Not all seafood is equal

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Our marine ecosystems are under pressure. A recently published report on the state of the world's fisheries by the United Nations Food and Agricultural Organization, estimated that approximately 85% of the world's fisheries are fished at (53%) or beyond (32%) their maximum sustainable limits.[1] Furthermore, because no fishing gear is completely selective, many non-target fish or endangered species are accidentally caught as bycatch.[2,3,4] Both the percentage of depleted stocks and the demand for seafood are at a record high.[1] In 2000, South Africa's Minister of Environmental Affairs and Tourism declared the linefish resource to be in a state of emergency[5] and, 11 years on, commercially valuable inshore marine resources, such as dusky kob (*Argyrosomus japonicus*) and red steenbras (*Petrus rupestris*), remain heavily depleted. Research shows that where responsible management is in place, fisheries are either healthy or recovering[6]; but unsustainable and irresponsible fishing practices continue to modify some marine ecosystems.[6] Many participants in the fishing industry do act responsibly, and market-driven incentives should be created for others to follow suit, but our marine resources continue to diminish. It has subsequently become abundantly clear that different management strategies are necessary for the sustainable use of our marine resources.

A paradigm shift in fisheries management

The last decade has seen a shift in resource management from an almost exclusively single-species basis to a more holistic ecosystem approach to fisheries management (EAF). The rationale behind an EAF is that, in order to manage fisheries responsibly, it is important to understand the dynamics of both individual populations and the ecosystem as a whole, including socio-economic necessities. An EAF should therefore take into consideration ecological relationships between species (harvested or not) and balance the diverse needs and values of all who use, enjoy or depend on the ocean now and those who will do so in the future.

Subsequently, with seafood as the most traded primary commodity in the world, developing a sustainable seafood industry goes far beyond focusing on the individual components of sustainable fishing. Similar to an EAF, it requires a holistic approach, addressing all aspects along the seafood chain of custody (Figure 1), from the fisherman's hook to the consumer's plate. This is the philosophy underpinning the work of the World Wide Fund for Nature's Sustainable Fisheries Programme, of which SASSI (the Southern African Sustainable Seafood Initiative) comprises the consumer outreach and awareness component.

The SASSI list: Making seafood sustainability everybody's business

SASSI has compiled a seafood guide to help consumers make more sustainable and environmentally friendly choices. The list, drafted in early 2005 and revised in 2010, aims to increase the awareness of seafood consumers around different species of fish, deter them from choosing illegal species and guide them towards more ecologically sound choices when faced with a selection of different species. Through an easy-to-use 'traffic light' system, consumers can now know which seafood species can be consumed with a clear conscience (green), which should be regarded with concern because of specified reasons (orange), and which are considered unsustainable or illegal to sell in South Africa (red) (Figure 2). The detailed list, based on verified information captured according to a robust methodology, encourages consumers to always ask three simple questions of their seafood: What is it called? Where is it from? How was it caught or farmed?

The methodology used for the listing scores a species across three categories: stock status, ecological impacts of the fishery in which the species is caught and the management measures in place for that particular fishery. Based on the score received, the species is categorised on the SASSI list as red, orange or green. The methodology, developed by a number of organisations internationally

FIGURE 1: A simplified representation of the seafood chain of custody.

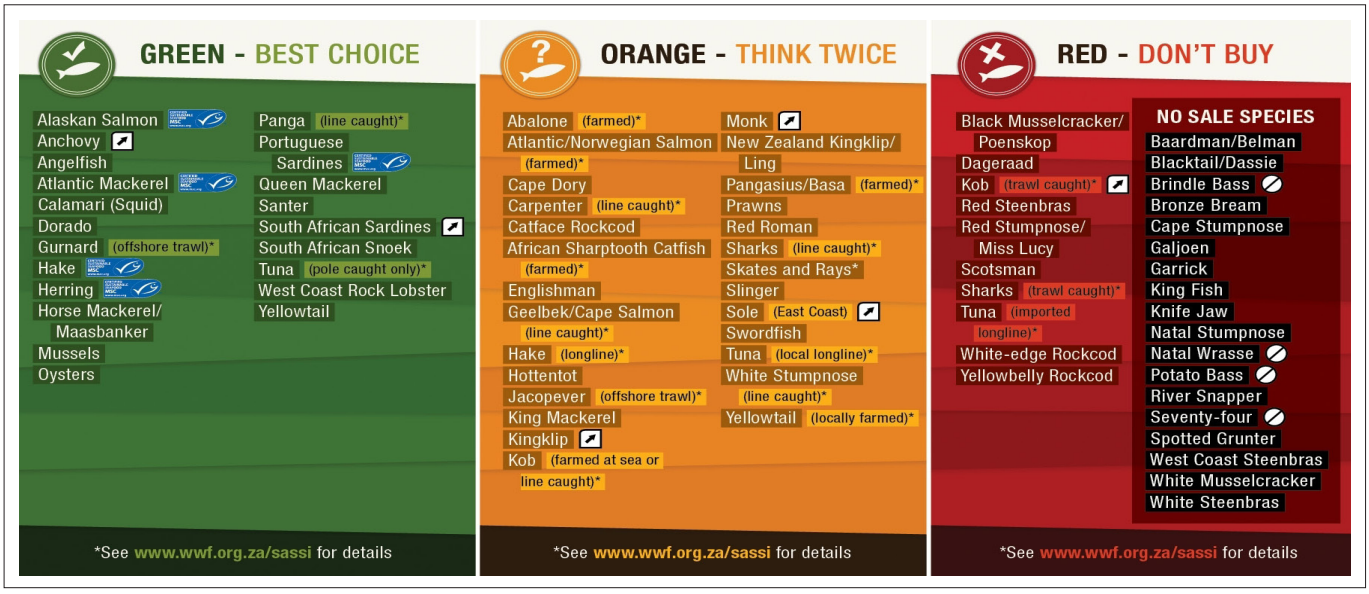

FIGURE 2: The colour-coded SASSI list categorises selected seafood species according to their conservation status: red, which includes species that are considered unsustainable and species that are illegal to buy or sell in South Africa (the message to consumers is that they should not buy these species); orange, which includes species that have associated ecological reasons for concern; and green, which indicates the most sustainable and well-managed choices available.

and considered best practice for seafood guides, provides a transparent process that clearly identifies cases in which a species or fishery is progressing well and where the outstanding challenges lie. It further outlines how a species or fishery can move towards green status, and allows for the incorporation of new information as it becomes available. It provides a mechanism by which both local and imported seafood can be assessed in order to present consumers with consistent advice across all seafood guides.

This information can be obtained using the SASSI website (www.wwf.org.za/sassi) and a mobi site (www.sassi.mobi), which facilitates viewing of the SASSI website using a mobile phone. Additionally, the ingenious FishMS brings the list to consumers via an SMS; by texting the name of the fish to the number +2779-499-8795, the service will send an immediate response advising whether to 'tuck in', 'think twice' or 'avoid'.

The revised list has resulted in mixed reactions from the public, as some believe that the new list is encouraging consumers to stop eating seafood altogether. Some feel despondent as there are fewer species on the green list than previously, whilst others feel betrayed by the new list despite their best efforts to support and invoke sustainable practices. Furthermore, the list has attracted wide criticism for overwhelming the consumer with too much information and for the inclusion of aquacultured products on the pocket card.

The SASSI effect: Inspiring change

But SASSI has also gained significant positive attention in the media since the launch of the revised list in September 2010. For example, a short SASSI film released on *YouTube* to coincide with the launch has enjoyed more than 17 000 views, and the SASSI website has had over 165 000 unique visits (averaging just under 1400 visits per day). More than 400 000 SASSI pocket cards have been printed and distributed since the launch and results from recent surveys show that almost 90% of respondents' ultimate choices in seafood was positively changed by using the various SASSI consumer

tools. Perhaps more remarkable are the select few individual consumers that have moved beyond a general call to action. As a result of continued lobbying by these consumers of top management of prominent South African retailers, significant changes have been catalysed: for example, one of the biggest retailers in the country has recently committed to not procuring overexploited imported linefish species, emphasising the role of consumer activism and informed buying as strong means of driving positive change through the seafood industry.

As a result of poor management in the past, our oceans have never been as degraded, but we have never been in a better position to improve the situation. The SASSI list makes the most current information available to all South Africans when and where it is needed, thereby empowering consumers to act on their convictions and help create an incentive for responsible and sustainable fishing practices.

References

1. Fisheries and Aquaculture Department. The state of world fisheries and aquaculture. Rome: Food and Agricultural Organization of the United Nations; 2010.
2. Walmsley SA, Leslie RW, Sauer WHH. Managing South Africa's trawl bycatch. ICES J Mar Sci. 2007;64:405–412.
3. Petersen SL, Nel DC, Ryan PG, Underhill LG, editors. Understanding and mitigating vulnerable bycatch in southern African trawl and longline fisheries. WWF South Africa Report Series. 2008;Marine/002.
4. Petersen SL. Understanding and reducing vulnerable bycatch in longline and trawl fisheries in southern Africa. PhD thesis, Cape Town, University of Cape Town, 2008.
5. Department of Agriculture, Forestry and Fisheries. Status of the resources report: Linefish. Unpublished report of the Branch Fisheries; 2009.
6. Worm B, Hilborn R, Baum JK, Branch TA. Rebuilding global fisheries. Science. 2009;325:578–585.