

The growth in certification of marine fisheries in Southern Africa

Potential benefits and challenges



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A discussion on the potential
benefits and challenges

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About this report

The United Nations Environment Programme (UNEP) has commissioned this report as part of a Norway-funded project on 'Promoting Sustainable Trade, Consumption and Production Patterns in the Fisheries Sector'. This project aims to build the capacities of governments, private sector stakeholders and consumers to promote sustainable fisheries management. This includes support for the design and application of market-based instruments such as labelling and certification for sustainable, wild-caught fish products and for promoting partnerships to stimulate and help meet demand for such products.

The report is one output of the UNEP-funded project by the Institute for Security Studies. The other main activity was the organisation of the first regional stakeholder meeting on certification in Southern Africa, which was held in Cape Town in October 2008 (henceforth referred to as the ISS/UNEP conference). This brought together some 50 participants from seven countries in the region, including industry representatives, government officials, marine scientists and members of inter-governmental and non-governmental organisations. The event was also attended by fish buyers from Europe and representatives from the Marine Stewardship Council (MSC) in London, arguably the leading organisation providing an eco-label for wild-caught marine fish. This report benefited greatly from the comments provided by the participants and draws on the discussions and presentations made at the stakeholder meeting in October.

The report also includes primary research by the author, albeit limited by time and resources, and draws on two UNEP-commissioned studies on MSC certification, one based on South Africa's hake trawl sector and the other on Namibia's hake fishery, that will be published separately. A further paper will be published in connection to this report, dealing specifically with the certification of the octopus fishery in Tanzania. This is a particularly interesting case study, worthy of its own report, as it represents the first artisanal fishery in the region that may proceed with full MSC certification.

Given the early stage in the growth of certification in Southern Africa, this report attempts to provide analysis that will stimulate debate and enable a wide range of stakeholders in the region to better engage with the subject. It is not possible or appropriate to speculate on

the suitability of specific fisheries for an eco-label. Rather the intention is to offer a discussion on potential benefits of environmental certification as well as a consideration of criticisms and challenges facing the successful growth of certification in the region.

In terms of gathering primary data, the report falls short of providing comprehensive analysis on all of the key themes. It is acknowledged by the author that the report contains considerable anecdotal evidence. However, undertaking more structured research on the certification of fisheries in Southern Africa is difficult for a number of reasons. One is that certification is in its early days, with only one fishery having obtained the MSC logo. There is therefore a shortage of case studies to draw on.

The only fishery to have gained MSC approval so far is the South African deep-sea hake trawl fishery, but a detailed review of certification in this industry is hampered by the fact that the fishery is currently undergoing its five-year re-appraisal. It is difficult to obtain up to date primary information on this fishery as there is understandably a reluctance by stakeholders to speak out before the results of the re-assessment are made public.

Some of the other fisheries that are on the verge of taking MSC assessment further have also asked for certain information on their fishery to be kept out of this report. Embarking on certification can be a sensitive decision and representatives of some fishing companies are reluctant to divulge specific information to their competitors and potential critics. What illustrates this sensitivity well is the fact that, despite several fisheries having paid for pre-assessment reports by MSC-accredited certifying bodies, none are prepared to make them public. This is also the case where pre-assessments have been paid for by the WWF. For the author this is frustrating as the pre-assessment reports themselves are worthy of evaluation and they also contain much information that would be useful to include in this report. Nevertheless, it is hoped that this report respects the wishes of those who were interviewed.

Given the limitations in its research methods, the report attempts to provide a discussion on some of the broad themes that are considered of importance by stakeholders in the region. It also draws on the considerable international literature on certification, while trying to keep a focus on the situation in Southern Africa. Further

work on this subject in the region, when more fisheries have been certified, will no doubt include detailed case studies and it may be useful to undertake a more structured stakeholder survey. It is hoped that this report will help inform such future work.

ACKNOWLEDGMENTS

Numerous individuals and organisations have been consulted and involved in this report and their generous time is greatly appreciated by the author. Particular mention needs to go to the head of the MSC in South Africa,

Martin Purves, who has provided numerous interviews and much advice and information.

Although the responsibility for the final report lies entirely with the author, its content has greatly benefited from an anonymous peer review and comments and feedback provided by Dave Japp, Martin Purves, Samantha Petersen and Dave Russell. The overall project has also benefited from the expertise and oversight provided by UNEP, particularly Anja von Moltke and Katharina Peschen from the Economics and Trade Branch, Division of Technology, Industry and Economics, and from UNEP's Regional Office of Africa.

Executive summary

While the necessary supporting data is neither abundant nor straightforward to summarise, it is uncontroversial to believe that in Africa, as elsewhere, marine fisheries face a precarious future. There are a number of factors contributing to this situation, but it is with unsustainable and wasteful fishing that the principle concern lies. The social and economic importance of this cannot be underestimated. Fisheries are an essential commercial industry, not only in terms of exports and job creation, but also in terms of promoting food security and livelihoods. Millions of Africans rely on the sea for their economic, social and cultural security.

Among international policy debates on how best to promote responsible fishing, the role of voluntary ecolabelling initiatives has gained impressive support and momentum. Few see these as offering a total solution; rather they are presented as possible initiatives that promote responsible fishing practices through empowering consumer choices. There are several international organisations offering third-party certification of fisheries, but so far the Marine Stewardship Council (MSC), based in London, is considered the global leader. This status of the MSC is confirmed by the growing commitment of the seafood retailing industry in favouring MSC-logoed products.

The growth of marine fisheries ecolabels have been most successful so far in developed countries, particularly Northern Europe, North America and Japan. It is in these countries where the retail industry has provided the most support. It has also been fisheries in developed countries that have predominantly engaged in third-party ecolabelling schemes, far more than those in developing countries.

While the local consumer demand for ecolabelled products in the developing world has yet to become significant, there are several reasons why more fisheries from developing countries may successfully engage in certification initiatives in the near future. As the demand for certified fish products continues to grow, more and more fish exporters from the developing world are realising that obtaining a credible ecolabel is necessary for their business and offers commercial opportunities. However, certification is also being actively brought to developing world fisheries from those promoting these initiatives.

Demand in Western countries for ecolabelled products far outstrips supply and with over half of world trade in marine products originating from developing countries, the commercial success of the ecolabelled fish market depends on the inclusion of fisheries from regions including Africa, Latin America and Asia. It is also the case that international ecolabelling initiatives are under pressure to certify fisheries from the Global South in order to maintain their legitimacy – without their inclusion, (particularly that of small-scale fisheries), ecolabelling initiatives have come under criticism for being exclusionary and potentially operating as an informal barrier to trade.

As an indication of this growth in interest for certification in Africa, the MSC has recently opened a new office in Cape Town, tasked with extending the initiative in East and Southern Africa. This work is strengthened by the local work of the World-Wide Fund for Nature (WWF), which jointly launched the MSC with Unilever in the late 1990s. WWF continues to consider the MSC a strategic tool in its efforts to conserve marine wildlife.

The growth of ecolabelling in Africa remains ‘work in progress’. The South African deep-sea hake trawl industry is still the only marine fishery to have obtained MSC certification. However, research for this report shows that a significant number of other fisheries have begun the certification process or have shown strong interest in doing so. They include the hake fishery in Namibia, an association of tuna fishing boats in South Africa, rock lobster fisheries in both Kenya and off the Tristan de Cunha islands, prawn fisheries in both Mozambique and Madagascar and an octopus fishery in Tanzania.

Given these developments, this report provides a discussion of the potential benefits of certification in the region as well as the challenges and criticisms that exist.

KEY OBSERVATIONS

The environmental benefits of certification

There is insufficient evidence to suggest that the growth of third-party certification schemes will have a positive environmental impact in terms of influencing international trade. However, initiatives such as the MSC are thought

to bring about tangible improvements to fisheries as a result of the assessment process. This is primarily due to the conditions that certifying bodies impose on fisheries in order for them to be compliant with the standards of sustainability developed by the MSC. Existing evidence seems to suggest that environmental improvements have been caused by the assessment process in several fisheries that have successfully been certified by the MSC, including the South African hake trawl fishery. There are also signs that environmental improvements are being made in local fisheries in anticipation of certification. However there are considerable difficulties in understanding and verifying the role that certification plays in bringing about environmental gains, which makes its environmental impact difficult to isolate in specific cases. Furthermore, despite the positive attitude towards certification by some organisations and experts, including local Southern African conservationists, there are critics who argue that weaknesses in the design and implementation of the MSC have undermined its environmental impact. Evidence for the benefits of certification remains highly contested, with some arguing that third-party certification schemes offer commercial benefits for fishing companies but little prospect for addressing overfishing and the loss of marine ecosystems. Critics suggest that the standards of sustainability need to be more ambitious if environmental benefits are to be improved on. However, raising standards too high will reduce the number of fisheries that will voluntarily engage in these schemes. Tension therefore exists between maximising the environmental impact of certification and growing its market coverage.

Incentives and concerns from the industry's perspective

The commercial benefits for fishing companies that enter the MSC initiative are complex and differ from fishery to fishery. Potential benefits for fishing companies include improved market access, the strengthening of their environmental legitimacy, the potential for gaining a price premium and the opportunity to influence the management of their fishery. In isolated cases, certification may also provide fishing companies with the opportunity to improve their vertical integration in international supply chains. Such benefits represent important incentives for fishing companies; however, there are concerns about committing to the initiative. In addition to the fear of failing certification, or of being de-certified in the future, industry representatives are concerned about the cost of certification, which not only includes paying assessment fees, but also a range of other activities that relate to conditions imposed by certifying bodies. As the benefits of certification are unknown in advance, it is difficult for

fishing companies to know if it is commercially viable for them. Concerns over costs are partly offset by the potential support to fisheries from donors and philanthropic organisations. Indeed, it would appear to be the case that the growth of certification in Southern Africa is highly dependent on subsidisation. Yet it is possible that an over-dependency on external funding undermines the sustainability of a voluntary market mechanism.

The role of the state and the growth of certification

Governments and fishing authorities have a critical role in the success of certification. The support of fishing authorities is needed in the certification process, while the MSC logo is only awarded to fisheries where there is evidence of responsible fisheries management. However, in many Southern African countries, state authorities tasked with managing fish resources lack capacity. Moreover, in some countries there are concerns with issues of governance and corruption. Certification of fisheries may help bring about improvements to fisheries management and authorities in charge of fisheries may play an active role in ensuring its success. In this respect there seems to be potential to create synergies with certification and national fisheries projects, including those supported by external donors. However, it remains a matter of some concern that in the immediate future the role of the state may be a critical barrier for the growth of initiatives such as MSC.

Certification and the small-scale fishing sector

Third-party certification schemes have come under sustained criticism for their inability to include small-scale fisheries. This is considered problematic by some commentators, as small-scale fisheries are considered to be better for the environment and local development than industrialised fisheries. Moreover, there has been concern that the uneven growth of certification could operate as an informal barrier to international trade for those involved in the small-scale sector. Certifying small-scale fisheries has therefore become a key challenge for both the MSC and WWF. However there are inherent difficulties in certifying small-scale fisheries, including a lack of data on these types of fisheries and their inability to afford the costs of certification. Adaptations to the certifying process are being explored to better accommodate small-scale fisheries and there are concerted attempts to provide funding assistance. This has meant the certification of small-scale fisheries has taken on the characteristics of a traditional donor-style activity and it is far removed from being a voluntary market mechanism,

as originally conceived. Whether the MSC and the WWF will succeed in certifying small-scale fisheries is unclear, but there are encouraging developments for proponents of certification in Tanzania and Kenya. The success of these developments will be influenced by the extent to which certification will lead to economic and social gains, particularly if considerable donor support is required, which seems likely. Yet there are doubts whether such gains will materialise and it is possible that commercial benefits will be more relevant to owners of production and exporting companies, rather than to fishing people and processors themselves. Moreover, some commentators have warned that certification, as with trade liberalisation, may not always be positive for local food and job security. It is therefore recommended that those paying for the certification of small-scale fisheries should undertake ongoing reviews on its impacts, which for the time being does not seem to be a planned research activity in the region.

The integrity of third-party certification schemes

Due to the normative aspect of certifying fisheries, maintaining public credibility is vital for all third-party certification schemes. The MSC has a strong track record

of multi-stakeholder engagement and has developed mechanisms and procedures that enable others to contest the decisions of certifying bodies. In this respect it is far stronger than other third-party certification bodies, some of which lack transparency and accountability. However, achieving broad-based stakeholder engagement in many African countries is difficult and the existing approach to this by certifying bodies may not be sufficient. Civil society may not have the capacity to influence the decisions of certifying bodies and provide the necessary checks and balances. This is compounded by the fact that key documents and reports are not translated into local languages. Maintaining the integrity of third-party eco-labels is also undermined by the inherent risk of conflicts of interests in the assessment process, which is not only applicable to the MSC, but has also been relevant for the Forest Stewardship Council (FSC). There are commercial incentives for certifying bodies to give favourable assessments to clients and the MSC has a vested interest in growing the initiative. To some extent biased and inappropriate findings of certifying bodies is countered by a peer-review mechanism, but there are flaws in the way peer reviews are conducted. Maintaining the credibility of the certification process, which includes strengthening civil society oversight, therefore remains an ongoing and difficult challenge.

Acronyms and abbreviations

| | |
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| AU | African Union |
| FAO | United Nations Food and Agriculture Organisation |
| FOS | Friends of the Sea |
| FSC | Forest Stewardship Council |
| FTEA | Fresh Tuna Exporters Association (South Africa) |
| GAPCM | Groupment des Aquacultures et Pecheurs de Crevettes de Madagascar |
| ILO | International Labour Organisation |
| MSC | Marine Stewardship Council |
| MCM | Marine and Coastal Management (South Africa) |
| NEPAD | New Economic Partnership for Africa's Development |
| SADC | Southern Africa Development Community |
| SADSTIA | South African Deep-Sea Trawling Industry Association |
| SFF | Sustainable Fisheries Funder |
| TAC | Total Allowable Catch |
| TED | Turtle Exclusion Device |
| UNEP | United Nations Environment Programme |
| WWF | World Wide Fund for Nature |

Introduction

Increasing attention is now being given in mainstream media to the decline of the world's marine resources as a result primarily of wasteful and unsustainable fishing. The extent of overfishing remains contested, yet conservative data suggests that since the 1980s, global wild-fish landings have decreased at a rate of approximately 0,7 million tons a year.¹ The United Nations Food and Agriculture Organisation (FAO) estimates that three-quarters of the world's available fisheries are being either fished at their maximum or are over-fished. This global marine crisis is not simply due to over consumption, but also to astonishing rates of waste and ecosystem destruction. A recent study suggests some 40 per cent of all marine fisheries catch is bycatch, defined as discarded fish and landings of non-target species that are not subject to fisheries management plans.² Due to the combined impacts of overfishing and ecosystem degradation, it is widely reported that numerous fish and marine wildlife are being pushed towards extinction. The mismanagement of fisheries is not only an ecological disaster, but it also represents a scandalous misuse of valuable natural resources. Research by the World Bank suggests that due to subsidies and overfishing, the global disparity between the potential economic rents from fisheries and their actual contribution is as much as \$50 billion each year.³

In this context of global over-fishing, Africa's fisheries are gaining strategic importance. With fish resources elsewhere becoming scarcer there is a growing demand for African fish and access to African waters by foreign fishing fleets, particularly from the European Union and Asia.⁴ Imports of fish in developed countries now account for 80 per cent of the value of global trade and developing countries provide 50 per cent of internationally traded fish.⁵ In the past decade, the export of fish from sub-

Saharan Africa has grown impressively and was estimated in 2005 to be worth \$2.7 billion, meaning fish are among the highest-value traded agricultural goods on the continent.⁶ Commercial fish trade for many African countries has therefore become a vital stream of national wealth, although it remains a matter of debate whether or not this has led to a meaningful developmental impact.⁷

At the same time as international demand for African fish is rising, there is also a growing need for marine resources among indigenous communities and local fishing boats in developing countries. The populations of coastal communities in numerous developing countries are expanding rapidly and, for millions of African citizens, fishing is vital to their livelihoods and human security. In the East African region, for example, recent research has estimated that approximately 120 000 people are involved in small-scale fishing in Mozambique and 55 000 in Tanzania.⁸ Many more people are involved in local processing and selling, particularly women who tend to outnumber men in this sector. In total it is thought that some 10 million people are directly employed in the fisheries sector of sub-Saharan Africa.⁹

Fish is also a widely available low-cost or free source of protein, a fact that is becoming more important given the precipitous global rise in the cost of food and the worsening food security among the citizens of many African countries.¹⁰ However, because many African countries allow the majority of their fish to be exported, as well as the fact that many fish stocks are dwindling due to unsustainable fishing, Africa appears to be the only continent where fish supply per capita is in decline. Per capita fish consumption in sub-Saharan Africa has declined by 14 per cent over the last 12 years and now stands at 6,5kg compared to the global average of roughly 16kg.¹¹ Unfortunately, while fish farming may help improve the

supply of fish for African citizens, it is thought that fish consumption on the continent will experience further decline in the near future. It has been argued that to maintain current levels of consumption, given projections on population growth in the next 10 years, domestic fish production would need to increase by over 25 per cent, which appears unlikely due to lack of investment and poor management.¹²

Given the importance of marine fisheries to African countries, it is critical that they are managed sustainably and in ways that promote local food security and employment. The cost of losing marine resources will be immense, impacting not only on food and income security but also on migration and the collapse of coastal communities. However, just as fishing globally is leading to worrying trends in terms of decreasing fish populations and depletion of wildlife and natural habitats, the same trends are evident throughout Africa. To cite just one example from the region that is the focus of this report, increased and poorly regulated fishing efforts meant that in 2008, Tanzanian fishing companies agreed to close the entire prawn fisheries. Indeed, it seems plausible to presume that many African countries are particularly vulnerable to such unsustainable exploitation, due to lack of capacity and weak governance. For example, fish bycatch is thought to be much higher in Africa than elsewhere; the global average is estimated at 40 per cent, whereas in Africa it is thought to be as much as 70 per cent.¹³ Moreover, illegal fishing in Africa's seas is routinely depicted as rampant and poorly policed. One study, commissioned by the British Department For International Development (DFID), estimated that the value of illegal fishing in Africa may be \$1 billion each year, although the economic and social costs of illegal fishing are far greater.¹⁴ In broad terms, because African countries are not responding to it well, illegal fishing has become an important cause and effect of decreasing fish stocks throughout the continent.

For the purpose of this paper it is not necessary to rehearse in detail the evidence of Africa's difficulty in preserving marine resources, nor the reasons. It is sufficient to accept that achieving sustainable and equitable fisheries management is a critical developmental objective throughout the continent, one that continues to be a source of considerable concern and uncertainty.

AIMS OF THIS REPORT

Policy debates on precisely how African countries can achieve this developmental goal are complex, far-reaching and ultimately unresolved. Yet among the various policy ideas to promote responsible and sustainable fisheries,

widespread interest and support has surfaced quite recently for voluntary market-led initiatives, which are premised on the hope that consumer demand can be harnessed to promote responsible fishing practices. Arguably the most important development has been the emergence of so-called third-party certification schemes that provide consumers with independent information, or more specifically, a product label, indicating that what they are buying has been fished sustainably and without harm to the natural environment. Recent estimates suggest that in the past decade, over \$6 million has been provided each year by conservation donor organisations to promote such initiatives.¹⁵ African inter-governmental organisations have also acknowledged the role ecolabelling can play on the continent; promoting the use of such tools is one part of the 'action plan for the development of Africa's fisheries' as proposed by the New Partnership for Africa's Development (NEPAD).

While there has been a proliferation of international and national certification schemes, the ecolabel provided by the MSC is regarded as the most reliable and widespread. It is certainly the case that, in Southern Africa, which is the focus of this paper, discussing the advance of certification involves essentially discussing the progress of the MSC. Indeed, in 2008 the MSC launched a new office in Cape Town that has the task of growing the initiative in the entire Southern African region, from Kenya to Namibia, including the African island states of the Indian Ocean.

Given the early stage in the growth of certification in Southern Africa, this report attempts to provide analysis that will stimulate debate and enable a wide range of stakeholders in the region to better engage with the subject. It is not possible or appropriate to speculate on the suitability of specific fisheries for certification. Rather the intention is to offer an introduction to the potential benefits of certification as well as a discussion on the challenges for the growth of certification in the region.

The report is organised into five broad themes. The first deals with the potential environmental impact of MSC certification, a subject that necessarily requires consideration of both positive and critical views. The second considers perspectives from industry stakeholders on the commercial benefits of certification as well as their concerns in committing to the initiative. The third considers the critical role the state plays in certification and it considers how a lack of state capacity and poor levels of governance may undermine the progress of MSC in the region. The fourth theme involves the inclusion of small-scale fisheries in the MSC initiative, which remains a perennial source of criticism and concern. Finally, the report considers the challenges of maintaining the integ-

city of the MSC, which includes giving consideration to multi-stakeholder engagement and dealing with inherent conflicts of interests in the certifying process.

THE RISE OF ECOLABELLING SCHEMES

The idea that ecolabelling can be an effective response to environmental problems has gained momentum in the last two decades. This growth was inaugurated at the 1992 Rio Summit, when voluntary market-led incentives were considered an important tool for achieving sustainability. Since then large numbers of internationally-traded consumer goods have begun carrying eco-labels, including those indicating conformity to organic standards, energy efficiency standards or sustainability criteria. Of the latter, the FSC has been one of the most prominent; it certifies

wood products as coming from well-managed and sustainable forests or forest plantations.

In the fisheries sector, the first major eco-labels were related to dolphin bycatch in the tuna industry, followed by a similar US government initiative on prawns that required a label showing the use of bycatch-reduction devices for turtles. However, the most impressive area of growth has been with third-party sustainability labels. In terms of eco-labels for wild-caught sea fisheries the MSC has emerged as the leading organisation worldwide. The MSC was initially a joint project developed during the mid 1990s between the WWF and Unilever, the then-largest international supplier of frozen fish products to retailers. As the name implies, the MSC was directly inspired by the FSC and operates on a very similar basis.¹⁶ By 1998 the MSC was established as an independent NGO

The MSC certification process

During consultations lasting from 1996 to 1999, the MSC developed the criteria that a fishery has to meet to be considered sustainable. The criteria are organised into three core principles, which are inspired by the FAO's guide on responsible fisheries.

1. Sustainability of the fish stock: A fishery must be conducted in a manner that does not lead to overfishing or depletion of the exploited populations and, for those populations that are depleted, the fishery must be conducted in a manner that demonstrably leads to their recovery.

2. Ecosystem impacts: Fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem (including habitat and associated dependant and ecologically related species) on which the fishery depends.

3. Effective management: The fishery is subject to an effective management system that respects local, national and international laws and standards and incorporates institutional and operational frameworks that require use of the resource to be responsible and sustainable.

Clients wishing to gain MSC certification must first choose an MSC-accredited certifying body to undertake a confidential pre-assessment. This pre-assessment attempts to identify the key strengths and weaknesses of the fishery in terms of the MSC principles and should give the client an informed decision on the suitability of entering into a full assessment, as well as some of the key issues that are likely to be raised in the full assessment report.

The second stage begins with the client making a commitment to undergo full assessment. The client again chooses an

accredited certifying body, which in turn identifies an assessment team comprising suitably knowledgeable experts on stock assessments, eco-system impacts and fisheries management. The certifying body is also mandated to communicate the decision on its assessment team to wider stakeholders for comment.

The assessment process involves fieldwork and primary data-gathering, as well as ongoing stakeholder engagement. The assessment process has undergone a series of methodological refinements. Most notably, in 2008 the MSC launched a new fishery assessment methodology that was intended to make decisions by certifying bodies more consistent. In total, a full assessment can take longer than a year (South Africa's hake certification took 20 months), although it can be quicker than this and the new methodology is designed to help in this respect. A draft report by the assessment team is circulated to stakeholders and the client, and is subject to a peer review. Certifying bodies score the client on the three principles mentioned above. Scores are given on a scale of one to a hundred. If the certifying body marks the client lower than 60 on any of the three principles, the client is not suitable for certification. If they score the client between 60 and 80, then the client can be certified, but with conditions for improvements. Any score over 80 allows the client to be certified unconditionally. Having gained the MSC certification, clients are subject to further annual reviews by the certifying body and a full re-assessment after five years.

Finally, for the MSC logo to be used on fish products, fish exporters have to apply for a Chain of Custody (CoC) certificate. This ensures that the product can be traced to the certified fishery, thereby undermining the potential for non-certified fish to use the MSC logo misleadingly. Again, in order to gain the CoC certificate, clients must pay accredited certifying bodies to undertake an audit of their operations and procedures.

and by early 2000, seed funding from the WWF and Unilever was phased out. The organisation now receives the majority of its support from charitable trusts. By 2008 the MSC was reported to have spent approximately \$30 million in developing the organisation and raising the profile of its eco-label.¹⁷ From its headquarters in London, the MSC now has further satellite offices in Australia, the US, Japan and most recently, South Africa.

The growth of the MSC over the past five years has been impressive. By the end of 2008, the MSC reported that 39 fisheries had received the full MSC certification, 88 were in the process of being certified and a further 20 to 30 were undergoing a confidential pre-assessment. MSC-certified fisheries represent 42 per cent of the world's wild salmon catch, 40 per cent of the world's prime whitefish catch and 18 per cent of the wild lobster catch. In total, the MSC has certified fisheries that record annual catches of five million tons of seafood.¹⁸

In January 2009, the number of MSC-certified products reached 2000.¹⁹ Support of and commitment to MSC by large supermarkets and fish producers continues to grow, although it remains concentrated in North America, Northern Europe and to a lesser extent, in Japan. In the US, Wal-Mart, the world's largest retailer, has pledged to sell only MSC-certified fish products by 2012. Wal-Mart owns Asda in the UK, Britain's second largest supermarket chain, which has now also agreed to match Wal-Mart's commitment. In the Netherlands, recent reports suggest the entire seafood-retailing sector has committed to sell only MSC-certified products by 2011. Despite historically showing low levels of interest in certified fish, there are also anecdotal reports that more fish buyers in Spain are looking to obtain MSC-labeled products. This is partly because fish buyers in Spain re-export fish products into Northern Europe, but it is also due to the emergence of seafood awareness campaigns in that country. For example, a recent campaign undertaken by Greenpeace ranked a prominent Spanish supermarket as the worst outlet for unsustainably caught fish in Europe. In response the supermarket is turning to MSC-labeled products to boost its consumer credibility.²⁰

It remains to be seen if the ambitious commitments of seafood buyers and supermarkets will be upheld and the challenge for the MSC is in being able to certify enough fisheries to meet these demands. Currently, the demand for MSC-certified products far outstrips supply.

Although the MSC has established itself as the leading third-party certification scheme for wild-caught sea fish, in the last decade a number of further initiatives have appeared. The second largest international third-party certification scheme is Friends of the Sea (FOS), based in Italy. FOS certifies both farmed fish and wild-caught fish and has actually certified far more fish than MSC—10

million tonnes of wild-caught fish and five million tonnes of farmed fish.²¹ Its method of granting an ecolabel is less rigorous, less expensive and less time-consuming than MSC's. As a result the FOS does not seem to have gained the same reputation as the MSC among food retailers and suppliers, and therefore there are far fewer FOS-labeled products, with the majority of these being sold in Italy.

Although far smaller than MSC and the FOS, a further international fish ecolabelling initiative is being launched by Naturland, the German organisation originally developed for promoting organic agriculture in the early 1980s. In addition to environmental criteria, Naturland's ecolabel places a strong emphasis on social and economic elements. Naturland claims it will only certify fisheries that meet core labour standards as set out by the International Labour Organisation (ILO).

In addition to international ecolabelling initiatives have been the development of several national ecolabelling initiatives. For example, in Australia a voluntary initiative called Clean Green has certified the Tasmanian rock lobster fishery. Similarly, in Sweden the fishing industry has used its own ecolabelling scheme, KRAV, that was originally established for organic produce. Iceland's fishing authorities have also announced the launch of their own, independently-verified ecolabel while the European Union is also currently considering its own ecolabel for fisheries operating in European waters. There are several other initiatives in the US and Japan.

There should be little doubt that the emergence of new international and national initiatives that certify fish products can be seen as a direct response to the success of the MSC. The fishing industries of many countries appear reluctant to see the emergence of one ecolabel that controls international markets. The situation poses threats to the hegemony and growth of the MSC and it raises the prospect of a plethora of smaller ecolabelling initiatives that drive standards down and confuse consumers. The FAO is aware of this situation and has therefore drafted guidelines for the establishment of minimum standards for certification schemes. However, for the purpose of this paper we do not need to dwell on the competitive global nature of fish eco-labels. In Southern Africa, the MSC is the dominant third-party certification scheme, compliant with FAO guidelines, and there appears little prospect of national or regional initiatives emerging in the short to medium term. It is for this reason that the preceding analysis focuses almost entirely on the MSC.

DEVELOPMENTS IN MSC CERTIFICATION IN SOUTHERN AFRICA

The opening of the new MSC office in Cape Town in 2008 signals both the growing interest in certification in the

region, as well as the organisation's intent of certifying more fisheries from Southern Africa. The MSC's efforts are supported by other partners, most importantly WWF in South Africa and Tanzania, which are actively promoting certification and assisting fishing companies through funding and advice.

To date only one fishery is certified by the MSC in the region. The South African deep-sea hake trawl-fishery received a positive full assessment in 2004. The hake fishery is the largest fishery in South Africa and most significant in terms of employment and value; in total it is thought to directly employ some 30 000 people and has a landed value of approximately ZAR 2 billion (~\$25 million).²² The trawl sector is responsible for 91 per cent of the total catch of hake, with longline and handline fleets accounting for the remainder.²³ Neither of these other hake fisheries have been MSC-certified, with the client of the certification being only the South African Deep Sea Trawl Fishing Industry Association (SADSTIA). The trawl fishery is currently undergoing its five-year re-assessment, the findings of which were due to be announced in the first quarter of 2009. However, delays in the assessment process have meant the outcome of the assessment is scheduled for June 2009. No other fishery in Southern Africa has embarked on full MSC assessment. However, a number of fisheries have begun the process of gaining certification, including some that have undergone confidential pre-assessments. How many will proceed to full assessment remains to be seen.

One of the most important fisheries that may proceed with the process of certification is the hake industry in Namibia.²⁴ Interest in MSC certification in Namibia dates back to 2003, when meetings were held between the MSC and industry representatives. Renewed interest in the MSC occurred in 2008, partly due to reduced demand for Namibian hake in Spain, as will be described below. Thus, in May 2008, members of the Namibian hake industry met again on this issue and agreed to pursue MSC certification more urgently. Follow up meetings with MSC and the Namibian authorities were held in early 2009. Unlike in South Africa, where MSC certification was only obtained by the trawl industry, the certification of hake in Namibia could include both the trawl fisheries and the longline sector. Progress in this respect is partly dependant on the outcome of the re-assessment of South Africa's hake trawl sector. If the South African hake trawl sector was to lose its MSC certificate, then this may discourage Namibian companies from committing to the MSC initiative. It is therefore likely that further developments in Namibia will only occur after the results of this re-assessment have been finalised.

In South Africa, MSC pre-assessment, partly funded by WWF, was undertaken in 2008 for the Fresh Tuna

Exporters Association (FTEA), based in Cape Town, Members of the FTEA, who number approximately 60 individual license-holders, fish both albacore and yellow-fin tuna by using pole and line methods, which are generally regarded as having limited impact on ecosystems and producing very low levels of bycatch in comparison to larger industrial fisheries that use longlines or purse-seine fishing methods. The decision by members of the FTEA to proceed with MSC certification is ongoing, although there is a level of apprehension with its potential costs, a matter that is exacerbated due to poor tuna harvests in this year's fishing season.²⁵

The Ovenstone Agency, based in Cape Town, has proceeded with a confidential pre-assessment of its fisheries for rock lobster in the coastal waters of the Tristan da Cunha group of islands. Ovenstone is currently considering the findings of the pre-assessment report and is undecided on whether to proceed with full assessment, again citing costs as being one of the main factors.²⁶

There have also been positive developments in the potential certification of prawn fisheries in the region. The Madagascar prawn industry, represented by the *Groupment des Aquacultures et Pecheurs de Crevettes de Madagascar* (GAPCM), underwent an MSC pre-assessment in 2003. This sector is one of the main economic industries in Madagascar, alongside mining and tourism. Current output yields, from both wild-caught prawns and aquaculture, are around 15 000 tonnes a year, providing an estimated \$75 million in foreign exchange earnings. Despite the delay in taking MSC certification further, recent indications from members of GAPCM suggest the decision to undertake full assessment is imminent. It is noteworthy that FOS have also certified Madagascar industrial prawn-trawling boats. However, the demand for FOS-labeled Madagascar prawns is limited to France only. At the time of writing Madagascar is experiencing considerable civil unrest due to a presidential coup. One presumes the economic and political disruption will delay certification further.

In Mozambique, discussions began in 2008 on the potential to certify both the deep-sea prawn fisheries and the semi-industrial shallow-water fisheries. Efforts at certifying the deep-sea fisheries have been driven by the South African company, Ocean Fresh, and again supported by research and funding assistance from WWF in South Africa. Stakeholders' meetings took place in September 2008 and February 2009. A recent decision has been made to proceed with an MSC pre-assessment, with the client paying for this assessment being a joint venture between industry representatives and WWF.

In Tanzania and Kenya, work by both WWF and MSC, together with government authorities and other stakeholders, have identified several small-scale fisher-

ies that may be appropriate for certification. As a result of these efforts, an artisanal octopus fishery is now set to undergo pre-assessment, with the client in this case being a joint venture between WWF and the Tanzanian government. It is noteworthy that the fishing industry involved in the octopus fishery is not involved in the pre-assessment, although it is hoped that their involvement will be forthcoming at a later stage.

Further small-scale fisheries that have been mooted for certification in the region include a rock lobster fishery in Kenya and a mud-crab fishery in Madagascar.

Finally, in Reunion, French companies engaged in both longline tuna fisheries and Patagonian toothfish fisheries have enquired about the MSC initiative and may proceed with pre-assessments in 2009, although indica-

tors suggest they are less likely to proceed with MSC certification than the other fisheries mentioned above.

In summary, numerous important fisheries may proceed to full MSC assessment in the next year or two, spanning divergent fisheries in terms of products and methods of fishing. It is not possible to predict if any of them will be successful, and it is feasible that new fisheries will show interest in certification in the near future, possibly inspired by further success stories in the region. In Namibia, for example, it has been reported that a large company involved in the horse mackerel mid-water trawl fishery has expressed interest in certification, but is waiting to see the outcome of MSC certification in the Namibian hake industry.²⁷

Discussion

Having provided a brief overview of some of the fisheries that may embark on certification, the following pages offers analysis on the potential benefits of certification, as well as the key challenges in going forward. As noted above, it is neither possible nor necessary to speculate on the difficulties each fishery faces in terms of stock assessments, ecosystem impacts and management performance. This report does not attempt an ‘informal pre-assessment’ of individual fisheries; rather it considers some broad thematic issues that appear to be important for the successful growth of MSC in Southern Africa, as well as a discussion on the potential challenges and criticisms.

THE POTENTIAL ENVIRONMENTAL IMPACT OF CERTIFICATION

In discussing the growth of certification in Southern Africa, a main consideration is whether and to what extent this will confer environmental benefits, including promoting sustainable fishing of commercial fish stocks and enhancing the protection of marine habitats and wildlife. Achieving such results is, of course, the fundamental purpose of certification and an explicit objective of the MSC initiative, expressed both in its corporate mission and in its annual reviews and promotional material.

This is, however, a complex subject. As described below, the potential way in which certification delivers environmental gains is multifaceted and documenting these benefits empirically is far from straightforward. In fact, a report commissioned by UNEP in 2005 concluded that there was no independent evidence that showed whether some of the world’s leading eco-labels (including MSC) had a positive environmental impact on production or consumption, making it difficult to recommend

whether or not further investments should be made in such initiatives.²⁸ Our knowledge about the impact of the MSC is growing, but the subject of how eco-labels confer an environmental benefit remains both under-theorised and under-studied.²⁹ Moreover, while many stakeholders believe that the MSC has been successful in improving fisheries and point to concrete examples, there are notable others who are less positive and they dispute specific case studies. The MSC’s environmental contribution remains a divisive subject and it is important here to try and give consideration to both positive and more critical perspectives.

Understanding how the MSC may impact positively on the environment

The underlying logic of voluntary eco-labels suggests that as more and more retailers and consumers demand certified fish, fisheries will either have to reform and meet the criteria of these labels or they will find that they are squeezed out of the market. Initiatives such as the MSC therefore attempt to promote the interests of good fisheries at the expense of bad ones.

This is an attractive objective, yet it remains uncertain whether the MSC or any other fish ecolabelling schemes have so far managed to displace unsustainable fishing practices or have led to a reduction in consumption of non-certified fish products. There is no empirical evidence for this. Indeed, identifying the environmental impact of third-party certification schemes through their influence on consumer preferences and global trade is immensely complex. A simple reason is that there is no way to be sure that non-certified fish products are any worse for the environment than certified ones. The vast majority of global fisheries have not been certified by the MSC or other

third-party certification schemes and it is quite likely that many sustainable fisheries may refuse to do so for various reasons. For example, the South African squid fishery is generally regarded as well run and has limited impact on the marine ecosystem, making it an ideal candidate for certification, but it has shown little interest in certification to date due to ambiguous commercial benefits. Thus, while initiatives such as the MSC may promote the interests of certified fisheries over non-certified fisheries, it would be difficult to conclude that this necessarily has a positive environmental outcome, unless we had comparative knowledge on the sustainability of all fishing industries.³⁰ Moreover, the growth of certification in the future may operate as a barrier to some markets for unsustainable fisheries, but any positive environmental gains this future scenario provides will be undermined if uncertified fisheries shift their focus towards eco-insensitive markets, of which there appear to be many worldwide.

While the trade impact of third-party certification schemes remains ambiguous, this does not seem to be the main way in which the MSC impacts positively on the environment. The most tangible source of MSC’s environmental impact lies with changes to fisheries that are achieved as an outcome of the certification process.

Existing evidence for MSC’s environmental impact

The approach to certifying fisheries under the MSC initiative allows certifying bodies to place conditions or corrective actions on fisheries. This makes MSC unique among eco-labels for fish, although the basic approach is

modelled on the FSC. Greenpeace, among others, have argued that the use of conditions is problematic as MSC certifies many fisheries that do not meet the criteria of a sustainable fishery on the grounds that they may make necessary changes later. The point is a valid one and consumers have little way of knowing whether the MSC logo indicates a sustainable fishery or a reforming one. However, due to the setting of conditions, the MSC offers the potential to make environmental improvements to those fisheries that commit to the scheme. How significant these improvements are depends partly on the state of the fishery; the potential benefits will be greater for those fisheries that are environmentally problematic than it will be for those that already operate sustainably and with little impact on the marine ecosystem.

The global experience to date shows that most fisheries that receive the MSC certification do so conditionally; the certification is awarded on the agreement that the fishery will improve in certain aspects, otherwise the label will be removed. It is the author’s view, based on conversations with MSC, that none of the fisheries that are potential candidates for certification in Southern Africa will gain MSC certification unconditionally. All fisheries will fall short of the MSC principles and standards, meaning if they are to gain the MSC logo they will have to improve on one or all of the three main MSC principles.

In addition to the environmental benefits that come as result of conditions set by certifying bodies, it is also the case that fisheries may implement changes to fishing operations and management in anticipation of gaining an eco-label. In other words, the environmental benefits of certification may be realised long before the full assess-

Table 1 Operational results attributed to MSC certification by 2005

| Fishery | ‘Operational results’ |
|---------------------------------|---|
| Western Australian rock lobster | 1) Reduction of fishery beach litter on metropolitan beaches 2) Volunteers removed discarded fishing gear from Dirk Hartog Island 3) Reduction in sea-lion mortality |
| New Zealand hoki | 4) Halting the decline of the eastern stock 5) Reduction in fur-seal mortalities |
| South Georgia toothfish | 6) Closer correspondence of extractions to total allowable catch (TAC) 7) Reduction of discarded hooks appearing in albatross nests 8) Revision of stock assessment process 9) Population stabilised with increasing number of large fish 10) Reduction in un-observed catches and mortality of seabirds and other bycatch 11) Continued low levels of illegal fishing |
| Loch Torridon nephrops | 12) Elimination of ghost fishing 13) Increasing stock density number of large animals |
| Thames herring | 14) Halt in the decline of spawning-stock biomass 15) Catches have fallen with TAC |
| South African hake | 16) Improved compliance in the fishery |

Source: Data compiled from D Agnew et al, 2006.³²

ment of the fishery is undertaken. Moreover, there may well be improvements generated by MSC in fisheries that decide not to proceed with full assessment. In this respect the environmental benefits of the MSC may not be fully appreciated through studying only those fisheries that successfully obtain the MSC logo.

Although there is a great deal of anecdotal evidence for these environmental improvements caused by the certification process, to date there has only been one empirical study, which was commissioned by the MSC in 2005.³¹ The resulting report reviewed 10 fisheries worldwide that have successfully obtained the MSC logo and found a number of positive outcomes that were directly linked to conditions imposed by certifying bodies, as well as a number of changes that came about leading up to the final assessment. The researchers categorised environmental gains into four headings: institutional gains, research gains, operational actions and operational results. Using these categories there were an estimated 89 gains attributed to the MSC, with the majority being either institutional gains (33 per cent) or research (30 per cent). Most important were 16 specific instances of operational results, described as tangible positive impacts on the environment. It is useful to list these 16 gains here, although it should be noted that since this study was undertaken numerous other fisheries have committed to the MSC initiative and therefore the list of environmental gains attributed to the MSC is likely to have increased.

The potential environmental benefits in Southern Africa

In the case of South Africa's hake trawl industry, which was included in the research report commissioned by MSC in 2005, the assessment of the fishery according to MSC criteria resulted in a good score across the three MSC principle areas. The fishery scored 88 per cent on principle 1, 80 per cent on principle 2 and 88 per cent on principle 3. However, the certifying body did impose seven main conditions for the SADSTIA, the client for MSC certification, and there were timeframes agreed for their completion.³³ The seven conditions were:

1. *Strengthen measures to protect bycatch*

Bycatch was identified as a critical economic component of the South African hake trawling fishery, with many fishing boats relying on the sale of bycatch for their profitability. However, the certifying body noted that bycatch was poorly managed and therefore it insisted that both the government authority in charge of the fishery, MCM, and the fishing industry put in place an agreed bycatch management plan within a year of certification.

2. *Structure of the stock*

The certifying body identified a lack of adequate scientific understanding on the structure and reproduction of the hake stock, which in fact has two distinct species. In particular, knowledge of the age structure of the two hake species being fished was considered insufficient to be fully incorporated into scientific modelling and the management process. A sampling programme and related research plan were required to be implemented within two years of certification, subject to ongoing annual monitoring.

3. *Improve the understanding of ecosystem effects*

Research was requested on the effect of trawling on ecosystems, including the consequence of removing large amounts of hake biomass and associated bycatch. The Condition required a plan within 12 months of certification to address the research needs and for there to be outputs from this research within two years of certification.

4. *Effects of trawling on benthic habitats*

A request was made for greater understanding of the impact of trawling on the seabed habitat. The creation of Marine Protected Areas was also suggested to limit or mitigate impacts of trawling on seabed habitat. The time frame for this condition was broken down into sub-components, with completion within four years of certification.

5. *An external review of the state's management system*

An independent review was required of all aspects of management, such as monitoring, control and surveillance. The condition stipulated that this review should be conducted on a periodic basis with the first external review commissioned within 18 months of certification.

6. *Improve compliance monitoring*

Evidence was to be provided that compliance in the hake trawl sector was improving, with appropriate instruction, training or corrective actions to be carried out within 12 months of certification.

7. *Impact of trawling on seabirds*

Research was requested on the impact of trawling on populations of seabirds. A mitigation plan was needed within 12 months of certification.

A further condition was imposed after the fourth annual surveillance visit. This was prompted by evidence of low stock levels of hake. There was therefore a request to demonstrate that stock rebuilding measures were put in place.

The extent to which these eight conditions have been met is discussed at length in each annual assessment report undertaken by the assessment team. However, it is not appropriate or possible to enter into a lengthy review of these developments here, given the impending re-assessment report to be issued by the certifying

body, Moody Marine. This reassessment report will provide the first comprehensive study that will indicate whether conditions have been met over the last five years. Nevertheless, since the successful certification of the hake fishery in 2005 several extensive research reports have been produced and it is the view of local stakeholders that improvements were made to improve understanding of the fishery's impact on ecosystems, birdlife and marine habitat. Limits have also been put in place for bycatch of three species (kingklip, monk and cob) and the kingklip spawning area was closed to fishing boats for three months in 2005. The trawl industry also worked closely with Birdlife South Africa and WWF on a research project regarding birdlife mortality, which represented ongoing work between these organisations that began prior to the MSC process. The external review of the state's management system was also undertaken. By and large, it is the view of a member of the original assessment team and of the re-assessment team that most of the conditions listed above have been adequately responded to.³⁴

Given these developments it is the view of some stakeholders that the process of gaining MSC certification did lead to a number of outcomes that will confer a positive environmental effect. For example, WWF-South Africa feel the MSC process has brought about a profound change in the way the main fishing companies who are members of SADSTIA engage with their eco-system impacts. WWF explain that before MSC certification was being considered, prominent industry players were uninterested in this issue, failing to engage effectively with WWF and other local conservation organisations. However, since engaging with MSC, attitudes have changed within the industry and the relationship between local conservation organisations and fishing companies has improved significantly. Thus, although plans were put in place to address bird mortality since 2002, it was only when the MSC process gained pace that the industry took a proactive response and worked more closely with WWF and Birdlife South Africa. This resulted in operational improvements, including the use of 'tori lines' that deter birds from nets. Since the MSC process began in 2004, annual bird mortality in the trawl sector has dropped impressively from an estimated 18 000 to 200.³⁵ Moreover, the leading fishing companies in the sector agreed to an expansion of on-board observers to monitor bird mortality and two of the largest South African fishing companies co-developed WWF's responsible fisheries skipper-training programme. This has led to the training of some 215 skippers, compliance officials and shore staff in improving their environmental impact.³⁶

In short, while it is prudent to wait for the outcomes of the re-assessment report before making any firm conclusions on the positive environmental changes made to the

South African hake trawl fishery, initial evidence suggests that the MSC process has led to improvements, particularly relating to the impact of the fishery on the marine ecosystem. The reported findings of the assessment team in 2009 will be of critical interest as this should provide conclusive data on the extent of environmental gains, as well as any evidence of non-compliance with the conditions set out in the first assessment.

Evidence of environmental improvements in other regional fisheries

Among the other fisheries that are embarking on MSC certification in the region, there are also signs that changes to fisheries management and practices are being implemented. It is too early to be sure of the exact list of such changes, but the following examples are reported.

In Mozambique, interest in MSC certification has led to a broad commitment by all industry players to implement turtle exclusion devices (TEDs) in the near future. It was recognised that without these, gaining MSC certification is unlikely. Interest in MSC certification has also highlighted the need for better understanding of the bycatch in this fishery. Although there have been studies implemented by the Mozambique authorities in partnership with a Spanish research organisation, local industry players have argued that the results are misleading, largely because that data was not obtained from actual fishing vessels but from a research vessel. Thus, in anticipation of the MSC assessment process, government and industry representatives have mandated WWF to undertake an independent research project that will better confirm levels of bycatch and the species affected. The research is funded by WWF and again they explain that without MSC, it is highly unlikely that government and industry representatives would have engaged proactively on this issue.³⁷

Another example is the Reunion Island toothfish longline fishery, which operates at the Crozet and Kerguelen Islands. For many years this fishery has been considered responsible for a high level of bird mortality and other marine wildlife bycatch, as is typical for longline fishing operations. According to MSC in South Africa, the fishery's recent decision to undergo a pre-assessment and possibly go on to a full assessment has encouraged commitment to the deployment of tori lines and the use of devices that speed up the rate at which longlines sink.³⁸

In both the octopus fishery in Tanzania and the rock-lobster fishery in Kenya, WWF reports that interest in gaining MSC certification has directly resulted in a commitment by the respective fisheries management authorities to develop new management plans.³⁹ These could lead to significant conservation policies that will reduce overfishing and environmental impact.

Overall, it is the view of several stakeholders that the growth in interest in MSC certification is leading to a number of positive developments in Southern Africa. Again, to cite WWF in South Africa, it is their view that MSC represents one of the most significant developments in Southern Africa that will help fisheries reform and address over-fishing and eco-system impacts. As a member of WWF in South Africa explained:

It provides companies with a carrot, or market incentive, to make real changes. For us at the WWF the MSC is one of the most positive developments in fisheries that has happened recently. It could make a number of important changes to fisheries in the region and we are seeing the results in South Africa's hake fisheries, as well as in the prawn fisheries of Mozambique and hopefully other countries such as Namibia.⁴⁰

Challenges in measuring and monitoring environmental impact

That the MSC process does have the potential to make improvements to fisheries that respond to the initiative seems to be evident in Southern Africa and is supported by research commissioned by the MSC in 2005. It remains an important task to monitor these developments and to illustrate success stories conclusively. However, the causality between the MSC process and environmental improvements in fisheries can be ambiguous and difficult to substantiate independently. A straightforward reason is that in many cases, impartial and detailed information on the performance of a fishery is not available and is extremely difficult to generate. In this respect certification of fisheries is quite different from certification of forests – it is much more straightforward for external stakeholders to monitor the impact of logging companies than it is to monitor fishing boats, for the obvious reason that fishing takes place in an environment that is naturally hidden and inaccessible.

It is also the case that the causality of environmental improvements for those fisheries engaging with the MSC process is far from straightforward to understand. Certain improvements made to fisheries may have happened irrespective of MSC certification, even if they were part of the conditions set by the certifying body. In such instances the MSC process may augment improvements, but cannot lay claim to causing them in isolation. In relation to South Africa's hake, the authors of the MSC-commissioned report concede that it is not possible to be sure improvements in compliance by the fisheries were caused by MSC. There was evidence that the authority in charge of hake, MCM, was already embarking on numerous reform measures. Likewise, while the MSC process seems to have influenced the decision of the Mozambique

prawn fisheries to review their stance on TEDs, it is also possible that this would have occurred anyway as some of the fishing companies in Mozambique are increasingly interested in selling prawns to the US, where the use of TEDs has been mandated for foreign companies for several years.

In fact, of the 16 operational results identified in their review of the 10 fisheries certified by MSC by 2005 (see table 2), the researchers noted that five did not relate to a condition set by a certifying body, and only eight could be considered directly stimulated by the certification process. Thus, 50 per cent of the environmental gains identified were only partially attributed to the MSC process. The authors of the research explain:

We should emphasize that it is not easy to directly attribute gains to the MSC process. Very often, those gains that we have attributed to certification were only mostly stimulated by certification, and it is difficult to convincingly argue, after the event, that they would not have happened in the absence of certification. Indeed, it is to be expected that a fishery making such gains, and generating a much more sustainable ethos within the industry and management, would naturally pre-dispose itself to certification. Thus there is a chicken and egg element to environmental gain development, in that only environmentally responsible fisheries are likely to be generating them and only these fisheries are likely to be interested in certification.⁴¹

The point is important as analysing the impact of the MSC on environmental changes in fisheries inevitably involves a degree of subjectivity and therefore two studies may not concur. Indeed, local stakeholders in South Africa rarely, if at all, mention improvements in compliance as being the key benefit of MSC certification of the hake industry, whereas for the MSC-commissioned study in 2005 and the annual reports of the assessment team, this has been an observation.

That it may be difficult to attribute environmental gains to the MSC process reflects the fact that the MSC is not the only reason why some fisheries improve their environmental impact. For example, while the MSC may be playing a positive role in helping the prawn industry in Mozambique improve its environmental footprint, many of the changes being discussed have already occurred in Madagascar's prawn industry, and these were not related to the achievement of an eco-label. Likewise, although WWF considers MSC certification as an important reason why the South African trawl fishery has made improvements in reducing bycatch, WWF has also worked closely with the hake longline fishery on similar projects. The longline fishery has not shown an interest in MSC certi-

fication. MSC may be one reason for ecological improvements in fisheries, but it is certainly not the only route for reform. Thus, while the MSC may be an important driver of change, it is not necessarily the case that it is more beneficial than other policy reforms or that it represents an efficient use of scarce resources. This is a relevant question for policy makers and NGOs as they need to decide whether supporting and investing in voluntary market mechanisms is likely to achieve more substantial results than alternative approaches, including mandatory regulatory reforms or advocacy campaigns, for example.

Complicating the task of understanding the environmental impact of certification, many of the positive outcomes that can be attributed to conditions set by certifying bodies may be tenuously linked to environmental impact, or if there is an environmental impact this may not occur immediately or indefinitely. Again, the case of the South African hake fishery is illustrative. The MSC process has undoubtedly helped generate more research and better understanding of the fishery's ecological impact and management effectiveness, but not all of this research has led to instant measurable improvements in levels of hake stock or adaptations in the way the fishery impacts on the marine environment. An example relates to the independent review of the management authority imposed by the certifying body, which was undertaken in 2006.⁴² According to a member of the assessment team, the recommendations of this review have been largely ignored.⁴³ Again, in the commissioned study by MSC this review of MCM was noted as one of the positive environmental gains attributed to the MSC process, but on closer inspection, and given the time that has elapsed since their review, one would expect this finding to be reconsidered.

In short, while there is evidence that MSC brings about environmental gains, the relationship between the MSC process and actual environmental improvements is complex and requires in-depth, ongoing qualitative research. Capacity and funding to conduct such research may not be available, which means conclusive evidence of the actual environmental impact of MSC may remain obscured and open to competing claims. It would therefore seem important that the MSC and WWF undertake regular studies of the environmental impact of certification, although it is to be expected that resulting reports may be contested. For the time being, in-depth studies on the environmental impact of certification in Southern Africa are not being undertaken, nor are they planned for the future.

Criticisms and potential limitations of the environmental impact of certification

Although the MSC is well supported by a large number of organisations and experts, the claim that it leads to

significant environmental gains remains disputed. There are marine scientists and conservation organisations who argue the impact of the MSC is far more limited than is often presumed. Indeed, some believe the MSC may have a negative impact on marine conservation.

Returning to the MSC-commissioned study in 2006, overall the results were positive for the MSC. However, the report did note a lack of evidence for a 'big story' in terms of environmental gain. In other words, the researchers considered all of the improvements attributed to the MSC process as somewhat modest, in addition to the fact that it was not clear whether the MSC was entirely responsible for all those gains that were identified. To some commentators the lack of big stories of environmental impact is disappointing, particularly given the MSC's high profile and the significant sums being invested in the initiative. For example, in contradiction to the MSC-commissioned study published in 2006, Australian marine biologist Trevor Ward argues that there has only been one significant lasting ecological improvement made by MSC to date, namely the reduction of endangered seabird bycatch in the South Georgia Patagonian toothfish fishery. Ward also points out that two other significant ecological improvements identified in the MSC-commissioned study—reduced sea-lion bycatch in Western Australia and reduced seal bycatch in the hoki fishery of New Zealand—were either unrelated to the MSC process or have been temporary improvements only.⁴⁴ Ward provides a damning statement on the MSC, arguing that it has not been able to demonstrate major achievements in marine bio-diversity contribution at all and that certification schemes remain 'primarily marketing opportunities, with little prospect for making stand-alone achievements in biodiversity conservation of either target species or non-target species'.⁴⁵

Ward's argument is shared by several other notable experts and conservation organisations. For example, Jennifer Jacquet and Daniel Pauly (the latter being a prominent consultant in drafting the MSC principles) have urged international donor organisations to cease funding for certification schemes entirely. They argue that emphasis should be given to reforms in international fisheries that will have more direct benefits, such as reducing perverse subsidies. They note that a minimum of \$6.2 million has been made available through conservation funding annually since 1999 for market-based sustainable seafood initiatives, compared with only \$150 000 per year on projects to abolish harmful subsidies. It is their view that years of certification have failed to show changes in consumer behaviour and there is insufficient evidence that this work has led to any reduction in over-fishing and ecosystem degradation, therefore 'recommendations to intensify ecolabelling and other market-based efforts to

move the fishing industry toward sustainability should be reconsidered'.⁴⁶ What is more, both argue that 'the limited money for fisheries conservation should go towards efforts that yield the highest sustainability returns on conservation investments'.⁴⁷

Accounting for certification's limited environmental impact

That critics claim evidence for major improvements in the environmental performance of fisheries that have paid for the MSC certification is ambiguous does not necessarily discredit its environmental worth or potential. The authors of the MSC-commissioned study into environmental impacts point out that 'big stories' in fisheries conservation are in fact quite rare and therefore critics may simply have an unfair level of expectation. Moreover, it is possible that modest improvements recorded to date may simply reflect that so far, only the good, responsible fisheries have taken the decision to pursue certification. As certification grows and the market demand for certified fisheries expands, more problematic fisheries may be forced to follow suit and the big stories will then surface. WWF in South Africa point out that if the Namibian hake fishery decides to proceed with MSC certification, then it is likely that profound changes will occur in terms of reduced bird-life mortality and marine species bycatch, problems that for the time being characterise this fishery. Similarly, the certification of prawn fisheries in Mozambique may provide a case study of the potential for the MSC to make changes to problematic fisheries which so far have not been achieved through other policy routes in the country.

Thus, according to one view, the modest environmental gains attributed to the MSC may be both reasonable to expect and likely to change in the future. Yet another perspective suggests the problem is more fundamental and unlikely to be remedied with the inclusion of more fisheries. This negative view of the MSC is based on two key arguments: weak criteria and standards of sustainability, and inconsistent and lenient interpretation of the standards. Each of these are discussed below.

Weak criteria and standards of sustainability

Firstly, critics believe the MSC standards, and by default the FAO guidelines on ecolabelling that are closely replicated by the MSC, are set too low. In terms of principle 1 of the MSC standards, which deals with the sustainability of the target fish stocks, the MSC allows for the certification of fisheries where the target stock is depleted but evidence is available for a suitable recovery plan. So, for example, MSC-certified South African hake, although both species of hake in South African waters are depleted. Existing estimates suggest the two species are depleted

to different levels of their possible pristine populations; the deep-water species is currently thought to be at 50 per cent of its pristine level, whereas the shallow-water species is currently at 10 per cent of its pristine levels. When combined, South Africa's hake is roughly 20 per cent of what it would be without fishing activities.⁴⁸

Although there are different interpretations of what constitutes an overfished fish stock and the science used to make estimates of pristine populations of exploited fisheries is imprecise, it is the view of several conservation organisations that no fishery should be certified as sustainable where the stock is overfished. Greenpeace, for example, has developed its own criteria to rank sustainable fisheries and they consider any indication that a fishery is overfished as sufficient to rate it as non-sustainable. Similarly, FOS claim not to certify any fishery that is overfished and the organisation has denounced the MSC's decision to certify South African hake for this reason. Indeed, FOS undertook an audit in 2007 on behalf of two European supermarkets of both the Namibian and South African hake trawl industries, thought by some to share the same stock, and concluded that neither was fit for certification according to its criteria of sustainability. FOS argued that both species of hake are unacceptably overfished and there was an unacceptable level of seabed destruction and bycatch of sharks and rays.⁴⁹

Critics also point out that the MSC standards do not include precise details on rates of recovery or the achievement of a certain percentage of pristine stock levels. All that is required is that a fishery shows some evidence of stock rebuilding. This is considered by some to be too vague, allowing fisheries to remain certified indefinitely even where fish stocks are overfished. It appears to make weak incentives for fisheries to achieve their maximum sustainable yield, which is contrary to mainstream marine conservation objectives, such as those agreed on at the World Summit for Sustainable Development (WSSD), 2004.⁵⁰ In other words, although the MSC system is designed to encourage fisheries to improve their environmental impact, the bar is set quite low in terms of stock rebuilding.

There are similar criticisms raised against principle 2 of the MSC standards, which deals with the ecosystem impact of fisheries. Here the MSC certifies fisheries if they 'maintain the structure, productivity, function and diversity of the ecosystem'. The MSC explicitly excludes any fishery that involves the use of dynamite or poisons, but it allows for all other types of fishing to be certified. Greenpeace has argued that criteria for ecosystem impacts are weak, allowing for the certification of inherently destructive fishing practices, including most importantly bottom-trawl fisheries. In fact, some 70 per cent of all MSC-certified fisheries are trawl fisheries, which inevi-

tably cause damage to sea environments and cause high levels of marine bycatch. Greenpeace has advised the MSC to raise its standards and exclude all trawl fisheries from the initiative.

Inconsistent and lenient interpretation of the standards

The second source of concern regarding the MSC, as mentioned above, is that the assessment methodology is vague and this has allowed for inconsistent, lenient and inappropriate decisions by certifying bodies. This has meant fisheries have been certified and re-certified erroneously. In 2004 a report commissioned by three of the largest conservation donor organisations in America reviewed several MSC-certified fisheries. The report, produced by Wildhaven, concluded that 'MSC's claim of certifying sustainable fisheries in most cases is not justified under the definition established by its standards, the Principles and Criteria'. In particular, the report argued,

Principle 2, requiring fishing operations to maintain the structure, productivity, function, and diversity of the ecosystem on which the fishery depends, routinely is not met.⁵¹

Trevor Ward, who has been involved in two MSC certification processes, has repeated the same argument. However he goes further and argues that certifying bodies are vulnerable to bias and conflicts of interests, which he believes explains why there is a lenient interpretation of the MSC principles (a matter dealt with more fully below). The conditions for improvements to ecosystem impacts raised by certification bodies are therefore considered by him to be *ad hoc* and lacking both ambition and long-term measurable goals.

One of the most explicit examples concerns the New Zealand hoki fishery, which was overfished when achieving its MSC certificate. The certificate was awarded on condition that suitable management plans were to be in place to aid stock recovery. Yet the fishery has maintained its MSC status despite the fact that the total TAC of New Zealand hoki decreased by 60 per cent from 250 000 tonnes a year in 2001 to 100 000 tonnes by 2007.⁵² Conservation organisations, including the Royal Forest and Bird Protection Society, Greenpeace and WWF in New Zealand, have argued that the hoki fishery should not have the MSC stamp of approval as the reduction in TAC is directly caused by overfishing.⁵³ The same conclusion was reached by one of the official peer reviewers of the assessment team. In fact, in a guide of the 68 commercial fisheries of New Zealand, the Royal Forest and Bird Protection Society ranked the hoki fishery in the bottom ten in terms of environmental sustainability, although

it is the only New Zealand fishery to have achieved and maintained the MSC logo.

Recently the MSC has acknowledged the controversy surrounding the hoki fishery but issued a press release claiming that the latest statistics issued by the New Zealand Ministry of fisheries shows that the hoki stock is now recovering.⁵⁴ Such reassurances have not satisfied all stakeholders, including British supermarket Waitrose, which has decided not to sell MSC-certified New Zealand hoki due to concerns over its environmental impact.

Greenpeace has also challenged the credibility of MSC certification in several high-profile fisheries. In addition to New Zealand hoki, Greenpeace claims that MSC certification has been granted to several North Sea herring fisheries despite continuing decline in the herring stock and warnings issued by regional fishing authorities that management plans for the fish stock 'were no longer in agreement with the precautionary approach'. Likewise, the Western Australian rock lobster fishery was certified in 1999, with a key condition being the deployment of sea-lion exclusion devices in the fishery. According to Greenpeace, the fishery was re-certified in 2006 despite the fact that sea-lion exclusion devices were still not implemented and therefore sea lions were killed unnecessarily within the fishery. Based on such examples, critics have contemplated what a fishery can possibly do to actually lose the MSC certificate, which so far has never happened.⁵⁵

MSC as a hindrance to conservation reforms?

The argument that the MSC (and FAO) standards are set too low and they are applied both inconsistently and too leniently raises doubts over the environmental impact of this initiative. Some critics go further than this, raising concern that certification may in fact have perverse and unintended consequences.

The basis of this accusation is that in certifying fisheries the MSC operates as a bulwark to more progressive reforms. Conservation organisations have argued that efforts to improve the sustainability of fisheries is undermined where companies involved in these fisheries point to their MSC certification as proof of their excellence. In the review of the MSC published in 2004 by Wildhaven, it was argued that the MSC provides a 'green shield' for inadequate fishery management. In the case of Alaska Pollock the authors of the report wrote:

...numerous conservation organisations contend that MSC certification labelling more than a third of all fish caught in the U.S. as sustainable would give the powerful factory trawlers association political cover for sweeping under the rug significant ecosystem, bycatch, and habitat concerns in this fishery.⁵⁶

That the MSC frequently defends the fisheries it certifies against conservation campaigns only adds further to this negative perception among some stakeholders.

Greenpeace has also accused the MSC of undermining international efforts to create Marine Protected Areas (MPAs), which many conservation organisations and marine biologists, including the WWF, believe can be crucial in protecting marine biodiversity and increasing the populations of commercially exploited fisheries. The MSC is accused of certifying fisheries in certain regions where MPAs have been considered appropriate. This, they believe, has undermined their lobbying for MPAs and has supported the interests of fishing companies that are opposed to them. Others have agreed with this view, including commentators from Australia who believe the certification of the Western Australian rock lobster fishery was important in convincing the authorities not to establish MPAs that would have restricted their fishing grounds.⁵⁷

Improving standards vs growing market coverage

Observations on the weakness of the MSC criteria have led to recommendations that the MSC standards should be made more ambitious and be more stringently applied in the certifying process. Greenpeace has drafted several recommendations to this effect, including the basic provision that the MSC should only certify fisheries where targeted stocks are not depleted.⁵⁸

However, raising standards for fisheries ecolabels is difficult for several reasons. Although it would seem reasonable to place more pressure on fisheries to recover stocks, the reality in many countries is that stock rebuilding is politically sensitive and necessarily slow. To continue with the analysis of South Africa's hake trawl fishery, the existing Operational Management Procedure adopted by the industry and the fisheries authorities is purposely conservative, as a more ambitious effort to rebuild stocks would inevitably cause short-term reductions in TAC, which in turn would cause job losses. Any policy that negatively impacts on employment in South Africa will be challenged and this could undermine the stability and legitimacy of the fishery. The current compromise is therefore reasonable, even though it may mean the recovery of the stock is slower than would be hoped for by conservationists.

If the application of the MSC was made more ambitious, it is also inevitable that fewer fisheries would meet the revised standards in the short to medium term and therefore there would be less of a market for MSC products. This in turn might weaken the incentive for fishing companies and retailers to enter the scheme and

might ultimately render the MSC unworkable. This is a view expressed by the head of MSC in South Africa, who explains that raising the standards of sustainability too high would seriously limit the MSC's ability to work with African-based fishing companies and so to influence environmental reforms.⁵⁹

Other commentators in South Africa express a similar view. A leading marine scientist suggests that the MSC standards may in fact be too high for it to achieve significant environmental impact.⁶⁰ It is his view that the existing approach means the initiative is only accessible to highly developed fisheries and the MSC is out of reach of the vast majority of commercial fisheries. His recommendation, which is shared by others, is for the creation of a two-tiered certification system, where top-performing fisheries could be awarded a gold standard, while others could achieve a bronze standard.⁶¹ The logic of this policy would be to increase the incentives for fisheries to enter the certification process, without lowering the overall standards.

There are practical difficulties and risks in creating such a dual certificate, which makes it unlikely to be pursued. However, the recommendation highlights a critical tension for the MSC. This tension stems from trying to balance the growth and accessibility of the initiative, on one hand, with maximising the environmental gains for individual fisheries, on the other. Moves towards making certification more accessible may weaken the potential to make stand-out changes to fisheries, while efforts to increase the standards and raise the bar for individual fisheries would not only limit the number of fisheries involved, but also undermine the success of the MSC logo, as well as the growth of the MSC itself.

The MSC is actively engaged in improving methods to monitor its environmental impact globally, which reflects positively on its commitment to meet its stated objectives. Further discussions on the tension between growing market coverage and maximising environmental benefit should be a critical ongoing theme in this work.

COMMERCIAL OPPORTUNITIES FOR FISHING COMPANIES

In discussing the growth of third-party certification in fisheries, it is important to consider the reasons that motivate fishing industries to engage with MSC and it is important to recognise the reasons why some industry players may be reluctant to proceed or engage with the initiative at all. However, as with the discussion on the environmental impact, these are difficult issues to generalise about, with significant differences being found between fisheries and between companies in the same fishery. Indeed, in some cases industry stakeholders are playing

a peripheral role in the certification process for the time being. For example, in Tanzania, the pre-assessment of the octopus fishery is being entirely funded by WWF, with no financial commitment from either the industry or the government, despite the latter being registered as the co-client for the pre-assessment. Despite such variations, it is nevertheless possible to describe some general themes from the region. The analysis below begins by considering the factors that are encouraging interest in gaining MSC certification from the fishing industry's perspective, followed by consideration of their concerns and apprehensions.

Maintaining or expanding market access

One of the key motivations in gaining MSC certification among industry players lies with improved international market access. However, the demand for certified products among the main consumer countries is currently uneven, although, as noted earlier, the trend does seem to suggest an increasing number of retailers are requesting certified products, particularly in Northern Europe and North America. The demand is lower in Southern Europe and Asia, although there are anecdotal reports that more fish buyers in Spain, for instance, are showing an interest in MSC-certified products. To date there is no market for ecolabelled products in Africa. Thus, the degree to which fisheries feel motivated to gain certification depends partly on the eco-sensitive nature of the main markets to which they sell, as well as their ambitions of increasing product sales in those countries where certified products are in demand. For the Tanzanian octopus fishery, for example, there appear to be weak incentives to use the MSC logo to expand into new markets. This is because the market for Tanzanian octopus is fully met by buyers in Southern Europe and the Middle East, and octopus is not sought after by Northern European consumers.

In the case of South Africa's hake trawl fishery, the majority of fish products are also sold to Southern Europe, considered their 'traditional' market, and only some products are sold in countries where eco-labels are considered important. It appears to be the case that only two of the larger South African companies involved in the hake trawl fishery sell substantial quantities outside these traditional markets and for many of the smaller companies, MSC certification has been less important to their business operations.

We therefore find that despite the entire South African hake trawl industry gaining MSC certification, a relatively small number of exporters of hake products have applied for MSC Chain of Custody (CoC). Considerable amounts of hake products from the trawl industry do not make use of the MSC logo, although finding out precisely what per-

centage does use it has not been possible for this study.⁶² Complicating the situation is the fact that not all hake products packaged and sold by South African companies originate in South African waters. The largest fishing company in South Africa has substantial fishing rights in Argentina, where some of the hake being sold from South Africa originates. Some of it also originates in Namibia.⁶³ Nevertheless, reports from industry representatives suggest more exporters are showing an interest in applying for MSC CoC, which indicates a growing market for MSC-certified products.⁶⁴ However, there appears to be a delay in this respect as the industry awaits the outcome of the current re-assessment.

In understanding the market incentives of certification, it is also important to consider international competition between fisheries. Gaining MSC certification is reported to assist in guaranteeing preferential status with key retailers and buyers of fish products, while at the same time not having an ecolabel may place fisheries at a competitive disadvantage in some countries. For example, South Africa's decision to pursue MSC certification was partly influenced by the certification of New Zealand's hoki fishery, which threatened to impact on South Africa's commercial relations with key fish buyers, including Unilever.⁶⁵ Similarly, Namibia's fishing companies acknowledge that without MSC certification, their ability to compete with South African-based companies and New Zealand hoki is substantially reduced.⁶⁶

Environmental legitimacy

While for some fish producers the relationship between market access and the MSC is defined almost entirely by retailer demand, for other producers requests for MSC by retailers may be of secondary importance. There are several fisheries whose concern over market access is more directly threatened by negative publicity and consumer campaigns. This appears particularly important in the prawn fisheries, which have come under increasing criticism for being one of the least environmentally sound fisheries in the world.⁶⁷ Companies in both Madagascar and Mozambique argue that this reputation is undeserved for them. MSC certification therefore provides one method not only to illustrate their environmental credentials, but also to potentially differentiate their product from other prawn fisheries that are less environmentally responsible. The latter includes farmed prawns, which are increasingly considered controversial for both social and environmental reasons.⁶⁸ Indeed, interest in MSC certification in Mozambique's deep-sea prawn fisheries stemmed from contact between Ocean Fresh, a South African company involved in Mozambique fisheries, and WWF in South Africa. Directors of Ocean Fresh were

concerned about the growing negative environmental publicity about their products and it was WWF in South Africa that suggested engaging in the MSC initiative as one way of addressing this situation.

A similar motivation has been expressed by the FTEA. Again, tuna fisheries worldwide are gaining a reputation for being unsustainable and are the cause of high levels of bycatch. In Northern Europe, campaigns by environmental groups such as Greenpeace are considered a major threat to FTEA's future markets. The MSC label is therefore considered critical in differentiating FTEA's tuna loins from other tuna fisheries, particularly European longline and purse seine fisheries. As noted above, the way in which members of the FTEA fish tuna is far less damaging to the marine environment and leads to very low levels of bycatch. Members of the FTEA want to find an efficient way of communicating this to buyers and end consumers, and for them the MSC represents one of the best methods available. Again, this decision was influenced by advice and funding by WWF in South Africa.

Certification is therefore a tool that can be used to communicate that the fishery is responding proactively to environmental concerns, and can be considered integral to a company's social responsibility profile. In a research report commissioned by UNEP in 2008, a survey of international fishery companies revealed that of all motivations in gaining certification, improving companies' 'environmental credentials' was by far the most important. Seventy-one per cent of respondents surveyed claimed this was among their primary motivations.⁶⁹

Gaining a price premium

Whether or not gaining certification provides companies with a price premium remains unclear. The anomaly of certification in fisheries is that the majority of retailers, particularly the larger supermarkets, do not appear willing or able to sell certified products for a premium in comparison to non-certified products.⁷⁰ The reported reason for this is that few consumers of fish are prepared to purchase more expensive products only on the basis they contain an eco-label, a situation that may be compounded by the global financial crisis. There have also been cases of effective competitive pricing from producers of non-certified products, which further limits the ability of retailers to provide certified fish at a price premium.⁷¹ Thus, South African certified hake has not yet been sold for more than similar non-certified products. As George Bezuidenhout, the CEO of Sea Harvest, explains:

[The] most significant benefit to certification has been preferential access to some markets. In some countries retailers and processors are calling for product from

MSC-certified fisheries. Our deep-sea hake certification has opened the door to these markets. However, I don't believe we are achieving any price premiums.⁷²

We cannot, however, generalise on the issue of price premiums. Several fisheries certified by the MSC have reported significant price premiums. The potential to gain a price premium may be higher for certain fish products than others. For example, producers of niche products may be less likely to suffer competitive pricing by other fish producers compared to producers of mass-marketed products such as hake.

Moreover, the ability to gain a price premium as a result of MSC certification may depend on broader marketing strategies. A prominent fish buyer in the Netherlands, Fishes, provides a good example. Fishes is committed to selling only MSC-certified products. However, the company does not simply rely on the MSC logo to promote its products. They also develop other marketing tools that help differentiate these products to consumers, such as posters describing the methods of fishing and the involvement of local communities. That this approach can be effective to generate price premiums for MSC-certified fisheries might be supported by the experience of the FTEA in South Africa. The secretariat of the FTEA is currently working closely with Fishes to explore new export opportunities in anticipation that the fisheries will gain the MSC certificate. Whereas the FTEA now receive €5,5 per kilogramme in European markets for tuna loins, Fishes has offered an initial price of €7. It is the view of Fishes that their customers will be willing to buy certified tuna at a price premium, given their ability to effectively 'tell the story' of this fishery. The FTEA and Fishes have been set to trade an experimental shipment of South African tuna to test these prices, but the shortage of tuna in South Africa's waters this year is delaying this. Making matters more complex, the shortage of tuna is leading to a domestic price increase and for the first time the South African market is offering prices above those found in Europe. It is, however, expected that this situation will be short-lived, with South African prices falling when the tuna return.

A key point is worth stressing here. The MSC logo may not lead to a price premium in itself, but it may rather be an important dimension of an effective marketing strategy. Therefore African fish producers wanting to improve profits through gaining an ecolabel may need to consider additional marketing ideas, perhaps working closely with retailers.

The case of FTEA also illustrates another potential benefit of certification, which may be less relevant for the larger industrial fisheries than it is for small-scale fisheries. Members of the FTEA currently sell all of their

fish products to buyers based in South Africa. However, the interest in MSC certification shown by Fishes in the Netherlands offers the potential for members of the FTEA to bypass local buyers and sell directly to Europe. In this respect MSC certification offers the prospect of fishing companies increasing their vertical integration in international supply chains, which should directly increase their profit margins. Indeed, other major retailers in Europe have also expressed keen interest in dealing directly with FTEA in the event of their successful certification. In an interview with the author, members of the FTEA explained that when speaking to a major supermarket buyer in the UK, the prospect of MSC certification had profound implications. As the secretariat of FTEA put it, 'when he (the buyer) heard we are going for MSC certification, it was if he couldn't get on the plane to Cape Town quick enough!'⁷³

The enthusiasm expressed by buyers of fish products for MSC-certified products reflects the fact that current demand for certified products far outstrips supply in some countries, and it appears that this is leading to a recent willingness for fish buyers in Europe to pay higher prices for them. This is a finding of research by Dave Russell, in Namibia, who claims Namibian hake exporters are being told by buyers in Europe that they will be able to sell MSC-certified products for significantly more than non-certified ones, which seems to contradict the situation experienced by South African exporters to date.⁷⁴ However, it is also recognised that if price premiums are being stimulated by a lack of supply of certified products now, an increase in the number of certified products may alter this situation, bringing prices for MSC-certified products back down. This dynamic has been noted for other certified products, including organically certified bananas.⁷⁵

While it remains uncertain whether certified products achieve a price premium across all fisheries, prices paid for fish products can differ between countries. There is thus a complex relationship between price premiums and market access. For example, at the time of writing, prices paid for hake products in Spain were lower than those paid in other countries in Northern Europe, partly because of an economic downturn in Spain, which has resulted in an oversupply of hake products. Spanish buyers offered approximately €1 less per kilogramme in 2008 than they did in 2007. Again, Dave Russell reports that for Namibian companies, who have historically relied on the Spanish market for the majority of their export, there is now a strong economic incentive to diversify their supply chains—essentially diverting products away from Spain and into more lucrative countries in Northern Europe. However, without certification, the ability of Namibian companies to penetrate Northern European markets is reduced. The situation may change if Spain's economy

revives; the motivation for certification in Namibia may then become less strong. Nevertheless, for the time being, there do appear to be sound reasons why MSC certification of Namibian hake will lead to short-term profit increases for Namibian hake exporters.

Currently it is not possible to be certain of the market benefits and price premiums that will accrue to different fisheries throughout the region if they gain certification. It is important to stress that the situation will differ between fisheries and will be influenced by a complex range of other developments, including the ability of fish producers and retailers to develop an effective marketing strategy. It is, however, beyond doubt that many fisheries themselves attach a great importance to gaining a credible ecolabel in the hope that this will provide preferential access to overseas markets, counteract the threat of negative environmental publicity and potentially provide a price premium for their products. The expectations are not unreasonable but predicting how significant the commercial benefits are is difficult in advance of successful assessment. It therefore remains an important task to monitor these developments as more fisheries in the region gain the MSC logo and one would expect that as more success stories become apparent, interest in certification will continue to grow.

Improvements to fisheries management

Alongside maintaining their environmental legitimacy, fishing companies also report that paying for certification offers the potential for making improvements in the management of their fisheries. This is an aspect that is unique to the MSC system and distinguishes it from rival certification schemes. Other eco-labels that involve a straightforward pass/fail judgment do not offer this benefit. Dave Japp reports that among South African hake trawl fishing companies:

The strongest motivator for MSC certification appears to have been a concern for the immediate and long-term management and sustainability of the hake resource. MSC, it was believed, would stimulate a greater sense of urgency for the management of hake with a view to sustainability of the stock and capacity development (research and management) based on sound principles. MSC was seen as one of several alternatives that could raise the profile of the fishery not only globally, but more importantly in the changing dynamic of fisheries management and administration regime in South Africa and the region.⁷⁶

Similarly, the director of Ovenstone Agency explained that while there may be benefits for his company in terms

of finding new buyers and selling lobsters for a higher price, the major incentive for embarking on MSC certification was the potential this process offered for improving working relations with the local fishing authority in Tristan da Cunha.

In other fisheries comparable motivations can be found. While all three of the Tanzanian exporters of octopus have yet to commit financially to the MSC, at least two believe certification could be a key strategy for making improvements in the fisheries' regulation and compliance. In the case of the FTEA in South Africa, members explain that in addition to commercial incentives it is hoped that the process of MSC certification will provide a rigorous evaluation of the tuna fishery that will help bring to light possible anomalies in its management. For example, the South African government has given approximately 200 individual licenses for tuna fishing, but there has been no official report or documentation on how this number was decided upon and whether it is sustainable. Representatives of FTEA hope that the review of the fishery under the MSC process will raise awareness on this matter and perhaps lead to corrective measures.

In many cases it would seem that using the MSC to make changes to management is motivated by concerns over the sustainability of the targeted fish stocks. However, there are some reports that suggest the MSC can also be used as a strategic tool to further the commercial interests of clients and may not be based on conservation of the environment. This has been the main argument put forward by Stefano Ponte regarding the certification of the hake trawl industry in South Africa.⁷⁷ Based on extensive fieldwork and interviews with industry players, he believes that alongside 'official' reasons why members of SADSTIA paid for MSC certification there were several hidden political motivations. Ponte argues that the MSC helped consolidate preferential allocation of fishing quotas to the trawl industry, at the expense of the rival longline industry that was not included in the certification process. Given the ambiguous evidence of improved market access and price premium, he believes such political factors were of uppermost importance.

It is not possible or appropriate here to review Ponte's argument on the potential political agenda influencing the certification of South Africa's hake trawl sector, although it is worth noting that others do not agree with his analysis and it is refuted by SADSTIA. Nevertheless, there are other cases which reinforce Ponte's assertion that certification can become relevant in the political economy of fisheries management. As already mentioned, some commentators note that MSC certification was critical in the case of the Western Australian rock lobster fishery in convincing the government not to proceed with establishing several marine protected areas, which would

have negatively impacted on the profitability of the lobster industry.⁷⁸ We can see from such cases why conservation organisations may not always interpret the environmental impact of certification positively.

To what extent other fisheries in the region consider third-party certification as a strategic tool for improving the performance of fisheries management, and whether this is for environmental, commercial or political reasons, remains unclear. However, presentations and discussions at the ISS/UNEP conference strongly suggest that the potential of certification to improve partnerships between industry and government agencies was welcomed in the region.

Industry concerns

The positive view towards certification in the region by fishing companies is partly countered by several important concerns. These can be separated into two broad themes: prohibitive costs and the threat of failing certification.

Costs

At the ISS/UNEP conference in October 2008, the cost of certification was a prominent topic of debate. It was acknowledged by delegates that the absolute costs vary considerably between fisheries, and that the cost relative to the turnover of the fishery is again case-specific. In all fisheries, however, difficulty arises from an inability to fully anticipate the costs from the outset. There is a sense that entering into the process of certification is a step into the unknown in terms of both financial commitment and the anticipated benefits. Apprehension is further constrained by knowledge of rising fuel costs, which looks certain to undermine the profit margins of most fisheries and remains a significant source of anxiety.

Assessment fees

A cost that is easy to predict is the fees for pre-assessment and full assessment. In the South African hake trawl industry, full assessment cost roughly GBP50 000 and each annual assessment a further GBP20 000. Local industries are forced to employ accredited certifying bodies from Europe, whose fees are considered high, not only due to weak local currencies, but also because they include international flights and accommodation. A straightforward recommendation made at the ISS/UNEP conference was the accreditation of local companies, who would improve competition and offer lower prices. An added benefit would be the investment in local expertise and employment.

MSC in Cape Town has already responded to this situation, with the first workshop for local certifying

bodies being held in Cape Town in February 2009. The event highlighted that local expertise is available. However, a considerable challenge is the cost of obtaining accreditation. Local companies must pay approximately ZAR100 000 (~\$8 000) to gain accreditation and they must also pay for annual audits. This investment may prove worthwhile in the long term. However, before companies are willing to commit to accreditation they will need to be assured that more fisheries in the region will embark on full assessment, which is not currently possible.

The cost of meeting conditions

While the fees of pre-assessment and full assessment are known in advance, there is uncertainty about the costs of meeting the conditions of certification. Although precise figures are not available, it is the view of the secretary for SADSTIA that so far, the cost of meeting requirements for certification in South Africa's hake fishery far outstripped the money paid to certifying bodies for pre-assessment, full-assessment and annual assessments. A rough estimate is that the accumulated direct costs of certification may be \$1 million. The same source, however, thought that the overall cost was reasonable, representing a small percentage of the total turnover of the industry.

While the accumulated costs incurred by South Africa's hake sector appears to be considered worthwhile by the companies involved, we cannot be sure that the experience in other sectors will be the same. This is particularly true in those fisheries for which certification may involve considerable changes, such as lowering TAC and fishing intensity. Such conditions could significantly reduce profits and be seen as unacceptable.

Concern about the unknown cost of certification appears to be an important factor in the progress of MSC in Namibia. According to Russell, Namibian stakeholders are divided on this issue, with some feeling the potential financial benefits of certification will be undermined not only by the fallout from the global financial crisis, but also in the expected competition to hake by cheaper farmed fish, such as Vietnamese *Pangasius catfish*. It is also recognised in Namibia that the MSC process will create demands for primary data on stocks and ecosystem impacts. Due to capacity problems among government authorities, the cost of generating this data will fall on industry's shoulders, as it has done to a large extent in South Africa.

Paying for conditions set by certifying bodies is therefore made more contentious when companies feel that certain conditions should in fact be paid for by state authorities. This is put forward as a reservation by the three main exporters of octopus in Tanzania, who point out that their fishery is heavily taxed by the Tanzanian

authorities, far more so than octopus fisheries in neighbouring countries, and they remain unsure to what extent this revenue is invested in managing their fishery, if at all. Among these companies there is therefore some reluctance about engaging in certification if it means they must further contribute to improving the fishery's management. It has been suggested by one of the company directors that government revenues derived from the octopus industry should be used directly to pay for the certification process, including undertaking required research.⁷⁹

Donor support and the risk of subsidisation

If there is a level of apprehension regarding costs, this is partly offset by optimism that external donors will provide financial support. This optimism is not unfounded. In South Africa, one of the conditions of certification was increased information on the impact of trawling on the seabed. SADSTIA was unable to complete this survey due to constraints on funding and expertise. However, funding by the Norwegian government has allowed a study to be undertaken by experts at the University of Cape Town. MSC and WWF have also helped fisheries apply to the Sustainable Fisheries Fund (SFF), an initiative of the Resources Legacy Fund based in California, that provides match funding or loans for activities directly related to advancing ecolabelling. According to MSC in Cape Town, at least 75 per cent of applicants for funding by the SFF worldwide have received some funding to date. There is also the view in Namibia that existing donors supporting fisheries in the country, such as the Spanish Cooperation and NORAD, may be supportive of their bid to gain MSC certification and will help pay for related research and capacity building.

It remains unclear whether or not donor funding will be extensive in helping fisheries meet certification in the region. This may be influenced by the ongoing global financial crisis, as levels of donor support from some sources look set to decrease in the coming years. Iceland has historically supported fisheries in Namibia but has now announced a drastic scaling down in its overseas development spending.

Whether or not donors should support certification is worthy of careful consideration. Subsidisation comes with potential negative consequences. The costs of certification are ongoing, not only due to annual assessment reports and five-year reassessments, but also because with each re-assessment the potential arises for new conditions and research needs. Donor support that is provided to fisheries to help them obtain certification may not be available in the future, placing companies in a vulnerable position of not being able to afford certification indefinitely. Moreover, at the ISS/UNEP conference, it was noted that

the success of certification schemes depends largely on the commitment of fisheries. Where the costs of entering into a voluntary, market-based initiative such as MSC are borne by external donors, levels of commitment by the clients may not be as high as they should be. In other words, the MSC model may not be sustainable if it relies too heavily on external funding or subsidisation. In this respect, that the SSF only provides match funding appears to be a responsible approach.

The threat of failing certification

In addition to concerns over costs, several industry representatives are worried about the prospect of failing certification, or more importantly, of losing certification after achieving it. Understandably, a failure to meet the standards of certification sends out a negative message, perhaps even more so for those fisheries that gained certification but had it removed later.

Here the experience of the South African hake trawl industry may be crucial, given that it is currently undergoing its five-year full reassessment. If it loses its certification, the impact this will have in the media, and more importantly on retailers and consumers, will no doubt be carefully examined, not least by the Namibian hake fisheries sector.

The spectre of de-certification remains a hypothetical event, however. No fishery has yet managed to fail its reassessment. However, industry representatives are aware that this is possible. What is more, factors leading to de-certification could be beyond the control of the clients themselves. To a large extent MSC provides protection to industries where fish stocks are negatively impacted by natural events, such as global warming or climatic shifts such as El Nino. As long as the fishery is able to respond to these events, by reducing TAC, for example, then the fishery will remain compliant with the MSC standard. However, there are other exogenous factors that are potentially threatening. One of these is simply the inability of fisheries to afford certification, which may be influenced by rising fuel prices. Other factors to consider include illegal fishing or poaching, or inadequacies in government management of fisheries. As will be described next, this gives rise to legitimate concerns and may yet prove frustrating for the advance of fisheries certification in the region.

The dilemma created by fear of de-certification is not easy to rectify. It is an inherent problem for ecolabelling initiatives that portray only positive information to consumers. Under a more complete regime of consumer information, which provided information on both unsustainable and sustainable fisheries, there would be no option for fisheries to opt out. As it is, more than one stakeholder has remarked that it may be better not to

be MSC-certified than to be certified and then lose this status in the future.

Concern with escalating demands

Fear of losing the MSC certification has further consequences. For many fisheries, entering into the process of certification represents an ongoing commitment. Certification is not a once-off event. It is quite likely that over time, demands placed on companies to retain their status as an MSC certified fishery will continue to be generated. This is partly because the science used to undertake stock assessments and measure ecosystem impacts is continually evolving and certifying bodies will either demand new conditions, or will be expected by others to place new conditions on fisheries. In the case of South Africa's hake trawl fishery, for example, re-assessment for MSC certification may require further research needs, including improving knowledge on the relationship between South African and Namibian hake stocks.

This situation represents a potential source of frustration to companies who have successfully obtained the MSC logo. Given the incentive of retaining their status as a certified fishery, companies may become 'locked in' to the certifying process and find that they are subject to ever more demands, which are both time consuming and expensive. Some local experts and industry representatives fear that this situation could be exploited unfairly, particularly by conservation organisations who know that certified fisheries will be less likely to ignore their demands if this threatens their MSC status. Thus, while gaining MSC certification is often depicted as a 'carrot' for improving the environmental activities of fishing companies, the threat of losing certification may also be used as a 'stick' for the same purpose.

VOLUNTARY MARKET MECHANISMS AND THE ROLE OF THE STATE

The advent of voluntary market mechanisms to promote environmental benefits was perceived by some as a remedy for the failings of state management.⁸⁰ This view was evident during the development of the MSC and still exists today among some commentators.⁸¹ However, it is increasingly clear that third-party certification schemes rely heavily on the participation of state authorities. Indeed, without the support of fisheries authorities it is extremely unlikely that any fishery could achieve certification. Moreover, a core aspect in assessing fisheries under the MSC scheme involves evaluating the strength of fisheries management. Where states are failing in their duty to provide responsible management of a fishery, the fishery should not be provided with MSC's stamp of approval.

The importance of support from government departments has been clear in the case of MSC certification of South Africa's hake trawl fisheries. Marine and Coastal Management (MCM), the governing body of fisheries in South Africa, was consulted extensively by the certifying body, Moody Marine, during research for full assessment. This involved not only requests for data, but meetings with a range of employees from MCM that were designed to shed light on their capacity and performance in managing the hake fishery. Overall, it is reported that MCM was agreeable to these interactions, although some frustration was voiced that the certification process was a distraction from core work and added further stress to employees.⁸² The situation was not helped by the fact that MCM was, and still is, considered short-staffed. Moreover, at the time of full assessment, MCM was engrossed in the stressful process of sorting out long-term fisheries rights allocation.

The demand placed on state authorities to meet the criteria of certification depends on their existing capacity and the performance of fisheries departments. Where fisheries are generally well run, the demands could be minimal. However, the stark reality is that in many countries in Southern Africa the management of fisheries appears to be weak and state departments face a chronic lack of capacity. In Mozambique, for example, the Fisheries Minister, Cadmeil Muthemba, has recently acknowledged that the ability of the state to combat illegal fishing is very limited, given that the government has only one modern patrol boat to police the entire 2,500 kilometre coastline.⁸³ In Namibia there are concerns that the Ministry of Fisheries currently lacks expertise and experienced staff. Since 2006, because of low pay and the perception of a lack of career paths, numerous employees have resigned, representing a loss of some 140 years of experience.⁸⁴ The same concerns exist in South Africa's MCM, which has lost experienced staff in the last few years. Reports suggest there is a difficulty in finding suitably experienced people for vacated posts.⁸⁵ This may yet prove significant in the re-assessment of the hake trawl fishery. Indeed, as noted already, one of the conditions of the successful certification of South Africa's hake trawl fishery was an independent review of MCM. This occurred in 2006 and resulted in several recommendations relating to the need for improvements in research and the administration of the hake management system. However, no follow-up review has been done and many of the recommendations have not been implemented.⁸⁶

The challenges of weak governance

Problems of fisheries management are not simply due to lack of capacity and expertise. In several countries in the region, fisheries management lacks transparency and

accountability. Data on financial flows and the number of licenses sold to fishing companies are often not made public. Where official data is published, it sometimes lacks reliability. For instance, official statistics on the volume of export of octopus from Tanzania are less than 50 per cent of what the industry and other independent sources records.⁸⁷ The situation could pose challenges to certifying bodies and prove frustrating to industry clients. Certification requires open access to reliable government data. Without this, certifying bodies will be unable to make in-depth assessments.

Unfortunately, lack of transparency speaks to a wider problem of corruption in fisheries management, which does appear to be a widespread problem. There is a lack of conclusive information on corruption, but common complaints include regular bribe payments between fisheries officials and fishing boats, which undermines compliance and seriously distorts fisheries statistics.⁸⁸ It is also the case that conflicts of interests exist in fisheries. For example, in one of the fisheries mooted for certification, partners in joint ventures include senior political figures and previous or current employees of fisheries departments. This situation is thought to explain why some fishing vessels have been exempt from prosecutions for known violations. Many stakeholders are aware of this situation and therefore the issue will have to be raised either in the pre-assessment or in the full assessment reports.

That corruption exists in fisheries in Southern Africa should not be surprising; many of the countries in the region rank among the lowest in the world on governance indicators and perception indexes of corruption.⁸⁹ It is, of course, precarious to infer levels of corruption in fisheries authorities from mainstream national corruption indicators, which are open to valid criticism.⁹⁰ But other research has shown that such indicators are closely correlated to aspects of fisheries management, such as levels of illegal, unregulated and unreported fishing.⁹¹ The MSC assessment criteria does not contain specific questions relating to corruption, but undoubtedly concerns over corruption should weaken scores relating to management performance and this is a matter that certifying bodies need to consider carefully.

The combined challenges of weak state capacity and poor governance are not insurmountable for certification schemes such as MSC. Indeed, one of the potential benefits of the certification process is the possibility that multi-stakeholder engagement on fisheries management may provide impetus for change and improvements in transparency and accountability. The available evidence does suggest that government authorities in Southern Africa are generally supportive of the MSC. It is recognised that the certification process can benefit industries

in gaining market access and the process of certification could assist with strengthening management capacity and effectiveness. As noted above, the Tanzanian fisheries authorities are collaborating with WWF to be the client for the pre-assessment of the octopus fishery, although the MSC in South Africa remains concerned that fishing authorities are not the ideal clients for certification and would prefer the process of certification to be driven by private fishing companies.⁹² Of course, it would seem reasonable to presume that the potential of certification to generate additional donor funding can only help promote certification within fisheries authorities, as they may see themselves as direct beneficiaries.

Maintaining support and cooperation by state authorities in certification remains ongoing and there are several difficulties. There is evidence that some fishing authorities in Southern Africa lack basic knowledge about the MSC process. Language barriers may compound this—in Mozambique it is reported by WWF that stakeholder meetings, which were initially held in English only, have greatly improved with the use of simultaneous translation. However, a more profound challenge in gaining the support of governments concerns capacity constraints. The initial support for MSC certification may weaken as state authorities feel unable or unwilling to meet resulting demands. Moreover, it is not unreasonable to predict that criticism of state management by certifying bodies could generate a defensive response. This is a particular concern where the results of assessments highlight inefficiencies or poor levels of accountability and transparency. State authorities may not wish to engage in projects that directly lead to negative publicity.

Finally, there is some evidence that senior fisheries officials may not feel comfortable in allowing foreign NGOs to dictate aspects of fisheries policy. For example, Russell reports that the Namibian Minister of Fisheries is concerned that certification may compromise his flexibility in making changes to fisheries policy: ‘If it is required that the total allowable catch should be set low, how long will that block development?’⁹³

THE INCLUSION OF SMALL-SCALE FISHERIES IN SOUTHERN AFRICA

The relationship between voluntary ecolabelling schemes and the small-scale fishing sector remains controversial. This issue has been raised since the beginning of certification schemes in fisheries and continues to be debated in other sectors where certification operates, such as forestry.

There is little doubt that MSC has made concerted efforts to address criticisms in this regard. However, opposition to ecolabelling in general, as well as the MSC specifically, still exists. In 2008, the FAO held the first

global meeting on small-scale fisheries, the Securing Sustainability in Small-Scale Fisheries Conference, in Bangkok. In meetings before the event, a coalition of small-scale fisheries organisations issued a statement to the FAO and other UN organisations that categorically rejected ecolabelling schemes on the grounds that they threaten the rights and security of the small-scale fisheries sector, particularly in developing countries, and consolidate the power of the industrial fishing sector.⁹⁴

The view that voluntary certification schemes favour industrial fishing over small-scale fishing is now well established and is vindicated by the available evidence. The MSC has been far more successful in certifying industrial fisheries in the global North than it has been with fisheries in developing countries. South Africa’s hake trawl fishery is currently one of three fisheries that have been certified in developing countries, the other two being the Mexican Baja California red rock-lobster fishery and the Patagonian scallop fishery. With more fisheries in Africa, Asia and Latin America expected to undergo assessment, this situation may change, although it remains very unlikely that certified fisheries will be evenly spread across developing and developed countries in the medium term.

However, the expansion of MSC certification in developing countries will not avert criticisms if the majority of certified fisheries are industrial. The South African hake trawl sector is an industrialised fishery, led by large multinational companies. Several of the other fisheries that are expected to enter into the MSC certification process in Southern Africa are similarly industrialised and many are foreign owned. For example, most of the companies operating in Mozambique’s prawn sector are joint ventures between Mozambique business and political elites and Spanish, South African, Russian and Japanese companies. The situation reflects a broader tendency regarding African commercial fisheries: with the exception of South Africa, the vast majority of industrial fishing in Africa is conducted by European and Asian fishing companies, either through private licenses, access agreements or joint ventures. In Tanzania, there is not one nationally registered fishing company that fishes in the country’s deep-sea waters, nor do any of the foreign vessels operating in the country’s waters land their fish catches in Tanzania.

The importance of including small-scale fisheries

The inability to include small-scale fisheries in certification schemes is considered objectionable by some experts, for two interrelated reasons. Firstly, small-scale fisheries are considered by some commentators to have less impact on the environment than industrial fisheries and they

tend to make a better contribution to local development and human security. According to Daniel Pauly,⁹⁵ globally small-scale fisheries generate approximately the same annual catch as large-scale industrial fishing (about 30 million tonnes), but require far less capital investment and are far more labour intensive.

Despite landing the same quantity of fish, the industrial fisheries sector employs roughly half a million people, compared to over 12 million engaged in small-scale fisheries. Every single job on board an industrial fishing boat represents a capital cost of up to \$300 000, in comparison with a maximum of US\$3 000 on board a small-scale boat. Similarly, Gorez reports that in Madagascar, industrial fishing generates 42 jobs for every 100 tonnes of shrimp caught, whereas 100 tonnes of shrimp landed by small-scale fisheries generates 230 jobs.⁹⁶ Pauly also points out that small-scale fisheries generate very little bycatch, whereas industrial fishing discards up to 20 million tonnes every year. Moreover, industrial fishing consumes far more fuel: 37 million tonnes compared with approximately five million tonnes by the small-scale sector. Pollution and the carbon footprint of fisheries is not an issue considered in the certifying process, although arguably it should be.

The second concern relating to the exclusion of small-scale fisheries to certification relates to the potential of voluntary, market-based initiatives to operate as informal barriers to international trade. With approximately half of global fish trade originating from the small-scale fishing sector, commitments by major retailers to source fish from only certified fisheries has worrying implications. However, for the time being this risk remains a hypothetical one. It is difficult to find cases in Southern Africa where a lack of certification is reducing market access by small-scale fisheries. Nor does there appear to be any evidence that the rise in certified products globally is diminishing the export of fish from developing countries, or indeed that it is influencing the geography of trade patterns. In the years when certification has grown, developing countries have been experiencing a growth in their proportion of global trade. In fact, recent evidence by the FAO suggests fish originating from developing countries are accounting for an increasing proportion of international trade.⁹⁷ It is possible that as certification expands, some small-scale fisheries will find that they are placed at a competitive disadvantage to certified industrialised fisheries. It would be interesting to know where developing world fisheries, particularly small-scale fisheries, may compete with certified fisheries in global trade in the future. Perhaps this is an area of research that could be addressed in Southern Africa.

The challenges of certifying small-scale fisheries

There is no reason to believe that the MSC deliberately discriminates against small-scale fisheries, although this view is sometimes expressed by small-scale fishing representatives. However, the system of certification does appear biased against them, making it less likely that they will be able to gain MSC-certification, specifically, or any ecolabel in general. There are several well-documented reasons for this.⁹⁸

- Certification schemes are expensive and small-scale fisheries find it difficult to afford the process. Few small-scale fisheries have capital to hand for upfront payments for the process and their access to credit is limited or offered on unfavourable conditions. Given this situation, it may be that the risks involved in certification are too great for small-scale fisheries and the margin for error is too small. For example, paying for pre-assessment would be difficult to justify if there is a chance of a negative outcome, whereas larger fishing companies are able to afford this risk more easily.
- Management of the small-scale fisheries sector in developing countries tends to be poor. Traditional fisheries, or artisanal fisheries, can often operate under an open-access regime. This is the case, for example, in shrimp fisheries, where semi-industrial and industrial fisheries are subject to more state intervention and control, compared with the large traditional fleets in the small-scale sector that operate under a more *laissez faire* management structure. While this creates opportunities for certification initiatives to make a contribution, it also makes it more difficult for the small-scale sector to meet the stringent requirements of ecolabelling schemes, particularly the third principle of the MSC criteria.
- Data on artisanal fisheries are often lacking or incomplete. This includes straightforward information on the number of fishing boats operating in a region and the number of hours each boat spends at sea. In addition, robust historical data on catch levels and species landed is often not available for artisanal fisheries, and it may be particularly difficult and costly to generate. A recent study has shown that official data on fish landings, as presented by the FAO for Mozambique and Tanzania, significantly under-record catches from artisanal fisheries. By reconstructing historical catch data this study claimed official reported catches in Mozambique underestimates actual catches by a factor of 6.2 in Mozambique and 1.7 in Tanzania.⁹⁹

- Finally, it may be difficult for initiatives such as the MSC to identify an appropriate unit of certification for small-scale fisheries. Many artisanal fisheries are involved in a mixed fishery, using multi-gear fishing techniques. This means they can target several species on an *ad hoc* or opportunistic basis. In tropical areas, given the high biodiversity of marine eco-systems, this opportunistic fishing can result in a large number of species being harvested. Certifying a mixed fishery appears to be far more complex than certifying a single-species fishery.

Overcoming the challenges

These obstacles to certifying small-scale fisheries are recognised by the MSC and some are being addressed through its 'developing world fisheries programme'. There is also further support from the WWF. Both organisations are engaged in research to identify which small-scale fisheries may be appropriate for certification. So far this has resulted in several being considered, with the octopus fishery in northern Tanzania perhaps being the most encouraging, along with a rock-lobster fishery in Kenya.

Managing data deficiency

The MSC has also developed a new methodology for certification, aimed at what are increasingly referred to as 'data-deficient' fisheries, which is being tested in a number of locations. Its essence is the greater use of risk-based assessments, as well as the incorporation of local knowledge and expertise. The FAO's guidelines for fish ecolabelling have recently been changed to better accommodate assessments of data-deficient fisheries and throughout the text of these guidelines it is stated that assessments should use 'available scientific information, and local traditional, fisher or community knowledge provided that its validity can be objectively verified'.¹⁰⁰

It is too early to know whether new methods developed for data-deficient fisheries will be successful. They are potentially open to the criticism of being less rigorous than methodologies used for industrial fisheries, meaning the potential for errors is increased. There is also the potential that elements of a new methodology, designed primarily for small-scale, data-deficient fisheries, will creep into the assessment of industrial and semi-industrial fisheries. Over time this may muddle the assessment process, allowing for more cavalier conclusions. Moreover, some of the benefits of certifying fisheries are conditions for research and improved data gathering efforts. Perhaps the success of modifying the assessment process for data-deficient fisheries will diminish the need for such conditions, which, in turn, will lessen the environmental benefits

that come as a result of the certifying process? However, the risks of the new methodology are straightforward to overcome so we should not see them as being too serious. Moreover, if it is successful the new methodology could open up numerous fisheries to the benefits of certification and it therefore remains an important development.

Funding assistance

With regards to costs, there are attempts at providing funding assistance to fisheries in Southern Africa, including through the SFF. However, it is likely that for many small-scale fisheries, matching funding may not be enough. Perhaps further financial assistance may be generated by philanthropic organisations and bi-lateral donor support. But again, whether or not funding is appropriate for a voluntary market mechanism remains moot. As noted above, the success of certification schemes requires the active participation of fisheries that are committed to the process. Where a fishery is certified almost entirely through donor funds, a risk is that the necessary level of ownership does not establish itself and the sustainability of certified fisheries is undermined as a result. This situation may be remedied if local participants see direct benefits to their livelihoods from having fish products certified, but as discussed next, the benefits of certification in this sector are not always assured.

The social and economic impact of certifying small-scale fisheries

Efforts by organisations such as MSC and WWF to certify small-scale fisheries in Africa are at an early stage. Unlike the process of certification in industrial fisheries, which is predominantly driven by the interests of the fishing industry, the certification of small-scale fisheries appears largely driven by outside interests. In other words, for the time being certification is being actively taken to small-scale fisheries, rather than small-scale fisheries actively pursuing certification themselves. The case of Tanzanian octopus fishery illustrates this well—the client for pre-assessment is WWF and the Tanzanian authorities, with the actual fishing communities themselves playing a peripheral role. Where there is a potential for the fishing industry to participate in the certification process, this will almost certainly involve the three exporting companies and not the thousands of fishermen who actually catch octopus.

Greater interest in certification among coastal communities in the region may change as more small-scale fisheries become certified and others see the benefits. However, in the case of small-scale fisheries it is not accurate to depict certification as being a voluntary,

market-based initiative. Rather, it has the characteristics of a donor-driven project. It is partly for this reason that those responsible for introducing certification to small-scale fisheries must carefully consider its consequences, not only in terms of environmental outcomes but also in terms of developmental impact. The MSC does not include such considerations in its certification procedure, whereas the FSC principles do. It is reported that the decision by the MSC has been to focus its standards only on environmental criteria and calls to include social aspects were rejected.¹⁰¹ Fish ecolabelling offered by Naturland, the German-based Association for Organic Agriculture, does include labour standards. It incorporates the need for sustainable fisheries to respect the core tenets of acceptable labour as provided by the International Labour Organisation (ILO), and it stipulates that fisheries should provide workers the right to adequate living conditions, including lodging, transport, health insurance and education. It remains to be seen how successful and stringent Naturland will be in including such ideals in its current certification of the Nile perch fishery in Tanzania.¹⁰²

To what extent certification can result in poverty alleviation and development at the level of artisanal and small-scale fisheries is difficult to know, and will be case specific. Any initiative that can support sustainable fishing in the small-scale sector will have long-term developmental benefits for the obvious reason that unsustainable fishing will lead to the collapse of a natural resource that so many communities depend on.

However, the more immediate question is whether local fisher people and the large numbers of people involved in fish processing can realise the commercial benefits of certification. A major obstacle is the lack of vertical integration, which is a feature of many, but not all, small-scale fisheries. The economic benefits of increased prices and market access may be more relevant to the owners of production and exporting companies than they are to the actual fisher people and fish workers. Therefore, where certification does lead to economic dividends, these may be captured by a relatively small number of exporters and middlemen.¹⁰³

There are, however, possible exceptions, illustrating that certification may empower local communities. As already described, the process of exploring certification for members of the FTEA has offered them the potential to by-pass domestic buyers and deal directly with fish importers in Europe. To what extent similar changes to international supply chains could occur in Southern Africa remains underexplored, and arguably this could become a strategic area for further research and policy intervention. However, we should be realistic about such potential. Many, if not most, communities involved in small-scale fishing face considerable obstacles in advanc-

ing their commercial interests in international fish trade, given their access to technology and their marginal political influence.

While the benefits of certification for these communities are uncertain, some commentators also suggest that introducing certification to them could have perverse outcomes.¹⁰⁴ For example, certification may be a catalyst to changes in the social structure of fishing communities. In the Tanzanian octopus fishery mooted for certification, local fisher people are largely autonomous and the fishery is depicted as having an informal structure. It is possible that certification in this context would encourage, or even necessitate, the formation of more rigid hierarchies and bureaucratic processes. This may be a positive development for the better management of fishing, but it also could introduce opportunities for inequality and exploitation, a dilemma that is recognised by MSC South Africa.

If successful, certification schemes may also encourage the exporting of more fish, which may raise the cost of fish products for local communities. The resulting impact could be negative in terms of local food security. It may place strain on other sources of local protein, or perhaps a greater dependency on imported food products. Moreover, successfully marketing sustainable fish from developing countries could have the perverse consequence of encouraging local demand for less sustainable sources of fish. So, if the FTEA were successful in exporting more of their tuna products to the EU, for example, then local South African buyers might simply import more tuna from countries such as Mauritius, where the environmental impact of the catching of tuna is not thought to be as benign.

The notion that certification of small-scale fisheries can have a negative impact on local food security remains hypothetical. Indeed, there may be little reason to believe that the process of certification will divert fish from local markets, particularly as most of the fisheries being considered for certification are already export driven. Furthermore, increased levels of income from certification, if they materialise, may offset any food security concerns, a point debated in the ongoing literature regarding the developmental contribution of trade liberalisation of fisheries in developing countries in general.¹⁰⁵ Indeed, the risks and perverse outcomes of introducing certification to small-scale fisheries can easily be overstated, and perhaps a pessimistic view is based on the assumption that fishing communities are vulnerable and incapable of adapting policy changes to their own benefit. Nevertheless, it is important to anticipate the potential negative or ambiguous impacts of introducing certification among coastal communities in Africa, particularly if donor support is needed; it is unlikely that certification projects will receive ongoing funding without strong

evidence that there is a developmental legacy. Indeed, considering the needs of coastal fishing communities, it is moot whether donor funding is most efficiently used for certification when the commercial benefits remain uncertain. As noted by a report on ecolabelling and developing world fisheries by the Swedish Society for Nature Conservation:

...the main barriers that developing country fisheries face when they try to increase exports today is not the lack of demand—neither for ecolabelled fishery products, nor for conventional products. The most difficult obstacles to overcome are the increasingly stringent hygiene, labeling and traceability requirements that the EU and other major export markets require exporters to comply with.¹⁰⁶

If certification continues to be a policy advanced by organisations in Southern Africa for small-scale fisheries, then it is necessary to incorporate independent evaluations of its social and economic consequences. These should document not only the consequences of certification, but also the processes and expectations of local resource users. The findings should enable the MSC and others, such as WWF, to review their engagement with small-scale fisheries and better understand what type of small-scale fisheries are appropriate for certification and how the process can be improved on. For the time being, it is the author's view that while there is an eagerness to push through pre-assessments for small-scale fisheries, the developmental potential of doing so is not being adequately considered.

STAKEHOLDER ENGAGEMENT AND MAINTAINING THE INTEGRITY OF CERTIFICATION

All third-party assessments of the sustainability of a fishery involve a degree of subjectivity. A number of value judgments are made by certifying bodies on how to rate fisheries, particularly in terms of their ecosystem impacts and levels of state management. This normative aspect to the scoring system means the certification process is vulnerable to bias and conflicts of interests. This becomes increasingly important where certification has direct and considerable consequences for profits and market access, and where there is pressure to grow market coverage rapidly, as seems to be the case for MSC operating in Africa.

The MSC has a strong track record of responding proactively to criticisms of the way that fisheries are assessed. Thus, over the years several new policies have been put in place to ensure that the integrity and validity

of assessments is upheld. The findings of certifying bodies are now subject to a peer review, certifying bodies are encouraged to actively engage external stakeholders and there is an arbitration panel in cases where the decision of a certifying body to pass or fail a fishery is met with sufficient concern. Several of these steps were adopted by the MSC in response to criticisms of the first certification of New Zealand's hoki fishery.

It is also important to note that the MSC has a thorough approach to posting information on the certification of its fisheries—all assessment reports, peer reviews and annual surveillance reports of certified fisheries are published on its website. Indeed, one of the overlooked benefits of the MSC process is the fact that significant amounts of new data on fisheries are generated due to full assessments and annual surveillance reports, and for many African countries the growth of the MSC will lead to a considerable deepening of stakeholders' understanding of their fisheries.

Nevertheless, the existing approach to stakeholder engagement and maintaining integrity is not beyond criticism or improvement. Two broad issues can be considered important.

Stakeholder engagement

The role of external stakeholders is critical for the integrity of certification schemes. Independent scientists, NGOs and fishermen provide necessary checks and balances, ensuring that the decisions of certifying bodies are legitimate and the interests of local resource users are upheld. Indeed, local resource users may be some of the best sources of information on trends in catches, changes in bio-diversity, the performance of management authorities and the activities of fishing boats, all of which are vital aspects of certification.

Without stakeholder engagement, suspicions about the validity of certification schemes will rise and this can ultimately threaten their credibility. The certification provided by FOS has no formal mechanism for stakeholder engagement at all, which considerably weakens its credibility.

The MSC recognises the importance of stakeholder engagement and this is a positive feature of its certifying process, at least at the point of full assessment.

In the case of South Africa's hake trawl fishery, Moody Marine, the certifying body, reported that 51 stakeholders were identified and consulted leading up to the final publication of the assessment report. Stakeholders were made aware of key steps in the process via emails and notifications on the MSC website, and there were a number of face-to-face interactions during the assessment team's five-day visit to Cape Town.

Table 2 Record of consultations leading up to MSC certification of the South African hake-trawl fishery

| Date | Purpose | Media |
|-------------------|--|---|
| 30 July 2002 | Notification of commencement of assessment, request for identification of additional stakeholders, call for team member nomination | Direct email Notification on MSC website |
| 27 September 2002 | Notification of assessment team nominees | Direct email Notification on MSC website |
| 14 December 2002 | Confirmation of assessment team | Direct email Notification on MSC website |
| 17 January 2003 | Notification of assessment visit and call for meeting requests. Consultation on draft scoring indicators and guideposts | Direct email Notification on MSC website |
| 29 January 2003 | Notification of change of date of assessment visit | Direct email Notification on MSC website |
| 17–21 March 2003 | Assessment visit | Meetings |
| 8 August 2003 | Notification of proposed peer reviewers | Direct email Notification on MSC website |
| 18 December 2003 | Notification of draft report | Direct email Notification on MSC website |
| 19 March 2004 | Notification of final report | Direct email Notification on MSC website |

Source: Dave Japp, *Overview and analysis of the Marine Stewardship Council certification of the South Africa hake trawl industry*, UNEP, Geneva, forthcoming.

It is reported that feedback from stakeholders influenced the identification and final selection of the assessment team. Moreover, in one area feedback from WWF and Birdlife South Africa led directly to a new condition—this concerned the potential impact of the fishery on seabirds. Those raising this concern provided information on species that may interact with the fishery and the potential significance of these interactions, including evidence from studies carried out on trawl fisheries in the Falkland Islands. The assessment team concluded that the extent and significance of such interactions had not been fully studied in the South African context and that research in this regard should be made a condition of certification, rather than a recommendation.

Other comments by WWF South Africa included recommendations on strengthening the eco-system based approach to the fishery, the potential of establish-

ing marine protected areas and the need for a formal Ecological Risk Assessment. However, on each of these issues the assessment team argued that the scoring guideposts and criteria adequately considered most conservation and management-related issues. With the balancing and weighting of scores and criteria within each principle, most issues raised were therefore thought to be addressed. It was reported by the assessment team that all stakeholders consulted were of the view that the fishery was suitable for certification. That is not to say that complaints were not raised by some stakeholders. The draft report of South Africa's hake trawl industry assessment contained no detail on the scoring of the fishery. Some raised concern over this, pointing out that without an indication of the scoring it was impossible to comment on the certifying body's overall findings. In a subsequent publication Moody Marine rectified this. There was also a sense among some stakeholders that the way in which stakeholders were approached for comment could have been stronger; some felt an open forum would have been more appropriate than individual meetings and emails.¹⁰⁷

It remains to be seen whether more substantiated concerns over the certification of South Africa's hake trawl fisheries will surface after the publication of the draft five-year re-assessment report. However, it is to be expected that such concerns will be considered by the certifying body and responded to before the final decision is made.

South Africa is perhaps exceptional in Southern Africa in terms of the number of external stakeholders on fisheries, their level of expertise and funding. In other countries in Southern Africa, NGOs, fisheries scientists and organisations representing the interests of fisher people are not plentiful, nor do existing stakeholders have the same capacity as in South Africa. Several countries in the region are also characterised by poor levels of democratic governance and fishing authorities typically do not publicly share information on fisheries. This lack of transparency may undermine the ability of non-government stakeholders to contest or interrogate the findings of certification bodies, which is exacerbated as the MSC scoring itself lacks transparency in some regards; not all data that is used by the certifying body to arrive at scores is published. FOS, however, publishes very scant information on the fisheries it certifies.

It is important to note that in Southern Africa, the most vociferous stakeholder from the non-governmental sector is WWF. It is undoubtedly one of, if not the, leading source of independent information and analysis of fisheries. However, it is directly involved in promoting certification and receives funding to do so. In the case of Mozambique prawn fisheries, for example, the WWF has been commissioned by prawn fishing companies to research the stocks of prawns and the ecosystem impact of

prawn fisheries as part of preparatory work for applying for MSC certification. WWF is also assisting the same fishing companies to access funding to begin the process of pre-assessment, a function that is also happening in Tanzania and Kenya where the WWF is paying for the pre-assessment of two fisheries. The vested interest of WWF in the success of MSC may therefore undermine its ability to provide objective or critical input, and it further strengthens the need for certifying bodies to actively go beyond international NGOs, such as WWF, in gaining broad-based participation and stakeholder engagement.¹⁰⁸

Achieving this broad-based participation is extremely challenging. In many African countries, the MSC needs to approach stakeholder engagement carefully to ensure the input of local resource users is not rendered tokenistic. This is of particular importance where industrial fisheries (the clients) exist alongside artisanal and traditional fishing communities, such as in the shrimp sectors of Mozambique and Madagascar.

The MSC has undertaken outreach programmes in selected developing countries, aimed at educating local stakeholders on the MSC initiative. However, it is unclear whether this is sufficient to empower local stakeholders in being able to evaluate and provide detailed input into the decision-making process of certifying bodies. The ways that certifying bodies interact with and communicate their findings to stakeholders may not be as effective as they could be. For example, emailing notifications or posting these on the MSC website may not be sufficient, given the limited access to the internet among the poor and coastal communities. The technical language used in assessment reports could also be inappropriate to communicate the main findings of assessment bodies, while many resource users and local people are not fluent in the language used by the assessment team. Publications and notifications should therefore be translated into indigenous languages, and the MSC, working in conjunction with certifying bodies, may need to take more time to identify and engage with local stakeholders during and leading up to the final assessment, particularly community-based organisations and local artisanal fisher people. Much more time is probably needed in this regard—Moody Marine gave only five days for their assessment visit in South Africa, which would seem far too brief to undertake a thorough, broad-based consultation. Perhaps additional stakeholder analysis, undertaken by local NGOs, could occur before full assessment is started. This should be beneficial given the requirement of certifying bodies to consider the performance of management authorities in terms of accountability, participatory governance and attitude towards indigenous resource users, as detailed in the MSC guidelines for assessments (under principle 3).

Maintaining the impartiality of certifying bodies

A second area of potential concern relates to the commercial relationship between clients and certifying bodies. Under the MSC system, clients chose which certifying body they want to undertake the assessment of their fishery. Certifying bodies, in turn, identify further experts to assist in the assessment process. Because certifying bodies are competing for clients and derive obvious financial benefits from this work, there is an inherent risk that they will lean towards favourable assessments and choose experts for their assessment team that they know will not take a harsh stance on sustainability criteria. This has been a major criticism of the FSC, which uses the same system for certifying timber companies and concessions.¹⁰⁹ It is also raised about the MSC system by Trevor Ward, an Australian marine-biologist who has himself been involved in two assessment teams. Ward writes:

The voluntary nature of the MSC assessment programme, combined with the competition amongst certifiers to secure assessment contracts and the flexible application of the MSC Principle 2 criteria leads to what appears to be a failure of the market-based incentive model...A flexible interpretation of the standard leaves the incentive model open to commercial and other sectoral pressures, and in the long term could lead to break-down of the incentive structure as consumers become more aware of the deficiencies of the assessment process...Flexible interpretation of the standard also leaves the assessment system open to claims of bias, because the certifiers may be influenced by commercial pressures, including the greater availability of data and knowledge from proponents that may have a strong motivational bias (such as environmental or fishing industry organisations).¹¹⁰

The otherwise sound policy of developing local certifying bodies in Southern Africa may increase the potential for conflicts of interests. Most local fisheries consultants will have worked for key industry players and fisheries departments, and most will no doubt want to foster positive working relationships with these clients for future work. Again, the danger is that vested interests undermine the impartiality of certifying bodies. This is not to doubt the integrity of fisheries consultants in the region, but rather to note that this needs careful monitoring and evaluation.

To some extent, biased decisions of certifying bodies should be countered by the peer-review mechanism imposed by the MSC. However, there are reasons why this mechanism is not as strong as it could be. For one, peer reviews are not anonymous, which is generally accepted

as necessary to safeguard reviewer independence. MSC in South Africa recognises this, but also argues that some stakeholders could consider anonymous peer reviews chosen by the MSC as equally objectionable, which is why they prefer to keep peer reviews known. However, more significantly, peer reviewers of assessment reports are chosen by the certifying body itself, although a committee at the MSC checks the suitability of peer reviewers in terms of their scientific expertise. It is worth noting that there are several instances where peer reviewers have been employed by the certifying body on other projects, either previously or at the same time. For example, one of the two peer reviewers chosen by the certifying body for South Africa's hake reassessment was recently employed by the same certifying body as part of the MSC assessment team on two other major fisheries. It is possible that peer reviewers would be reluctant to provide a negative review of the work of an organisation that they work closely with and on which they rely for consulting contracts.

We would expect that if decisions on sustainable fisheries lack validity, the results will become apparent in declining fish stocks and lower fish catches. Yet the degradation of ecosystems may be more difficult to notice over time. As noted already, in this respect the certification of other products, such as wood from forests, may be easier for external experts and local resource users to monitor,

for the loss of fish and marine bio-diversity is so difficult to observe and quantify scientifically.

If the credibility of third-party certification schemes becomes open to ongoing criticisms, retailers and consumers may no longer want to be associated with the label. Indeed, there are strong reasons why certifying bodies, such as the MSC, would want to limit the potential for lenient and inappropriate decisions by certifying bodies. Therefore, monitoring the role of certifying bodies, improving peer review mechanisms and actively engaging external stakeholders may be critical for their success.

However, analysis of the integrity of voluntary market mechanisms to promote sustainable resource use needs to give some consideration to conflicting motivations that may influence the management of certification organisations. Although the credibility of an ecolabel is vital in order to achieve its objective, a risk for those managing third-party certification schemes is that primary importance is given to growing the market coverage of their logo. Under this scenario, progress will be defined primarily by the volume of products certified and the proportion of market coverage achieved in comparison with other rival certifying companies. This may usurp concerns with the quality of the assessments and the reliability of the information conveyed to consumers. If this situation was to happen, then one can see how incentives for maintaining the highest standards could be weakened.

Conclusion

There should be little doubt that Southern Africa has a clear need for innovative and long-lasting improvements in marine resource management. Economic development and the security of thousands of people depend on this. Third-party certification schemes, such as that offered by the MSC, are a relatively new development and an important potential solution. Although only one African fishery has been certified by the MSC, the opening of the new MSC office in Cape Town reflects both the growing interest in MSC certification from industry in the region and the MSC's intention to expand its client base. It is too early to predict how many fisheries will embark on full assessment, let alone how many will succeed. The signs are, however, positive for the MSC and other NGOs involved in the initiative, including WWF. Several important fisheries are undergoing confidential pre-assessments, while others, such as the Namibian hake fishery, may well follow suit in 2009. It seems unlikely that the reach of the MSC in Africa will start and end with South Africa's hake trawl fishery.

In attempting to contribute to the regional debates surrounding certification, this report has discussed a broad range of topics that seem to be of central interest to industry, governmental and non-governmental stakeholders. In doing so it has highlighted the potential of certification to bring about positive impacts. Most importantly, the process of certification may augment changes to the way that fisheries are conducted, which in turn may lead to improvements in the sustainability of fish stocks and the reduction of eco-system degradation. Certification also increases knowledge about fisheries management via the in-depth assessment reports conducted by certifying bodies and through multi-stakeholder engagement. What is more, for those fisheries that successfully gain a credible eco-label, there is the promise of commercial

benefits, whether through improved market access, price premiums, enhanced ecological legitimacy or perhaps improvements in their integration within international supply chains.

The report has also discussed some of the key challenges for the growth of certification, as well as some criticisms. The advance of certification is compounded by a number of factors. For example, African governments and fishing authorities play a critical role. All fisheries require the active co-operation of fishing authorities if they are to satisfy the MSC criteria of sustainability. Yet the reality in many countries is that government authorities lack capacity and there are serious concerns about poor governance. In theory, certification could provide a remedy for this situation, but in the short to medium term, weakness in state management of fisheries may prove a considerable obstacle for certification's expansion. We cannot be sure of this as fishing authorities could proactively engage in certification and play a strategic role in its success.

A second challenge relates to costs and the concerns of industry players. While there are potential commercial dividends from certification, these remain difficult to predict, which makes it hard for companies to calculate the costs and benefits of committing to the scheme. For many companies it is reasonable to assume that the costs of certification could be greater than the commercial benefits. There is also apprehension about the consequences of failing certification and about losing certification after achieving it.

For many companies, the decision on whether or not to invest in certification is influenced by the likelihood of securing external funding. In fact, in so many of the fisheries that are on the verge of undergoing full assessment, donor funding is all-important—for small-scale fisheries the costs of certification are almost entirely covered by

philanthropic organisations and funding from conservation organisations, such as WWF. This is a key point in assessing certification in the region—certification is a voluntary market mechanism that depends on high levels of subsidisation. It remains a critical research challenge to calculate the investments fishing companies themselves make in certification and what contribution external funders are providing. Perhaps it will be an indicator of success for certification schemes if the proportion of costs provided by external donors diminishes over time.

Considering the financing of certification leads to a number of critical policy issues. Firstly, there could be a greater role for consumers, fish retailers and exporters in meeting the costs of certification, which not only includes the fees of certifying bodies, but also other activities that are needed to meet conditions of certification. For the time being it would seem that paying for certification is expected to fall on the shoulders of fishing companies, and that due to their inability to afford this, international donor organisations and philanthropic organisations are heavily relied on. Perhaps certification organisations such as the MSC could do more to encourage the fish retailing industry to make more substantial contributions and make more effort to promote ecolabelled fish to consumers. This is not simply relevant to the fish retailing industry in the developed world. Local fish retailers in Africa, including supermarkets, restaurants and the hotel industry, should play a more prominent role in creating a demand for certified fish products and investing in those companies that are committed to gaining a credible ecolabel. This may go some way to boosting the incentives of certification and lessening the need for external funding support.

Also worthy of further investigation is the potential synergy between certification and existing donor funded projects in Southern Africa. Large amounts of donor funding and international financial support continues to be provided for fisheries reform. An example is in Tanzania, where the World Bank is financing a fisheries project with a total five-year budget estimated to be over \$60 million. No doubt such projects should improve the chances of fisheries meeting the criteria of sustainability. However, there appear to be ample opportunities for these government-led projects to work more closely with certification initiatives, which for the time being does not seem to happen.¹¹¹

Secondly, and related, there needs to be careful consideration of whether, or to what extent, donor funding and expertise should be directly invested in third-party certification schemes. One report suggests that world-wide, leading conservation donors are spending over \$6 million each year on advancing ecolabelling in fisheries,

which suggests it is seen as a priority issue. The concept of certification has certainly proved marketable. However, it is moot whether a voluntary market mechanism can itself be sustainable if it relies heavily on subsidies. The logic of such initiatives would suggest that they should be self-financing from within the private sector, which ensures a genuine commitment to environmental goals by the fishing industry and retailers.

It is also currently uncertain whether investing in certification will lead to substantial environmental and developmental results. While many believe it can be a powerful tool for fisheries reform, others argue that it has had a disappointing environmental impact, both in terms of influencing trade and in changing fishing practices, and is unlikely to have significant developmental consequences. There are even concerns, albeit hypothetical and largely unsubstantiated, that certification could bring about perverse consequences in terms of entrenching the interests of industrial fisheries and causing negative social and economic consequences for marginalised indigenous fishing communities.

It has not been possible in this report to provide a definitive answer on whether certification can bring about environmental and social benefits. It is important to note that overall the perspective from local stakeholders is a positive one. There are already signs that certification is bringing about positive changes to the fisheries that are entering into the process; certification is facilitating partnerships between fishing companies and conservationists that may have been difficult to establish otherwise and the desire to meet the MSC criteria is encouraging fishing companies to explore ways of lessening their environmental footprint. However, the honest conclusion is that current research on these themes is lacking and given that certification in Africa is at an early stage, there is a shortage of case studies to draw on. It is difficult to know whether the positive developments occurring in the region will prove significant or long lasting.

That the MSC has commissioned research into its environmental impact, and continues to do so, is clearly positive. It is an example of how MSC is deserving of its reputation as the leading organisation in this field, as no other similar organisation has attempted the same. However, the study commissioned by the MSC into its environmental impact falls short of providing conclusive evidence; at least, it has not managed to convince all experts. Independent longitudinal studies of fisheries that are entering the certification process may therefore be useful, particularly in Southern Africa where so many fisheries are at an early stage of the process.

The requirement for further research must also consider difficult developmental questions. The obvious

focus of future studies would be on those cases where certification is being implemented in small-scale fisheries. Some of the key issues concerning food security and economic benefits are described above, although further work may explore other issues, including the gendered impact of certification.¹¹² A less obvious focus, but equally important, is the social and economic consequences of certification in industrial fisheries, including controversial in-shore fisheries where industrial and artisanal

fisheries co-exist. Ponte's research into the political economy of the certification of South Africa's hake fishery stands out in this field and further studies should build on his analysis. Ultimately it may not be enough to show that certification has environmental benefits if considerable donor support is to be forthcoming. Sustainable fishing in Africa must incorporate human development if it is to succeed. Perhaps this is the key challenge for the growth of certification in Africa.

Notes

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Annexure 1

United Nations Environment Programme

The United Nations Environment Programme (UNEP) is the overall coordinating environmental organization of the United Nations system. Its mission is to provide leadership and encourage partnerships in caring for the environment by inspiring, informing and enabling nations and people to improve their quality of life without compromising that of future generations. In accordance with its mandate, UNEP works to observe, monitor and assess the state of the global environment, improve the scientific understanding of how environmental change occurs, and in turn, how such change can be managed by action-oriented national policies and international agreements. UNEP's capacity building work thus centers on helping countries strengthen environmental management in diverse areas that include freshwater and land resource management, the conservation and sustainable use of biodiversity, marine and coastal ecosystem management, and cleaner industrial production and eco-efficiency, among many others.

UNEP, which is headquartered in Nairobi, Kenya, marked its first 35 years of service in 2007. During this time, in partnership with a global array of collaborating organizations, UNEP has achieved major advances in the development of international environmental policy and law, environmental monitoring and assessment, and the understanding of the science of global change. This work also supports the successful development and implementation of the world's major environmental conventions. In parallel, UNEP administers several multilateral environmental agreements (MEAs) including the Vienna Convention's Montreal Protocol on Substances that Deplete the Ozone Layer, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and

their Disposal (SBC), the Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention, PIC) and the Cartagena Protocol on Biosafety to the Convention on Biological Diversity as well as the Stockholm Convention on Persistent Organic Pollutants (POPs).

DIVISION OF TECHNOLOGY, INDUSTRY AND ECONOMICS

The mission of the Division of Technology, Industry and Economics (DTIE) is to encourage decision makers in government, local authorities and industry to develop and adopt policies, strategies and practices that are cleaner and safer, make efficient use of natural resources, ensure environmentally sound management of chemicals, and reduce pollution and risks for humans and the environment. In addition, it seeks to enable implementation of conventions and international agreements and encourage the internalization of environmental costs. UNEP DTIE's strategy in carrying out these objectives is to influence decision-making through partnerships with other international organizations, governmental authorities, business and industry, and non-governmental organizations; facilitate knowledge management through networks; support implementation of conventions; and work closely with UNEP regional offices. The Division, with its Director and Division Office in Paris, consists of one centre and five branches located in Paris, Geneva and Osaka.

ECONOMICS AND TRADE BRANCH

The Economics and Trade Branch (ETB) is one of the five branches of DTIE. ETB seeks to support a transi-

tion to a green economy by enhancing the capacity of governments, businesses and civil society to integrate environmental considerations in economic, trade, and financial policies and practices. In so doing, ETB focuses its activities on:

1. Stimulating investment in green economic sectors;
2. Promoting integrated policy assessment and design;
3. Strengthening environmental management through subsidy reform;
4. Promoting mutually supportive trade and environment policies; and
5. Enhancing the role of the financial sector in sustainable development.

Over the last decade, ETB has been a leader in the area of economic and trade policy assessment through its projects and activities focused on building national capacities to undertake integrated assessments – a process for analyzing the economic, environmental and social effects of current and future policies, examining the linkages between these effects, and formulating policy response packages and measures aimed at promoting sustainable development. This work has provided countries with the necessary information and analysis to limit and mitigate negative consequences from economic and trade policies and to enhance positive effects. The assessment techniques and tools developed over the years are now being applied to assist countries in transitioning towards a green economy.

During the past decade, ETB has intensively worked on the issue of fisheries to promote integrated and well-informed responses to the need for fisheries policies reform. Through a series of workshops, analytic papers and country projects, ETB particularly seeks to improve the understanding of the impact of fisheries subsidies and to present policy options to address harmful impacts.\

PROJECT ON “PROMOTING SUSTAINABLE TRADE, CONSUMPTION AND PRODUCTION PATTERNS IN THE FISHERIES SECTOR” (2006-09)

This Norway-funded project is led by ETB and implemented in cooperation between ETB and SCP. It aims to assist and strengthen the capacities of governments and stakeholders to promote the sustainable management of fisheries and to contribute to poverty reduction. It further seeks to promote the role and capacity of the private sector, including industry, financial institutions, local fishing communities to adopt appropriate environmental standards and practices in their operations, and encourage the creation of public-private partnerships that

develop effective marketing strategies for a sustainable production and consumption of fish products.

The work consists of a set of national and international capacity-building initiatives focusing on promoting fisheries subsidies reform at national and international level, as well as voluntary private sector initiatives, including certification and sustainable supply-chains. The work carried out within this frame includes analytical studies on issues discussed at the WTO, as well as on challenges and opportunities of voluntary private sector initiatives; country projects for capacity building and awareness raising at national level; and workshops at international and regional level to support trade negotiators and raise awareness among national policy-makers, as well as among private sector representatives.

For more information on this project, please contact:

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