

MOODY MARINE LTD

SOUTH AFRICAN HAKE TRAWL
FISHERY

REVIEW OF MSC CERTIFICATION REPORT

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JANUARY 2004



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Acronyms

CPUE	Catch Per Unit Effort
EEZ	Exclusive Economic Zone
MCM	Marine and Coastal Management (of the Dept. of Environmental Affairs and Tourism)
MCS	Monitoring, Control and Surveillance
MPA	Marine Protected Area
MSC	Marine Stewardship Council
NGO	Non Governmental Organisation
RSA	Republic of South Africa
SADSTIA	South African Deep-Sea Trawling Industry Association
SSB	Spawning Stock Biomass
UCT	University of Cape Town
WWF	World Wildlife Fund

1 INTRODUCTION

This is a review of the draft certification report for the South African Hake Trawl Fishery (ref. 015-013 v1) by Moody Marine Ltd. (the 'Certification Body') for their client, the South African Deep-Sea Trawling Industry Association (SADSTIA - the 'Applicant') received on December 18, 2003.

This scope of this review is limited to the following:

- The factual basis of the main report
- The consultation of stakeholders and addressing of stakeholder concerns
- The sufficiency of scope and rigour of the scoring indicators and guideposts used in the assessment, in relation to the MSC standard and the fishery in question
- The appropriateness of weightings and scores allocated
- The suitability of the conditions attached to certification.

No attempt has been to 'rescore' the fishery, although comments on the Certification Body's weighting and scoring have been included.

The primary materials used in this review include (i) the draft Certification Report and (ii) the associated scoring table. Other reference material is listed in Appendix A.

This review has been prepared by Graeme Macfadyen (the 'Reviewer'), a director of Poseidon Aquatic Resource Management Ltd.

2 THE FACTUAL BASIS OF THE MAIN REPORT

The draft Report is generally robust and demonstrates a detailed understanding of the fishery and the socio-political environment in which it operates. A number of minor points are identified below and clarifications sought.

Geographical area (Section 1.1, p5): The geographical area for the fishery considers that the South African and Namibian stocks are managed as discrete stocks and that certification covers the South African stocks alone. However there is some evidence from surveys (see Strømme, 1996) that, since 1990, there has been a gradual migration or expansion of *Merluccius paradoxus* northwards into Southern Namibia and farther north. It is suggested that this is explored further and further clarification of the rationale for separate stock management is provided.

Fishing Fleet (Section 2.3): Given Government policy pressure to widen access to the hake resource combined with the need to retain sustainability, greater detail on the current fishing effort directed at the offshore and inshore stocks would be useful. This might include (i) a company-by-company breakdown of those currently licensed to fish the resources, (ii) how the TAC is allocated within these companies and (iii) the implications for/of further access rights.

Stock assessment (Section 4): various trends on CPUE and biomass estimates are provided in this section. However a graphical presentation of time-series data in major trends (i.e. CPUE, SSB, F and recruitment, etc.) would aid the reader.

Fishery management (Section 5.3 MCS): clarification on the following would be useful:

1. Are MCM inspectors ever present at landing points to verify landings?
2. What elements of catch size and composition are reported and verified? Is this effective in reducing catch misreporting?
3. What proportion of vessels are using Vessel Monitoring System (VMS) equipment, what is the legislative requirement for VMS, and what is the anticipated roll-out?

3 CONSULTATION WITH STAKEHOLDERS AND ADDRESSING THEIR CONCERNS

3.1 STAKEHOLDER CONSULTATION

It would be useful if the 51 stakeholders identified and consulted by the Assessment Team were detailed, together with their interests in the fishery.

3.2 STAKEHOLDER ISSUES

Only two areas of stakeholder concern were identified by the assessment team:

3.2.1 Rights Allocation

The mid-term four year rights allocation has evidently required considerable management time of MCM and other regulatory and control organisations. As reflected in the Scoring Table this, together with the migration of technical staff out of MCM, has impacted this organisation's capacity for research and management. Although this has been addressed in part through strategies such as outsourcing to external organisations (such as UCT and Rhodes University), it would be useful to know the longer-term management capacity implications of (i) further rights allocation (esp. to smaller, less experienced companies) and (ii) institutional change for the effective research and management of the hake fishery.

3.2.2 Nature Conservation

Concerns over nature conservation issues seem to be limited mainly to bird-related impacts. It might be useful to know what other nature conservation issues were raised (as per the scoring table) and how they were dealt with.

4 THE SUFFICIENCY OF SCOPE AND RIGOUR OF THE SCORING INDICATORS AND GUIDEPOSTS

The scoring indicators relating to the Principles and Criteria of the MSC standard have been well developed to ensure that they reflect the particular nature of this trawl fishery. I have a few comments to make on the individual indicators and their guideposts:

4.1 PRINCIPLE 1

- 1.1.2.5: Maybe 'the area' in this criteria should be better delineated i.e. does it include the Namibian / RSA transboundary region?

4.2 PRINCIPLE 2

- None

4.3 PRINCIPLE 3

- As a general point, there seems to be limited recognition of the transboundary nature of the hake resource and potential benefits of having some level of shared management with Namibia. I recognise they are managed as separate stocks (with some considerable historical justification) but equally there is evidence that some degree of transboundary co-management is justified (see Sumaila *et al*, 2003).

5 THE APPROPRIATENESS OF WEIGHTINGS AND SCORES ALLOCATED

The weightings within **Principle 1** correctly reflect the importance of the need to rebuild the depleted stocks. The equal weighting at the third and fourth levels are also considered appropriate.

The weightings for **Principle 2** are also considered satisfactory. This includes the equal weighting of the three criteria at the 2nd level and the similar weighting at the 4th level. The higher weighting for the availability of strategies to address impacts at the 3rd level also seems well justified.

The weightings for **Principle 3** are also reasonable. The raising of the importance of the legal and rights issue is particularly relevant, although I personally consider compliance and MCS to be equally important (although this is weighted at the next level down).

In general I feel that the scoring awarded is objective and fair, and certainly not overly generous. However, I have the following specific comments on the scoring:

5.1 PRINCIPLE 1

- 1.1.1.3: This analysis does not mention the potential for mixing across the Namibian / RSA border. As mentioned previously, there are indications of some transboundary migration (presumably being investigated through the BENEFIT programme mentioned in the text).
- 1.2: Given the uncertainty of the relative status of the two stocks, and the possible implications of the Rights Allocation programme I am surprised this scored so highly (although it is undoubtedly above the 80 mark).

5.2 PRINCIPLE 2

- 2.1.1.1: Although the physical nature of the habitats is reasonably well understood, I don't think there is complete knowledge about its sensitivity and how this varies through the fishing area. Therefore a score of 100 might be difficult to justify.
- 2.1.1.4: Scoring is fine but the term "Also, all of the main elements" is possibly misleading – does this literally mean that all the main elements of ecosystem functioning are not fully understood or maybe it should read "Also, not all of the main elements ..."
- 2.1.2.2: I have some concerns over the level of detail on discarding. Discarding (for what ever reason – including high-grading) is obviously a major risk from a bottom trawl fishery. It is evident that this only recently has been raised as an issue (the only quoted reference is the Rhodes University studies (References R31-R33, which are undated on page 8-9 of the report), with both high grading and discarding both considered as historical issues with this fishery (see Lux Development, 2002). More evidence might therefore be needed to confirm that discarding/high-grading occurs at acceptable levels and are discouraged by both operator policy and operational incentives. One of the potential implications of the industrial fishing companies being so well-developed in terms of vertical integration and their marketing skills, is that they may fish for, and sell into very discrete market niches. This can require targeted fishing of specific size-grades to match processing and marketing requirements, and may be a cause of discarding.
- 2.1.3.1: This is again realistically well scored. However the whole issue of the particular physical impact of trawling on benthic habitats is not mentioned at all in the draft

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Report, although it is well covered in the Scoring Tables. This unbalance, esp. for a trawl fishery, would seem strange.

- 2.1.3.2: It is accepted that trawl gear losses are relatively infrequent but clarification on (i) the historic record of such losses (inc. successful gear recovery attempts) and (ii) a brief description of the fate of non-recovered gears to justify that they do not 'ghost fish' or smother habitats.
- 2.2.1.2: A little more information of the results of the effects of the fishery on seals would be useful, including any observer reports.
- 2.3.1.2: The second para, first sentence is slightly misleading. Does this mean that the hot spots are being fished excessively for a non-target species aggregation (which would seem unusual for this fishery) or that non-target species aggregations might be considered a high risk (i.e. appearing as by-catch)?

5.3 PRINCIPLE 3

- 3A.1.2: It might also be worth noting here on staff issues that the MCM compliance and MCS sections have been significantly increased in recent years. While new staff have been brought in who may have had little previous MCS experience, a good MCS management structure is now in place, better than in previous years, and significant training programmes are now underway of observers and inspectors.
- 3A.2.3: It is worth noting here that there were no customary historical deepsea trawling rights (see also Section 2.2 of the Report). The deepsea trawl fishery was pioneered by the (white) industrial industry at the turn of the century, and did not have customary rights that were taken away during apartheid (although obviously new black entrants were effectively precluded from the fishery prior to 1994).
- 3A.8.2: Some reference to the observer programme might be appropriate here, esp. as a deterrent to discarding and high-grading.
- 3B.5.2: The statement that compliance offshore is "difficult to monitor" seems to, albeit only slightly, contradict the score in 3A.8.2 (i.e. 75 against 85).

6 THE SUITABILITY OF THE CONDITIONS ATTACHED TO CERTIFICATION

Although no pre-conditions for certification have been set, six conditions, with associated timetables, have been set to address the areas of weakness as determined by the scoring indicators (i.e. those that scored less than 80).

In general, it is considered that these conditions are warranted and address many of the weaknesses identified by the report (and indeed flagged up in this review). Comments are made individually below:

6.1 CONDITION 1: BY-CATCH

This condition is a welcome recognition of the recent Government and industry concern over by-catch. As such, it provides a reasonable requirement through the implementation of a by-catch management plan within 18 months. It may also be worth considering specifically measures to monitor and where necessary, control the discarding of by-catch, either as unwanted species or in the form of high-grading. Whilst it is acknowledged that some of the larger companies utilise/tore unwanted species for conversion into fish meal (at sea or on land), this

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practise may be less common in smaller vessels fishing shallower areas, where by-catch levels might be higher and there is reduced on-board capacity for storing this unwanted material.

6.2 CONDITION 2: STRUCTURE OF STOCK

Rather outside my field of competency but the recognised need for evaluating both species is considered appropriate.

6.3 CONDITION 3: ECOSYSTEM RELATIONS

The current understanding of the ecosystem impacts of this dominant predator in the demersal niche are recognised as warranting improvement – as such this condition is welcome and the two year time frame appears realistic.

6.4 CONDITION 4: EFFECTS OF TRAWLING ON BENTHIC HABITAT

Given that little is known of the sensitivity of offshore environment to trawling, again this condition is welcome. It is noted that whilst there are currently no place for offshore marine protected areas (MPAs), the industry could assist by providing useful information to MCM (and their advisers) on the nature and distribution habitats impacted by trawling and allow an assessment as to whether any specific areas might need particular protection. The timing of the sub-conditions (a-d) appear realistic.

6.5 CONDITION 5: EXTERNAL REVIEW

The implementation of external reviews is welcomed, especially as the mechanisms are already in place. It might be suggested that the reviews are opened up to regional participation (i.e. with Namibia).

6.6 CONDITION 6: COMPLIANCE MONITORING

Again, this appears to be a highly necessary condition, especially for the offshore sector. With the opening of the sector to new entrants, it is important to ensure that compliance remains good across the sector. It might be suggested that corrective actions for non-compliance could extend to include (i) greater observer coverage and other MCS techniques such as (ii) electronic logbooks linked to VMS, (iii) the extension of VMS use to smaller vessels and (iv) increased cross-checking of recorded versus landed/processed catches, rather than the training/education/awareness actions covered by the condition at present.

7 ERRATA

Provided below is a list of spelling, grammatical and logical errors:

7.1 DRAFT REPORT

Section/page no	Error / Suggestions
Throughout	Consistent use of the , separator between thousand units
2.2, p12, para 6	Non-separation of words i.e. tonsless (Line 2), 'inshorethe (line 10), 1999with (Line 12)
5.3, p27, para 3, line 3	Replace 'logbooks top MCM' with 'logbooks to MCM'.

7.2 SCORING TABLE

Section/page no	Error / Suggestions
1.1.1.3, p2, para 2	\ inserted in front of "Orange River"

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1.1.3.1, p7, para 2	First sentence does not make sense.
2.2.2.1, p27, para 1	Full stop required between “required This”
2.3.1.1, p28, para 1	“Such as kingklip on the wet coast” (presumably should be west coast)
3A.1.1, p31, para 1, l4	“The recent nature of some of the of legislation” should be “The recent nature of some of the legislation”
3A.2.3, p34, para 2	Join last two sentences as one.
3A.3.2, p35, para 1	Second sentence needs review.
3A.8.1, p43, para 1	“Training education systems also exists” (should be “exist”)

The report also lacks a list of the extensive acronyms used.

Appendix A: References and Bibliography

Lux Development (2002). Monitoring, Control and Surveillance in South Africa. Working Paper No. 9 (dated December 2003) as part of the SADC Monitoring, Control and Surveillance of Fisheries Activities Programme. Windhoek, Namibia pp 114

Strømme, T. (1996). An overview of hake research undertaken in Namibian waters by the Dr Fridtjof Nansen Programme. In ‘Proceedings of the Seminar and Workshop The Benguela Current and Comparable Eastern Boundary Upwelling Systems’, Swakopmund, Namibia, May 1995: 100-107.

Sumaila, R., C. Ninnes and B. Oelofsen (2003). Management of Shared Hake Stocks in the Benguela Marine Ecosystem. Paper presented at the Norway-FAO Expert Consultation on the Management of Shared Fish Stocks, Bergen, Norway, 7-10 October 2002. FAO Fisheries Report No. 695, Supplement FIPP/R695.