

Contextualising illegal, unregulated and unreported fishing of marine resources in South African waters

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Introduction

There can be little doubt that South Africans enjoy their seafood. One need only look at the increase in the number of seafood and sushi restaurants along the South African coast and in the larger in-land urban centres. South Africa's growing love for seafood is not a unique national phenomenon. Global seafood consumption has also increased. In 2000, some 96.9 million tons of seafood were consumed by the world's population of 6.1 billion people (FAO 2006). This equated to a *per capita* consumption of 16kg. By 2005, the world consumed 107.2 million tons of seafood, representing a 10.6% increase, while the global population grew by 6.5% to 6.5 billion people. Per capita consumption of seafood in 2005 was the highest in recorded history at 16.6kg (FAO 2006).

The significant increase in global seafood consumption occurs in a period when regulated and legal wild fish harvesting and production is in decline and dire warnings are being sounded that overfishing, illegal fishing and climate change are severe threats to seafood protein food security. One need only be reminded of the fact that since 1987, when annual human consumption of our planet's resources first outstripped the ability of our ecosystem to replenish itself, the annual global ecological debt day is reached earlier and earlier each year, ecological debt being the point during the year at which consumption exceeds the availability of resources. In 2006 ecological debt was reached on 9 October.

Between 2000 and 2005 total wild fish production declined from 95.6 million tons (101.35% of global seafood consumption) to 93.8 million tons (114.28%). In the same period, we are advised that aquaculture production increased from 35.5 million tons (36.6% of global seafood consumption) to 47.8 million tons (44.5% of global seafood consumption).

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This increase in global seafood consumption is largely attributed to the positive image seafood receives in the media and among health care professionals because of the beneficial powers of omega-3 fatty acids and because it is a low-fat and traditionally affordable source of protein (The Seafood Choices Alliance 2007). Per capita trends regarding the consumption of fish indicate that regions that have overfished their stocks – predominantly the wealthy industrialised regions, such as the European Union, North America and Oceania – continue to access the bulk of the world's fish. Per capita consumption in the industrialised nations stood at 29.7kg in 2003 while in Africa the figure was 8.2kg (FAO 2006). In Europe per capita seafood consumption is approximately 26kg, well above the global average of 16kg. Americans consume 21.3kg per capita and the Japanese, with a diet that includes fish for breakfast, lunch and dinner, consume 65.6kg per capita per year! (The Seafood Choices Alliance 2007).

The trade in global seafood and fish products is worth more than R480 billion annually according to the Food and Agriculture Organisation of the United Nations. In South Africa, wild commercial fisheries had a landed value of approximately R4,4 billion in 2006 (Feike Natural Resource Management Advisers, hereafter Feike n.d.). Commercial fishing vessels landed a reported catch of 636 600 tons of fish across 22 commercial fisheries (Feike n.d.). This compares with reported landed catches of 835 000 tons of fish in 2005 with an estimated value of R5,1 billion (Feike n.d.). In 2006, South Africa exported approximately 18% of its fish or fish products worth an estimated R787 million and imported fish to the value of R54 million (Department of Trade and Industry 2007). The remaining 82% of seafood is either consumed domestically or processed into fishmeal and fish oil.

The South African commercial fisheries employ approximately 43 000 people directly. Investments in fixed assets have an insured value of approximately R12 billion. More than 2 990 commercial fishing right holders deploy some 1 400 fishing boats each year in South Africa's exclusive economic zone (EEZ) (Feike n.d.).

The commercial future of the South African fishing industry is increasingly dependent on the sustainable utilisation and sound management and conservation of its wild marine living resources. It is in South Africa's interests to ensure that the exploitation of marine living resources within its EEZ takes place in a sustainable manner and that unsustainable fishing practices are reduced, or alternatively eliminated in their entirety.

The nature of illegal, unregulated and unreported (IUU) fishing in South Africa

What is IUU fishing?

The 1995 United Nations FAO Code of Conduct for Responsible Fisheries defines IUU fishing according to its component parts.

Illegal fishing refers to activities that are:

- conducted by national or foreign vessels in waters under the jurisdiction of the state, without the state's permission or in contravention of its laws and regulations;
- conducted by vessels flying the flag of states that are party to a regional fisheries management organisation (RFMO) but operate in contravention of the conservation or management measures adopted by that organisation; or
- in violation of national laws or international obligations.

Unreported fishing refers to activities that are:

- not reported or are misreported to the relevant national authority in contravention of national laws and regulations; or
- undertaken in the area of competence of a relevant RFMO that has not been reported or misreported in contravention of the reporting procedures of that organisation.

Unregulated fishing refers to activities that are:

- in the area of application of a RFMO that are conducted by vessels without nationality or by those flying flags of states that are not party to that organisation; or
- in areas or for fish stocks in relation to which there are no applicable conservation or management measures and where such fishing activities are conducted in a manner inconsistent for the conservation of living marine resources under international law.

It is important to note that the component parts are not mutually exclusive. In fact, *unregulated fishing* amounts to *illegal fishing* as it is in breach of either domestic or international law. IUU fishing is often synonymous with straightforward poaching, as it is commonly understood. It usually takes the form of fishing without authorisation and may be carried out by nationals or foreigners and national or foreign vessels. These vessels may be completely unlicensed or may be licensed to fish in an adjacent jurisdiction. Illegal fishing may also involve vessels fishing in areas for which they have a license. In this situation the illegality results from breaches of the rules governing fishing practices. It could include the use of banned gear, overfishing, fishing in closed areas, exceeding by-catch limits or failing to report accurate data. IUU fishing also involves complex webs of actions and entities and is not limited to the illegal harvesting of fish, but includes the shipment,

processing, landing, sale and distribution of fish and fish products. Usually it is not the harvesting vessel that unloads its cargo in ports. Rather, transactions take place at sea, with fish transferred from a harvesting vessel to other vessels, such as factory ships. The catch can be divided among numerous processors, brokers or importers and multiple marketers can be involved, making it difficult to track.

IUU fishing thrives where governance is weak and countries fail to implement domestic laws and policies, adhere to international agreements and implement international law.

IUU fishing in South African fisheries

The most recognisable and immediate threat to the commercial viability of wild fisheries in South Africa, and indeed across the globe, is that of IUU fishing. There appears to be a “panic” in a number of regions to implement measures to curb IUU fishing. For example, on 17 October 2007, the European Commission unveiled its intention to deny IUU fishing vessels and their products access to any European port. The European Commission has estimated that IUU seafood to the value of approximately R10 billion enters the EU via its members’ ports annually (Worldfish Report 2007). In August 2007, the Southern African Development Community’s Secretariat decided to rekindle, as a matter of urgency, a Regional Ministerial Conference on IUU fishing, which was initially proposed in May 2002 and again in December 2004.

In South Africa, IUU fishing has been blamed for the collapse of the traditional line fishery, abalone and Patagonian toothfish stocks. More recently, IUU fishing has also impacted on the viability of South Africa’s largest fisheries, namely hake and pilchards. There are also increasing numbers of reports of an “IUU creep” in the South African lobster and shark industries. Although this paper will analyse more closely the ecological, social and economic impacts of IUU fishing on a number of these fisheries, it may be useful to introduce briefly the context of the crises affecting them.

The traditional line fishery

The traditional line fishery is South Africa’s oldest fishery, dating back to the 1500s. Traditional line fish species are fished by commercial and recreational fishers. More than 500 000 South Africans and tourists purchase annual recreational line fish permits and some 3 000 commercial linefishermen take to the seas each commercial season to harvest species such as yellowtail, snoek, stumpnose and others. By 2000, the South African Minister of Environmental Affairs and Tourism, Mr Mohammed Valli Moosa, was convinced that due to decades of overfishing, poor enforcement and simple poaching, the fishery faced an ecological crisis. Of the commercially harvested line fish stocks, 19 species of fish were classified as

having “collapsed” and approximately 50 more are classified as being “overexploited”. Although the fishery was not closed to commercial fishing, it became a criminal offence to harvest any of the “collapsed” species. In addition, the recovery of collapsed and overexploited species, including South Africa’s national fish, the galjoen, was considered a priority. A number of strategies were implemented including a traditional line fish recovery plan, which focused on severely curtailing the extraction of overexploited stocks and the recovery of stocks in marine protected areas, such as the Tsitsikamma, St Lucia and De Hoop Marine Protected Areas.

Abalone fishery

IUU fishing of abalone stocks is perhaps the best-documented and most popular example of how a fishery collapsed due to poaching. Abalone is a popular target for poachers because of its exceptionally high demand in South East Asia, which is the destination for more than 95% of South Africa’s legally and illegally harvested abalone, as well as the farmed abalone stock. Its demand in South East Asia is complemented by the fact that it is also a lucrative commodity in South Africa, where its sale pays for drugs, human trafficking for prostitution, counterfeit products and organised crime more broadly. The poaching of abalone has rapidly increased: the demand for South Africa’s white-shelled *haliotis midae* escalated with the continued boom of both the Hong Kong and Chinese economies. Demand for abalone in Hong Kong, China and other South East Asian nations has increased by an estimated 20% annually between 2004 and 2007.² The growth of the South African abalone market in South East Asia has occurred against a backdrop of a collapsing total allowable catch for legal abalone right holders in South Africa and a stagnating abalone farming industry, which produces an average of 900 tons of abalone annually. The legal and regulated South African abalone industry – both wild and aquaculture – could have marketed a maximum of 1 025 tons (shell weight) of *haliotis midae* to China and Hong Kong during 2006. However, it is understood that Chinese and Hong Kong consumers purchased approximately between 2 000 and 2 500 tons (flesh weight³) of South African abalone in 2005 and 2006.⁴ These numbers are supported by anecdotal reports by South African law enforcement officials, conservation groups and members of the abalone industry that only about 10% of poached abalone is confiscated by South African authorities. Research undertaken by Feike during 2006 and 2007 shows that in

² Research undertaken by Feike, involving telephonic interviews with Chinese abalone buyers and marketers, as well as interviews with South African abalone processors and marketers.

³ “Shell weight” is roughly three times heavier than “flesh weight”.

⁴ Research undertaken by Feike, involving telephonic interviews with Chinese abalone buyers and marketers.

2006, South African authorities confiscated about one million units of abalone⁵ with a value of between R80 and R100 million.⁶

Patagonian toothfish

The poaching of South African fish stocks is not reserved to its inshore waters by any means. The poaching of Patagonian toothfish or, as it is known in North America, Chilean seabass, has only recently been brought under some degree of control thanks to significant coordinated interventions by the regional fishery management body, the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), a number of coastal states, consumers of toothfish and toothfish quota holders. This coordinated strategy, which has focused on consumer education, Port State Control Measures and the Catch Documentation Scheme, requires the integral support of coastal states and has resulted in a reported reduction in the number of IUU incidents involving Patagonian toothfish, including a reduction in the substantial death of seabirds such as albatrosses caught on toothfish long lines.⁷ However, a reduction of toothfish poaching must not be equated with its elimination.

During the late 1990s, it was estimated that IUU fishing for toothfish in South African waters netted 32 000 tons over a two-year period, with as many as 13 IUU vessels operating at one time (Moolla 2005). Thirty-two thousand tons of toothfish is worth an estimated R2,6 billion. The current annual sustainable total allowable catch limit set by the South African government has remained at 450 tons for the last three seasons. This is a further indication that perhaps IUU fishing of toothfish has either declined or stabilised in South African waters. The difficulty in determining the current extent of IUU fishing of toothfish in South African waters is that South Africa is no longer able to afford to regularly deploy its offshore patrol vessel to the toothfish fishing grounds in the vicinity of the Prince Edward Islands. It is also due to the failure of the South African government to conclude formal resource sharing arrangements with other countries that have similar interests and obligations in the Southern Ocean, such as France and Australia.

Hake fishery

The South African hake fishery is the country's most important and valuable fishery. Hake fishing can be undertaken by deep-sea trawlers, inshore trawlers, by hand

⁵ One million units of abalone are equivalent to roughly 330 tons (shell weight) or 110 tons flesh weight.

⁶ This value has been disputed by the Department of Environmental Affairs and Tourism. The Department stated in Cape Town's *Saturday Argus* (Page 6, 10 November 2007), that "...only a meager R42 million" was earned from confiscated abalone during 2006. However, various newspaper reports contradict this assertion. In October 2007, the *Cape Argus* reported that the South African government led evidence against poachers in court and stated on oath that during 2006 one million units of abalone worth R130 million were confiscated by enforcement officials.

⁷ See further www.colto.org

line or by long line. There are therefore effectively four separate fisheries, each subject to its own set of rules and regulations. Of the four hake fisheries, the deep-sea trawl fishery is the most lucrative and important. The legal catch was worth an estimated R2.1 billion in 2006. The fishery employs slightly more than 9 000 people on boats and in factories. The hake fishery has traditionally been well regulated and well managed. The sustainable management of the South African hake deep-sea trawl fishery resulted in it being awarded Marine Stewardship Council Certification in 2004. However, subsequent to the allocation of 15-year commercial fishing rights in 2006, the hake fishery has attracted the attention of a number of Spanish operators seeking to enter and control the trawl fishery. The dubious fishing practices of the Spanish coupled with the increasingly visible impacts of overfishing of hake in Namibia and the changing ecology of the Benguela Current, have sounded alarm bells. The South African hake trawl total allowable catch has declined from 124 500 tons in 2006 to 112 700 in 2007 and the projections are that the TAC will have to be reduced regularly in the near term. The reduction in the total allowable catch between 2006 and 2007 is estimated to have cost the industry between R200 million and R230 million.

Sharks

As South African abalone stocks become harder and harder to find due to excessive levels of poaching, poachers have increasingly redirected their energies toward poaching sharks and west coast rock lobsters. Historically considered as “niche poaching”, the poaching of sharks for shark-fin soup has expanded to killing sharks for their jaws. There has been an increase in the number of reports of shark carcasses being found with their jaws removed. Shark jaws are reported to fetch up to US\$50 000 each. In 2006 a raid on storage facilities in Cape Town Harbour resulted in the confiscation of 7.3 tons of shark-fins, which had a value of approximately R5 million. Shark-fin soup may fetch up to US\$1 500 per serving in Asian restaurants.

Are we able to quantify the value of South African fish stolen?

In February 2006, the *Cape Argus* led with a front-page headline “R4 400 000 000 – Poachers’ Mammoth Catch”. The story was based on research undertaken by Feike on the value of poaching in the South African abalone and Patagonian toothfish sectors. The research concluded that the value of fish stolen from just these two fisheries in 2005 may have been worth R4,4 billion, which is greater than the total value of the entire South African commercial fishery (Moolla 2005). If one adds to that figure the value of hake, small pelagics⁸ and shark that are

⁸ In 2004, Marine and Coastal Management uncovered a massive pilchard poaching syndicate that operated out of Mossel Bay on the Cape South East Coast. The surveillance and subsequent investigations indicated

poached, it may be fair to assume that the value of fish stolen from South African waters may be as high as R6 billion annually.

However, the cost of the poaching cannot be restricted to only the value of fish taken. There are ecological costs and social costs too. The unregulated removal of vast amounts of fish from the marine environment has significant adverse impacts on the ability of the ecosystem to function and recover. Calculating the ecological costs may be near to impossible and extremely expensive, but South Africa has done it before. After successfully prosecuting Mr Bengis, the Managing Director of Hout Bay Fishing Industries (Pty) Ltd, in a US Federal Court in 2003, the South African government appointed a specialist to calculate the ecological costs of Hout Bay Fishing Industries' extensive theft of South Coast rock lobster stocks. Essentially, the trick is to rationally determine what the biomass of the stock would have been had it not been subjected to the poaching and then what the total allowable catch limits would have been set at. In 2004, the South African government successfully petitioned a US Federal Court to allow it to proceed with a claim of US\$90 million against Mr Bengis for ecological damage to the South Coast rock lobster stock.

What about the social costs? Poaching results in job losses. This was the case with Hout Bay Fishing Industries, where more than 150 jobs were lost when the company was liquidated and its fishing operations terminated. Alternatively, where the IUU fishing is so extensive, the applicable authorities are forced to close the fishery in an attempt to save it from biological extinction and this, too, means job losses. The South African government is currently considering the closure of the abalone fishery, which will result in the loss of more than 1 000 direct jobs. The social costs are not simply restricted to job losses, but as is the case with abalone, the closure of the fishery and the subsequent loss of jobs could simply fuel a range of crimes and anti-social behaviour, such as poaching, gangsterism, prostitution, drug use, assault, rape and murder.

Understanding the causes of IUU fishing

Understanding the causes of IUU fishing in South African fisheries may be depressingly easy. The reason IUU fishing continues to flourish is that measures that have been thrashed out and agreed to at untold numbers of national, regional and international gatherings simply do not get implemented. It really is that simple.

The common underlying reason why people resort to stealing fish, whether inshore, offshore or on the high seas, is simply that it can then be sold on and traded for

that as much as 200 000 tons of pilchards were harvested illegally by a number of quota holders during one fishing season. The amount of 200 000 tons was equivalent to 50% of the pilchard TAC in 2004 and worth more than R600 million. In 2006, the pilchard TAC was slashed by 48% due to overfishing. The pilchard TAC is currently set at 164 436 tons, down from 400 000 tons in 2004.

commodities at fantastic profits. Money, and ultimately greed are the foundational reasons for IUU fishing. Unfortunately, there is a further component – one that is emotive – and which complicates the picture, particularly if one analyses the reasons why fathers and even mothers in the Cape Overberg resort to poaching abalone. On one hand, the “abalone bosses” – the Triad leaders and gangster bosses – are involved in abalone poaching because of sheer greed and the need to pay for illicit and legitimate goods and services, ranging from drugs and human trafficking to luxury vehicles, children’s branded clothes and private school fees. At the other end of the scale are the actual poachers – the Hawston and Gansbaai mothers and fathers, who are unemployed, in all probability addicted to drugs and alcohol and also involved in various forms of illegal activity, which could range from car-jacking and house robberies to prostitution. To pay for their drugs and alcohol, and even perhaps their rent and groceries, they fall prey to the organised structures of the Triads and other gangs.

Not *all* unemployed people in the Overberg become poachers, but high levels of unemployment, drug addiction and alcoholism do provide the Triads and local gangs with an almost endless supply of poachers, who can be easily replaced. Once we understand and accept that ordinary poachers, whether their catch is lobster, line fish or abalone, poach out of economic and social necessity, it should be sufficiently convincing to direct resources largely at those who “employ” the poachers and are involved in poaching for sheer economic benefit and greed. The reasons are three-fold. First, the “employers” are fewer in number: there is not an endless supply of them. Second, remove the “employer” paymaster and you immediately remove the funder of the hundreds if not thousands of “poacher employees”.⁹ Third, it is naive and impractical to believe that providing poachers access to low-skilled, low paying jobs or to providing them with low-cost housing will somehow convince them to give up their relatively lucrative tax free incomes and perks. Additionally, the fish stocks simply cannot survive the time that is required for government to fix the social and economic crises affecting the communities, which are the catalysts that lead people into poaching.

If we have regard to the causes of IUU fishing in, for example, the Patagonian toothfish fishery, the owner of a vessel, its captain, engineers and even its crew get involved in IUU fishing because of the tremendous economic benefits that await them when they sell their illegal catches to unscrupulous restaurants, hotels and owners of high-end supermarkets in Europe or North America. Governments, too, bear some responsibility: it is known, for example, that the Patagonian toothfish IUU vessel, the *Chilbo San 33*, recently docked in the Port of Mombassa and offloaded approximately 100 tons of illegally harvested toothfish. How was this possible? Did Kenya not realise that the vessel it allowed into its port was carrying toothfish; that this vessel is listed on both the CCAMLR and COLTO websites as an

⁹ Anecdotal evidence based on interviews by Feike with more than 30 abalone divers and known poachers established that there are between 400 and 500 active poachers between Cape Point and Gansbaai.

IUU vessel; that because the captain of the vessel could not provide the requisite catch authorisation documentation, its cargo was IUU; or that allowing the vessel access to port facilities made Kenya complicit in the support for IUU fishing and the destruction of marine ecosystems?

Case studies: The abalone and hake deep-sea trawl fisheries

Abalone

During the last quarter of 2007, the issue of illegal abalone fishing received unprecedented levels of media coverage, which also allowed for an elevated debate on the causes of, solutions to and socio-economic realities underlying abalone poaching in the Western Cape. During the winter of 2007, the Minister of Environmental Affairs and Tourism announced in his budget speech to Parliament that he was considering closing the commercial abalone fishery should the resource not recover from unprecedented levels of poaching. Nobody really took the Minister's threat seriously, especially since his department successfully avoided meeting the abalone industry to discuss the issue of a possible closure in 2006 and in the first half of 2007. In addition, of course, abalone could not recover between June – when the Minister made his budget speech – and the start of the 2007/2008 abalone fishing season on in November. When on 25 October the Minister then announced – a week before fishing was to commence – that he had decided to suspend the commercial abalone fishery indefinitely because it was threatened with commercial extinction, he cut the last thread of trust between government and the abalone fishing industry.¹⁰ The abalone industry then proceeded to court the following week to obtain an urgent interdict to prevent the suspension. Realising that a fatal legal error had been made by his Department by not consulting with the abalone fishing industry, the Minister announced on 31 October 2007 that the commercial abalone fishery would not be suspended and that 70 tons of abalone could be harvested until the end of January 2008.

South African abalone is generally regarded as one of the finest available. The average price per kilogram on the South East Asian market reflects the demand for it and only Japanese abalone – *Ezo* – regularly commands a higher price. The poaching of abalone is a global phenomenon but nowhere else has this resource been so completely decimated by poaching. The TAC for abalone has continued to be reduced over the last 11 seasons. For the 1995/1996 season, it was set at 615 tons. The current TAC has been provisionally set at 70 tons. For right holders, the cost of putting a crew together and putting a vessel to sea will simply make it unaffordable to harvest their allocations. For most, however, their legal quota will simply be used as a mechanism to launder many more tons of poached abalone,

¹⁰ Interviews conducted by Feike with abalone divers and members of the South African abalone industry.

especially since the relationship with the South African government has been so significantly damaged.¹¹

There is a strange unanimity among social academics, conservationists such as the World Wildlife Fund for Nature and TRAFFIC, scientists, non-governmental organisations, law enforcement agencies and the abalone industry that the intention to close the legal abalone fishery within the current regulatory and governance framework will only allow poaching to flourish. The poaching of abalone, and not its legal commercial harvesting, poses the greatest threat to the viability of South African abalone stocks. Unfortunately, the prospects of abalone stocks being able to recover naturally remain extremely bleak. The reasons are because of the high value of South African abalone and the ever-increasing demand for it, coupled with the fact that the South African government does not have the resources, strategy or skills to significantly halt the poaching of remaining abalone stocks in the Western Cape. In the Eastern Cape, where commercial abalone harvesting has never been properly regulated, locals have simply completely denuded the inshore waters of all abalone and divers have decimated the stocks in deeper waters, to the point where independent scientific researchers off the Cape Recife peninsula near Port Elizabeth were able to find less than one abalone in every square metre.

Curbing the illegal harvesting of abalone has been successfully attempted before in South Africa. In 2001, the South African government took the first bold step to include known poachers of abalone in its regulatory framework by allocating these poachers, together with legal divers, two-year commercial harvesting rights in a bid to determine a long-term strategy to recover abalone stocks. Between 2002 and 2003 abalone divers were invited by the government regulator, Marine and Coastal Management, to advise it on the design of a long-term strategy and policy for the management of abalone. The product was a policy premised on the territorial user rights fishery format, or TURF. The TURF policy allowed for the allocation of 10-year commercial abalone fishing rights to abalone divers who were each allocated a proportion of the total allowable catch that was determined for their geographically defined TURF area. The foundational principle of the TURF strategy was to encourage right holders, who would be supported by fishery control officers allocated to specific TURFs and members of the communities living adjacent to the TURF area, to ensure that poachers were not allowed to operate there. Joint management or co-management of the resource was essential for the success of the strategy, coupled with a sense of resource “ownership” and the knowledge that good management could result in higher future TURF allocations while high incidences of poaching that required a reduction in TURF allocations could mean reduced individual TAC allocations in the future. The policy was readily accepted

¹¹ Interviews conducted by Feike with abalone divers in the Overberg region.

with each TURF area establishing management committees and appointing TURF representatives.

To further support the TURF strategy and anti-poaching initiatives, a dedicated environmental court was opened in January 2003 in Hermanus, which was co-funded and resourced by the Departments of Environmental Affairs and Tourism and Justice. The justifications for such a specialised court were essentially the following: First, the normal magistrates courts were overburdened by more “serious” crimes such as murder, rape and so forth. Second, environmental crimes were not considered as “important” as other crimes by the overburdened magistracy. Third, a specialised environmental crimes court would be able to deal with poaching crimes efficiently and expeditiously and a clear message could be sent to poachers and their bosses. Fourthly, the environmental crimes court would be staffed with properly trained judicial and prosecutorial officers who were experts in environmental law. In its first year of operation, the environmental crimes court recorded a 75% conviction success rate, compared with 10% for environmental crimes in the normal courts. By the end of 2004, the success rate increased to 80%. Further supporting strategies that were put in place in 2003 and the first part of 2004 were an increase in the fine for being in possession of illegal abalone and the establishment of a dedicated anti-poaching unit called the MARINES. The fine was increased from R40 000 to R800 000. The MARINES unit was established as a strategic collaborative partnership between Marine and Coastal Management, the South African Police Service in the Western Cape and the Overberg Local Municipality, which has jurisdiction over the most lucrative abalone fishing areas. The partnership saw the deployment of at least 140 enforcement personnel in the region, the establishment of a 24-hour incident reporting centre and the deployment of a core team of specialised officials available all day, every day, to respond to incidents. In terms of resources, vessels and vehicles confiscated from previous enforcement actions were made available. Within months of the MARINES commencing work, the average number of abalone poaching incidences fell from 36 a week to one a week. The average dollar price paid for South African abalone also increased in China and Hong Kong – a sign that less illegal abalone was making its way to the market.

Responding to the causes of abalone poaching, Marine and Coastal Management (MCM) developed a specialised enforcement unit in 2003, which worked closely with a dedicated group of law enforcement officials from the National Prosecuting Authority’s Scorpions Unit. This collaboration focused on gathering evidence of criminal activity against the known Triads and gang leaders who traded in illegal abalone to fund a range of organised criminal activity. Between 2003 and 2004, a number of abalone syndicate leaders were arrested and jailed. Elizabeth Marx, who controlled syndicates in the Overberg region, was arrested, her assets confiscated and forfeited to the state and she was imprisoned for three years. Jason Ross, who controlled syndicates in the Port Elizabeth area, was also arrested, R40 million of

his assets were forfeited to the state and he was jailed for five years by the Port Elizabeth environmental court that was established in 2004 as a result of the successes of the Hermanus environmental court.

The TURF strategy floundered, however, and poaching rapidly increased by 2005 as the Department of Environmental Affairs and Tourism suddenly decided to halt all funding for the environmental courts, which then closed. The Department also put an immediate halt to the MARINES unit and halted all investigations into Triad and other high-profile gang involvement in the illegal trade in abalone. By the end of 2005 and again at the end of 2006, it was understood that approximately no less than a million units of abalone were illegally harvested. This compares with the estimated 400 000 to 500 000 units that were believed to have been poached during 2003 and 2004.

Neither the Minister of Environmental Affairs and Tourism nor his department offered any explanations as to why these extremely successful partnerships were so abruptly halted. This failure has led to increased speculation that because of the massive cash crisis at MCM, coupled with the fact that the Minister of Finance refused to allow MCM to increase any fees and levies because of its inability to manage its finances¹², MCM increasingly became reliant on the sale of confiscated abalone: the legal industry thus effectively denied it a further 100 tons of a potential income source.¹³ One million units of abalone is conservatively valued at between R80 to R100 million, or one third of MCM's total operating budget. In other words, because MCM relies so heavily on income from the sale of IUU abalone, the legal abalone industry is its most serious competitor.

Various bodies, including WWF, TRAFFIC, Feike Natural Resource Management Advisers and the University of Cape Town's Environmental Evaluation Unit have stated publicly that banning the harvesting of abalone under the current circumstances – characterised by a complete lack of trust and working relationship between government and the abalone industry and affected communities, and an absence of any compliance and socio-economic strategies to mitigate the various consequences of a ban – will only fuel the illegal fishing of this resource.

Hake deep-sea trawl

The demersal hake trawl fishery, which began in the 1890s, is South Africa's most important fishery and, for the last decade, has accounted for approximately half the wealth generated from commercial fisheries. In the 1960s foreign distant water fleets moved into the Southeast Atlantic, leading to substantial over-exploitation of demersal fish stocks off South Africa and Namibia. The International Commission

¹² Based on interviews with staff members at MCM during September 2007.

¹³ Based on interviews with the South African abalone industry and abalone divers from Hawston, Hermanus, Gansbaai and Cape Town during September and October 2007.

for the Southeast Atlantic Fisheries (ICSEAF) was established in 1972 in an attempt to control the rapidly escalating fishery. But it was only the declaration of the 200 nautical mile Exclusive Economic Zone in 1978 and the subsequent exclusion of foreign fleets that enabled South Africa to reclaim its fish resources and begin to rebuild the demersal resources. Until 1978 the demersal fishery was largely unregulated and participants were not restricted by catch limits. An annual total allowable catch was introduced in 1978 and individual quotas were introduced the following year. The fishery was also formally separated into deep-sea and inshore sectors. The deep-sea trawl allocation of the global hake TAC remained remarkably stable until 2004. Between 1978 and 2004 it fluctuated between 140 000 tons and 133 000 tons. However, in 2005, the TAC dropped to 132 000 tons and in 2006 it was set at 124 000 tons. The TAC set for 2007 was the lowest on record at 112 700 tons. Between 1978 and 2004 the TAC varied by 5%. However, between 2005 and 2007 its variation increased to 14%. The South African hake fishery clearly faces a crisis. The TAC was reduced by more than 19 000 tons in three fishing seasons. This reduction would have cost the hake industry approximately R300 million.

The two species of Cape hake contribute 80-90% to trawl catches made on the west coast (mainly deep-water hake) and 60-80% to trawl catches made on the south coast (mainly shallow-water hake). The balance is made up of various by-catch species, many of which are utilised, and on average just over 90% of the catch is retained. The hake deep-sea trawling grounds are widespread on the Cape west coast in waters deeper than 200 metres. On the Cape south coast hake deep-sea trawlers may not fish in water depths of less than 110 metres or within 20 nautical miles of the coast, whichever is the greater distance from the coast, and trawling is focused primarily on two fishing grounds.

The crisis affecting the hake fishery may very well relate to the complicated and ambiguous relationship between Namibian and South African hake and the changing environmental conditions of the Benguela Current. Namibian hake stocks, which are in all probability related to South African hake stocks, have been plundered for decades by South African and Spanish trawl vessels. Namibian hake stocks have all but collapsed. From about 2005, South African hake trawlers started netting unprecedented amounts of baby hake or very small hake. Baby hake has little to no value on the lucrative Spanish market. In 2006 reports started surfacing from quota holders and scientific observers on board vessels that trawlers were dumping between 30% and 50% of their catches because of the huge take of baby hake. This practice of dumping or high grading is illegal and tremendously damaging to the stock because of the high levels of under-reporting.

In addition, the allocation of unreasonably small quotas¹⁴ to a number of hake trawl right holders during the 2005/2006 long-term rights allocation process

¹⁴ The majority of quotas allocated were below 1 000 tons, with a number of quotas allocated under 400 tons. Having regard to the need to reduce the hake TAC until at least 2010, these quotas effectively coerced

attracted the attention of a number of Spanish operators. The Spanish purchase the majority of South African hake but are lawfully excluded from being right holders in the South African fishery in terms of section 18 of the Marine Living Resources Act, 1998, which stipulates that the fishing rights must be allocated to South African persons. The Spanish are currently entering the South African hake fishery through the “back door” and with the blessing of the South African government, which appears to have elected to turn a blind eye. Their strategy is a rather simple one, which is extremely attractive to small hake trawl quota holders. The incentive is simply that of better rates of pay: instead of being beholden to a large South African hake trawl company that will harvest, process and market the fish, the small hake trawl quota holder receive better payment from the Spanish, who receive EU subsidies to keep their vessels operating, even if doing so is ecologically unsustainable, and whose fishing practices are often dubious.

The basic premises of the joint venture agreements between the Spanish vessel owners and South African small quota holders are the following:

1. There is an agreement by the South African right holders that they will have no right to participate in the management and marketing of their quotas, effectively negating the strides made in local capacity building over the past 10 years.
2. The agreement is irrevocable and gives the Spanish vessel owner complete and unfettered control over the quota for its duration. In return the South African right holder is paid on a pre-arranged Rand per ton basis annually. A paper quota is created, which is unlawful in terms of South African law.

The standard practices implemented by the Spanish vessel owners, which makes it profitable and affordable to operate in South Africa and pay the South African right holder the inflated prices being offered, are the following:

1. **Random weight:** The Spanish trawler will dock at Cape Town harbour. Fish is discharged into a cold store, but not weighed. The mass of each random weight carton is then declared to MCM at an average mass, which is usually 30% less than the real average mass. This cargo is then loaded onto a break-bulk reefer ship and transported to Spain, where the fish is weighed. The value of the difference in weight is then deposited into a Spanish bank account for the benefit of the vessel owner. The loss to South Africa is both financial and ecological and will increase with every catch.
2. **Packing of secondary products not being declared as hake:** Spanish vessel owners instruct that by-catch figures declared to MCM are to be inflated. The inflated by-catch is actually hake. These boxes are marked as by-catch species on board the vessel but contain additional coded markings that

the quota holders to become fronts for one or other entity as economic viability as a standalone entity is simply not feasible in such a high-risk and capital intensive fishery.

- signify which grade of hake the box actually contains. These ‘by-catch’ species are included in the export shipment on break-bulk reefer ships where they are sorted into their real categories in the cold stores in Spain. This is fairly easy to detect as large quantities of genuine by-catch are never exported to Spain, where the market for them simply does not exist.
3. The practice of keeping two logbooks: This is a standard and common practise used by distant water fishing Spanish vessels, as taught to Hout Bay Fishing Industries who used the system of two logbooks until being caught. Essentially, this practice involves the Master of the vessel, who carefully maintains two logbooks – one for MCM and another for the vessel owner. The latter records the *actual* catch. It is, after all, in the Master’s interests to carefully record exactly how much fish and of what species was caught as his commission is determined by these records.
 4. Targeted fillet production: The vessels operated by Spanish vessel owners often concentrate their fishing effort on fillets, which are then declared either as by-catch species or H&G (head and gutted) hake in order to circumvent quota restrictions and significantly increase the overall value of the catch.

The above carefully crafted schemes are what have made fishing in South African waters so profitable an option for Spanish vessel owners. The schemes essentially pay the South African right holders for their allocated quotas and all profits are made by poaching on a significant scale. An integral part of this scheme is the use of break-bulk shipments to get the catch transported to Spain, whereafter it is properly sorted and weighed. Since it takes days to offload one of these reefers, checks by regulatory authorities are done on a spot check basis only and offloading goes largely unmonitored. If, for example, containerised cargo were used, checks by the authorities would quickly pick up discrepancies between declared product and what is actually in the container. This was one of the errors made by Hout Bay Fishing Industries (Pty) Ltd, for example.

Feike’s investigations have confirmed that it is substantially more expensive to ship using break-bulk reefers from South Africa. Since MCM has banned true transshipment of catches, the Spanish fishing vessel would have to offload into a South African cold store, transport the fish to the break-bulk reefer, use National Port Authority cranes to load the fish onto the reefer and in doing so, would incur double stevedoring costs – once for offloading the fishing vessel and again for loading the fish onto the reefer. No vessel operator who makes use of the break-bulk reefer does so because it is not cost effective. Since fundamental economics rule out the use of break-bulk reefers, one can only deduce that vessels that make use of its services do so as it is the best means to smuggle undeclared catch (and revenue) from South Africa. The practice is illegal both in terms of South African fisheries laws, as well as under South African Revenue Service and Customs legislation.

Finally, a number of Spanish-owned vessels have already been allowed by MCM to enter the fishery. For example, the vessel *Echelar*, which was removed from the South African fishery registry in 1997 because of IUU fishing, has once again been allowed into the fishery. Even more concerning is the candid acknowledgement by the Department of Environmental Affairs and Tourism in August 2007 that it knowingly allowed a number of Spanish vessels owned by convicted poacher Manuel Martinez¹⁵ into the South African fishery. These actions have caused significant damage to South Africa's international reputation and places in serious jeopardy South Africa's hake trawl fishery MSC Certification and may also place in jeopardy its standing in international and regional fora such as the FAO and CCAMLR. The following is a tabular list of Spanish owned and controlled vessels

Fishing trawler	Year entered South African hake fishery	Registered RSA owner	Beneficial owner
<i>Sandile</i>	2005	Atlanzi Fishing (JV with Lusitania)	Merlus Fishing/Namibia (Julio Lloves/Christian)
<i>Elke M</i>	2005	Partnership between Leon van Niekerk and Boya Chetty	Spanish/Foreign /Namibian (De Gouveia)
<i>Eyodidi (Antares Secondo)</i>	2005	Offshore Fishing	Capensis Trading SL/Spain Vigo (Martinez)
<i>Vesilifia</i>	Sept 2006	Altius Trading	Iberconsa, Vigo/Spain (De Gouveia)
<i>Khulisa Eyethu (Ribadeo)</i>	Feb 2007	Suidor Trawling	Pescanova, Vigo Spain
<i>Antares Prima</i>	March 2007	Shade Wind 16	Capensis Trading SL/Spain Vigo (Martinez)
<i>Echelar</i>	July 2007	Echalar Fishing	Iberconsa, Vigo Spain (Front = De Gouveia)

that have been allowed into the South African hake fishery over the past two years.

Stepping up to the plate: Does the South African government have the will to prevent, deter and eliminate IUU fishing?

¹⁵ Manuel Martinez was convicted of IUU fishing by a South African court in November 2002.

IUU fishing of South African fish stocks may cost the South African economy as much as R6 billion annually. This cost does not, however, take into consideration the massive ecological, social and indirect economic costs that are inevitable.

The ecological costs could be many multiples of the R6 billion annual cost. This was evident from the computation of the ecological cost claim lodged by the South African government against Hout Bay Fishing Industries (Pty) Ltd in 2004. In addition, the ecological costs do not have an annual financial impact only. The loss of stocks due to poaching will adversely affect many future fishing generations and future regional economies dependent on fishing or tourism related to the fishing industry.

The socio-economic costs too will be substantially greater than the pure economic loss. This is particularly evident when one considers how abalone poaching and its relationship to organised criminal activity has so completely decimated entire communities in the Western and Northern Cape due to drug and alcohol addiction, prostitution, violence and loss of education. These impacts will be felt for generations to come.

Accordingly, what measures are in place to prevent, deter and eliminate IUU fishing and accordingly save our fisheries and coastal communities? Sadly, the answer is none. By the end of 2004, South Africa had an international reputation for being a beacon of hope in the fight against IUU Fishing.¹⁶ In July 2004, South Africa reported to the FAO its commitment to the development and implementation of a South African National Plan of Action to Prevent, Deter and Eliminate IUU Fishing (NPOA-IUU Fishing) in accordance with the FAO International Plan of Action to Prevent, Deter and Eliminate IUU Fishing. The NPAO-IUU Fishing has never seen the light of day even in draft form. In addition, South Africa confirmed to the FAO the various measures and tools at its disposal to prevent, deter and eliminate IUU fishing. These measures and tools included the following:

- a comprehensive **compliance and enforcement strategy** that focused on preventive and deterrent compliance;
- the latest **vessel monitoring systems**, which can plot the location, speed and fishing patterns of each fishing vessel in SA waters;
- state-of-the-art environmental **patrol vessels** to protect our 1,5 million square km of EEZ. These vessel were being deployed on an average of 200 days per vessel each year;

¹⁶ South Africa's leadership and interventions in the Hout Bay Fishing Industries matter, the successful high seas arrest of the Patagonian toothfish IUU vessels, the *Viarsa* and *Apache*, and the arrest of IUU vessels in Mozambique's EEZ are some of the more high-profile anti-poaching examples.

- strategic **compliance partnerships** with the Scorpions, South African Police Service, the Criminal Justice system, local governments and conservation bodies;
- **co-operation and close working relations** with the South African Revenue Service and the South African Bureau of Standards to monitor quantities of fish stocks exported;
- **co-operation with international partners** such as France, the United Kingdom and Australia to share resources and strategies to prevent and deter IUU fishing in the Southern Ocean;
- **environmental courts** in Hermanus and Port Elizabeth with magistrates and prosecutors who are trained specifically on environmental crimes.

The Marine Living Resource Fund – the fund used to finance the activities of MCM – which had a positive balance of R53 million at the end of March 2005, was R45 million in the red a year later. The financial crisis at MCM has only become worse since then and has been extensively documented in the print media and was also the subject of a damning Special Assignment investigation in late 2006. The crisis, which at one stage almost led to MCM’s electricity and telephone being cut off, resulted in major budget cuts in, *inter alia*, the fisheries compliance division. By the end of 2006, the impressive tools in the South African monitoring and surveillance toolbox had been decimated. The compliance and enforcement strategy was shelved and not replaced with any alternative. The state-of-the-art patrol vessels were barely functional as fuel became unaffordable. There were no patrols, for example, in the Southern Ocean and co-operation with international partners came to an abrupt halt. Both environmental courts were closed at a time when they were achieving phenomenal successes in the prosecution and imprisonment of poaching bosses. And the strategic compliance partnerships with local law enforcement agencies and units fizzled out.

The only conclusion that can be drawn is that South African fisheries management has completely failed in its bid to prevent, deter and eliminate IUU fishing. In fact the opposite is true. The comprehensive mismanagement of South Africa’s fisheries by MCM has provided illegal operators, such as the Spanish hake trawlers, the Triads and Cape gangsters, with an ideal platform from which to escalate their activities. If one still has doubts about such a conclusion, then consider the report that appeared in the Cape Argus on 13 November 2007, titled “*Calls ignored as rock lobster and perlemoen poached at Betty’s Bay*”. The report confirms what may people have been saying: The Minister of Environmental Affairs and Tourism and his department do not have any plan to protect abalone stocks from poachers. On 12 November 2007, members of the Betty’s Bay community tried to contact MCM to come and arrest the poachers who were brazenly poaching abalone in a national marine protected area. When the MCM compliance officers finally arrived they simply stood on the shore and watched the poachers at work as they did not have a boat.

To be able to effectively prevent, deter and eventually eliminate IUU fishing in national waters, requires strong leadership, an effective NPOA-IUU Fishing, the financial and human resources to implement the NPOA, a network of strategic domestic, regional and international partnerships that complement the NPOA-IUU Fishing and strong political will to keep at bay opportunistic and predatory foreign fishing fleets. South African fisheries management today sadly lacks all of these.

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