New Millennium, “Fish for the People,” in November 2001. It was later endorsed by ASEAN’s Ministers of Agriculture and Forestry. Article 5 of the resolution concluded that it was necessary to “...[e]ncourage effective management of fisheries through delegation of selected management functions to the local level”. And Article 6 concluded that it was necessary to “[r]ecognize the need to progressively replace ‘open access’ to fisheries resources with ‘limited access regime’ through the introduction of rights-based fisheries that also may facilitate the management of fishing capacity and promote the use of responsible fishing gears and practices” (ASEAN and SEAFDEC 2001).

#### **Institution building: Community level organizations**

Resource management focuses more on stock assessments than social factors; is normally conducted between government agencies acting as managers of individual fishing units; and focuses

mostly on decentralization and management linkages with a relatively small number of individual resource users. Little attention has been paid to the role of local institutions such as fishermen's organizations, although some systems refer to roles unrelated to fisheries management

Given the large number of scattered small-scale fishing settlements, focusing government intervention on individual fishing units would be impractical. Thus, the establishment of appropriate institutions in each fishing community is a key to the success of any alternative management system, with an appropriate group of fishermen in each fishing community serving as a local partner. Creating an appropriate interface institution with a user-rights group in each fishing community is the most important policy consideration. Under such an arrangement, the obligation to conduct responsible and sustainable fisheries would become the responsibility of these local institutions.

Implicit in a fisheries legislative framework is an educational component that addresses the allocation of common resources. The general perception is that fisheries regulations lack strict legal definitions because infringement impacts only on common resources, rather than seriously violating the rights of others. To counter this, one option would be to clarify resource ownership by providing fishing rights. However, if a fishing right provided only to resource users fails to convince them to act as custodians of common resources, their compliance with rules imposed by a government agency is unlikely to improve. It is therefore important to delegate some fisheries management rights as obligations that accompany fishing rights.

While general rules would be based on national fisheries regulations, detailed rules of conduct should be developed by the fishermen themselves. With assistance from government agencies, the fishermen's organizations could formulate such regulations as by-laws. Considering the current poor compliance with government rules and regulations, there is nothing to lose by such an arrangement. On the contrary, if resource users are involved in making rules and regulations the compliance level could improve substantially (SEAFDEC 2006).

Based mainly on rural development objectives and the improvement of the national market for agricultural products, some Southeast Asian governments attempted to establish community organizations, including for fisheries, but most such attempts quickly failed. Several reasons account for this. First, most organizations were established by government agencies, and the continuous need for financial support became burdensome, because their financial independence was not well conceived. Second, modernization of markets based on a public auction

system initiated by fishermen's organizations (but not strongly supported by the government) was either not accepted or was sabotaged by middlemen. Third, fisheries management was not considered important and the objectives of fisheries institutions were poorly defined. Combined with other constraints, this led to the collapse of the nascent institutions.

### **Marketing fish and fishery products**

Enhancing the economic capability of community institutions such as fishermen's organizations may require an additional right in addition to those related to fishing and management: that of being involved in the marketing of products via community public auctions. This would require further clarification of the legal status of fishermen's organizations, including their exact legal status as non-profit organizations, including privileges regarding taxation.

It is often asserted that coastal small-scale fisheries remain financially weak because their incomes are retarded by an informal market structure, and particularly by "middlemen", who are conventionally characterized as a "social problem". But this cannot be so easily assumed without prior and thorough investigation of the various aspects of each particular case of informal credit and finance (Ruddle 2011). However, informal marketing makes it difficult for the small-scale fishermen to set the price of their products, which they may be obliged to market with no involvement in value added owing to their relationship with middlemen. Because fish and fishery products are increasingly destined for the international market, modernization of local fish marketing systems is an immediate need to establish transparency. Without an enhanced financial status to provide a strong incentive for fishermen, it is unlikely that small-scale fisheries management systems can be improved. An improved local marketing system can be critical to ensuring better local fisheries management and fishermen's livelihoods.

Alternative fisheries management designs must include major changes at the local level. Local institutions such as fishermen's organizations can be financially independent through their involvement in fish marketing, particularly via community-level public auctions. However, strong government support is required (to provide an enabling environment, and especially a legal framework) if the current and long-established marketing systems, which are based on a relationship between individual fishermen and middlemen, are to be modified

### **Functions of government agencies and fishermen's organizations**

One difficulty in delegating management authority could be the general perceptions that individuals

in charge hold regarding fishermen. “Resource management” is conventionally regarded as highly technical and science-based, making it difficult to convince national fisheries administration staff and policymakers that fishing community members are capable of conducting management tasks. Effective promotion of an alternative fisheries management system requires changing the mindset of decision-makers wedded to existing approaches.

### **Potential additional benefits of an appropriate fisheries management system**

#### ***Promotion of responsible fishing***

Promoting responsible fisheries is difficult in a context of declining resources and increasing user competition under an open access regime. The lack of clear ownership of fisheries resources is commonly but erroneously considered to be the main cause of the problem (Davis and Ruddle 2012), leading to the assumption that once fishing rights and partial delegation of management responsibility have been established, conditions could improve drastically. In Ban Saphan Bay, Thailand, although fishermen had minimal rights, they demonstrated an interest in using resources sustainably by complying with a voluntary moratorium on such illegal fishing gear as the push net, and upgrading their gear to a larger mesh size. The Ban Saphan Bay project was supported by Thailand’s Department of Fisheries, but no national legal support was provided. However, provincial regulations supported the system (Anuchiracheeva 2005; Anuchiracheeva et al. 2003). Fishermen gradually became more sensitive regarding implementation of sustainable resource use to the extent of monitoring the misconduct of outsiders fishing in the designated exclusive rights areas of others. Based on mutual agreement, they regulated their activities and informed on the irresponsible behavior of outside fishermen.

It is well understood that any system based on government regulations cannot be effectively implemented and enforced in myriads of fishing settlements scattered along vast coastlines, especially considering the current low management capacity of governments in developing countries. A different and appropriate system is required to regulate fisheries. There is no overriding reason why any government enforcement is required to regulate small-scale fisheries. This is well demonstrated by the case of Japan, where there is almost no government intervention at the local level, as all coastal fisheries activities are confined in their respective designated areas, and compliance with rules developed by resource users (with guidance by the government) is normally high (Kato 2004b; Makino and Matsuda 2005; Ruddle and Akimichi 1989; Yamamoto and Short 1991).

Provision of fishing rights together with management rights to resource users may greatly enhance their compliance with fishing rules, especially when the critical rules are developed by themselves as one of the most important functions of the fishermen’s organizations. Such an arrangement would promote responsible fisheries as well substantially reduce the costs of government enforcement. Although enforcement of the rules for small-scale and coastal fisheries might be improved through an internal mechanism under an appropriate system as described here, the resolution of conflict between small-scale operators and large commercial boats that frequently encroach into coastal areas would remain an external problem requiring solution through government intervention, including an improved licensing system for commercial fisheries.

#### ***Overcapacity***

Although overcapacity is recognized as a serious problem facing small-scale fisheries in Southeast Asia, no effective solution has emerged, and the number of fishermen is increasing continuously. Entrance to small-scale fisheries is presently unregulated, and new entrants are not discouraged mainly because of the widespread rural poverty and lack of alternative livelihood opportunities. It is doubtful that any top-down approach by government agencies would be effective, although a primary objective of introducing fishing rights is limiting the number of small-scale fishing units. On the other hand, a solution could be promoted through fishermen’s organizations, because introduction of a user-rights group via a fishermen’s organization could also function to limit membership, as they develop their own regulations to either reduce or not increase membership so as to secure larger shares for existing members. Transparent and logical selection criteria and a stringent evaluation of applicants could freeze membership size and even lead to an eventual decrease.

#### ***Data collection***

Although government agencies normally collect fisheries data either directly or using contracted enumerators at fishing ports, markets and other sites where fish are aggregated, the geographically scattered pattern of small-scale coastal fisheries and the small size of marketing points ensures that most transactions between fishermen and market intermediaries (“middlemen”) are conducted privately, so that the volume of fish transacted is not visible to outside enumerators. This makes reliable collection difficult (Kato: 2003b). In contrast, data collection in cooperation with fishermen has been considered, but has never been successfully implemented, owing to a lack of mutual trust between national fisheries administrations and fishermen. Agencies

claim disappointment with the quality of data, and fishermen are reluctant to provide data without knowing how it will be used. However, that could change if the right to manage fisheries is delegated to fishermen's organizations, because they would require basic operational data that fisheries agencies could then access and compile.

Collection of statistical data and information is also problematic because the current systems were introduced long before fisheries management data needs were identified. Current fishery statistical systems are focused on the collection of production data and not on the data required for fisheries community management, such as the number of fishermen and the number and type of fishing boats and gear. Such basic data have not been emphasized or systematically collected, even after fisheries management became a priority issue. This may have also resulted from the narrow Western fisheries management focus on resources. Data required for fishermen's involvement could be easily collected by resource users or local institutions if management functions are delegated appropriately to the community level.

Scientific indicators such as MSY are inherently too uncertain and hypothetical to be of value in the management of tropical small-scale fisheries, and will not be understood by resource users, who can more easily understand management indicators such as CPUE that are more appropriate to assessing fishermen's activities than resources. Based on such an understanding, regional guidelines for indicators were developed by SEAFDEC (2006). Fisheries management for small-scale tropical fisheries should focus on the management of fishermen's activities rather than on resources, and both managers (local institutions that collaborate with national fisheries administrations) and resource users (fishermen) must use mutually understandable indicators and communication tools.

### Conclusion

One assumption of globalization is that internationally agreed upon issues should be applicable worldwide. However, in many cases that may not reflect reality, especially in developing countries. Further, because the globalization of fisheries administrations is a relatively recent phenomenon (having begun after 1990), most developing country representatives attending international meetings are not yet accustomed to the format and rules that govern the meetings. For example, although some countries may consider a specific proposal unacceptable, the meeting could consider that issue as unanimously accepted if dissenting opinions and concerns are not expressed. There is a large gap in the way different countries participate

in meetings organized to address issues relating to the promotion of the globalization of fisheries administrations.

Concerns have been expressed (Kato 2003a) that methodologies, such as the resource management system developed in temperate areas, have been overwhelmingly promoted and widely accepted as the means of attaining sustainable fisheries, without carefully investigating the applicability of the system in different and diversified ecosystems around the world (particularly in the tropics), and without recognizing the longstanding existence of viable, successful alternative systems (Kato 2008; Ruddle and Hickey 2008).

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## Massaging the misery: Recent approaches to fisheries governance and the betrayal of small-scale fisheries<sup>1</sup>

Anthony Davis<sup>2</sup> and Kenneth Ruddle<sup>3</sup>

Common assertions about the benefits for small-scale fisheries under co-management and human rights approaches become untenable in the context of neoliberalism, because they facilitate the penetration into communities of rationalities and operational methods that betray resource harvesters by undermining family life and cultural systems, and destroying the local social organization of production. Based on neoclassical economics, neoliberalism does not recognize cultural, historical, and social characteristics and so cannot accommodate power relationships, social class inequalities and exclusion, social class-based exploitation, vested interests, and wealth appropriation that all must be overcome to deal effectively with inequity, poverty, and powerlessness. These weaknesses are ignored in the small-scale fisheries governance literature, which is characterized by a naïve faith in the magnanimity of the state to perform in a morally and socially positive manner. But the state is no benevolent patron of the public interest and democratic representation, although these are among the predominant underlying yet unstated assumptions in the recent approaches. Rather, based on property ownership and the “individualization” of rights and decision making, it facilitates empowered social classes to further increase wealth and capital accumulation. Although portrayed as benefits of the recent management approaches, democracy, popular participation, institution building, partnership, and local knowledge are sought by the state to legitimize the imposition of market discipline, not for their intrinsic value.

*The overarching structure of the corporate state and the idea of the common good are irrelevant to [academic] specialists. They exist to make the system work, not to examine it.*

Hedges 2009:98

### Introduction

The contributions of small-scale fisheries are increasingly recognized (FAO 2010), leading to the vigorous promotion of alternative approaches for their governance. Co-management is particularly promoted, its widely asserted benefits being a more inclusive and equitable form of resource governance that directly engages and, thus, empowers “users” and “stakeholders.” In ways generally not clearly specified, it is implicitly assumed that this would enhance ecological and livelihood sustainability, while fostering “user/stakeholder” regulatory compliance.

A fundamental problem is that the term “co-management” is vague, partly because its usage covers too wide a variety of arrangements. That undermines understanding, meaning, and its usefulness to redesign management, such that “[t]he

term ‘fisheries co-management’ has now become so broadly used in applied settings and in social science that it risks losing important aspects of its original thrust” (Pinkerton 2003:69). In contrast, Jentoft (2003:3) opines that “co-management can mean different things in different settings...This is partly because the concept is broad.” He continues, “although principles such as democracy, transparency, accountability, and sustainability are key defining attributes of co-management, the way they are converted into concrete management institutions may vary from one country to another and from one fishery to another. The context into which co-management is introduced must always be taken into account. This means that co-management as a concept...has to be...sufficiently flexible to be generally useful...” (Jentoft 2003:3). He continues describing co-management as “a collaborative and participatory process of regulatory decision making between representatives of use groups, government

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agencies, research institutions, and other stakeholders. Power sharing in partnership is an essential part of this definition. Admittedly, this is a broad characterization, perhaps even too broad, since it frequently leads to questions of what co-management really is. *Therefore it seems easy to state what co-management is not than what it really is* (Jentoft 2003:3, emphasis added). In a similar vein, we are advised that “[c]o-management should be viewed not as a single strategy...but rather a process of resource management...Thus, the co-management process is inherently adaptive, relying on systematic learning and the progressive accumulation of knowledge” (Pomeroy, Cinner, and Nielsen 2011:115). In other words, despite the accumulation of a large and numbingly repetitious and descriptive wave of social science publications that too commonly lack a basis in evidence, there is nothing inherently different about co-management: it is precisely the same as any process of knowledge acquisition in being adaptive, systematic, and progressive (cf. “additive” and “sequential” learning in traditional education, as described by Ruddle and Chesterfield [1977, 1978]). Those authors quoted above nicely confirm that co-management of fisheries is basically an ill-defined philosophical and advocacy-academic approach that is actually a Godsend for neoliberally-inclined governments as a template for designing both domestic fisheries governance and foreign assistance for fisheries.

In this article, we examine the central topic of the relationship between neoliberalism and co-management using examples from Nova Scotia, Canada. In our view, this analysis can be extended to other nation-states where fisheries governance has become permeated by neoliberal ideas, including Denmark (Høst 2011), Norway (Hersoug 2005), and, if Individual Transferable Quotas (ITQs) are included, Iceland (Matthiasson and Agnarsson 2010) and New Zealand (Connor and Shallard 2010; Duncan 2011; Hersoug 2002). In addition, as illustrated by the approach of the Canadian International Development Research Center (IDRC), it can also be applied to small-scale fisheries management in the developing world, where it has been asserted that “managers need to exert more control over access” (i.e., property rights) (Davy 2002:viii), and whose “[r]ecommendations have included new governance regimes, such as community-based management or co-management, and increased use of local fishery knowledge” (Davy 2002:vii).

More recently, a “human rights” perspective has been added by Allison et al. (2011) Allison (2011) and Charles (2011), in line with FAO (2005:3) observations such as “... fisheries ethics deals [sic] with the values, rules, duties, and virtues of relevance to both human and ecosystem well-being, providing a critical normative analysis of the moral issues

at stake in that sector of human activities.” Such human rights propositions appeal to sensibilities about morality and justice, especially in the liberal-democratic understanding and championship of these attributes. Implicitly, they assume that the neoliberal state is a promoter of social and economic justice.

Although superficially these initiatives appear broadly positive, an unintended side effect has been the acceptance of many assumptions that have neither been well researched nor proven. As a consequence, ill-considered approaches to governance have been promoted — particularly the assumption that governments must organize and mobilize communities — since the substantive sociological content of the implications of these new approaches for small-scale marine settings has been barely considered. This is evident in the worldview embodied in key assumptions of many leading researchers about governance, the state, and small-scale fisheries, such as the simple assumptions that it acts for the common good and best socioeconomic interests of its citizens, or that property rights are essential for rational and sustainable natural resources exploitation. Such assumptions, unexamined and perhaps not even perceived by those making them, have recently been exquisitely demolished by Bromley (2009).

Worse, apparently it is not understood that such proposals facilitate the penetration of neoliberal values and operational modes, thereby betraying the very people claimed as beneficiaries. Such key political-economic characteristics of small-scale fisheries as social class inequality, wealth appropriation, and class-based exploitation, which must be addressed to overcome poverty, inequity, and powerlessness, are ignored. This was demonstrated by our online searches (cf. Davis and Ruddle 2009). An August 28, 2011 Google search on “fisheries and management” and “fisheries governance” generated, respectively, 8.43 and 8.14 million results, while an identical search in Web of Knowledge produced 1,620 and 56,400 results, respectively. In addition, a Web of Knowledge search on August 15, 2011 using “fisheries research and management” yielded 1,600 journal articles published since 1987. By contrast, “neoliberalism and fisheries” yielded just two results, supporting Høst’s (2011:4) observation that “[i]n disciplines concerned with the management and economics of fisheries, the neoliberal ideas and political project seem to live an inconspicuous but influential life....” The second result is troubling because over the last three decades “governance” and management have been emphasized in fisheries social research. How can such an omission be explained?

Focusing on co-management and treating briefly the “human rights” approach, we analyze the key

concepts and presumptions from a selection of the recent governance literature identified through Internet searches, supplemented by several papers from a recent compilation (Chuenpagdee 2011) and illustrated by two vignettes from Nova Scotian small-scale fisheries. The central argument posed is that co-management, rather than being a benign, power-sharing concept, shifts the burdens and responsibilities to citizen-users —“stakeholders,” in the neoliberal parlance — as a means of rationalizing fisheries. Our intent in this article is to provide a first step toward isolating and illustrating central ways that “recent approaches” in governance actually betray both small-scale fisheries and the promise of social research.

### On the term “neoliberalism”

Neoliberalism is closely linked with neoclassical economic ideas, in which individuals are related only by their simple and everywhere similar social relationships in a market. Further, behavior and institutions beyond the market are also assumed as uniform everywhere, with minimal impact on economic activities (Bruton 1985), and all change is the result of external influences (Feldman 1987). In neoclassical economics, the gap between theory and reality is enormous and is rooted in the specious universalistic concept of *Homo economicus*, conceived of as unfailingly operating as a “rational, self-interested, instrumental maximizer with fixed preferences” (Hirsch, Michaels, and Friedman 1987:322). Everyday economic life is reduced to the deterministic and presumed universal trait of “rational choice making,” which can be represented easily in formal models (Barnes 1988) as one of the fundamental goals of neoclassical economic study.

Such a teleological approach cannot accommodate power relationships, the strong influence on market behavior of vested interests, and the attendant qualities of social class and group structures and dynamics. The incorporation of non-economic factors is condemned as detracting from the scientific rigor of the neoclassical conceptual framework and its all-important, but overly simple, models (Brohman 1995). Thus, the assumptions of neoliberalism lack any semblance of appreciation for the cultural, historical, or social characteristics of the “real world.” As a consequence, approaches to resource management based on the assumptions of neoliberalism grounded in neoclassical economics stand little chance of success. Indeed, Amin (2004:11) discusses these ideas as “imaginary capitalism,” “closer...to sorcery than to the natural science which it pretends to imitate.”

The enormous interest in neoliberalism has generated a plethora of definitions and understandings

(Hartman 2005; McCarthy and Prudham 2004). Those most widely shared are captured by Hartman (2005:58-59) describing neoliberalism as “an economic doctrine which gives supremacy to [self-regulating] free markets as a method of handling not only the economic affairs of nations, but also as a political ideology which can be applied to all manner of governance issues,” within which the state’s primary role is limited to championing and assuring the entitlements and rights of private property and contracts. This entails privileging an individual-centric notion of rights and freedoms over collectivist orientations and practices, including a concept of individual empowerment and action as contingent on “freeing” individuals to develop and employ their skills and abilities innovatively and entrepreneurially through the medium of secured private property (Hartman 2005). The state’s contribution is to assist the citizen-individuals “to practice their freedom” (Hartman 2005:60) through providing access to secured privatized property, combined with the responsibility to employ ownership in self-interested, competitive, and creative ways. This entails “the commodification of everything” (McCarthy and Prudham 2004:276). In the neoliberal ethos, anything of value, including individual human labor and productive/creative capacities, must be marketable (i.e., a transactable commodity). For this to occur, everything must be transformed into alienable property (i.e., commodities) and made available for transactions through a process of state-secured private property ownership and entitlements. In this sense, the market is regarded as “a powerful instrument of civilization, inculcating such virtues as prudence, diligence, punctuality, self-control” (Hindess 2001:26). By extension, securing market and property rules while concomitantly reducing or eliminating non-market economic activities means that the rule of the market can be used as a powerful instrument of development policy and management of natural resource extraction.

The presumption of the existence of and necessity for private property as a tangible, alienable, and transactable good is the requisite organizing principle and central referent (e.g., Mansfield 2001; Pomeroy, Katon, and Harkes 2001). Further, as Mansfield (2004) argues, it is critical to understand that this neoliberal presumption is evident and advanced, irrespective of whether property ownership is individual or collective, when property ownership and rights are conceptualized as the key condition requisite for achieving economic rationality, to empowering self-interest and action and to securing livelihoods. Specific to fisheries, Mansfield (2004:314) observes that “the development of property rights in fisheries is tied into the neoliberal focus on markets as the central form of governance...through the presumption that private

property rights are necessary for markets to work, and that markets are necessary for optimal economic and environmental behavior.”

Thus, the neoliberal state has the important yet limited role of advancing the application of private property-based market discipline in every meaningful area of life and social organization. In so doing, the state is purported to be advancing individual freedom, unlocking creative and innovative capacities, empowering citizens, and fostering “true” democracy. Key methods employed include the devolution of administrative functions to “the community” and “helping” “individuals to align their individual desires with government and to acquire the requisite virtues in order to become self-governing, enterprising individuals” (Hartman 2005:63). Citizenship becomes entwined with notions of obligation rather than rights, and “the language use revolves around the notion of contract and the ‘mutual obligation’ of both parties” (Hartman 2005:63).

There is an important associated vocabulary. “Good governance,” together with “empowerment,” “popular participation,” “responsibility,” and “democracy” related to it, are among the concepts most promoted by some Western governments both at home and overseas, via their international development agencies and dominance over United Nations agencies. As Hindess (2001:35) observes, “While modern democracy allows citizens only a limited role in the government of the state to which they belong, it is often sought to secure a degree of legitimacy for the activities of the state which other regimes are unable to match. It is this, rather than the expansion of popular control itself, that particularly appeals to the development agencies and financial institutions which promote democracy as a fundamental component of good governance.”

Of course, in so doing, the state is facilitating and advancing conditions whereby the empowered dominant social class can increase wealth extraction and capital accumulation at ever-lower costs. In short, the neoliberal state and its cognate international bodies should not be confused with an image of benevolent and even-handed purveyor of the public interest, fairness, and democratic representation; yet, this perspective pervades the assumptions underlying the recent approaches to fisheries governance in social science research.

### **Co-management and its shortcomings**

Co-management is the predominant recent approach to fisheries governance championed since the 1980s to promote resource sustainability and the participation of small-scale marine harvesters. Its basic attributes are described by proponents as

administrative arrangements whereby user groups and government agencies participate and collaborate in resource management decision making (e.g., Jentoft 1989; Jentoft, McCay, and Wilson 1998; Pomeroy and Berkes 1997; Sen and Nielsen 1996). Key words like “collaborate,” “share,” and “cooperation” are sprinkled throughout discussions of the meaning of co-management, which, it is argued, decentralizes decision making through devolution and delegation of authority, thereby empowering resource users. Such qualities and outcomes are presented as desirable for the democratization of decision making, social justice, improved user compliance, and enhanced resource sustainability. Superficially, all seem eminently virtuous and progressive. Unfortunately, there are devils at play.

The first difficulty is the presumption that the liberal-democratic state is willing to share authority to empower marine harvesters and enhance social justice. For example, in their recent assessment of Chilean small-scale fisheries co-management, Marin and Berkes (2010) do not identify negative impacts on pre-existing governance practices, but find virtue in the “centrality of state institutions,” “the stability of the state,” and “the rule of law” while recognizing that “[t]he combination of bureaucracy and rigidity of the law define a state-driven system with little room for bottom-up learning and innovation” (Marin and Berkes 2010:856). This precisely exemplifies the confused and contradictory thinking arising from an absence of conceptual sophistication and analysis regarding the neoliberal state.

Rather, the neoliberal state devolves and delegates, as Hartman (2005:69) observes, for the purposes of “producing docile subjects who discipline themselves in the name of individual initiative and responsibility.” That is, the neoliberal state pursues regulatory policies and seeks opportunities that will download responsibility and costs onto citizens, whom it understands as “clients,” “users,” and “stakeholders.” In so doing, the state champions the imposition of market-based logic and discipline to organize and express new management responsibilities. In turn, this fosters the interweaving of livelihood interests as self-interest with management responsibilities.

Once defined by and embedded in this form of participatory management, livelihoods are extracted from their customary social and cultural contexts and relations and recast as a narrowly conceived and necessary means for achieving economic goals. Meaning becomes referenced to the self and the advancement of self within administrative structures and processes. Self-interest is extracted and alienated from customary social relationships, dynamics, and constraints and then placed squarely in the arena of individual performance, as

measured by market-derived “efficiencies” associated with such variables as supply, demand, costs, and income. Users have little choice but to adopt the behavioral and organizational discipline demanded by participatory management and its responsibilities, but in so doing, they fatally compromise their social capacity to oppose and resist the neoliberal definition of what matters and of how life should be oriented. Contrary to the apparent assumption of fisheries co-management proponents, the neoliberal state and its international cognates are anything but facilitators of social justice, rights, and empowerment through management collaboration with citizen-clients.

Co-management in the neoliberal vortex also requires that resource users adopt organizational and decision making methods alien to their customary practices. Co-management collaboration requires new organizational forms, formal leadership and administrative specialists, decision making processes, and the like. Collaboration, devolution, and delegation require shared organizational attributes and operational rationalities. That is, state authorities and managers can deal only with entities and their representatives that in fundamental ways embody a mutual understanding of what is important, employ a common worldview and language to express it, and make decisions in a manner consistent with neoliberal administrative practices and objectives (Ralston Saul 1992). These requirements characterize what is commonly referred to as local-level “institution-building,” a prior requisite for co-management. Indeed, such “institution-building” is usually presented as an additional benefit of co-management initiatives to build new local-level capacities. Such methods must either be placed above or be separated from the customary practices used by small-scale fishers (e.g., Gelcich et al. 2006). Co-management proponents, ostensibly champions for inclusion, empowerment, and “voice,” intended or otherwise, make the case for transforming small-scale fishing societies from that which is valued and desired into that which is abhorred. As part of the process, the essential rationalities framing and expressed through social relationships are levered out of a socially-embedded and referred way of living and replaced by a self-centered, institutionally mediated, professionalized occupation that internalizes and references the core principles of neoliberal valuations and market discipline.

Next, co-management proponents presume that “property” is central to organizing effective marine resource governance (e.g., Bromley 1991, 1992; Hanna, Folke, and Mäler 1996). Hanna (1998:3) typifies the neoliberal perspective, observing that assigned and clearly specified “[p]roperty rights in some form are necessary for co-management because without them there is no definition or

assurance of legitimate participation or of the conditions that link user groups to each other and to the government.” Harvesters’ relations to and tacit possession of fishing grounds, resources, and livelihoods in themselves legitimate participation in marine harvesting and decisions concerning it. This is evident in the common usage of “stakeholder” to characterize those involved in local marine harvesting. For instance, Jentoft (2003:3) argues that co-management involves “a collaborative and participatory process of regulatory decision making between representatives of use groups, government agencies, research institutions, and other stakeholders.” Often employed interchangeably with the more descriptive term “user,” “stakeholder” conjures images of mineral prospectors registering claims, or, as in the corporate business world, persons or groups with a stake in an organization. Certainly the term “stakeholder,” used to denote marine harvester relationships, subsumes all the values of neoliberalism. In particular, for an individual to be cast as “holder” of a “stake” assumes that they are defined through their relationship to “property.”

Hanna (1998:4) states, “linking stakeholders into the management process is a critical element of co-management.... The organizational task is to maximize representation so that decisions reflect a full array of interests and so stakeholders are as vested as possible in the process.” The characterization “stakeholder” embodies liberal-democratic assumptions about the sorts of institutional and legal conditions requisite for achieving fairness, inclusivity, “voice,” empowerment, and justice. Much rests on situating freedom, liberty, and rights as inherently vested in the individual human being and the presumption that individuals in possession of themselves are free to use their self-possession however they choose. Thus, liberty and freedom first require establishing and institutionalizing property (i.e., ownership of self as a “right.”) Property and particularly relations of exchange between individual property owners characterize the assumed basis for liberal-democratic social organization, institutions, and relationships. Self-possession is the first condition, but it becomes meaningful only when mobilized in relation to material property used for productive and essentially self-interested purposes. That is, the individual’s relation to the ownership and use of property is the key condition in the liberal-democratic approach to achieving liberty and freedom, to defining rights (legal or human), and to enabling what it considers progress and development (cf. MacPherson 1962). Additionally, institutions have value only in so far as they tangibly advance the self-interests of those engaged and/or represented. Consequently, the co-management model, regardless of the specific details of its iteration,

presumes that the neoliberal notion and essential principle of property are critical to organizing and advancing human interests.

It is important to note here that many proponents specifically argue that co-management arrangements address small-scale fisheries' needs for social and distributive justice (e.g., Hauck 2011). Yet, rarely are any substantive empirical data and analyses provided on the political economic conditions underwriting such injustices. Concepts such as social class, wealth appropriation, power, and exploitation are notably absent throughout the new governance literature, with the defining economic, political, and social relational attributes and outcomes of marine resource commodity pricing and market structures and processes rarely mentioned as determinant of poverty and powerlessness (e.g., Jentoft and Eide 2011).

For example, in a well-intended but ultimately unsuccessful effort, one leading proponent of co-management recently noted the absence of and need for the analysis of power in fisheries management research (Jentoft 2007). Jentoft's treatment is problematic largely because of an apparent inability to recognize that power is seated in and expressed through economic, political, and social structures dedicated to sustaining and advancing the material interests of dominant social classes, wherever they are situated within commodity production and exchange systems. That is, power is the consequence and instrument of hegemony (class dominance and relations), *not* the source of hegemony. Identifying and understanding power in such settings must begin by isolating and examining the structure and dynamics of the social class systems, particularly the social and economic relations of and basis for wealth appropriation and harvester exploitation (e.g., commodity price determination). This analysis is inconsistent with a position that argues that "...co-management is defined as power-sharing... by introducing a system that gives stakeholders an equal chance to apply or shield themselves from power" (Jentoft 2007:428). Explicitly valuing the potential of the liberal-democratic state to act in the interests of citizen welfare and situating property rights as the legitimate and requisite organizational reference simply adds to the fog enveloping conceptual and analytical clarity.

Finally, the concept of "community" is falsely idealized and defined in much of the literature (Li 1996). This is partly because so-called communities are characterized by multiple and overlapping boundaries (Ruddle 1996), most often have a shifting membership, are hugely varied in geographical scale, and are internally differentiated by qualities such as religion, social class, and ethnicity. Further, it is generally assumed and sometimes even stated that,

in extreme contrast to the inefficient State, rural and particularly "traditional" communities had long lived sustainably in harmony with "nature" (e.g., McCay and Acheson 1987). Such inaccurate, reductionist, and essentializing images of an "idealized community" were used in an attempt to alter radically the stereotypical, conventional thinking that, for example, the "tragedy of the common was inevitable" (Acheson 1989) or that rural people were backward and ignorant whereas scientific knowledge and management systems were superior (Chambers 1983). Past with present and fiction with fact are conflated to produce an "ideal" type of community that was likely considered more impactful than mundane reality for the task of advocacy in influencing policy (Li 1996). Of course, homogenizing notions of "community" also overlook the key issue of exactly who from within what communities will be engaged in capacity-building, decision making, organizational control, and resource management (cf. Béné and Neiland 2004). Often, these challenges are treated through vague reference to community "stakeholders" as the loci for participants and empowerment.

### **Neoliberal co-management illustrated: A Nova Scotian interlude**

Over the last two decades, the Small Craft Harbors Unit (SCHU) of Fisheries and Oceans Canada has strived to divest itself of property developed and overseen on behalf of small-scale harvesters and recreational boaters. For instance, in 1995 Nova Scotia had 308 small craft harbors, of which now 47 percent either have been sold or transferred. The remaining 164 are "co-managed" through a so-called partnership between SCHU and local non-profit Harbor Authorities. SCHU created the Harbor Authority Program 20 years ago to facilitate divestiture. It assists users to assume management responsibilities (GoC 2008, 2011) for which they must organize themselves into a formal Harbor Authority that once "certified" by SCHU then must lease the facilities from it. Thereafter, local authorities are responsible for all routine administrative and maintenance matters. SCHU's role in this "partnership" is to receive proposals for major upkeep or expansion of the facility and decide which harbor "partners" to support.

This example illustrates how the state employs co-management to download operational responsibilities and costs onto citizen-users, while divesting government of providing infrastructure critical for sustaining livelihoods. This has been a key component of the Canadian government's policy to rationalize small-scale fisheries by concentrating capacity on "core" harbors, while essentially abandoning others. Gradually, marine harvesters unable to bear the additional costs of using non-core harbors are

leveraged out, thereby serving the government's goal of reducing capacity and maintenance costs. As one harvester is reported to have observed in response to a recent SCHU divestiture, "It's not impossible to fish out of [the local core harbor], but when you consider that it is an extra one and a half to two hours on each day, along with fuel costs, labor costs, and wear and tear on equipment, it's not a good alternative." (Beswick 2011:A7). Further, the terms of Harbor Authority organization and operation prioritize neoliberal sensibilities and "market discipline," so local Harbor Authorities must rely on users to cover the costs, thereby increasing harvester vulnerability to rising costs and fluctuations of resource prices.

Meanwhile, the SCHU lauds Harbor Authorities as "essential to the social and economic life of many communities... that depend on local harbors. [They] link people to nearby waters by keeping vital harbor facilities in good repair [and] are also key in representing the needs of its users at the community level and to various interested parties" (GoC 2011). What was once understood as a liberal-democratic government's duty and responsibility to support livelihoods through the provision and maintenance of essential infrastructure now largely depends on "volunteer participation [where] an estimated 5,000 people generously give their time through more than 550 Harbor Authorities across Canada. The volunteer effort approximates 135,000 hours per year, which equate to nearly 70 full-time people" (GoC 2011). While imposing neoliberal methods and market discipline and downloading responsibilities, costs, and risks, the state celebrates the new volunteerism and co-management arrangement. Warm and fuzzy language masks the essential rationality and intent of "co-management" and "partnership," i.e., to shift the burdens and responsibilities to citizen users as a means of rationalizing fisheries.

### The "human rights" approach

It has recently been proposed that a "human rights-based" approach would advance the interests of small-scale fisheries more than current governance schemes (e.g., Allison et al. 2011; Charles 2011), since framing fisheries governance in terms of existing international conventions on human rights would compel governments to address *inter alia* income and asset poverty, food insecurity, marginalization, risk, poor education, and inadequate access to health care. Further, Allison et al. (2011) note that a "human rights" approach would better enable fisheries-dependent peoples to employ devolved governance opportunities more fully than earlier. For these and other advocates, a human rights approach would focus on transforming the political circumstances, issues, and

decision making processes at the heart of injustice, inequality, and poverty. Although such terms as "empowerment," "poverty," and "injustice" again accompany this proposition, there is, apart from a notable corpus of literature by Béné and associated authors, mostly on African and inland small-scale fisheries (e.g., Béné, Hersoug, and Allison 2010; Béné and Neiland 2004, 2006), little unambiguous analysis of underlying economic, political, and social conditions.

Since fisheries alone cannot satisfy their nutritional requirements, as Raymond Firth (1946) observed long ago, marine harvesters must engage in exchange relationships. This means full-time fishing demands the production of commodities for exchange or sale, and it follows that the material quality of harvesters' lives depends on the terms of economic exchange (cf. Béné, Hersoug and Allison 2010; Béné and Neiland 2004, 2006). Remarkably, such an essential condition has been generally overlooked by the human rights advocates, although in many cases, poverty in fisheries resource harvesting stems directly from the processes and relationships that determine catch values. That is, harvesters are impoverished by political and economic circumstances they generally cannot control. Thus, the local, regional, national, and international political economy of commodity values, wealth distribution and accumulation, power, and class are more germane to understanding material poverty than is an absence of human rights.

Without considering the underlying characteristics of advantage and exploitation, it makes little sense to argue that a human rights approach will somehow benefit the poor majority in a political economy where commodity systems assure the wealth accumulation of a small minority. Equally troubling is the presumption that the nation-state is something other than an instrument organized to benefit the dominant wealth-accumulating class. For example, neither Allison et al. (2011) nor Charles (2011) acknowledge the existence of class systems that subordinate and exploit small-scale fishers. This is a serious omission because the appropriation from small-scale harvesters of the real economic value of what they produce is the foundation for entire systems of wealth generation, economic organization, and political action. This is where poverty begins; this is how poverty is sustained. The nation-state, in its relations with the dominant classes advances and protects their specific interests, including the conditions whereby wealth is appropriated and accumulated, requiring the impoverishment of marine harvesters' families and communities.

As currently structured, the nation-state and its political economy are improbable vehicles for addressing fisheries' poverty, injustice, and

inequality. Under such conditions, imagining that a human rights agenda will somehow transform state “governance” and action from the interests of the dominant and advantaged class to those of the exploited, marginalized, and impoverished demands a denial of historical evidence. Although most nations have signed the various international human rights conventions, small-scale fisheries, as with other livelihoods, remain defined by the social, political, and economic relations of economic value appropriation, wealth accumulation, and class advantage, intimately interlocked with their continuing exploitation and impoverishment.

### **Social relationships and what matters to small-scale fishers: Lessons from a Nova Scotian vignette**

Much about the organization of life, values, and meaning among small boat marine harvesters contradicts the assumptions of the recent governance literature. Extensive and time-honored social research evidence demonstrates that small boat fishing is best understood as a way of life rather than an occupation (e.g., Davis 1985; Davis and MacInnes 1998; Davis and Wagner 2004; Matthews 1976; Thiessen and Davis 1988). “Work” and “social” relationships are indivisible in any locality because day-to-day experiences and life histories are similar for everybody. They share common fundamentals across generations. At the core of their social relationships lies economic/livelihood production controlled entirely by crews composed of immediate family and social familiars, all of whom learned their roles from either kin or family friends. Small-scale fishing has always been an intimate and socially tight world, with most people nurtured in fishing as a way of life and sharing the values, attitudes, behaviors, and understandings of the local fishing culture (Apostle, Kasdan, and Hansen 1985; Davis and Wagner 2004; SRSF 2001a, 2001b; Thiessen, Davis, and Jentoft 1992).

When on the water, boats often have a formal social hierarchy, with captains occupying authoritative positions based on years of experience and knowledge accumulated, which earn them respect and influence, although usually routine matters are decided by mutual agreement between captain and crew. Captains are usually the legal owners of their vessels and equipment, although this is arguably not all that meaningful because the attributes and dynamics of social relationships when fishing matter much more to harvester satisfaction with their livelihood and all that is related within family and community life. But the ownership of boats, in particular, is also the medium through which captains attain reputation and express status among their peers. Success is captured in newness and such attributes as where boats were built, their equipment, and design.

A captain’s status among peers depends largely on success and its associated reputation. Status and reputation among family, familiars, and within a livelihood and social community matter, and these are born and grown within an intimate social matrix where what really matters is what is done with ownership and not ownership itself. Certainly, ownership is not understood as the basis of social and economic differentiation within communities and between families. Crew (i.e., non-owners) could aspire to captaincy and ownership following their apprenticeship “in the stern of the boat.”

However, once off the water, everything changes abruptly. With their catches on the wharf, Nova Scotian small-scale harvesters immediately become enmeshed in an exploitative “port market” process. Little negotiation takes place with fish buyers and processors about purchase prices for catches, such that harvesters become price takers to the buyers and processors as price givers. If not, they would be left with a quickly degrading and unmarketable catch. Further, most harvesters are locked into a patron-client system that obligates captains to “sell” their catches to specific buyers/processors, since indebtedness and obligation are managed by buyers to assure regular resource supplies. This reduces marine harvesters to a subordinate position within the local class structure. Through control of commodity values and exchange relations, resource buyers exercise their power to expropriate the lion’s share of commodity value. An array of neoliberal state policies, ranging from resource management and income insurance, through environmental regulation and industrial development, to finance and export regulation, assure the hegemony of the dominant class and its material interest in wealth appropriation and accumulation.

The new governance proponents embrace a neoliberal rationality that distinguishes captain-owners (“stakeholders”) from others and attaches vested interest in resource management and access to captaincy-ownership. This heightens local-level socioeconomic differentiations, creating the basis for social class divisions within small-scale fisheries communities. Whereas those participating as crew were once an integral component of livelihood social relations and dynamics, within neoliberal governance they become something akin to hired labor. As such, crew are effectively excluded from direct membership in local management organizations and decisions. The economic interests of captain-owners and their families are resituated in opposition to those of crew and their families, as factors like return on investment and enterprise efficiency supersede the obligations, decisions, and comportment that flow from livelihoods framed by the social relationships.

## Conclusions

The “new” resource governance alternatives are anything but what they claim to be, because they simply advance neoliberal presumptions about the necessity for and priority of proprietorship as a basic requirement for local empowerment. Most new governance proposals envision marine harvesters, at the very least for boat owners and captains, as having a role in decision making, possibly as partners with existing authorities. Clearly, such proposals do not expect the underlying neoliberal system to be transformed to respect and engage with local social and economic priorities or practices. Nor do they challenge proprietorship and associated exclusion as the central requirement for effective governance.

In fact, most new governance proposals would deepen the penetration of neoliberal values and, by so doing, further define and advance social class formation and differentiation in families and local societies. In essence, new governance is just another way of transforming small-scale marine harvesters into the self-interested maximizers presumed in neoclassical economics. Failure to locate power relationships, particularly those associated with economic exploitation and appropriation, at the very center of the context in which the production, sale, processing, and distribution of resources as commodities constitutes the basis of livelihoods means that recent governance approaches are not empowering for small-scale fisheries. Since neither co-management nor human rights proposals emerge from the practices and priorities of small-scale fishing cultures, families, and societies, the very specification of governance as designated function and priority reveals values, organizational necessities, and specified priorities that presume requisite neoliberal modernity and governance practice as imperative. Little if any value or substance is associated with engaging and advancing small-scale harvester social relations of production and way of living as the key reference in any form of harvester-referenced and driven governance.

Participation in small-scale fisheries creates and sustains a way of living and a local culture and buffers families and communities from powerful external forces that would dehumanize and disrupt local social relations of economic production and social life. In Nova Scotia, as across the globe, an array of external forces strives diligently to force neoliberal production and market “efficiencies” on small-scale marine harvesters. These forces range from government marine resource allocation and management policies, through exploitative market processes, to the so-called “alternative” and “empowering” approaches of “new governance.” Above all, these attributes are revealed by exposing the logic and

assumptions that promote and legitimate, either intentionally or otherwise, the imposition of “enterprise efficiency” and “market discipline” as desirable outcomes for small-scale harvesters.

Further, the motives for adopting new governance approaches can muddle implementation, particularly since a common aim is replacing failed previous attempts to manage a fishery, as in Canada, where much of the fisheries management focus struggled with its failure to reconcile and treat critical conditions. Although a period of resource collapses seems hardly an appropriate time to champion devolution of resource governance responsibilities to marine harvesters and their communities, it is certainly ideal from the perspective of wily bureaucrats seeking to shift the blame and duck responsibility for the consequences of their actions. The exercise of effective and empowered “voice” in governance requires the economic resources to develop and to support a wide array of necessary and foundational capacities ranging from an independent ability to design, conduct, and assess research concerning resources, through development of locally determined organizational, management, administrative, and decision making abilities to the wherewithal to design, implement, and enforce local management policies and practices. Certainly, marine harvesters striving to cope with resource collapses and fishing moratoria are unlikely to generate and dedicate the economic and organizational resources required to create and sustain co-management.

Defining the generic and universally applicable cause of governance failure in the now generally accepted terms of property rights is less than sophisticated. Rather than a one-size-fits-all approach, there is a fundamental need to examine each fishery in terms of its local attributes and social, economic, and historical contexts. Further, the character and prospects of locally prevailing social relations and social structures are more likely the locus of insight respecting poverty, inequity, and injustice than are organizational capacities to advance property rights claims. It is imperative when thinking of introducing new governance arrangements to acknowledge that the diversity, complexity, and dynamics of small-scale fisheries eschew simple panaceas. Introduced governance will succeed only where complexity, diversity, and the changing contextual factors that impinge on small-scale fisheries are taken into account and where the locally distinct range of “actors” involved are all included. Rigorously designed and implemented social science research can play a crucial role in documenting conditions and change in small-scale fisheries, especially since cultural characteristics, social relationships, labor supply, and marginalization are of critical, if largely still unappreciated, importance to



designing and implementing fisheries policy.

Co-management and “human rights” options rarely examine conditions “on the ground,” preferring to employ a generic or ideological approach. Largely ignored are the need for, the requirements of, and the methods by which to empower “voice” so as to achieve real and substantial powers enabling key aspects of the “fit” between local priorities and the attributes of resource governance. Particularly serious is that most champions of “new” approaches to governance ignore entirely the local exercise of economic power and the vested interests it represents. That is, there is little analysis of the determinant structure and dynamics of the local market respecting the definition, allocation, and distribution of resource values. In a commodity-producing, corporate-capital, profit-taking/capital accumulation economic context, the power and capacity to manage resources cannot be decoupled from engagement with the distribution and dynamics of power regarding the buying, selling, processing, and marketing of resources. Analyzing and understanding the linkages among and potentials of local practices and relations with initiatives focused on such harvester-centered and determined alternatives as marketing control, cooperatives, resource price negotiation/determination, and the like would do much more to advance harvesters’ economic and social interests than would championship of governance approaches that are likely to assure nothing more than deeper disempowerment of pre-existing social and cultural strengths

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