4 Human Rights and Fishery Rights in Small-scale Fisheries Management

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Introduction

When the word 'rights' is used in fisheries discussions, two very different ideas come to mind, depending on one's perspective. First, from the perspective of the people and communities engaged in fishing or otherwise dependent on the fishery, there are human, social and economic rights that can be reinforced, or negatively impacted, by actions taken in the fishery. Second, from the perspective of fishery management, there are 'fishery rights' that define who can go fishing and who can be involved in managing the fishery. This form of rights arises in what is referred to as rights-based fishery management (Neher et al., 1989), focusing on the rights (together with the responsibilities) held by individuals, communities, companies and/or governments specifically in relation to fishery management.

These two categories of rights have typically been treated separately, but there is now an emerging focus on linking human rights and fishery rights (e.g. Civil Society Preparatory Workshop, 2008). This chapter seeks to expand upon and reinforce the links between them, in the context of small-scale fisheries and their management. The following section introduces aspects of human rights and fishery rights, and summarizes current thinking on the practical links between these in the context of small-scale fisherfolk and fishing communities. This is followed by a section with more detailed discussions of fishery rights, including access rights, effort rights, harvest rights and management rights, as well as the particular importance of community fishery rights. A range of implementation issues are then examined; these arise when existing rights are being recognized or when a new rights system is being put in place, and cover questions of who can receive rights, how long the rights last, whether they can be transferred and how to choose among specific forms of rights. Finally, a set of conclusions is presented, along with potential directions forward in reinforcing or creating rights frameworks that provide better integration and balance than in many past approaches.

Human Rights, Fishery Rights and Their Interaction

When most people think of rights, it may well be *human rights* that come to mind. The United Nations has defined the overall nature of human rights, as well as accompanying social and economic rights (United Nations, 1948). Recently, efforts have been under way to examine the specific manifestations of such rights in fisheries and fishing communities – with attention to this highlighted particularly by international bodies of fishers and fishworkers, and with coverage in legal and policy debates. Some efforts in this direction will be discussed below.

At the same time, within fisheries management circles, attention is focused on so-called fishery rights - the rights of specific individual fishers, fishing communities or companies to have access to the fishery, to be able to exert a certain amount of fishing effort or to catch a certain amount of fish and/or to be involved in managing the fishery (e.g. Shotton, 2000). These rights are typically discussed in the context of achieving more effective management, both by specifying who is involved in the fishery (and how much) and by bringing fishers and others more actively and supportively into the management process. In a small-scale fishery setting, such rights may also have impacts on the well-being and security of fishers and fishing communities; the effects can be positive, given suitable recognition, design and implementation of rights, but can alternatively be negative (Charles, 2001, 2009; Béné et al., 2010). The various forms of fishery rights will be explored in detail later in this chapter.

There are clear and important relationships between human rights and fishery rights (Charles, 2009). The former reflect imperatives in terms of the relationships among people, specifically fishers, and between people and society. The latter govern who can go fishing and who can be involved in decisions relating to the fishery. The FAO (2007, p. 6) connects these together in addressing small-scale fisheries, noting that:

A rights-based approach, in defining and allocating rights to fish, would also address the broader human rights of fishers to an adequate livelihood and would therefore include poverty-reduction criteria as a key component of decisions over equitable allocation of rights, including in decisions over inclusion and exclusion, and the protection of small-scale fishworkers' access to resources and markets.

Certainly, if there are some aspects of human rights that can be maintained and enhanced through fishing activities, then this provides a strong link to fishery rights, and a context within which decisions concerning who should hold those rights, how they should be managed and so on, can be made. This connecting of fishery-specific rights and human rights has been neglected in much of the literature on rights in fisheries management, but will become increasingly important to take into account in fishery policy development, at scales from the local to the international. Such linkages are important in particular in addressing the challenge of poverty in fishing communities.

In considering these linkages, one analyst (Kearney, 2007) has developed a list of five 'fishing rights' that apply specifically to fisheries but reflect more general statements found in the Universal Declaration of Human Rights. These five 'fishing rights' Kearney notes are as follows:

- the right to fish for food;
- the right to fish for livelihood;
- the right to healthy households, communities and cultures;
- the right to live and work in a healthy ecosystem that will support future generations of fishers; and
- the right to participate in the decisions affecting fishing.

The adoption of this human rights-based approach in fisheries has been advocated by two major international fisherfolk organizations, the World Forum of Fisher People (WFFP) and the International Collective in Support of Fishworkers (ICSF). In a briefing note prepared for the FAO Committee on Fisheries in 2009, these organizations state (ICSF-WFFP, 2009, p. 3) that such an approach:

... recognizes that development efforts in fisheries should contribute to securing the freedom, well-being and dignity of all fisher people everywhere. Given the international consensus on achieving human rights, committed action to realizing the human rights of fishing communities, as indeed of all vital, yet marginalized groups and communities, is an obligation.

The organizations highlight two reasons for a human-rights approach in fisheries: 'The adoption of a human rights approach has an intrinsic rationale as achieving human rights of all citizens is an end in itself. Adopting this approach also has an instrumental rationale in that it is likely to lead to better and more sustainable human development outcomes'.

The ICSF and WFFP, together with many other civil society organizations, defined a human rights approach in fisheries within the 'Bangkok Statement' (Civil Society Preparatory Workshop, 2008) that was presented at the FAO-organized Global Conference on Small-Scale Fisheries (FAO, 2008). These organizations note (ICSF-WFFP, 2009, p.3) that the Statement 'expands on what a human-rights based approach to fisheries and fishing communities means, from the perspective of small-scale fishworkers and their communities'.

The approach of ICSF-WFFP (2009, p. 3) builds on the above list of Kearney (2007) to include the rights of fishing communities:

... (a) to their cultural identities, dignity and traditional rights, and to recognition of their traditional and indigenous knowledge systems; (b) to access territories, lands and waters on which they have traditionally depended for their life and livelihoods; (c) to use, restore, protect and manage local aquatic and coastal ecosystems; (d) to participate in fisheries and coastal management decision-making; (e) to basic services such as safe drinking water, education, sanitation, health and HIV / AIDS prevention and treatment services; and (f) of all fish workers to social security and safe and decent working and living conditions.

Furthermore, the ICSF and WFFP (2009, p. 3) specifically note the rights of women to:

... participate fully in all aspects of smallscale fisheries; to have access to fish resources for processing, trading, and food, particularly through protecting the diversified and decentralized nature of small-scale and indigenous fisheries; and to utilize fish markets, particularly through provision of credit, appropriate technology and infrastructure at landing sites and markets.

In considering these rights, it is important to keep in mind that the well-being of a small-scale fishery is often closely interrelated to that of the corresponding coastal communities. In particular, holding fishery rights over the use of fishery resources and the management of the fishery can empower communities, while loss of those rights (e.g. through their transfer to outside players) can lead to a loss of social cohesion in the community. This can be reflected in reduced local involvement in the fishery, reduced employment and a corresponding increase in the proportion of 'outsiders' fishing on what had been locally controlled resources. All of these impacts can run counter to the human rights of the community and its residents. Thus, attention to livelihoods and poverty reduction in the context of small-scale fisheries is directly related to fishery rights.

As Allison and Horemans (2006, p. 760) note: 'Livelihoods approaches are evolving and merging with rights-based approaches and community-development...' Indeed, these authors argue (Allison and Horemans, 2006, p. 760) that how fishery rights are dealt with is critical to the well-being and human rights of the people:

It is policies and institutions that determine access to assets, set the vulnerability context and determine peoples' livelihood options, reactions and strategies, and ultimately, the outcomes of those strategies in terms of their ability to make a living and willingness to invest in helping to conserve the natural resource base. Addressing governance therefore remains the key challenge for both poverty reduction and responsible fisheries.

The connection of artisanal and subsistence fishing to food security and livelihoods is an important element in considering human rights and fishery rights. As Schumann and Macinko (2007, p. 716) suggest: 'Reverence for cultural concerns and anxiety over food security can both be justifiable grounds for subsistence priorities, warranting precedence over other uses of fishery resources when not all uses can be sustained ... '. Consider, for example, the case of South Africa. In 1999, the South African government, reviewing management of the subsistence fishing sector, formed a Subsistence Fisheries Task Group (SFTG), which revised the definition of 'subsistence' to be more restrictive (Sowman, 2006, p. 66): 'The SFTG resource recommendations have resulted in no subsistence fishers being recognized along the west and south coasts of South Africa. This is of grave concern given the high levels of food insecurity found in fisher households in these regions'.

Along similar lines, Jaffer (2006, pp. 22–23) reports on a legal battle between the artisanal fishing sector and the government in South Africa. The artisanal fishers argued that legislation relating to fisheries management, the Marine Living Resources Act, 'deprived them of their right to choose their trade or occupation' under Section 22 of the South African Constitution. They claimed further that 'the current legislative framework violates a number of other basic socio-economic rights, most notably, the right of access to sufficient food', but also the 'right to healthcare, housing and education, and the rights of the child to basic nutrition'.

Furthermore, in certain situations, human rights and fishery rights are closely linked to aboriginal rights. This arises, for example, in some small-scale fisheries of the Asia-Pacific region, where 'Traditional management systems ... are based on property rights and associated regimes which reflect local culture, economic conditions, and structures of power and social organization' (Pomeroy, 2001, p. 121). The links are also important in the aboriginal fisheries of northern countries, such as Canada and Norway, where fishing is crucial to community food security, health and livelihoods.

Finally, the connection of fishery rights and human rights can be usefully related to recent debates over the desired focus of small-scale fishery policy – debates between a so-called 'wealth-based' approach, with an emphasis on rent maximization (Cunningham *et al.*, 2009) and a multiobjective approach that highlights the 'welfare functions' of small-scale fisheries, and the dual goals of poverty reduction and poverty prevention (Béné *et al.*, 2010).

A Focus on Fishery Rights

The discussion in the previous section emphasized the links between human rights and fishery rights in broad terms, but there remains a need to examine the various forms of fishery rights in more detail, and particularly to assess their implications in small-scale fisheries. This section will address such matters, adapting and extending the discussions in Charles (2002, 2009) to explore a range of fishery rights relevant to small-scale fisheries, from rights over fish in the sea to access rights and other rights over use of the resource, and finally to management rights. At the end of the section, a focus is placed on an approach of particular relevance in small-scale fisheries, namely implementing fishery rights at the community level.

Rights over fish in the sea

While coastal fishers have significant social, economic and human rights that relate to fisheries, they do not typically own the fish swimming in the sea, until those fish are landed on a fishing boat or on shore. Who, then, does own fish in the sea? With small-scale fisheries generally located within national exclusive economic zones (EEZ), perhaps the most common arrangement is that fish are under the jurisdiction of the particular nation in whose waters they are located. If it is possible in such a situation to speak of ownership, the fish could be thought of as the property of that nation's citizens – typically until the time at which they are caught by fishers.

Another common scenario in small-scale fisheries, particularly traditional ones, occurs when the fish in the sea are 'owned in common' by a certain identifiable group of people – e.g. the set of citizens within a specific local jurisdiction, such as a coastal community, or the members of a native tribe, as opposed to a whole nation, or a single private individual or company. In such cases, the fish, as a common-pool resource, are managed under a *common property* regime (Dolsak and Ostrom, 2003), a situation that will be explored in more detail below.

Whoever are considered the 'owners' of the fish hold certain property rights, such as the right to decide how the fish are to be used and by whom. Fishers may or may not be seen to hold those specific rights, but are likely to hold other 'fishery rights', namely access rights, harvesting 'use rights' and management rights. These rights, which are the focus of what is often referred to as 'rights-based fisheries management', are discussed in turn below.

Access rights

Whenever a fishery is managed by restricting who can have access to the fishery, those with such entitlements are said to hold access rights (Charles, 2001, 2002, 2004) – simply the right to 'use' the fishery. This right is recognized, or assigned, by the relevant management authority, whether formal or informal. For example, in a tribal fishery, it may be the chief deciding who is to have access to the resource, while in another situation a governmental fisheries authority may designate the holders of fishing licences. There is often a territorial aspect to the rights, in that those outside the community or region often lack access rights and are thus excluded from the fishery.

Access rights may be suitable where there is a recognized need for and desirability of restriction of use of fishery resources. This can be for a variety of reasons - food and livelihood security, sustainability of the resources, conflict reduction, manageability, etc. Access rights are widely accepted within fishery management, seen as a remedy to the problems of open access - unrestricted access to fishery resources. Indeed, the FAO Code of Conduct for Responsible Fisheries (FAO, 1995, para. 10.1.3) makes reference to access rights, not only within fisheries but pertaining to coastal resources in general: 'States should develop, as appropriate, institutional and legal frameworks in order to determine the possible uses of coastal resources and to govern access to them taking into account the rights of coastal fishing communities ...'.

Specifying access rights is helpful to the fishery manager, both in resolving openaccess problems and helping to clarify who is being affected by management. An access rights system resolves the uncertainty over who are the users of the fishery (i.e. who holds access rights and who does not). However, this only becomes clear once rights are established. Thus in any fishery, a key issue arises: who *should* hold access rights?

The above-noted Code of Conduct (para. 6.18) has addressed one aspect of this question in a clear way, stating that: 'States should appropriately protect the rights of fishers and fishworkers, particularly those engaged in subsistence, small-scale and artisanal fisheries, to a secure and just livelihood, as well as preferential access, where appropriate, to traditional fishing grounds and resources in the waters under national jurisdiction'.

However, the situation is often complicated. First, the fishers in a given location are not necessarily homogenous. For example, Pomeroy (2001) notes that in addition to full-time fishers, there are also often part-time or seasonal fishers, including those who come from their inland homes to fish on the coast. Indeed, the latter point reinforces the reality that those who have traditionally had access to a local fishery may not be limited to community residents. Allison and Ellis (2001) argue that some small-scale communitybased fisheries may allow for 'reciprocal access' between differing locations, to boost sustainable livelihoods in both places: 'Outsiders can access village-based fishing territories in times of their need, or when there are local surpluses, often in exchange for an access fee' (p. 380). In such situations, they state (p. 387): 'Institutions to regulate access to resources are still important, it is just that they do not necessarily take the form of fixed fishing territories and fixed license numbers ...'.

In addition to challenges in determining who should have access to a given fishery, there are also issues with making access rights in small-scale fisheries effective. Indeed, Pomeroy (2001, p. 122) has stated that many '... coastal fisheries in developing countries are in effect de facto open access ...' even though access rights may be specified in these fisheries. He argues (p. 122) that: '... the ability to enforce these laws and regulations is practically non-existent due to the fact that fisheries department and enforcement agencies do not have sufficient resources. In addition, the political will is often not in place to enforce these laws and regulations due to the influence of power elites'.

Therefore, while informal and traditional access rights have existed for centuries in a wide variety of fishery jurisdictions, and such rights are being implemented with increasing frequency even where direct government regulation dominates, there are nevertheless likely to be difficulties in making access rights fully effective in many small-scale fisheries. Access rights can be defined spatially, in terms of rights to a specific fishing ground or in terms of entry ('access') into the fishery as a whole. These two options are described in turn below.

Spatial access rights

First, in terms of spatial access rights, two key concepts are customary marine tenure (CMT) and territorial use rights in fishing (TURFs). These have long been applied by fishing communities in determining, for each fisher or household, the location where they can access fishery resources. Both approaches are inherently spatial management mechanisms, assigning rights to individuals and/or groups to fish in certain locations (thus the term 'territorial' in TURF), generally, although not necessarily, based on long-standing tradition ('customary tenure'). A classic reference on TURFs is that of Christy (1982, p. 1), who noted that: 'As more and more study is given to the culture and organisation of fishing communities, there are indications that some forms of TURFs are more pervasive than previously thought to be the case, in both modern and traditional marine fisheries'.

Indeed, TURFs have a particularly long history in traditional, small-scale/artisanal and indigenous fisheries. Two particularly well-known examples are the long-standing arrangement in coastal Japan, where traditional institutions are incorporated in modern resource management, and the small-scale lobster fisheries on the north-eastern coast of North America, where fishers in many locations have been able to maintain informal but effective community control on entry, i.e. demonstrating the capability to exclude others.

Some CMT and TURF systems have gone through periods when they lacked support in policy and thus suffered declines over time. However, there are now moves to maintain or restore many such systems. For example, in the fisheries of Oceania, traditional CMT/TURF systems declined as fisheries were 'modernized', but as recognition of the efficiency of such systems grew, there have been initiatives in some nations (notably in the South Pacific) to re-establish them. As Johannes (2002, p. 317) noted: 'Factors contributing to the upsurge include a growing perception of scarcity, the restrengthening of traditional village-based authority, and marine tenure by means of legal recognition and government support, better conservation education, and increasingly effective assistance, and advice from regional and national governments and NGOs'.

For example, Veitayaki (1998) reported on the case of Fiji, where customary marine tenure over traditional fishing grounds was historically the principal marine resource management practice, but had been in a significant state of decline. However, it was suggested that recent initiatives to formally register the boundaries related to CMT could be an important step in helping to restore community ownership over these areas.

As with any management mechanism, CMT and TURFs are not suitable in all cases. For example, Allison and Ellis (2001, p. 385) point out that:

Creating TURFS associated with individual fishing villages is a currently fashionable form of institution building in fisheries development; however temporary migration to places where fish are available is a prevalent feature of artisanal fisheries worldwide, and one that does not sit comfortably with the notion of territorial rights being based on resident populations in shoreline villages.

While caution is thus necessary, there is a broad sense that for appropriate cases, these 'traditional sea tenure systems' can hold considerable potential to provide efficient and relatively stable socially supported fishery management, particularly if implemented within the framework of existing social institutions and livelihood approaches (Ruddle, 1989).

Limited entry access rights

The second key form of access rights is found in the form of a fishing licence, reflecting the 'limited entry' approach that is common in modern state management of fisheries. Indeed, this form of management is often expressed as a regulatory tool to control the activities of fishers and fishing communities, in which the government (typically) issues a limited number of licences to fish. Each licence conveys a 'right' on a fisher, a fishing group or a community to access the fishery (to go fishing); some will thus have this right to 'use' the fishery, while all others will not. In this way, limited entry seeks to prevent the expansion of the number of fishing boats and/or fishers, with the aim of controlling potential fishing effort (fleet capacity), thereby helping to conserve the resource and generating higher incomes for the licence holders (i.e. those holding the access right).

Limiting access is also common in smallscale fisheries. Indeed, Berkes et al. (2001, p.148) refer to work by Wilson et al. (1994) showing that for a sample of 32 locations worldwide, limited access is the second most common traditional fishery regulation (after fishing area restrictions). However, the feasibility of a limited entry rights approach will depend on the particular small-scale fishery, and on how the approach is implemented. For example, if such rights were given out to community members, but not to outsiders, it could be a helpful means to protect local livelihoods - indeed, perhaps a mechanism to institute fishery rights that also reflect human rights. On the other hand, if it were seen as a means to give fishing rights only to some in a community but not to others, serious social and/or political conflict could result, unless there is broad acceptance of who constitutes the valid fishers.

Furthermore, it should be noted that even if licensing of this form is feasible, limited entry cannot be expected by itself to 'solve' all management problems. In particular, while limited entry specifies access rights, it does not limit the fishing of those with such rights. Over-harvesting could still occur. To deal with this, limited entry, if implemented at all, should be seen not as a sole measure by itself but rather as part of a 'management portfolio' that also includes approaches by which current fishers limit their own fishing activity.

Summary

Access rights have the advantage, from a fisher and fishing community perspective, that those with such rights – whether an individual fisher, fishers' organizations or a fishing community - are provided with some security over access to fishing areas. If access rights are managed well, they can reflect a desired balance of social, cultural, economic and environmental goals; they can assist in reducing rather than causing conflict; they can enhance food security and livelihoods for small-scale fishers and fishing communities; and they can protect local ecosystems (e.g. by preventing overharvesting and potentially by favouring more conservationist gear types or fishing practices). However, there are significant issues to be addressed in restricting fishery access, notably relating to equity considerations, and to impacts on poverty and vulnerability of households and communities (see, e.g. Béné et al., 2010).

Effort and harvest rights

Within the spectrum of possible fishery use rights, access rights may be extended through quantitative (numerical) use rights - rights to use a specific amount of fishing effort (effort rights, e.g. to fish for a certain amount of time or with a certain amount of gear) or to take a specific catch (harvest rights allocated to individual fishers, companies, cooperatives or communities, to catch a specified amount of fish). Such forms of fishery rights have relatively high information and management requirements, and thus are less common and indeed often inappropriate in small-scale fisheries. Nevertheless, as they are widely discussed in the fisheries literature, and may be suitable in certain circumstances, they will be briefly reviewed here.

Both effort rights and catch rights have parallels in fishery management regulations, namely in terms of fishing effort limits (e.g. 'How much gear can be used?') and catch quotas (e.g. 'How much fish can be caught?'), respectively – see, e.g. Pope (2002). Clearly, quantitative use rights like these incorporate or must be accompanied by access rights, but the converse need not be the case – many fisheries operate through access rights without there being any quantitative use rights specified.

Effort rights

As noted above, effort rights are related to fishing effort controls, i.e. restrictions on the activity of the fishing fleet (through limits on time fished, amount of gear, gear attributes, etc.) to keep that activity at levels compatible with resource sustainability. Effort rights typically designate a specific amount of fishing time and/or gear for each fisher, or vessel (Charles, 2001). This can serve conservation needs as well as spreading the effort across more vessels than would otherwise be the case, for equity reasons. A common example of such an effort rights approach arises in trap fisheries, notably those for lobster, crab and other invertebrates, where each fisher has the right to set a specified number of traps. It may be that all fishers have equal rights (i.e. to the same number of traps) or that the rights vary from one individual to another, perhaps based on location, boat size or some other criteria.

A key challenge for an effort rights programme arises if the rights relate to only one or two of the factors influencing fishing effort. In the above example, if rights relate only to the number of traps a fisher uses, that leaves the amount of time to use the traps unlimited. То overcome this, a multidimensional approach is needed, by implementing effort rights over not one but a range of inputs. Another challenge is the need to deal with the natural process of technological improvement that gradually increases the effectiveness of any given set of inputs over time. An effort rights programme must adjust for improvements in fishing efficiency by reducing the total number of allowable input units over time. Thus effort rights, while more costly than simple access rights, can be a viable approach if care is taken in defining the rights, if the rights cover a range of effort inputs and if a plan is put in place to deal with fishing efficiency improvements.

Harvest rights

The second main form of quantitative use rights is the harvest right (or 'catch quota'). If a fishery is managed through a total allowable catch (TAC), and that TAC is then subdivided into quotas held by sectors of the fishery, individual fishers, companies or communities, these shares of the TAC are the harvest (or catch) rights. They may be held collectively, whether by a sector of the fishery or by fishing communities (see the discussion of 'community quotas' later in this section). Alternatively, the rights may be allocated to individual fishers as trip limits (providing the right to take a certain catch on each fishing trip) or as individual quotas, rights to harvest annually a certain fraction of the TAC. In the latter case of individual quotas, these harvest rights may be nontransferable, or (mainly in industrial fisheries) there may be buying and selling of these quotas in a 'quota market' (i.e. for 'individual transferable quotas', or ITQs).

Harvest rights are widely promoted at present as a means of better matching catches to available markets, and avoiding the 'race for the fish' (so that catches can be taken at a lower cost and with less incentive for overcapacity e.g. Shotton, 2000). This is meant to increase profitability by reducing fishery inputs such as fleet size and the number of fishers, and by increasing product value. However, harvest rights raise economic and conservation concerns in small-scale fisheries (Copes and Charles, 2004). Perhaps most fundamentally, the costs of running a quota system can be prohibitive – in determining the suitable TAC, in monitoring catches and in enforcing catch allocations. There are also risks to conservation, including those arising with catch controls in general (notably the potential to overestimate biomass and thus TACs), and those arising if the catch rights are allocated to individuals. The latter risks are due to: (i) inherent incentives to cheat by under-reporting catches, since every caught fish that is unreported is one less that must be deducted from the quota; (ii) similar incentives to dump, discard and high-grade fish, since this allows the fishers with the quota directly to increase the value of what they actually land; and (iii) pressure on decisionmakers to increase the TAC beyond sustainable levels, to help fishers who have gone into debt to purchase rights (quota) from others. The high costs and various negative impacts of harvest rights explain why individual quota systems (in particular) are rarely found

in small-scale fisheries – even while being intensively promoted in industrial fisheries.

Management rights

The various use rights described above serve to specify and constrain who is to be involved in resource use, and this has the potential to improve the effectiveness of management and make conservation more likely. There is a parallel need to specify who is to be involved in fishery management – i.e. through what are called *management rights*. Management rights reflect the fifth 'right' noted by Kearney above – the right to participate in decisions affecting fishing. Such rights can be seen in parallel with use rights: the former specify the right to participate in fishery management just as the latter specify the right to participate in the fishery itself. Indeed, management rights are among the *collective choice* rights defined by Ostrom and Schlager (1996); these contrast with operational-level rights (including use rights) and in fact include the 'authority to devise future operational-level rights' (Ostrom and Schlager, 1996, p.131).

There is a widespread understanding that effective management requires a broader approach than conventional top-down methods – through new *co-management* arrangements that involve some degree of joint management by fishers, government and possibly local fishing communities (Pinkerton, 1989; Wilson *et al.*, 2003). In the language of fishery rights, this co-management requires allocation of management rights, the right to be involved in managing the fishery.

Who should hold management rights? Typically, the relevant government will have the responsibility to conserve the resource, to produce benefits from that resource and to suitably distribute those benefits, so it will certainly be among those holding management rights. Furthermore, successful management requires the support (or at least the acceptance) of fishers (who already hold use rights), and thus they should be among the holders of management rights. Finally, it may be that communities, non-governmental organisations (NGOs) and the general public could all be involved in management, but this is much more likely in the case of strategic management (dealing with the fishery's overall objectives and policy directions) than for operational matters (measures such as closed areas and seasons, or allowable hook or mesh sizes, that affect the fishing process directly). This is because strategic issues are typically ones of broad public interest, about which a wide spectrum of interested parties - and fishing communities in particular - should hold management rights. On the other hand, for operational matters, it is particularly important for fishers to hold management rights, but dealing with such operational aspects may attract little interest among communities, NGOs and the general public.

Parallel to the question of who should hold management rights is that of what situations are actually conducive to co-management arrangements. For example, Brown and Pomeroy (1999, pp. 567–568) suggest that for countries in the Caribbean:

... the near shore fisheries targeted by small-scale fishers for benthic species such as lobster and conch, coral reef fish, and coastal pelagics will have the best chances for successful comanagement. These fisheries usually have easily identified users and boundaries, similar gear and fishing operation patterns, and a small number of target species. Co-management can be either resource-specific or site-specific depending on the situation.

Similar conclusions may hold for a range of other small-scale fisheries.

Communities and fishery rights

Use rights and management rights can be allocated to individual fishers or they can be held in a collective manner by a community or a fishers' association. There is a long history in small-scale fisheries of fishing rights being held collectively within a particular community, but unfortunately, there has been relatively little attention in current debates over fishery rights to community-held rights (cf. Charles, 2006). Furthermore, such rights have not always been properly understood and incorporated into 'modern' management, leading to social and conservation problems. It is thus worth paying extra attention to such rights here, particularly since, as Panayotou (1982, p. 44) has suggested: 'The revival and rejuvenation of traditional community rights over coastal resources offer, perhaps, the best possible management option for scattered, remote and fluid, small-scale fisheries'.

The choice between individual and community rights should depend on both the historical context and the fishery objectives being pursued. For example, in the case of a fishery that has developed relatively recently and that has an industrial focus, there may be a natural inclination to an individual rights system, which may be viewed as compatible with the entrepreneurial independence of fishers. On the other hand, while community rights cannot be expected to work in every fishery, the approach seems more likely to be effective given: (i) cohesiveness of the community involved; (ii) experience in and capacity for local management; (iii) geographical clarity of the community; (iv) a modest overall size and extent; and (v) an institutional framework in which rights are specified through a combination of legislation, government decisions and traditional/informal arrangements.

Where community rights are feasible, they have the potential to: (i) utilize management institutions and moral pressure locally to create incentives for resource stewardship (conservation); (ii) increase management efficiency; and (iii) improve the implementation of local enforcement tools. In addition, with community rights, local 'fine-tuning' can help to achieve equity and fairness goals – e.g. by taking into account a broader range of fishery participants in a community, including not only current boat or licence owners but also crew members, shore workers and those (present and future) with an interest in participating in the fishery (Graham *et al.*, 2006).

Pursuing community rights may involve understanding and reviving former management systems. As Panayotou (1982, p.45) notes: 'Such revival would necessitate a removal of the factors responsible for the breakdown of these traditional management systems by: (a) explicitly allocating the coastal resources to artisanal fisheries; (b) dividing these coastal resources among fishing communities...'.

This allocation can take place with any desired combination of spatial access rights (such as TURFs), limited-entry licensing approaches and other use rights.

As but one example, while harvest rights in the form of catch quotas are most often inappropriate for small-scale fisheries, if they are to be implemented, then a promising approach is through 'community quotas', i.e. community-defined harvest rights in the form of portions of a TAC allocated to coastal communities. Defined on a geographical basis, they have the potential to bring people in a community together in a common purpose since, typically, the community as a whole (or the group of fishers in the community) manages the quota in such a way as to suit their specific local situation, to maximize overall benefits and to reflect community values and objectives (Charles, 2001). By having each community decide for itself how to utilize its quota, this can support community empowerment and enhance community sustainability. Examples of this approach in small-scale fisheries within industrialized countries are found in Alaska (specifically community development quotas (CDQs) and Atlantic Canada (Charles et al., 2007).

Community rights contrast with marketbased rights (such as individual transferable quotas) – see Copes and Charles (2004). Berkes (1986, p. 228) proposes that a communitybased approach '... provides a relevant and feasible set of institutional arrangements for managing some coastal fisheries', particularly '... small-scale fisheries in which the community of users is relatively homogeneous and the group size relatively small'. On the other hand, he suggests that individual market-based rights may be appropriate '... for offshore fish resources and larger-scale, more mobile fishing fleets'. This indicates that a useful differentiation can be made between small-scale fisheries (with fishers closely connected to communities, and with history and tradition playing a major role) and those that are predominantly industrial and capital-intensive (in which profitability dominates over other societal goals). However, there are bound to be exceptions to any

general direction, and a wide range of intermediate options can be contemplated as well, so allocation decisions must be made with great care.

Implementing Fishery Rights in Small-scale Fisheries

The previous section reviewed the various fishery rights, notably access, effort, harvest and management rights. In this section, we explore some major considerations in implementing these rights in small-scale fisheries, specifically: (i) the recognition of pre-existing rights, if they exist, or the choice among new rights systems, if needed; (ii) the approaches available for allocating rights; and (iii) choices relating to the duration of rights and whether transferability of those rights should be allowed.

Recognizing rights

In many existing small-scale fisheries, particularly those with a long history, rights have already developed naturally over time, perhaps put in place by fishers themselves or by their communities (see, for example, Dyer and McGoodwin, 1994; Hanna et al., 1996). Indeed, Béné et al. (2010, p. 338) suggest that this situation of existing rights is a general reality: 'Anyone who has worked closely with small-scale fisheries in developing countries knows that the access to fisheries (in particular, small-scale coastal or inland fisheries) is always conditioned by some form of formal or informal, symbolic or substantial, control systems generally established at the local/ community level'.

It is not surprising that access rights would have emerged, since there are clear benefits to defining the group of fishers entitled to fish in certain locations, both for the fishers themselves and for the well-being of the fishing community. If rights already exist, and holders of the rights are already specified, it will be important to assess the nature of those rights, how effective they are in meeting current objectives (as well as criteria of equity and sustainability) and whether there are available mechanisms to reinforce them. Certainly, it is likely to be less costly and easier politically to accept and reinforce traditional rights than to attempt the development of an entirely new regime.

Choosing among rights

If for some reason no use rights system is already in place (or alternatively, if use rights do exist but the current system is not functioning in a manner widely considered as effective or acceptable), then those involved in fishery management are faced with a choice among the various use rights options described above. However, given the biological, economic and social diversity of fisheries, no single-use rights approach will be applicable everywhere. The choice of use rights must fit into the culture, the historical reality and the policy directions of the specific fishery and overall jurisdiction. As the head of FAO's Fisheries and Aquaculture Department has noted (Nomura, 2006, p. 25): '... fisheries policies, management approaches and fishing rights - need to be tailored to the specific context of countries and localities with respect to the fisheries in question, the social setting, culture, etc'. This reinforces the broad point of Kuperan and Raja Abdullah (1994, p. 306): 'Planning and setting objectives for management of small-scale coastal fisheries requires a good understanding of what is meant by small-scale coastal fisheries, the resource attributes, the traditional values of fishing communities, the institutional arrangements and the overall environment in which small-scale fisheries operate'.

This implies the need for a collaborative process to determine a framework of use rights that will meet objectives and be feasible in practice. The collaboration must be designed and implemented in an equitable manner that is widely recognized as legitimate, and involve fishery managers and planners working together with a suitable range of interested parties. It must also be recognized that each use rights option has its inherent advantages and limitations, so that what is 'best' will depend on the fishery in question. Thus it is important to understand how the particular fishery circumstances influence the desirability of certain options over others. Factors to take into account include: (i) the societal objectives; (ii) the relevant history and traditions; (iii) the relevant social, cultural and economic environment; (iv) the key features of the fish stocks and the ecosystem; and (v) the financial and personnel capacities of the particular fishery (Charles, 2002). It should not be surprising, given this reality, that there is no consensus about which use rights options are most compatible with which fishery features, only some trends (e.g. that sedentary fishery resources may be especially amenable to the use of TURFs).

Allocation of rights

In small-scale fisheries, as has been noted, rights may well already be allocated. However, if a new use rights system is being implemented for some reason, or if there is seen to be a need for adjustments to the existing system, how should the rights be allocated? There is no universally correct way to accomplish this and difficult choices are faced. Some approaches, such as one-time auctions or ongoing markets for rights, are not generally suitable for small-scale fisheries, since community and social values, while crucial in such fisheries, are typically ignored in these approaches. For example, as Panayotou (1982, p. 43) notes: 'Auctioning or market sale of a limited number of licences is certain to exclude many small-scale fishermen who have poor access to funds to bid for or purchase a licence'. The sale of fishing rights also tends to limit (especially financially) the capability of governments to undertake new policy directions, such as shifts in the fishery toward small-scale rather than industrial fisheries, or toward conservationist over destructive fishing gear.

Another allocation option is to assign rights on the basis of 'catch history'. This is common in industrial fisheries, where it is often done in proportion to each individual's past catches, or some other measure of participation in the fishery, possibly with adjustments to increase equity among the fishers. However, it is problematic to properly define historical participation, especially in small-scale fisheries where catches are rarely fully monitored.

A third option is for use rights to be allocated on a group/collective basis directly to participating communities, fishing sectors or other identifiable groups. Typically, the community or group holding the rights in common makes subsequent allocations (whether permanently or periodically) to participating individuals through methods that can be tailored locally. This approach has desirable features, in terms of empowering communities and allowing for local values to be reflected, but must ensure that possible imbalances in power within the community do not lead to inequitable results in the allocation of rights.

Duration of rights

In small-scale fisheries, the fishers and fishing communities involved typically have a longterm dependence on the fishery for their livelihood. The link between fishery rights and social, economic and human rights is therefore one in which access to the fishery is guaranteed to local fishers and communities. In return, the security of tenure and access can lead to local stewardship of coastal resources and an incentive to better 'plan for the future' in husbanding the resource. Thus in many small-scale or artisanal fisheries, access rights – which may well be available to all those in the local community – tend to be of indefinite duration, considered essentially permanent.

On the other hand, long-term rights can be problematic if a fishery was initially developed or exploited by industrial fishing companies or foreign fleets, but government now seeks to improve the situation of small-scale fishers by shifting rights to them. If the initial larger-scale operators had been given long-duration use rights, that might prevent the subsequent entry of small-scale fishers. In such situations, clearly there could be a benefit in shorter-duration rights, to provide greater management flexibility.

Transferability of rights

The transferability of use rights refers to the capability of rights holders to shift ownership of the right to someone else – whether permanently (e.g. by selling those rights, or handing them down in a family from one generation to the next) or temporarily (e.g. by transferring the rights to another fisher within a fishing season). The choices in this regard can have large impacts on small-scale fisheries and fishing communities.

If those holding use rights transfer these to their children, this may well be positive from the perspective of community stability. On the other hand, if the rights are able to be bought and sold, as advocated by some fisherv commentators, this tends to lead to a concentration of those rights, as those with greater financial resources buy out others (Copes and Charles, 2004). Since small-scale fisheries are often the economic foundation of their communities, this concentration of rights is likely to produce negative impacts on community stability, because the rights typically shift out of small communities and into larger centres, together with a loss of rural livelihoods (employment) and detrimental effects on equity in the coastal economy. Given all these impacts, it will typically be important to place limits on (if not fully prohibit) the permanent transfer of use rights. This would be particularly important for market-based use rights, but even for the widely acceptable within-family process of handing down the rights from fishers to their children, there could be benefits in greater stability within the fishing community or region if transferability is restricted to within the particular sector or community in which the use rights reside.

On the other hand, there may be relatively few problems with temporary transferability, in which use rights can be transferred from one fisher to another within a fishing season, but then revert back to the original fisher at the end of the season. This provides occasional short-term flexibility (e.g. for fishers who happen to become sick or injured in a given year) while maintaining long-term stability in the distribution of the rights.

Conclusions

This chapter has focused in two main directions: (i) describing fishery rights from the specific perspective of small-scale fisheries; and (ii) linking fishery rights with human rights. Both of these areas of emphasis are very much in the spirit of a major meeting organized by the Food and Agriculture Organisation (FAO) of the United Nations in 2008, the Global Conference on Small-scale Fisheries. That meeting, which brought together a wide range of fishers, fishworkers, NGOs, governments and international organizations, reinforced a major shift in fisheries management, and the end of an era of simplistic thinking about rights in fisheries.

The simplistic view of rights revolved around an imbalance between fishery rights and human rights, with the focus on the first while ignoring the second. This led to an illusory view of the world in which it was assumed that, to achieve success in fisheries, one merely needs to assign the right to fish, regardless of whom gets those rights. In such a view, it really does not matter whether the rights holders are fishers, corporations or communities, only that rights are assigned.

This simplistic approach had an element of truth at its roots – that regardless of who holds rights, having secure access to the fishery does provide them with more security and makes it more worthwhile to take care of the resource into the future. However, other key realities in small-scale fisheries and fishing communities were neglected:

1. That rights may well already be in place in many small-scale fisheries, and these should be reinforced and supported, rather than ignored and replaced.

2. That who holds fishing rights, and how those rights are handled, makes a critical difference to the broader issues of community well-being, poverty alleviation, socio-economic success and system resilience.

3. That fishing rights need to be closely linked with, and supportive of, social, economic and human rights.

4. That rights held by communities ('community rights') may be particularly effective in some small-scale fisheries.

Figuring out the right form of rights requires an understanding of all these realities. Indeed, moving to a more realistic vision of rights requires reinterpreting a term commonly used in the literature on fishery economics and management - 'rights-based management' (Neher et al., 1989). What is needed is an understanding that, for fisheries management to be 'rights-based', it must take place in the context of all the various forms of rights. Given their mandate, fisheries agencies may have been inclined to focus only on use rights (over fishery access) and management rights (as in co-management). A broader vision of rights involves adding social, economic and human rights to the picture rights that are fundamental and cannot be given out or taken away by government.

Furthermore, along with rights go responsibilities. The FAO Code of Conduct for Responsible Fisheries (1995, para. 6.1) states: 'The right to fish carries with it the obligation to do so in a responsible manner ...'. A key aspect in moving toward responsible fisheries thus lies in developing effective and accepted sets of both rights and responsibilities among fishers. As Jentoft *et al.* (1998, p. 434) note: 'When rights of management and property go together, property is not only a right but also a responsibility for the collective as well as the individual. Without that responsibility there is no guarantee that property rights may institute sustainable resource use'.

Understanding, assessing and dealing with the impact of fishery rights on livelihoods, poverty, community well-being and human rights are clearly critical topics. In a context of developing countries, attention is needed to the relationship of fishery rights to the overall objectives of fishery and development policy. For example, a more complete rights-based approach, one combining fishery and human rights, can contribute in a practical way to achieving a balance in the debate over 'wealth-based' and 'welfare function' perspectives on the priorities for small-scale fisheries (Cunningham *et al.*, 2009; Béné *et al.*, 2010).

Drawing on insights in an oft-quoted paper of Béné (2003) on poverty and fisheries, Hersoug (2006, p. 7) concludes that: 'The point is simple: rights-based fisheries management may secure some type of ownership, be it individual or collective. But we need to secure rights for the right people. That can only be done through institutional reforms ...'.

A similar conclusion is reached by Jentoft (2007, p. 93): 'Property rights can lead to more inequity but they can also be employed for correcting inequities, as they can be used as a mechanism to protect those in need of protection, that is, the marginalized and impoverished among fishers'.

Herein rests a major challenge in linking human rights and fishery rights within a context of small-scale fisheries.

To this end, we need to move toward the 'bigger picture' that connects the fisheries 'silo' to broader policy and legal frameworks, and to the well-being of coastal communities, in order to address, in a holistic way, the many issues facing small-scale fisheries (Berkes et al., 2001; Charles, 2001). For example, ensuring access rights to subsistence fishing in coastal communities may well be closely related to enhancing local food security, and incorporating postharvest aspects into rights discussions can be important to ensure consideration of the rights of women involved in marketing fish. Moving to a 'bigger picture' perspective will involve better understanding linkages among the various forms of rights, both within the fishery system itself and in a multi-sectoral context, so as to produce more comprehensive approaches to managing small-scale fisheries, ones that are better able to improve well-being and safeguard livelihoods.

Acknowledgements

This chapter has grown out of the author's previous research on fishery rights, referenced herein, as well as from helpful discussions with many colleagues, including Melanie Wiber, John Kearney, Merle Sowman, Chris Béné, Evelyn Pinkerton, Fikret Berkes, Patrick McConney, Bob Pomeroy, Serge Garcia, Kevern Cochrane, Chris Milley, Arthur Bull and Sherry Pictou. As usual, any remaining errors are the responsibility of the author. Financial support from the Sciences and Humanities Research Council of Canada is gratefully acknowledged.

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Small-scale Fisheries Management

Frameworks and Approaches for the Developing World

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A catalogue record for this book is available from the British Library, London, UK.

Library of Congress Cataloging-in-Publication Data

Small-scale fisheries management: frameworks and approaches for the developing world / edited by Robert S. Pomeroy and Neil L. Andrew.

p. cm.

Includes bibliographical references and index.

ISBN 978-1-84593-607-5 (hardback: alk. paper)

1. Small-scale fisheries–Developing countries. 2. Fishery management–Developing countries. I. Pomeroy, R. S. (Robert S.) II. Andrew, Neil. III. Title.

SH329.S53S63 2011 338.3'727–dc22

2010033561

ISBN-13: 978 1 84593 607 5

Commissioning editor: Rachel Cutts Production editor: Fiona Chippendale

Typeset by AMA DataSet Ltd, Preston. Printed and bound in the UK by CPI Antony Rowe, Chippenham.

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4 Human Rights and Fishery Rights in Small-scale Fisheries Management

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Introduction

When the word 'rights' is used in fisheries discussions, two very different ideas come to mind, depending on one's perspective. First, from the perspective of the people and communities engaged in fishing or otherwise dependent on the fishery, there are human, social and economic rights that can be reinforced, or negatively impacted, by actions taken in the fishery. Second, from the perspective of fishery management, there are 'fishery rights' that define who can go fishing and who can be involved in managing the fishery. This form of rights arises in what is referred to as rights-based fishery management (Neher et al., 1989), focusing on the rights (together with the responsibilities) held by individuals, communities, companies and/or governments specifically in relation to fishery management.

These two categories of rights have typically been treated separately, but there is now an emerging focus on linking human rights and fishery rights (e.g. Civil Society Preparatory Workshop, 2008). This chapter seeks to expand upon and reinforce the links between them, in the context of small-scale fisheries and their management. The following section introduces aspects of human rights and fishery rights, and summarizes current thinking on the practical links between these in the context of small-scale fisherfolk and fishing communities. This is followed by a section with more detailed discussions of fishery rights, including access rights, effort rights, harvest rights and management rights, as well as the particular importance of community fishery rights. A range of implementation issues are then examined; these arise when existing rights are being recognized or when a new rights system is being put in place, and cover questions of who can receive rights, how long the rights last, whether they can be transferred and how to choose among specific forms of rights. Finally, a set of conclusions is presented, along with potential directions forward in reinforcing or creating rights frameworks that provide better integration and balance than in many past approaches.

Human Rights, Fishery Rights and Their Interaction

When most people think of rights, it may well be *human rights* that come to mind. The United Nations has defined the overall nature of human rights, as well as accompanying social and economic rights (United Nations, 1948). Recently, efforts have been under way to examine the specific manifestations of such rights in fisheries and fishing communities – with attention to this highlighted particularly by international bodies of fishers and fishworkers, and with coverage in legal and policy debates. Some efforts in this direction will be discussed below.

At the same time, within fisheries management circles, attention is focused on so-called fishery rights - the rights of specific individual fishers, fishing communities or companies to have access to the fishery, to be able to exert a certain amount of fishing effort or to catch a certain amount of fish and/or to be involved in managing the fishery (e.g. Shotton, 2000). These rights are typically discussed in the context of achieving more effective management, both by specifying who is involved in the fishery (and how much) and by bringing fishers and others more actively and supportively into the management process. In a small-scale fishery setting, such rights may also have impacts on the well-being and security of fishers and fishing communities; the effects can be positive, given suitable recognition, design and implementation of rights, but can alternatively be negative (Charles, 2001, 2009; Béné et al., 2010). The various forms of fishery rights will be explored in detail later in this chapter.

There are clear and important relationships between human rights and fishery rights (Charles, 2009). The former reflect imperatives in terms of the relationships among people, specifically fishers, and between people and society. The latter govern who can go fishing and who can be involved in decisions relating to the fishery. The FAO (2007, p. 6) connects these together in addressing small-scale fisheries, noting that:

A rights-based approach, in defining and allocating rights to fish, would also address the broader human rights of fishers to an adequate livelihood and would therefore include poverty-reduction criteria as a key component of decisions over equitable allocation of rights, including in decisions over inclusion and exclusion, and the protection of small-scale fishworkers' access to resources and markets.

Certainly, if there are some aspects of human rights that can be maintained and enhanced through fishing activities, then this provides a strong link to fishery rights, and a context within which decisions concerning who should hold those rights, how they should be managed and so on, can be made. This connecting of fishery-specific rights and human rights has been neglected in much of the literature on rights in fisheries management, but will become increasingly important to take into account in fishery policy development, at scales from the local to the international. Such linkages are important in particular in addressing the challenge of poverty in fishing communities.

In considering these linkages, one analyst (Kearney, 2007) has developed a list of five 'fishing rights' that apply specifically to fisheries but reflect more general statements found in the Universal Declaration of Human Rights. These five 'fishing rights' Kearney notes are as follows:

- the right to fish for food;
- the right to fish for livelihood;
- the right to healthy households, communities and cultures;
- the right to live and work in a healthy ecosystem that will support future generations of fishers; and
- the right to participate in the decisions affecting fishing.

The adoption of this human rights-based approach in fisheries has been advocated by two major international fisherfolk organizations, the World Forum of Fisher People (WFFP) and the International Collective in Support of Fishworkers (ICSF). In a briefing note prepared for the FAO Committee on Fisheries in 2009, these organizations state (ICSF-WFFP, 2009, p. 3) that such an approach:

... recognizes that development efforts in fisheries should contribute to securing the freedom, well-being and dignity of all fisher people everywhere. Given the international consensus on achieving human rights, committed action to realizing the human rights of fishing communities, as indeed of all vital, yet marginalized groups and communities, is an obligation.

The organizations highlight two reasons for a human-rights approach in fisheries: 'The adoption of a human rights approach has an intrinsic rationale as achieving human rights of all citizens is an end in itself. Adopting this approach also has an instrumental rationale in that it is likely to lead to better and more sustainable human development outcomes'.

The ICSF and WFFP, together with many other civil society organizations, defined a human rights approach in fisheries within the 'Bangkok Statement' (Civil Society Preparatory Workshop, 2008) that was presented at the FAO-organized Global Conference on Small-Scale Fisheries (FAO, 2008). These organizations note (ICSF-WFFP, 2009, p.3) that the Statement 'expands on what a human-rights based approach to fisheries and fishing communities means, from the perspective of small-scale fishworkers and their communities'.

The approach of ICSF-WFFP (2009, p. 3) builds on the above list of Kearney (2007) to include the rights of fishing communities:

... (a) to their cultural identities, dignity and traditional rights, and to recognition of their traditional and indigenous knowledge systems; (b) to access territories, lands and waters on which they have traditionally depended for their life and livelihoods; (c) to use, restore, protect and manage local aquatic and coastal ecosystems; (d) to participate in fisheries and coastal management decision-making; (e) to basic services such as safe drinking water, education, sanitation, health and HIV / AIDS prevention and treatment services; and (f) of all fish workers to social security and safe and decent working and living conditions.

Furthermore, the ICSF and WFFP (2009, p. 3) specifically note the rights of women to:

... participate fully in all aspects of smallscale fisheries; to have access to fish resources for processing, trading, and food, particularly through protecting the diversified and decentralized nature of small-scale and indigenous fisheries; and to utilize fish markets, particularly through provision of credit, appropriate technology and infrastructure at landing sites and markets.

In considering these rights, it is important to keep in mind that the well-being of a small-scale fishery is often closely interrelated to that of the corresponding coastal communities. In particular, holding fishery rights over the use of fishery resources and the management of the fishery can empower communities, while loss of those rights (e.g. through their transfer to outside players) can lead to a loss of social cohesion in the community. This can be reflected in reduced local involvement in the fishery, reduced employment and a corresponding increase in the proportion of 'outsiders' fishing on what had been locally controlled resources. All of these impacts can run counter to the human rights of the community and its residents. Thus, attention to livelihoods and poverty reduction in the context of small-scale fisheries is directly related to fishery rights.

As Allison and Horemans (2006, p. 760) note: 'Livelihoods approaches are evolving and merging with rights-based approaches and community-development...' Indeed, these authors argue (Allison and Horemans, 2006, p. 760) that how fishery rights are dealt with is critical to the well-being and human rights of the people:

It is policies and institutions that determine access to assets, set the vulnerability context and determine peoples' livelihood options, reactions and strategies, and ultimately, the outcomes of those strategies in terms of their ability to make a living and willingness to invest in helping to conserve the natural resource base. Addressing governance therefore remains the key challenge for both poverty reduction and responsible fisheries.

The connection of artisanal and subsistence fishing to food security and livelihoods is an important element in considering human rights and fishery rights. As Schumann and Macinko (2007, p. 716) suggest: 'Reverence for cultural concerns and anxiety over food security can both be justifiable grounds for subsistence priorities, warranting precedence over other uses of fishery resources when not all uses can be sustained ... '. Consider, for example, the case of South Africa. In 1999, the South African government, reviewing management of the subsistence fishing sector, formed a Subsistence Fisheries Task Group (SFTG), which revised the definition of 'subsistence' to be more restrictive (Sowman, 2006, p. 66): 'The SFTG resource recommendations have resulted in no subsistence fishers being recognized along the west and south coasts of South Africa. This is of grave concern given the high levels of food insecurity found in fisher households in these regions'.

Along similar lines, Jaffer (2006, pp. 22–23) reports on a legal battle between the artisanal fishing sector and the government in South Africa. The artisanal fishers argued that legislation relating to fisheries management, the Marine Living Resources Act, 'deprived them of their right to choose their trade or occupation' under Section 22 of the South African Constitution. They claimed further that 'the current legislative framework violates a number of other basic socio-economic rights, most notably, the right of access to sufficient food', but also the 'right to healthcare, housing and education, and the rights of the child to basic nutrition'.

Furthermore, in certain situations, human rights and fishery rights are closely linked to aboriginal rights. This arises, for example, in some small-scale fisheries of the Asia-Pacific region, where 'Traditional management systems ... are based on property rights and associated regimes which reflect local culture, economic conditions, and structures of power and social organization' (Pomeroy, 2001, p. 121). The links are also important in the aboriginal fisheries of northern countries, such as Canada and Norway, where fishing is crucial to community food security, health and livelihoods.

Finally, the connection of fishery rights and human rights can be usefully related to recent debates over the desired focus of small-scale fishery policy – debates between a so-called 'wealth-based' approach, with an emphasis on rent maximization (Cunningham *et al.*, 2009) and a multiobjective approach that highlights the 'welfare functions' of small-scale fisheries, and the dual goals of poverty reduction and poverty prevention (Béné *et al.*, 2010).

A Focus on Fishery Rights

The discussion in the previous section emphasized the links between human rights and fishery rights in broad terms, but there remains a need to examine the various forms of fishery rights in more detail, and particularly to assess their implications in small-scale fisheries. This section will address such matters, adapting and extending the discussions in Charles (2002, 2009) to explore a range of fishery rights relevant to small-scale fisheries, from rights over fish in the sea to access rights and other rights over use of the resource, and finally to management rights. At the end of the section, a focus is placed on an approach of particular relevance in small-scale fisheries, namely implementing fishery rights at the community level.

Rights over fish in the sea

While coastal fishers have significant social, economic and human rights that relate to fisheries, they do not typically own the fish swimming in the sea, until those fish are landed on a fishing boat or on shore. Who, then, does own fish in the sea? With small-scale fisheries generally located within national exclusive economic zones (EEZ), perhaps the most common arrangement is that fish are under the jurisdiction of the particular nation in whose waters they are located. If it is possible in such a situation to speak of ownership, the fish could be thought of as the property of that nation's citizens – typically until the time at which they are caught by fishers.

Another common scenario in small-scale fisheries, particularly traditional ones, occurs when the fish in the sea are 'owned in common' by a certain identifiable group of people – e.g. the set of citizens within a specific local jurisdiction, such as a coastal community, or the members of a native tribe, as opposed to a whole nation, or a single private individual or company. In such cases, the fish, as a common-pool resource, are managed under a *common property* regime (Dolsak and Ostrom, 2003), a situation that will be explored in more detail below.

Whoever are considered the 'owners' of the fish hold certain property rights, such as the right to decide how the fish are to be used and by whom. Fishers may or may not be seen to hold those specific rights, but are likely to hold other 'fishery rights', namely access rights, harvesting 'use rights' and management rights. These rights, which are the focus of what is often referred to as 'rights-based fisheries management', are discussed in turn below.

Access rights

Whenever a fishery is managed by restricting who can have access to the fishery, those with such entitlements are said to hold access rights (Charles, 2001, 2002, 2004) – simply the right to 'use' the fishery. This right is recognized, or assigned, by the relevant management authority, whether formal or informal. For example, in a tribal fishery, it may be the chief deciding who is to have access to the resource, while in another situation a governmental fisheries authority may designate the holders of fishing licences. There is often a territorial aspect to the rights, in that those outside the community or region often lack access rights and are thus excluded from the fishery.

Access rights may be suitable where there is a recognized need for and desirability of restriction of use of fishery resources. This can be for a variety of reasons - food and livelihood security, sustainability of the resources, conflict reduction, manageability, etc. Access rights are widely accepted within fishery management, seen as a remedy to the problems of open access - unrestricted access to fishery resources. Indeed, the FAO Code of Conduct for Responsible Fisheries (FAO, 1995, para. 10.1.3) makes reference to access rights, not only within fisheries but pertaining to coastal resources in general: 'States should develop, as appropriate, institutional and legal frameworks in order to determine the possible uses of coastal resources and to govern access to them taking into account the rights of coastal fishing communities ...'.

Specifying access rights is helpful to the fishery manager, both in resolving openaccess problems and helping to clarify who is being affected by management. An access rights system resolves the uncertainty over who are the users of the fishery (i.e. who holds access rights and who does not). However, this only becomes clear once rights are established. Thus in any fishery, a key issue arises: who *should* hold access rights?

The above-noted Code of Conduct (para. 6.18) has addressed one aspect of this question in a clear way, stating that: 'States should appropriately protect the rights of fishers and fishworkers, particularly those engaged in subsistence, small-scale and artisanal fisheries, to a secure and just livelihood, as well as preferential access, where appropriate, to traditional fishing grounds and resources in the waters under national jurisdiction'.

However, the situation is often complicated. First, the fishers in a given location are not necessarily homogenous. For example, Pomeroy (2001) notes that in addition to full-time fishers, there are also often part-time or seasonal fishers, including those who come from their inland homes to fish on the coast. Indeed, the latter point reinforces the reality that those who have traditionally had access to a local fishery may not be limited to community residents. Allison and Ellis (2001) argue that some small-scale communitybased fisheries may allow for 'reciprocal access' between differing locations, to boost sustainable livelihoods in both places: 'Outsiders can access village-based fishing territories in times of their need, or when there are local surpluses, often in exchange for an access fee' (p. 380). In such situations, they state (p. 387): 'Institutions to regulate access to resources are still important, it is just that they do not necessarily take the form of fixed fishing territories and fixed license numbers ...'.

In addition to challenges in determining who should have access to a given fishery, there are also issues with making access rights in small-scale fisheries effective. Indeed, Pomeroy (2001, p. 122) has stated that many '... coastal fisheries in developing countries are in effect de facto open access ...' even though access rights may be specified in these fisheries. He argues (p. 122) that: '... the ability to enforce these laws and regulations is practically non-existent due to the fact that fisheries department and enforcement agencies do not have sufficient resources. In addition, the political will is often not in place to enforce these laws and regulations due to the influence of power elites'.

Therefore, while informal and traditional access rights have existed for centuries in a wide variety of fishery jurisdictions, and such rights are being implemented with increasing frequency even where direct government regulation dominates, there are nevertheless likely to be difficulties in making access rights fully effective in many small-scale fisheries. Access rights can be defined spatially, in terms of rights to a specific fishing ground or in terms of entry ('access') into the fishery as a whole. These two options are described in turn below.

Spatial access rights

First, in terms of spatial access rights, two key concepts are customary marine tenure (CMT) and territorial use rights in fishing (TURFs). These have long been applied by fishing communities in determining, for each fisher or household, the location where they can access fishery resources. Both approaches are inherently spatial management mechanisms, assigning rights to individuals and/or groups to fish in certain locations (thus the term 'territorial' in TURF), generally, although not necessarily, based on long-standing tradition ('customary tenure'). A classic reference on TURFs is that of Christy (1982, p. 1), who noted that: 'As more and more study is given to the culture and organisation of fishing communities, there are indications that some forms of TURFs are more pervasive than previously thought to be the case, in both modern and traditional marine fisheries'.

Indeed, TURFs have a particularly long history in traditional, small-scale/artisanal and indigenous fisheries. Two particularly well-known examples are the long-standing arrangement in coastal Japan, where traditional institutions are incorporated in modern resource management, and the small-scale lobster fisheries on the north-eastern coast of North America, where fishers in many locations have been able to maintain informal but effective community control on entry, i.e. demonstrating the capability to exclude others.

Some CMT and TURF systems have gone through periods when they lacked support in policy and thus suffered declines over time. However, there are now moves to maintain or restore many such systems. For example, in the fisheries of Oceania, traditional CMT/TURF systems declined as fisheries were 'modernized', but as recognition of the efficiency of such systems grew, there have been initiatives in some nations (notably in the South Pacific) to re-establish them. As Johannes (2002, p. 317) noted: 'Factors contributing to the upsurge include a growing perception of scarcity, the restrengthening of traditional village-based authority, and marine tenure by means of legal recognition and government support, better conservation education, and increasingly effective assistance, and advice from regional and national governments and NGOs'.

For example, Veitayaki (1998) reported on the case of Fiji, where customary marine tenure over traditional fishing grounds was historically the principal marine resource management practice, but had been in a significant state of decline. However, it was suggested that recent initiatives to formally register the boundaries related to CMT could be an important step in helping to restore community ownership over these areas.

As with any management mechanism, CMT and TURFs are not suitable in all cases. For example, Allison and Ellis (2001, p. 385) point out that:

Creating TURFS associated with individual fishing villages is a currently fashionable form of institution building in fisheries development; however temporary migration to places where fish are available is a prevalent feature of artisanal fisheries worldwide, and one that does not sit comfortably with the notion of territorial rights being based on resident populations in shoreline villages.

While caution is thus necessary, there is a broad sense that for appropriate cases, these 'traditional sea tenure systems' can hold considerable potential to provide efficient and relatively stable socially supported fishery management, particularly if implemented within the framework of existing social institutions and livelihood approaches (Ruddle, 1989).

Limited entry access rights

The second key form of access rights is found in the form of a fishing licence, reflecting the 'limited entry' approach that is common in modern state management of fisheries. Indeed, this form of management is often expressed as a regulatory tool to control the activities of fishers and fishing communities, in which the government (typically) issues a limited number of licences to fish. Each licence conveys a 'right' on a fisher, a fishing group or a community to access the fishery (to go fishing); some will thus have this right to 'use' the fishery, while all others will not. In this way, limited entry seeks to prevent the expansion of the number of fishing boats and/or fishers, with the aim of controlling potential fishing effort (fleet capacity), thereby helping to conserve the resource and generating higher incomes for the licence holders (i.e. those holding the access right).

Limiting access is also common in smallscale fisheries. Indeed, Berkes et al. (2001, p.148) refer to work by Wilson et al. (1994) showing that for a sample of 32 locations worldwide, limited access is the second most common traditional fishery regulation (after fishing area restrictions). However, the feasibility of a limited entry rights approach will depend on the particular small-scale fishery, and on how the approach is implemented. For example, if such rights were given out to community members, but not to outsiders, it could be a helpful means to protect local livelihoods - indeed, perhaps a mechanism to institute fishery rights that also reflect human rights. On the other hand, if it were seen as a means to give fishing rights only to some in a community but not to others, serious social and/or political conflict could result, unless there is broad acceptance of who constitutes the valid fishers.

Furthermore, it should be noted that even if licensing of this form is feasible, limited entry cannot be expected by itself to 'solve' all management problems. In particular, while limited entry specifies access rights, it does not limit the fishing of those with such rights. Over-harvesting could still occur. To deal with this, limited entry, if implemented at all, should be seen not as a sole measure by itself but rather as part of a 'management portfolio' that also includes approaches by which current fishers limit their own fishing activity.

Summary

Access rights have the advantage, from a fisher and fishing community perspective, that those with such rights – whether an individual fisher, fishers' organizations or a fishing community - are provided with some security over access to fishing areas. If access rights are managed well, they can reflect a desired balance of social, cultural, economic and environmental goals; they can assist in reducing rather than causing conflict; they can enhance food security and livelihoods for small-scale fishers and fishing communities; and they can protect local ecosystems (e.g. by preventing overharvesting and potentially by favouring more conservationist gear types or fishing practices). However, there are significant issues to be addressed in restricting fishery access, notably relating to equity considerations, and to impacts on poverty and vulnerability of households and communities (see, e.g. Béné et al., 2010).

Effort and harvest rights

Within the spectrum of possible fishery use rights, access rights may be extended through quantitative (numerical) use rights - rights to use a specific amount of fishing effort (effort rights, e.g. to fish for a certain amount of time or with a certain amount of gear) or to take a specific catch (harvest rights allocated to individual fishers, companies, cooperatives or communities, to catch a specified amount of fish). Such forms of fishery rights have relatively high information and management requirements, and thus are less common and indeed often inappropriate in small-scale fisheries. Nevertheless, as they are widely discussed in the fisheries literature, and may be suitable in certain circumstances, they will be briefly reviewed here.

Both effort rights and catch rights have parallels in fishery management regulations, namely in terms of fishing effort limits (e.g. 'How much gear can be used?') and catch quotas (e.g. 'How much fish can be caught?'), respectively – see, e.g. Pope (2002). Clearly, quantitative use rights like these incorporate or must be accompanied by access rights, but the converse need not be the case – many fisheries operate through access rights without there being any quantitative use rights specified.

Effort rights

As noted above, effort rights are related to fishing effort controls, i.e. restrictions on the activity of the fishing fleet (through limits on time fished, amount of gear, gear attributes, etc.) to keep that activity at levels compatible with resource sustainability. Effort rights typically designate a specific amount of fishing time and/or gear for each fisher, or vessel (Charles, 2001). This can serve conservation needs as well as spreading the effort across more vessels than would otherwise be the case, for equity reasons. A common example of such an effort rights approach arises in trap fisheries, notably those for lobster, crab and other invertebrates, where each fisher has the right to set a specified number of traps. It may be that all fishers have equal rights (i.e. to the same number of traps) or that the rights vary from one individual to another, perhaps based on location, boat size or some other criteria.

A key challenge for an effort rights programme arises if the rights relate to only one or two of the factors influencing fishing effort. In the above example, if rights relate only to the number of traps a fisher uses, that leaves the amount of time to use the traps unlimited. То overcome this, a multidimensional approach is needed, by implementing effort rights over not one but a range of inputs. Another challenge is the need to deal with the natural process of technological improvement that gradually increases the effectiveness of any given set of inputs over time. An effort rights programme must adjust for improvements in fishing efficiency by reducing the total number of allowable input units over time. Thus effort rights, while more costly than simple access rights, can be a viable approach if care is taken in defining the rights, if the rights cover a range of effort inputs and if a plan is put in place to deal with fishing efficiency improvements.

Harvest rights

The second main form of quantitative use rights is the harvest right (or 'catch quota'). If a fishery is managed through a total allowable catch (TAC), and that TAC is then subdivided into quotas held by sectors of the fishery, individual fishers, companies or communities, these shares of the TAC are the harvest (or catch) rights. They may be held collectively, whether by a sector of the fishery or by fishing communities (see the discussion of 'community quotas' later in this section). Alternatively, the rights may be allocated to individual fishers as trip limits (providing the right to take a certain catch on each fishing trip) or as individual quotas, rights to harvest annually a certain fraction of the TAC. In the latter case of individual quotas, these harvest rights may be nontransferable, or (mainly in industrial fisheries) there may be buying and selling of these quotas in a 'quota market' (i.e. for 'individual transferable quotas', or ITQs).

Harvest rights are widely promoted at present as a means of better matching catches to available markets, and avoiding the 'race for the fish' (so that catches can be taken at a lower cost and with less incentive for overcapacity e.g. Shotton, 2000). This is meant to increase profitability by reducing fishery inputs such as fleet size and the number of fishers, and by increasing product value. However, harvest rights raise economic and conservation concerns in small-scale fisheries (Copes and Charles, 2004). Perhaps most fundamentally, the costs of running a quota system can be prohibitive – in determining the suitable TAC, in monitoring catches and in enforcing catch allocations. There are also risks to conservation, including those arising with catch controls in general (notably the potential to overestimate biomass and thus TACs), and those arising if the catch rights are allocated to individuals. The latter risks are due to: (i) inherent incentives to cheat by under-reporting catches, since every caught fish that is unreported is one less that must be deducted from the quota; (ii) similar incentives to dump, discard and high-grade fish, since this allows the fishers with the quota directly to increase the value of what they actually land; and (iii) pressure on decisionmakers to increase the TAC beyond sustainable levels, to help fishers who have gone into debt to purchase rights (quota) from others. The high costs and various negative impacts of harvest rights explain why individual quota systems (in particular) are rarely found

in small-scale fisheries – even while being intensively promoted in industrial fisheries.

Management rights

The various use rights described above serve to specify and constrain who is to be involved in resource use, and this has the potential to improve the effectiveness of management and make conservation more likely. There is a parallel need to specify who is to be involved in fishery management – i.e. through what are called *management rights*. Management rights reflect the fifth 'right' noted by Kearney above – the right to participate in decisions affecting fishing. Such rights can be seen in parallel with use rights: the former specify the right to participate in fishery management just as the latter specify the right to participate in the fishery itself. Indeed, management rights are among the *collective choice* rights defined by Ostrom and Schlager (1996); these contrast with operational-level rights (including use rights) and in fact include the 'authority to devise future operational-level rights' (Ostrom and Schlager, 1996, p.131).

There is a widespread understanding that effective management requires a broader approach than conventional top-down methods – through new *co-management* arrangements that involve some degree of joint management by fishers, government and possibly local fishing communities (Pinkerton, 1989; Wilson *et al.*, 2003). In the language of fishery rights, this co-management requires allocation of management rights, the right to be involved in managing the fishery.

Who should hold management rights? Typically, the relevant government will have the responsibility to conserve the resource, to produce benefits from that resource and to suitably distribute those benefits, so it will certainly be among those holding management rights. Furthermore, successful management requires the support (or at least the acceptance) of fishers (who already hold use rights), and thus they should be among the holders of management rights. Finally, it may be that communities, non-governmental organisations (NGOs) and the general public could all be involved in management, but this is much more likely in the case of strategic management (dealing with the fishery's overall objectives and policy directions) than for operational matters (measures such as closed areas and seasons, or allowable hook or mesh sizes, that affect the fishing process directly). This is because strategic issues are typically ones of broad public interest, about which a wide spectrum of interested parties - and fishing communities in particular - should hold management rights. On the other hand, for operational matters, it is particularly important for fishers to hold management rights, but dealing with such operational aspects may attract little interest among communities, NGOs and the general public.

Parallel to the question of who should hold management rights is that of what situations are actually conducive to co-management arrangements. For example, Brown and Pomeroy (1999, pp. 567–568) suggest that for countries in the Caribbean:

... the near shore fisheries targeted by small-scale fishers for benthic species such as lobster and conch, coral reef fish, and coastal pelagics will have the best chances for successful comanagement. These fisheries usually have easily identified users and boundaries, similar gear and fishing operation patterns, and a small number of target species. Co-management can be either resource-specific or site-specific depending on the situation.

Similar conclusions may hold for a range of other small-scale fisheries.

Communities and fishery rights

Use rights and management rights can be allocated to individual fishers or they can be held in a collective manner by a community or a fishers' association. There is a long history in small-scale fisheries of fishing rights being held collectively within a particular community, but unfortunately, there has been relatively little attention in current debates over fishery rights to community-held rights (cf. Charles, 2006). Furthermore, such rights have not always been properly understood and incorporated into 'modern' management, leading to social and conservation problems. It is thus worth paying extra attention to such rights here, particularly since, as Panayotou (1982, p. 44) has suggested: 'The revival and rejuvenation of traditional community rights over coastal resources offer, perhaps, the best possible management option for scattered, remote and fluid, small-scale fisheries'.

The choice between individual and community rights should depend on both the historical context and the fishery objectives being pursued. For example, in the case of a fishery that has developed relatively recently and that has an industrial focus, there may be a natural inclination to an individual rights system, which may be viewed as compatible with the entrepreneurial independence of fishers. On the other hand, while community rights cannot be expected to work in every fishery, the approach seems more likely to be effective given: (i) cohesiveness of the community involved; (ii) experience in and capacity for local management; (iii) geographical clarity of the community; (iv) a modest overall size and extent; and (v) an institutional framework in which rights are specified through a combination of legislation, government decisions and traditional/informal arrangements.

Where community rights are feasible, they have the potential to: (i) utilize management institutions and moral pressure locally to create incentives for resource stewardship (conservation); (ii) increase management efficiency; and (iii) improve the implementation of local enforcement tools. In addition, with community rights, local 'fine-tuning' can help to achieve equity and fairness goals – e.g. by taking into account a broader range of fishery participants in a community, including not only current boat or licence owners but also crew members, shore workers and those (present and future) with an interest in participating in the fishery (Graham *et al.*, 2006).

Pursuing community rights may involve understanding and reviving former management systems. As Panayotou (1982, p.45) notes: 'Such revival would necessitate a removal of the factors responsible for the breakdown of these traditional management systems by: (a) explicitly allocating the coastal resources to artisanal fisheries; (b) dividing these coastal resources among fishing communities...'.

This allocation can take place with any desired combination of spatial access rights (such as TURFs), limited-entry licensing approaches and other use rights.

As but one example, while harvest rights in the form of catch quotas are most often inappropriate for small-scale fisheries, if they are to be implemented, then a promising approach is through 'community quotas', i.e. community-defined harvest rights in the form of portions of a TAC allocated to coastal communities. Defined on a geographical basis, they have the potential to bring people in a community together in a common purpose since, typically, the community as a whole (or the group of fishers in the community) manages the quota in such a way as to suit their specific local situation, to maximize overall benefits and to reflect community values and objectives (Charles, 2001). By having each community decide for itself how to utilize its quota, this can support community empowerment and enhance community sustainability. Examples of this approach in small-scale fisheries within industrialized countries are found in Alaska (specifically community development quotas (CDQs) and Atlantic Canada (Charles et al., 2007).

Community rights contrast with marketbased rights (such as individual transferable quotas) – see Copes and Charles (2004). Berkes (1986, p. 228) proposes that a communitybased approach '... provides a relevant and feasible set of institutional arrangements for managing some coastal fisheries', particularly '... small-scale fisheries in which the community of users is relatively homogeneous and the group size relatively small'. On the other hand, he suggests that individual market-based rights may be appropriate '... for offshore fish resources and larger-scale, more mobile fishing fleets'. This indicates that a useful differentiation can be made between small-scale fisheries (with fishers closely connected to communities, and with history and tradition playing a major role) and those that are predominantly industrial and capital-intensive (in which profitability dominates over other societal goals). However, there are bound to be exceptions to any

general direction, and a wide range of intermediate options can be contemplated as well, so allocation decisions must be made with great care.

Implementing Fishery Rights in Small-scale Fisheries

The previous section reviewed the various fishery rights, notably access, effort, harvest and management rights. In this section, we explore some major considerations in implementing these rights in small-scale fisheries, specifically: (i) the recognition of pre-existing rights, if they exist, or the choice among new rights systems, if needed; (ii) the approaches available for allocating rights; and (iii) choices relating to the duration of rights and whether transferability of those rights should be allowed.

Recognizing rights

In many existing small-scale fisheries, particularly those with a long history, rights have already developed naturally over time, perhaps put in place by fishers themselves or by their communities (see, for example, Dyer and McGoodwin, 1994; Hanna et al., 1996). Indeed, Béné et al. (2010, p. 338) suggest that this situation of existing rights is a general reality: 'Anyone who has worked closely with small-scale fisheries in developing countries knows that the access to fisheries (in particular, small-scale coastal or inland fisheries) is always conditioned by some form of formal or informal, symbolic or substantial, control systems generally established at the local/ community level'.

It is not surprising that access rights would have emerged, since there are clear benefits to defining the group of fishers entitled to fish in certain locations, both for the fishers themselves and for the well-being of the fishing community. If rights already exist, and holders of the rights are already specified, it will be important to assess the nature of those rights, how effective they are in meeting current objectives (as well as criteria of equity and sustainability) and whether there are available mechanisms to reinforce them. Certainly, it is likely to be less costly and easier politically to accept and reinforce traditional rights than to attempt the development of an entirely new regime.

Choosing among rights

If for some reason no use rights system is already in place (or alternatively, if use rights do exist but the current system is not functioning in a manner widely considered as effective or acceptable), then those involved in fishery management are faced with a choice among the various use rights options described above. However, given the biological, economic and social diversity of fisheries, no single-use rights approach will be applicable everywhere. The choice of use rights must fit into the culture, the historical reality and the policy directions of the specific fishery and overall jurisdiction. As the head of FAO's Fisheries and Aquaculture Department has noted (Nomura, 2006, p. 25): '... fisheries policies, management approaches and fishing rights - need to be tailored to the specific context of countries and localities with respect to the fisheries in question, the social setting, culture, etc'. This reinforces the broad point of Kuperan and Raja Abdullah (1994, p. 306): 'Planning and setting objectives for management of small-scale coastal fisheries requires a good understanding of what is meant by small-scale coastal fisheries, the resource attributes, the traditional values of fishing communities, the institutional arrangements and the overall environment in which small-scale fisheries operate'.

This implies the need for a collaborative process to determine a framework of use rights that will meet objectives and be feasible in practice. The collaboration must be designed and implemented in an equitable manner that is widely recognized as legitimate, and involve fishery managers and planners working together with a suitable range of interested parties. It must also be recognized that each use rights option has its inherent advantages and limitations, so that what is 'best' will depend on the fishery in question. Thus it is important to understand how the particular fishery circumstances influence the desirability of certain options over others. Factors to take into account include: (i) the societal objectives; (ii) the relevant history and traditions; (iii) the relevant social, cultural and economic environment; (iv) the key features of the fish stocks and the ecosystem; and (v) the financial and personnel capacities of the particular fishery (Charles, 2002). It should not be surprising, given this reality, that there is no consensus about which use rights options are most compatible with which fishery features, only some trends (e.g. that sedentary fishery resources may be especially amenable to the use of TURFs).

Allocation of rights

In small-scale fisheries, as has been noted, rights may well already be allocated. However, if a new use rights system is being implemented for some reason, or if there is seen to be a need for adjustments to the existing system, how should the rights be allocated? There is no universally correct way to accomplish this and difficult choices are faced. Some approaches, such as one-time auctions or ongoing markets for rights, are not generally suitable for small-scale fisheries, since community and social values, while crucial in such fisheries, are typically ignored in these approaches. For example, as Panayotou (1982, p. 43) notes: 'Auctioning or market sale of a limited number of licences is certain to exclude many small-scale fishermen who have poor access to funds to bid for or purchase a licence'. The sale of fishing rights also tends to limit (especially financially) the capability of governments to undertake new policy directions, such as shifts in the fishery toward small-scale rather than industrial fisheries, or toward conservationist over destructive fishing gear.

Another allocation option is to assign rights on the basis of 'catch history'. This is common in industrial fisheries, where it is often done in proportion to each individual's past catches, or some other measure of participation in the fishery, possibly with adjustments to increase equity among the fishers. However, it is problematic to properly define historical participation, especially in small-scale fisheries where catches are rarely fully monitored.

A third option is for use rights to be allocated on a group/collective basis directly to participating communities, fishing sectors or other identifiable groups. Typically, the community or group holding the rights in common makes subsequent allocations (whether permanently or periodically) to participating individuals through methods that can be tailored locally. This approach has desirable features, in terms of empowering communities and allowing for local values to be reflected, but must ensure that possible imbalances in power within the community do not lead to inequitable results in the allocation of rights.

Duration of rights

In small-scale fisheries, the fishers and fishing communities involved typically have a longterm dependence on the fishery for their livelihood. The link between fishery rights and social, economic and human rights is therefore one in which access to the fishery is guaranteed to local fishers and communities. In return, the security of tenure and access can lead to local stewardship of coastal resources and an incentive to better 'plan for the future' in husbanding the resource. Thus in many small-scale or artisanal fisheries, access rights – which may well be available to all those in the local community – tend to be of indefinite duration, considered essentially permanent.

On the other hand, long-term rights can be problematic if a fishery was initially developed or exploited by industrial fishing companies or foreign fleets, but government now seeks to improve the situation of small-scale fishers by shifting rights to them. If the initial larger-scale operators had been given long-duration use rights, that might prevent the subsequent entry of small-scale fishers. In such situations, clearly there could be a benefit in shorter-duration rights, to provide greater management flexibility.

Transferability of rights

The transferability of use rights refers to the capability of rights holders to shift ownership of the right to someone else – whether permanently (e.g. by selling those rights, or handing them down in a family from one generation to the next) or temporarily (e.g. by transferring the rights to another fisher within a fishing season). The choices in this regard can have large impacts on small-scale fisheries and fishing communities.

If those holding use rights transfer these to their children, this may well be positive from the perspective of community stability. On the other hand, if the rights are able to be bought and sold, as advocated by some fisherv commentators, this tends to lead to a concentration of those rights, as those with greater financial resources buy out others (Copes and Charles, 2004). Since small-scale fisheries are often the economic foundation of their communities, this concentration of rights is likely to produce negative impacts on community stability, because the rights typically shift out of small communities and into larger centres, together with a loss of rural livelihoods (employment) and detrimental effects on equity in the coastal economy. Given all these impacts, it will typically be important to place limits on (if not fully prohibit) the permanent transfer of use rights. This would be particularly important for market-based use rights, but even for the widely acceptable within-family process of handing down the rights from fishers to their children, there could be benefits in greater stability within the fishing community or region if transferability is restricted to within the particular sector or community in which the use rights reside.

On the other hand, there may be relatively few problems with temporary transferability, in which use rights can be transferred from one fisher to another within a fishing season, but then revert back to the original fisher at the end of the season. This provides occasional short-term flexibility (e.g. for fishers who happen to become sick or injured in a given year) while maintaining long-term stability in the distribution of the rights.

Conclusions

This chapter has focused in two main directions: (i) describing fishery rights from the specific perspective of small-scale fisheries; and (ii) linking fishery rights with human rights. Both of these areas of emphasis are very much in the spirit of a major meeting organized by the Food and Agriculture Organisation (FAO) of the United Nations in 2008, the Global Conference on Small-scale Fisheries. That meeting, which brought together a wide range of fishers, fishworkers, NGOs, governments and international organizations, reinforced a major shift in fisheries management, and the end of an era of simplistic thinking about rights in fisheries.

The simplistic view of rights revolved around an imbalance between fishery rights and human rights, with the focus on the first while ignoring the second. This led to an illusory view of the world in which it was assumed that, to achieve success in fisheries, one merely needs to assign the right to fish, regardless of whom gets those rights. In such a view, it really does not matter whether the rights holders are fishers, corporations or communities, only that rights are assigned.

This simplistic approach had an element of truth at its roots – that regardless of who holds rights, having secure access to the fishery does provide them with more security and makes it more worthwhile to take care of the resource into the future. However, other key realities in small-scale fisheries and fishing communities were neglected:

1. That rights may well already be in place in many small-scale fisheries, and these should be reinforced and supported, rather than ignored and replaced.

2. That who holds fishing rights, and how those rights are handled, makes a critical difference to the broader issues of community well-being, poverty alleviation, socio-economic success and system resilience.

3. That fishing rights need to be closely linked with, and supportive of, social, economic and human rights.

4. That rights held by communities ('community rights') may be particularly effective in some small-scale fisheries.

Figuring out the right form of rights requires an understanding of all these realities. Indeed, moving to a more realistic vision of rights requires reinterpreting a term commonly used in the literature on fishery economics and management - 'rights-based management' (Neher et al., 1989). What is needed is an understanding that, for fisheries management to be 'rights-based', it must take place in the context of all the various forms of rights. Given their mandate, fisheries agencies may have been inclined to focus only on use rights (over fishery access) and management rights (as in co-management). A broader vision of rights involves adding social, economic and human rights to the picture rights that are fundamental and cannot be given out or taken away by government.

Furthermore, along with rights go responsibilities. The FAO Code of Conduct for Responsible Fisheries (1995, para. 6.1) states: 'The right to fish carries with it the obligation to do so in a responsible manner ...'. A key aspect in moving toward responsible fisheries thus lies in developing effective and accepted sets of both rights and responsibilities among fishers. As Jentoft *et al.* (1998, p. 434) note: 'When rights of management and property go together, property is not only a right but also a responsibility for the collective as well as the individual. Without that responsibility there is no guarantee that property rights may institute sustainable resource use'.

Understanding, assessing and dealing with the impact of fishery rights on livelihoods, poverty, community well-being and human rights are clearly critical topics. In a context of developing countries, attention is needed to the relationship of fishery rights to the overall objectives of fishery and development policy. For example, a more complete rights-based approach, one combining fishery and human rights, can contribute in a practical way to achieving a balance in the debate over 'wealth-based' and 'welfare function' perspectives on the priorities for small-scale fisheries (Cunningham *et al.*, 2009; Béné *et al.*, 2010).

Drawing on insights in an oft-quoted paper of Béné (2003) on poverty and fisheries, Hersoug (2006, p. 7) concludes that: 'The point is simple: rights-based fisheries management may secure some type of ownership, be it individual or collective. But we need to secure rights for the right people. That can only be done through institutional reforms ...'.

A similar conclusion is reached by Jentoft (2007, p. 93): 'Property rights can lead to more inequity but they can also be employed for correcting inequities, as they can be used as a mechanism to protect those in need of protection, that is, the marginalized and impoverished among fishers'.

Herein rests a major challenge in linking human rights and fishery rights within a context of small-scale fisheries.

To this end, we need to move toward the 'bigger picture' that connects the fisheries 'silo' to broader policy and legal frameworks, and to the well-being of coastal communities, in order to address, in a holistic way, the many issues facing small-scale fisheries (Berkes et al., 2001; Charles, 2001). For example, ensuring access rights to subsistence fishing in coastal communities may well be closely related to enhancing local food security, and incorporating postharvest aspects into rights discussions can be important to ensure consideration of the rights of women involved in marketing fish. Moving to a 'bigger picture' perspective will involve better understanding linkages among the various forms of rights, both within the fishery system itself and in a multi-sectoral context, so as to produce more comprehensive approaches to managing small-scale fisheries, ones that are better able to improve well-being and safeguard livelihoods.

Acknowledgements

This chapter has grown out of the author's previous research on fishery rights, referenced herein, as well as from helpful discussions with many colleagues, including Melanie Wiber, John Kearney, Merle Sowman, Chris Béné, Evelyn Pinkerton, Fikret Berkes, Patrick McConney, Bob Pomeroy, Serge Garcia, Kevern Cochrane, Chris Milley, Arthur Bull and Sherry Pictou. As usual, any remaining errors are the responsibility of the author. Financial support from the Sciences and Humanities Research Council of Canada is gratefully acknowledged.

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