

From reef to retail

Certification schemes are one way to increase accountability in industries that affect the environment. Paul Holthus and Nathalie Gamain from the Marine Aquarium Council describe one scheme that is seeing tangible results.

illions of visitors to public aquariums and thousands of snorkelers and divers across the globe are amazed by the diversity of life on coral reefs. Looking to replicate this marine wonderland, an increasing number of them have created a "living aquarium" at home, unaware of the impact this is having on species and the lives of people in far-flung regions.

In many developing countries, coastal communities depend on coral reefs for their livelihoods. These biologically-rich ecosystems account for about a quarter of the world's fish catch and provide sustenance for as many as one billion people in Asia alone.

Despite their importance, the majority of the world's reefs are threatened by human activity. Threats include coastal development, destructive fishing practices, climate change, over-exploitation, marine pollution, and run-off from inland deforestation and farming.

A responsible trade in marine ornamentals – corals, tropical fish, seahorses and other species – has great potential to provide incentives for coastal communities to conserve and manage coral reefs, thereby securing their income and livelihoods.

Harvesting marine ornamentals provides one of the few potentially sustainable industries in rural tropical areas. Ornamental species come from around 45 countries that have coral reefs,

mostly in the developing world, with the Philippines and Indonesia the largest exporters. Aquarium animals are the highest value-added product possible to harvest sustainably from coral reefs; aquarium fish sell for US\$ 496 per kilogramme compared to food fish at US\$ 6 per kilo.

The US and Europe constitute over 90% of the market demand, creating an industry worth an estimated US\$ 6 billion annually. But the industry is littered with unsustainable and irresponsible practices. Overharvesting of marine species, destruction of reefs, poor husbandry, hazardous working conditions, and poor financial return for fishers are among them.

Responsible practices for collecting, handling and husbandry of marine ornamentals do exist, and are used by numerous collectors and companies, proving that it is possible to have a sustainable fishery. The aquarium industry, hobbyists and other stakeholders have said they would support responsible and sustainable practices if there was a system to build capacity of collectors and communities to use them, verify those complying, and label both responsible companies and sustainable products. Consumer choice could then reward responsible operators and sustainable products, creating further incentives for sustainable use and conservation.

In response, the Marine Aquarium Council (MAC), a

nonprofit organization, brings together the aquarium industry, fishing communities, conservation organizations, public aquariums, hobbyists and others to create the standards, certification and labeling needed to ensure quality and sustainability. Building on the good practices of responsible industry members, the MAC has created international standards covering the entire "reef to retail" supply chain.

MAC certification promotes industry compliance with these standards to ensure that marine species and the coral reefs they inhabit are thriving and well managed. It ensures the species are kept in good health as they are transported from collector to wholesaler to retailer.

Pilot MAC certification is being carried out in selected source and market countries, and if successful, will be scaled up. Supply-side efforts focus largely on the global marine biodiversity "hotspot" of the Philippines and Indonesia that supply 70–80% of the aquarium fish in trade, with Indonesia also the world's largest coral exporter.

As of mid-2006, in the Philippines, Indonesia and Fiji, 11 harvest areas and collectors' groups had achieved MAC certification, with scientific surveys and multi-stakeholder management in place for nearly 30,000 hectares of reef. Over 1,000 community stakeholders have participated in

training and over 300 fishers and 20 exporters have become MAC-certified. In certified areas, reef destruction has been reduced and sustainable harvest levels are in place. Collectors' livelihoods are improving, with better business operations, steadier income and fewer accidents due to unsafe diving practices.

On the market side, over 20 importers and retailers in the US, Netherlands, France, Germany, the UK, Canada and Singapore are MAC-certified. An increasing volume, variety and quality of certified products are reaching consumers. Demand from hobbyists is rising, as is industry interest in MAC-certification, with over 150 companies signing public commitments to seek certification.

The vision of MAC is to ensure that marine aquarium fishery and trade becomes sustainable through the entire chain of custody, wherever it operates. It is aiming to create the world's largest network of managed reef areas, thousands of sustainable livelihoods, and incentives that result in healthy reefs, healthy fish, healthy business and a guilt-free hobby.

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www.aquariumcouncil.org