Eco-certification of unsustainable fisheries

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Abstract

Eco-certification and eco-labeling hold the promise of augmenting traditional fisheries management approaches carried out by governments and regional fisheries management organizations for sustainable fisheries. However, a number of Marine Stewardship Council certified fisheries may not in fact be sustainable using commonly accepted MSY-based criteria and in these cases the eco-label may be misleading the public. Eco-certification of depleted fisheries or fisheries with insufficient data to determine a sustainable fishing strategy are contributing to a weakening of the impact the MSC brand and could diminish a valuable societal feedback mechanism to achieve truly sustainable fisheries where government and RFMO legislation and conventions have largely failed. Further complications arise because MSC certifies fisheries targeting more than one species (e.g. South African hake) or more than one stock (e.g. New Zealand Hoki) where one component may be depleted, yet the fishery as a whole is deemed “sustainable”. Aspects of MSC governance are also of concern in democratic society in which wild marine fish populations are viewed as a public asset. A secret pre-assessment selection process for candidate fisheries before public disclosure that a full assessment has commenced (and non-disclosure of unsuccessful pre-assessments), profit-maximizing strategies of a small group of consulting companies hired to do the assessment, the down-weighting of negative independent review of assessments, the costly objection process and the legal rather than scientific objection-resolution process should all be of public concern. Rather than being universally supported by environmental groups, MSC has been accused of lowering the bar on a number of controversial sustainability assessments in order to increase its market share and feed its expansionist aspirations. MSC may also be shading out existing credible regional or national sustainable seafood eco-ranking endeavors such as the Monterey Bay Aquarium Seafood Watch program. Seafood Watch (SeaChoice in Canada) not only identifies best seafood choices, but also highlights those to avoid. A number of these shortcomings can be addressed, and should be, if public support for the MSC eco-label is to grow at the same rate as the number of fisheries being certified.

Keywords: eco-certification, sustainability, Precautionary Approach, eco-label, Marine Stewardship Council, fisheries governance, fisheries management strategies

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Introduction

In Shelton (2009) the question was posed whether or not eco-certification was redundant given the existing policies and practices of governments and regional fisheries organizations (RFMOs) with regard to the sustainable management of wild capture fisheries. Based on the generally poor performance of these institutions in achieving sustainably managed fisheries, the argument was made that a “belt and braces” approach would be advantageous, building on synergies between eco-certification and traditional instruments for sustainable fisheries.

A number of regional and national groups, such as Monterey Bay Aquarium Seafood Watch and SeaChoice in North America, have made considerable progress in educating the public with regard to product options from sustainably managed wild capture fisheries through their seafood sustainability rating programs. However, the Marine Stewardships Council (MSC) has emerged to become the dominant force globally as a certifier of wild capture fisheries as sustainable.

With the list of fisheries certified by MSC expanding to include depleted fisheries, exploratory fisheries and fisheries on key forage species, there has been increasing criticism that not all MSC assessed fisheries should have passed certification. Some recent controversial MSC assessments are reviewed and consideration is given to improving both the approach and governance in regard to fisheries eco-certification.

Controversial certifications

New Zealand Hoki

NZ Hoki (*Macruronus novaezelandiae*) are assessed as two intermixing biological stocks, based on two main spawning areas, an Eastern Stock that spawns in the Cook Strait and a Western Stock that spawns off the west coast of South Island (NZ Ministry of Fisheries, 2009). Based on the most recent stock assessment (McKenzie and Francis 2009), both Hoki stocks are estimated to be increasing after being depleted to low levels by 2005 (Fig. 1). Currently the Western Stock is more depleted (36–39%B₀) than the Eastern Stock (47–49%B₀). The NZ Harvest Strategy Standard specifies a Target around which the stock should fluctuate (B_MSY or better), a Soft Limit that triggers a requirement for a rebuilding plan that would recover the stock to the target within a specified period of time (50% B_MSY or 20% B₀, whichever is greater) and a Hard Limit below which fisheries should be considered for closure (25% B_MSY or 10% B₀, whichever is greater). For both Hoki stocks, an interim Target is expressed as a range of 35-50% B₀, the Soft Limit at 20% B₀ and the Hard Limit at 10% B₀. Both stocks are therefore considered to be inside the interim Target zone, although the Western Stock is at the low end of the range with a risk of 40-50% of actually being below the lower extent of the interim Target zone when uncertainty in the assessment is taken into account.

The improvement in the Western Stock is a relatively recent phenomenon. The NZ Hoki fishery was first certified as sustainable by Marine Stewardship Council in March 2001.
and recertified sustainable in October 2007 based on an assessment by SGS Product and Process Certification (Netherlands). This implies that, for at least part of the certification period, the fishery on the Western Stock was deemed to be sustainable even though it was well outside the Target zone and at or below the Soft Limit. The NZ Harvest Strategy Standard requires a less than 10% risk of being below the Soft Limit, otherwise the stock is considered Overfished or Depleted. A sustainability certification is inconsistent with a stock in an overfished or depleted state. Annual TACs are set by the NZ Government based on the scientific assessment with the objective of rebuilding the stock and this seems to be having a positive effect. However, it could be argued that until the stock is fluctuating around $B_{MSY}$ or above under a fishing mortality that is less than $F_{MSY}$, the Western Hoki fishery should not be considered to be sustainably managed.

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**Fig. 1.** Model estimates of the New Zealand Hoki spawning stock biomass and 95% confidence intervals for two alternative formulations for the Eastern Stock (top) and Western Stock (bottom) from McKenzie and Francis (2009). For the Western Stock, horizontal lines demarcate the Soft Limit and the lower boundary of the interim Target zone.

**South African Hake**

The South African or Cape hake fishery targets both a shallow water species (*Merluccius capensis*) and a deep water species (*Merluccius paradoxus*). Hake is by far the most valuable fish resource in South Africa accounting for significant exports to countries such
as Spain, France, Portugal, Italy, Australia and the USA. The hake fishery was first certified by MSC in April 2004 based in large part on an assessment in which the South and West coast components of both fisheries were treated separately, but the two species were lumped within each component, mainly because catch-and-effort statistics collected from the fishery are not species-disaggregated. However, a recent species-disaggregated baseline assessment of the South African hake resource (Rademeyer et al., 2008) estimated that *M. paradoxus* was at <10% of its pre-exploitation level (i.e. collapsed) whereas *M. capensis* was estimated to be above its maximum sustainable yield level (Fig. 2).

![Fig. 2. Estimates of median and range of spawner biomass as a fraction of carrying capacity for the reference set of South African hake models from Rademeyer et al. (2008).](image)

In March 2010 MSC re-certified this fishery based on a new evaluation of all available information. Under Principle 1: Sustainability of Exploited Stock, *M. capensis* achieved a score of 86% and *M. paradoxus* achieved 82%, even though *M. paradoxus*, the major contributor to this two-species fishery, is in a collapsed state and did not improve during the previous certification period. This was clearly pointed out by one of the two
independent reviewers of the Moody Marine Ltd. re-certification assessment who stated “I nevertheless consider that some of the marks awarded are too high particularly in relation to the stock status of M. paradoxus (which appears to be in a very depleted state) and the lack of evidence that this has been ameliorated during the certification period ...I therefore question the assessment that the overall Performance of the South African Hake Trawl Fishery passes in relation to MSC Principles 1, 2 and 3, and that the fishery be certified according to the Marine Stewardship Council Principles and Criteria for Sustainable Fisheries.”

Antarctic Krill

Antarctic krill (Euphausia superba) is a key prey species in the Antarctic ecosystem. Concerns regarding the possible overexploitation of krill and the impact on the recovery of seal and whale populations precipitated the formation in 1980 of the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), part of the Antarctic Treaty System (Constable et al., 2000). The commercial fishery for krill began in the early 1970s, reached a peak of over 500 kt in 1982 and is currently about 150 kt. Highest densities of krill occur in the southwest Atlantic sector of the Southern Ocean, particularly in Area 48 (Southern Ocean waters around the Antarctic Peninsula and South Georgia). A synoptic acoustic survey of krill biomass in Area 48 in 2000 led to estimates by the CCAMLR Scientific Committee of an unexploited biomass (B₀) of 44 million t and a potential yield of about 4 million t. Although current harvest is small relative to the estimated biomass, CCAMLR is concerned about the impact of an expanding krill fishery on the ecosystem, especially small-scale spatial requirements of land-based predators. To this end the Scientific Committee of CCAMLR recommended to the Commission that krill catches do not exceed a ‘trigger’ level of 620 kt in Area 48 until a procedure for division of the overall catch limit into smaller management units has been established to reduce the potential impact on predators.

Nine countries submitted notifications for 23 vessels to fish Antarctic krill in the 2008/09 season using four different gear types generating a potential catch of 879 kt, exceeding the trigger level for Area 48 (Medley et al., 2009), although realized catches are expected to be less. Nevertheless, there are concerns that an expanding krill fishery for aquaculture fish food and the nutraceutical market could detrimentally impact the Antarctic ecosystem. The Aker Biomarine pelagic trawl vessel Saga Sea is a significant participant in the krill fishery in this area. This enterprise commenced assessment by Moody Marine Ltd. for MSC ecocertification in October 2008 and achieved certification in June 2010.

One of the two expert reviewers of the draft Moody Marine Ltd. report was strongly critical of high scores given by the assessment body to the Aker Biomarine fishery. These stemmed mainly from concerns regarding the impact on the ecosystem of an expanding fishery, inadequate catch and bycatch monitoring overall and the unproven efficacy of the harvest rule that is in place (essentially a constant catch limit based on a percentage of the estimated B₀ rather than a feedback harvest control rule) (Nicol in Medley et al., 2009). Moody Marine Ltd. responded by lowering the scores for two
performance indicators under Principle 2 (Fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem), however an overall high passing score was nevertheless achieved. Nicol expressed concern that, while the sole Aker Biomarine vessel, the Saga Sea, had 100% international observer coverage and minimal bycatch, the same could not be said about the other 22 vessels which could potentially engage in the krill fishery. Moody Marine emphasised that it was only concerned about the single unit of certification – the Saga Sea. This precedent by Moody Marine Ltd. of establishing that, under the MSC Principles, the fishery by a single vessel in a multi-vessel and multi-nation fishery could be deemed sustainable, irrespective of the behaviour and impact of other vessels and nations engaged in targeting the same species within the same ecosystem, is of considerable significance.

As noted by Constable et al. (2000), CCAMLR is yet to face the real test in its ecosystem approach - the expansion of the krill fishery. Before this occurs, appropriate management strategies have to be developed to avoid localized effects on the ecosystem and to provide effective feedback responses to future changes in krill biomass and other ecosystem components. Given the complexity and dynamics of the Southern Ocean, CCAMLR acknowledges that it is still far from reaching its ultimate goal, the “ecosystem approach” to the regulation of fisheries (Kock, 2000).

A formal objection to MSC certification of the Aker Biomarine krill fishery as sustainable was filed by the Antarctic and Southern Ocean Coalition (ASOC, a coalition of over 200 non-governmental organizations in fifty countries concerned with the preservation of the Antarctic environment) in December 2009. The ASOC objection was based on three claims (i) Moody has misapplied the MSC principles in relation to the “unit of certification”, contending that the unit of certification must be the entire Antarctic krill fishery; (ii) Moody has incorrectly applied MSC procedures in reaching its conclusions; and (iii) The scores given by Moody in relation to a number of the Performance Indicators cannot be justified. Based on the response from Moody, the MSC Independent Adjudicator (AI) concluded that Moody had “cured the procedural defect” identified in the remand by taking into account a paper by Watters et al. (2009) on risks associated with the fishery, and had provided a “reasonable explanation” for not altering the scoring of the performance indicators in question. This cleared the way for the Aker Biomarine krill fishery to be certified sustainable by MSC on 15 June 2010.

Ross Sea Toothfish

The Argos Georgia Ltd., Sanford Ltd. and New Zealand Longline Line Ltd. exploratory longline fisheries on the Antarctic toothfish *Dissostichus mawsoni*) in the Ross Sea entered assessment by Moody Marine Ltd. for MSC certification in November 2007. The fishery operates in international waters in CCAMLR Subareas 88.1 and 88.2 (Ross Sea). It is an “Olympic style” fishery open to all CCAMLR member countries and closes when the TAC level is reached. In 2008/09 13 vessels from several countries participated in the exploratory fishery in Subarea 88.1 reporting 2,434 t while 7 vessels fished in 88.2 reporting 484 t. (CCAMLR, 2009). Some of these countries have been implicated in the collapse of toothfish fisheries elsewhere and in IUU landings. The fishery is managed by
CCAMLR but the enforcement of regulations and licensing of vessels is the responsibility of flag states.

The Ross Sea toothfish fishery is in what is called an “exploratory phase”, during which information is collected on the biology and productivity of the stock - information that will help in understanding the life history, biology, population dynamics and spatial patterns of distribution, leading to an assessment of the sustainable yield for a commercial-scale fishery. Both the fishing effort and the catch have been increasing over the last decade. However, many aspects of the biology, lifehistory and spatial patterns of abundance are still are still speculative. Therefore the assessment is considered to be relatively uncertain with tag-recapture data providing the best information, although even this information is uncertain because the total number of tagged fish is relatively small (CCAMLR, 2009).

Scientific advice by CCAMLR is based on projections of the modeled stock under different catch levels (CCAMLR, 2009). The catch level advised is either the constant catch that results in a 10% probability of the spawning biomass dropping below 20% of its median pre-exploitation level over a 35-year harvesting period, or the catch that results in the median escapement at the end of a 35-year period being 50% of the median pre-exploitation level. Which ever one is lower is selected as the scientific advice. Analysis at the 2009 CCAMLR assessment estimates that this is achieved with a TAC of 2,850 t, as illustrated in Fig. 3.

![Estimated spawning stock biomass median (solid line) and 95% CI (dashed lines) for the base-case Ross Sea toothfish model with the projection based on a constant TAC of 2,850 t (From CCAMLR, 2009).](image-url)

**Fig. 3.** Estimated spawning stock biomass median (solid line) and 95% CI (dashed lines) for the base-case Ross Sea toothfish model with the projection based on a constant TAC of 2,850 t (From CCAMLR, 2009).
The CCAMLR Working Group on Fish Stock Assessment has recommended in recent years that the relative merits of alternative harvest strategies for toothfish be evaluated using simulations (CCAMLR, 2009).

The Moody Marine Ltd. assessment of the sustainability of the fishery resulted in passing scores on all three MSC Principles: Sustainability of Exploited Stock, Maintenance of Ecosystem, and Effective Management Systems. However, they did attach a number of conditions for ongoing certification. Knowledge on the life history and population characteristics of the target stock must be improved. Stock assessment must be improved through a wider tagging program to reduce uncertainty. The impact of the longline fishery on the benthic habitat must be better understood. There needs to be better information of the trophic effects of the fishery and the impacts of bycatch.

An objection to the Moody Marine report was filed by ASOC on 11 December 2009 claiming that there was an absence of any real understanding of the natural history of toothfish, the impacts of the fishery on stocks and the potential negative impacts of significantly reducing the abundance of one of the top predators in the ecosystems. The objection is still before the MSC “Independent Adjudicator”.

**Why are these certifications controversial?**

The reasons why a number of MSC sustainability determinations are considered controversial, whether or not formal objections are made, are varied. On the one hand MSC will certify a fishery on two stocks or even two species, when one of these units are depleted or collapsed, and either not recovering or in early stages of recovery (Hoki and hake). In other cases MSC certifies a fishery comprising a subset of a larger fishery (krill and toothfish) with no clear evidence that the fishery as a whole is sustainable. Certification of fisheries on forage species (krill), on species with “slow” life histories prone to collapse (toothfish), and exploratory fisheries for which only limited data exist (toothfish), raise particular concerns. All fleet components of the fishery as a whole need to be fishing in a sustainable way and all catch and bycatch components need to be in a non-depleted state with low probability of future depletion based on credible analysis of sufficient data, if widespread public acceptance of sustainability determinations is to be achieved.

Forage species typically have large fluctuations in abundance and feedback harvest control rules are generally required to ensure that removals are adjusted to changes in the size and productivity of the stock. It is anticipated that the constant TAC approach adopted by CCAMLR will be precautionary, posing a low risk to both the shrimp population and the populations of dependent predators (Hewitt et al. 2002). However constant TAC approaches are not robust to unpredicted changes in future krill abundance or productivity. ENGOs claim CCAMLR is gambling with krill Fisheries in the Antarctic because large uncertainties will equate to high risks (Johnston et al., 2009).

Antarctic toothfish are long-lived, slow-growing and late maturing, although fecundity is not particularly low in toothfish (Evseenko et al., 1995 based in analysis of *Dissostichus*...
This would place them in the category of “periodic strategists” (King and McFarlane, 2003). Periodic strategists typically have long periods between strong yearclasses and are particularly susceptible to fishing down the age structure. Spatial refugia could be important components of an effective sustainable management strategy for periodic strategists. The rapid collapses of the conspecific Patagonian toothfish (*Dissostichus eleginoides*) populations off Argentina and around Prince Edward and Marion Islands demonstrates the vulnerability of this lifehistory to overfishing using longline gear.

Consistent with the exploratory nature of the fishery and the limited amount of scientific data available, much of the important life history of the Antarctic toothfish in the Ross Sea is still only hypothetical (Hanchet et al., 2007). MSC has recently introduced a Risk-Based Framework to be used to evaluate and score fisheries against the MSC principles and criteria when such data-deficiency is encountered (MSC, 2010b). One of the methods considered is productivity-susceptibility analysis (PSA) derived from Stobutzki et al. (2001). PSA takes into account both the productivity of the stock and the susceptibility of the stock to fishing in order to determine relative vulnerability. There is no doubt that Ross Sea toothfish would come out as having a high potential risk under a PSA analysis had one been applied. Certifying the fishery as sustainable could lesson the argument for taking additional conservation measures such as a large marine reserve within the stock area to secure the age structure vital to the dynamics of the stock.

**Achieving sustainability at the single species and ecosystem level**

Although sustainability is a widely touted as an objective in fisheries management, it is seldom explicitly defined in operational terms, and may mean different things to different people (Quinn and Collie, 2005). Shelton and Sinclair (2008) examined Canadian policy and legislation as well as international agreements and conventions supported by Canada to develop a sharper definition of sustainability in a single species context. They suggest that only a fishery in which the stock is fluctuating around B_{MSY} or above under a fishing mortality which is, on average, less than F_{MSY}, or a fishery on a stock which is depleted below the range of normal fluctuations around B_{MSY} but which is being managed to rebuild to the vicinity of B_{MSY} or above with a high probability within a specified and acceptably short period of time by setting F well below F_{MSY}, should be considered sustainable.

MSC Principle 1 relates to single-species sustainability and is largely consistent with the above definition (MSC, 2010a). However, in practice MSC appears to afford considerable latitude in the requirement for management of depleted stock to be aggressive enough to achieve rapid rebuilding. The South African hake fishery discussed above provides a clear example. *M. paradoxus* was reduced to less than 10% of the unexploited stock, a level normally considered to be consistent with collapse and impaired recruitment. The population did not rebuild during the first MSC certification period yet the fishery was given a passing score of 82% under Principle 1 in the new (2010) assessment, with the condition imposed that it demonstrate some degree of rebuilding within the current 5 year certification period. It is not yet clear that this will
happen. No fishery has had its MSC certification revoked for not meeting such conditions. The NZ western Hoki stock is in a better situation, responding positively to a rebuilding strategy put in place in 2007. TAC adjustments are made annually with the objective of rebuilding the biomass to at least 50% of B₀ by the end of a five year period. However the stock has not yet rebuilt to the stage where it is fluctuating around B_{MSY} or above.

The single-species MSY-based definition of sustainability could be criticized for not taking into account ecosystem considerations. To achieve “ecosystem sustainability”, however it is defined, may require that stocks have to be rebuilt to a much greater percentage of the unexploited biomass than B_{MSY} and be fished at levels of only a fraction of F_{MSY}. MSC Principle 2 addresses ecosystem sustainability, requiring maintenance of the structure, productivity, function and diversity of the ecosystem. This principle has been put to the test with the certification of the Antarctic krill fishery as sustainable. There is no doubt that krill is the key species in the structure, productivity and functioning of the Antarctic ecosystem. Although the current harvest may be small relative to the estimate of B₀ from the 2000 synoptic acoustic survey, it is not clear what the impact of an expanding krill fishery will be. The absence of a feedback management strategy that responds to changes in krill abundance and productivity suggests that ecosystem functioning could well be disrupted by fishing activity at some point in the future. As pointed out by the PEW Foundation in its comments on the MSC assessment “The fishery targets the core of the Antarctic food web; consequently the fishery has the potential to undermine the key role of krill in the ecosystem structure and function, thus causing irreversible harm. Krill fishing catches are concentrated in areas of high krill productivity and availability, which are key for maintaining the balance of the ecosystem.” (PEW comments in Medley et al., 2009). The MSC certification currently extends to only one enterprise, ignoring the activities of other enterprises, and is justified on the basis that the current fishery is relatively small given the biomass estimated in the 2000 survey. This would seem to be rather weak justification for determining a fishery on a key prey species as “sustainable” in an ecosystem context. One could well argue that until there is sufficient understanding of the potential impact of a krill fishery on the krill population and the rest of the Antarctic ecosystem, there should be a cessation of commercial fishing. CCAMLR is still far from achieving this level of ecosystem understanding (Kok, 2000).

**Governance, process and market share**

It is generally accepted and written into law that fish within territorial waters are public property and cannot be privatized. Fishing enterprises may be given tenant rights under certain conditions that have value and can be traded, but never ownership of the resource itself. It is the responsibility of government to manage the resources within territorial waters for long-term public good by balancing exploitation against conservation. RFMOs attempt to achieve the same objectives for straddling stocks and high seas fisheries in the interests of society as a whole. The balancing act between exploitation and conservation has proven difficult to achieve because of politics, the influence of
powerful commercial players, the inertia of management systems and public indifference. MSC has the power to influence this balance in a positive way.

Although MSC principles and criteria generally have a sound scientific basis, it can be argued that MSC favors exploitation over conservation. Certification bodies accredited to do MSC sustainability assessments have yet to conclude that any fishery that has passed through the confidential MSC pre-assessment process is not sustainable. Instead, concerns that are found during the assessment process are captured as “conditions” that have to be met to ensure ongoing MSC sustainability certification. The idea is that, rather than applying the “stick” and deeming publically that a fishery is unsustainable, the incentive of the “carrot” will result in improvements being put in place by industry and fishery mangers - they are given the opportunity to put their house in order. Clearly unsustainable fisheries seeking certification are weeded out early in a secret pre-assessment process, outside public purview. No public warning is subsequently issued to avoid products from these clearly unsustainable fisheries. Those fisheries for which an argument can be made that they are en route to becoming sustainable are certified sustainable on the assumption that they will meet certain conditions down the road. Premature certification of fisheries as sustainable when in actual fact they should first have demonstrated that they have already met these conditions is cause for concern. “Conditionally sustainable” makes no sense. Either the fishery is sustainable now (based on commonly accepted criteria such as those applied by MSC) or it is not. Timelines and progress with regard to meeting conditions are difficult to monitor in ongoing audits and re-certifications. For example, the continued lack of recovery of the major component of the South African hake fishery illustrates the difference between intent and results. Further, so far there is no case where a sustainability certification has been revoked by MSC because of a failure to address conditions.

Raising public awareness regarding the need to balance conservation and exploitation through sustainable fisheries management is important for the future of wild capture fisheries. Local and regional conservation groups have been effective in creating ranked lists of fish species that consumers can feel comfortable purchasing because they come from sustainably managed fisheries. These eco-ranking lists are not costly to produce and rely largely on volunteers to gather the available information and to compile and review the findings in the context of sustainability principles that are scientifically sound. Typically fish species will be color coded from Red (avoid/unsustainable) to Green (best choice/sustainable). Seafood Watch (US) and SeaChoice (Canada) are examples of groups prominent in providing sustainable seafood eco-ranking in North America. This approach is facilitated where government itself provides a clear public determination of those stocks which are either overfished or have overfishing taking place, such as the US fish stock sustainability determination. The client of these eco-ranking lists is clearly the public, both in terms of being the resource owner, and thus having a vested interest in the future of the resource, and as a consumer of the resource who can directly influence the future of a resource though the marketplace. There are only two parties – the conservation organization which provides the eco-ranking list and the public who uses it to make decisions. Restaurants and retailers can adjust their menus and inventory to meet public desire to avoid Red-listed species and only consume Green-listed species as they
see fit, but they are not a directly a party to the process. Because eco-ranking sustainability determinations tend to be at the scale of the species rather than a subcomponent of a fishery on a particular stock of a species, eco-traceability is not a major issue (although some species substitution does take place illegally in the market place). This system works with very little money changing hands and no empire building, and tends not to be highly controversial. How well it works may be difficult to gauge in quantitative terms but there is certainly a greater awareness among North American public regarding what seafood to avoid, and some evidence that restaurants and retailers are becoming more responsive to increasingly discerning tastes.

Marine Stewardship Council style eco-certification takes a very different approach. The client is the fishing industry and associated supply chain, not the public. Three parties are involved in the process – MSC, the industry and the independent certifier. The public, although owners of the resource, are to some degree sidelined. They can have input as “stakeholders”, comment on the draft assessment completed by the independent certifier, and can, if they have the resources, mount a formal and costly objection to the determination by the independent certifier, but these instruments have proven of limited value thus far in terms of addressing public concerns.

A non-profit organization is an organization that does not distribute its surplus funds to owners or shareholders, but instead uses them to help pursue its goals. As a non-profit, MSC has an aggressive and expansionist business strategy designed to increase brand awareness and market share globally. It has opened offices in London, Seattle, Tokyo, Sydney, The Hague, Edinburgh, Berlin, Cape Town and Paris and currently has 212 fisheries around the globe engaged in the MSC program (93 certified fisheries, 119 fisheries in assessment and 40 -50 fisheries in confidential pre-assessment). An aggressive business plan and global expansion are not necessarily bad attributes in and of themselves, provided product quality is maintained, the organization remains focused on its primary objects and is responsive to changing societal values. Aggressive business plans usually include a desire to outcompete and, if possible, eliminate the competition. Although there are no challengers to MSC’s global dominance in the fisheries eco-certification market, it has made no efforts to form alliances with existing grass-roots seafood eco-ranking organizations such as Seafood Watch and SeaChoice to further common goals of sustainable fisheries. This is a concern that could easily be addressed.

Although MSC is a non-profit, its instrument for determining sustainable fisheries is through accredited independent certifiers which are for-profit companies. As such the independent certifiers’ objective is to maximize their profits within the market place. While not a cartel, there is only a small group of suppliers accredited by Accreditation Services International GmbH (ASI) to the MSC accreditation requirements that are allowed to do fishery sustainability certification assessments under the MSC process. A couple of players such as Moody Marine Ltd. dominate. Contract bidding processes, whereby a component of the fishing industry contract the independent certifier to carry out the assessment, is not public. Market forces prevail as evidenced by the recent takeover by Moody Marine Ltd. of the smaller but successful competitor TAVEL. Within this market environment the independent certifiers will strive to offer the most
competitive price to industry while reducing the cost of the assessment to the degree possible within the limits of the MSC accreditation standard. Because independent certifiers do not have enough expertise in-house to do the assessments, they usually have to hire the services of a fishery stock assessment expert, an ecosystem expert, and a fishery management expert. These tend to be moonlighting salaried government officials, academics and retired experts. They are paid to achieve a particular result - a successful sustainability determination. One would assume that the independent certifiers would attempt to hire as cheaply as possible while still meeting the accreditation standard, although concerns regarding a prolonged review, comment and objection process resulting from a poor quality assessment may discourage them from hiring too cheaply. Gulbrandsen (2009) has suggested that competition among certifiers to secure assessment contracts may favor certifiers that are client-friendly in their assessments, thus lowering the bar for passing the assessments. He considers that the incentive to use certifiers that can provide relatively cheap assessments could, in the long run, undermine trust in fisheries certification.

MSC income in 2008/09 (£8 million) came mainly from charitable grants (49%) and from logo licensing (38%) paid by components of the supply chain for the right to display the blue MSC sustainable fishery label. One has to accept that the MSC board of trustees expansionistic vision is motivated by an altruistic desire to improve the sustainable management of fish resources globally for long-term public good, rather than simply world domination. The more fisheries that are certified the better off we will be. This is dependent on the fisheries they certify being truly sustainable, or that certification conditions result in near-sustainable fisheries rapidly becoming sustainable. It also depends on the resource owners, the public, placing their trust in the MSC brand. It is not clear that either is happening.

The MSC’s responsiveness to changing societal values and the mechanisms in place to respond to comments, criticisms and objections from the public is a concern. It is not uncommon that large corporations develop a mentality that they are too large to care. Negative feedback from consumers is ignored or dismissed. Ultimately this can erode consumer confidence in the brand and even big corporations can fail. Although not directly part of the MSC triangle (MSC-certifier-industry), the public is the consumer that responds to the MSC brand. NRC (2010) in their report “Certifiably Sustainable?” found that “Overall, consumer familiarity with MSC and MSC-certified seafood seems limited. MSC has done a good job consulting industry and working with fisheries, but consumer knowledge and participation are generally minimal.” Mounting critical reviews from impartial experts and negative comments and objections by individuals and groups normally supportive of conservation and sustainability efforts, suggests that MSC is facing challenges to public confidence in its brand that could, if not resolved, render it of limited value.

MSC does provide opportunity for stakeholder input throughout the assessment process and public comment on the draft assessment report prepared by the independent certifier assessment team. The certifier has to respond to these comments. Two independent reviewers are hired to formally review the draft report and the certifier has to respond to
these comments in the final assessment report. The final assessment report and
determination are open to a formal objection process by the client or any parties that were
previously involved in the fishery assessment process either through written submissions
or attendance at stakeholder meetings. The process is also available to any parties who
feel that they were prevented from participating in the assessment process through
deficiencies in the certifier’s procedures. MSC retains 4 lawyers as Independent
Adjudicators (IAs) to evaluate objections. An IA assesses the objection to determine
whether it has a reasonable prospect of success. This depends primarily on whether: (a)
The objection identifies a serious procedural or other irregularity in the assessment
process that made a material difference to the fairness of the assessment; (b) The score
given for one or more performance indicators cannot be satisfactorily justified by the
certifier due to factual errors, omission of relevant information or arbitrariness; (c)
Additional information has been identified that is relevant to the assessment by the date
of Determination and was not available or known to the certifier.

If the objection is accepted by the IA, the certifier has an opportunity to reconsider its
final report and determination and address matters raised by the objection. The IA then
consults with the objector, the fishery and the certifier in order to determine whether the
certifier has adequately addressed the issues raised in the objection. Issues not resolved
through consultation proceed to oral hearing and adjudication at a cost cap of £15K
(recently reduced £5K). During the oral hearing (closed to the general public), there is an
opportunity for the objector(s), the certifier and the fishery to present their respective
cases. Following the hearing, the IA may seek expert advice on technical
matters relating to the issues raised in the objection (not clear that this has ever happened)
after which a written decision is made either confirming the original determination by the
certifier or remanding the determination by the certifier. If the Determination is
remanded, the certifier has an opportunity to submit a written response to the MSC, the
fishery and the objector. The IA can then decide to further prolong the process in an
attempt to reach a resolution, accept the response of the certifier as an adequate
resolution, or uphold the objection.

Negative reaction regarding the ability of the public to materially influence any aspect of
the MSC certification process is growing and should be of great concern to MSC if it
wants to preserve its brand. The view of some, whether right or wrong, is that the
certifier tends to be impervious to stakeholder input outside of the fishing industry,
dismissive of negative comments by the independent reviewers and reluctant to deal
adequately with formal objections. There are also concerns regarding the efficacy of the
independent adjudication process set up to judge objections.

In a recent objection to the controversial sustainability determination of Ross Sea
toothfish, the appointed IA noted that the MSC process “leaves a substantial margin of
discretion to the certification body in the way in which it sets scoring guideposts against
individual performance indicators. Almost by definition, the circumstances on which an
adjudicator could interfere with the exercise of that discretion must be extremely
limited.” Similarly, the IA appointed to hear objections to the controversial Ross Sea
toothfish sustainability determination noted that “Other IAs, in recent decisions,
recognizing the purpose of the OP [Objection Procedure], have described the standard of review available [by the IA to an objection] as being narrow and requiring deference to the determinations of the certification body”.

Conclusions

All 93 fisheries that have entered the MSC certification process have successfully achieved passing scores against the MSC principles and criteria and have been determined to be sustainable. This allows purveyors of products from these fisheries to be licensed by MSC to display their blue sustainability logo (provided parallel chain-of-custody assessment process has also successfully been completed).

Most of these sustainability determinations carry with them conditions that need to be met by the fishing enterprise to allow ongoing certification and for consideration of re-certification after 5 years. No audits or reassessments have thus far resulted in a sustainability determination being revoked.

Formal objections have been levied against a number of controversial MSC sustainability determinations. No objection to a sustainability determination leading to non-certification has thus far been upheld by an MSC appointed Independent Adjudicator.

While the MSC principles and criteria generally have a sound scientific basis, there is growing public perception that determinations of sustainability are biased in favor of the fishing industry.

Controversy has grown as assessments have moved from including only those stocks that are well studied and well managed to those that are depleted and recovering, depleted and not yet showing signs of recovery, data poor, or key components of sensitive ecosystems.

There is a substantial margin of discretion to the certification body in the way in which it sets scoring guideposts against individual performance indicators and assigns scores. The MSC process allows the Independent Adjudicator only a narrow ambit with regard to reviewing objections and requires deference to be given to the determinations of the certification body.

Eco-certification has the potential to add to the efforts of eco-ranking in positively influencing consumer choices towards sustainably managed wild capture fisheries. This can increase pressure on the fishing industry to fish sustainably. It can also have a synergistic effect with regard to existing government and RFMO measures to implement sustainable fisheries management policies.

If all this happens it will be for long-term public good, extending benefits we can derive from our wild capture fisheries for many years. It is not going to happen if the process is thought to be flawed, biased towards exploitation and outside meaningful public purview. No matter how ambitious the business plan, the brand will end up having little value and conservation will not, in the end, be served.
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