



Sustainable Trade in Marine Endangered Species in East Asia

Hard Coral Genera Distribution in East Asia



Veron, 1993

Key facts on international trade:

- 86% of all organisms in the marine aquarium trade originate in East Asia¹;
- 85% of all the aquarium fish in global trade come from the Philippines and Indonesia and 75% of the invertebrates other than corals¹;
- 99% of all live corals in trade come from Indonesia¹;
- In 1997, live corals constituted more than half of the global trade²;
- Indonesia and the Philippines serve as main sources of high-priced species for the live fish food trade³; and
- The US is the largest consumer of marine organisms and the market sources include Indonesia, the Philippines, Thailand, Singapore, Hong Kong, Malaysia and Japan⁴.

*"If all the beasts were gone,
man would die of great loneliness of spirit.."*

Chief Sealth
Duwamish Indian Tribe, 1855

The trade in marine endangered species is a worldwide concern. Its impacts, however, are more felt in East Asia than elsewhere since the region serves as the major hub of trade in marine endangered species, that is, serving as supplier and consumer of traded species. This can be attributed to the region being considered the global center of marine biodiversity, surpassing other geographical areas in terms of numbers and diversity of marine species (see map). Coral reefs in particular support the largest number of species used in trade (Box 1). Domestic and international trade is driving the use of destructive fishing practices such as dynamite and cyanide fishing leading to habitat degradation and decimation or removal of key species. The annual economic benefits derived from the coral reefs of Indonesia and the Philippines alone are estimated at US\$1.6 billion and US\$1.1 billion, respectively⁵. Notwithstanding their worth, the reefs in the region are under continual stress and degradation, as a result of human activities.

Unsustainable trade is essentially the result of a high market demand, which encourages commercial exploitation of high-priced and oftentimes rare species. A total ban in harvest had been found to be completely ineffective as it only drove the industry underground. More importantly, aside from heavily relying on the marine resources for food, a significant portion of the coastal population who predominantly belong to the poor sector also harvest marine organisms for income, thus supporting the thriving trade to some extent. A number of efforts had been undertaken at the international, regional and national levels aimed at regulating the trade (Box 2). Some successes had been achieved although the number of threatened species is still increasing rather than declining. Concrete actions are therefore needed to protect the resource base to allow the continuous flow of goods and services, and in the interest of trade, reduce the current rate of species decline.

This brief is presented with the hope that it will provide the basis for further policy debate and in due course enable policy makers and managers to formulate concrete actions to address marine endangered species trade.

Box 1. Trade involves⁶:

- Marine aquarium trade – reef substrate, live corals, fish and invertebrates
- Live food fish trade – live reef fish, giant clams, giant tritons, lobsters, shrimps, clams and snails
- Dried food and medicinal trade – dried sea cucumbers, fish, sharks, sea turtles, seahorses and other invertebrates
- Curio and jewelry trade – dried corals, precious corals, seashells, sea turtles, starfish and other invertebrates

The Policy Issue

Economic pressures, growing international and domestic demands and high prices for certain species encourage unsustainable harvest. Individuals involved in the trade continue to find ways to evade controls, which are weakened by financial, logistic and human resource constraints.

A sustainable trade, which entails balancing trade with resource conservation, is seen as the best option. In addition, since trade transcends national boundaries, cooperative efforts among the countries in the region and other geographical areas, particularly exporting and importing countries, are needed in earnest. A major challenge to policy is how to balance the economic and ecological dimensions of the trade in order to benefit the people and the marine environment of the East Asian region.

Setting the Stage for National Policy

The following are key recommendations for action that may serve as guide for the formulation of policies to address the problem in endangered species trade:

- **Building cooperation and collaboration through international agreements and regional instruments**



Stuffed marine turtles for sale at a souvenir shop in Vietnam (Photo: E.H. Chan)



Corals and shells for trade in the US. (Photo: U.S. Fish and Wildlife Service)

Considering that trade transcends national boundaries, the key step to building cooperation is for the countries in the region to achieve consensus on the problem and agree on common measures on how to strengthen international cooperation and policy coordination.

- Foremost is the **ratification of conservation-related international conventions** such as CITES, Ramsar, Biodiversity, etc. (see ratification table).

These international agreements act in synergy with each other to conserve species and protect critical habitats. CITES in particular is the only international legal mechanism with the mandate to protect species from overexploitation due to international trade. Relatively few marine species, however, are covered by CITES. There are also problems in the implementation and enforcement of its provisions due to inadequate funds and lack of technically capable human resources. As Contracting Parties to the Convention and considering the region's status as major hub of trade and global center of biodiversity, it is vital for the countries to:

- **examine the gaps and opportunities** (i.e., strengthening capacity for monitoring, enforcement and compliance; promoting incentives for participation and compliance; making institutional reforms necessary to enforce laws and discouraging trans-shipment of traded species through non-parties to CITES); and to require the **conduct of appropriate scientific studies** (i.e., analysis of data on harvests and trade, etc.) to support policy decisions.

Other effective means to foster collaboration among the countries in the region, which complement the international agreements, include the:

- **adoption and implementation of key regional instruments** such as the Sustainable Development

Box 2. Strategies and approaches used to regulate trade and conserve species.

- Regulating trade through CITES and other conservation-related international conventions, regional instruments and national legislations;
- Establishing a certification system for sustainable marine aquarium trade;
- Establishing marine protected areas;
- Enhancing consumer/public awareness;
- Promoting mariculture for species used in trade and instituting rehabilitation measures of degraded habitats;
- Accessing reliable and comprehensive information on levels of harvest and trade; and
- Creating partnerships with international organizations, scientists, consumers, exporters, importers, governments, NGOs, civil society and communities.

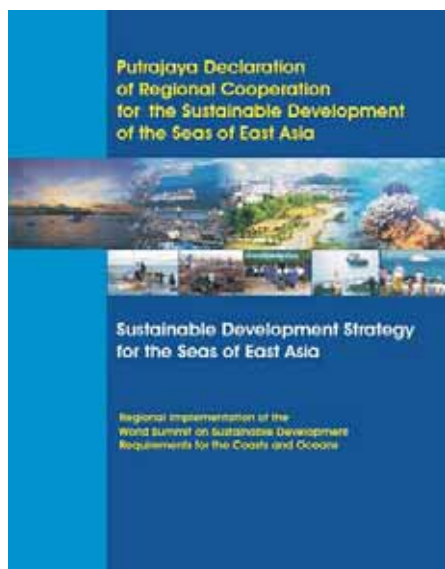
East Asian Ratification of International Conventions Relating to Marine Environment (as of 31 October 2002)

	C	O	N	V	E	N	T	I	O	N
	UN FCC	Biodiversity	Jakarta Mandate	Ramsar	CITES	Migratory Species	World Heritage	Whaling	Montreal Declaration	
COUNTRY	92	92	95	71	73	79	72	72	01	
Brunei Darussalam					90					
Cambodia	95	95	Y	99	97		91		Y	
PR China	93	93	Y	92	81		85	80	Y	
DPR Korea	94	94	Y				98			
Indonesia	94	94	Y	92	78		89			
Japan	93	93	Y	80	80		92	51	Y	
Malaysia	94	94	Y	95	77		88		Y	
Philippines	94	93	Y	94	81	94	85	81	Y	
RO Korea	93	94	Y	97	93		88	78	Y	
Singapore	97	95			86					
Thailand	94			98	83		87		Y	
Vietnam	94	94	Y	89	94		87			

Numbers represent year of ratification/accession Y - Participated in conference

Strategy for the Seas of East Asia (SDS-SEA) and the East Asia Regional Policy Agenda on promoting sustainable and equitable practices in the international trade in coral reef species.

The SDS-SEA in particular is a holistic and integrated framework for environmental and natural resource governance for the region's coasts and oceans. It builds upon a strategic management framework within which coordinated strategies and programs of action are developed through an extensive stakeholders' consultation process. Action programs specifically addressing protection of marine biodiversity and endangered species are articulated in the strategy.



Initiatives dealing directly or indirectly with endangered species trade have been put in place in the region. Of significance, particularly for marine turtles, include the establishment of the Turtle Islands Heritage Protected Area (TIHPA) in 1996. Collectively, the Turtle Islands is the largest green and hawksbill turtle rookery in the region. A recent initiative involved the formulation of a tri-national marine turtle conservation program involving Indonesia, Malaysia and the Philippines. One of the highlights of the initiative is the plan to establish the world's first sea turtle protected area through the expansion of the TIHPA spanning the 3 countries. Strong regional cooperation is needed to see this initiative through.



- **Formulating and implementing innovative regulatory framework and incentive mechanisms**

Promoting sustainable trade

Balancing trade with resource conservation requires relevant interventions on both the supply and demand sides of the industry.



Certification of the marine aquarium industry aims to eliminate the destructive use of cyanide and promote the environmentally sustainable use of hand nets.
(Photo: Marine Aquarium Council, Inc.)

An innovative approach intended to regulate the trade is shifting the burden of proof on importing countries through export regulations and licenses and requiring commercial users to demonstrate that traded products were collected in a sustainable manner. Complementing this approach is the international certification system being developed and tested by the Marine Aquarium Council where the symbiotic relationship between reef conservation and the marine aquarium trade is emphasized. Since the marine aquarium trade brings socioeconomic benefits such as creation of jobs and income for the rural low-income coastal communities, this has provided an added incentive in the development of standards for quality products and sustainable practices including the establishment of a system to certify compliance with these standards, and creating consumer demand and confidence for certification and labeling. The socioeconomic benefits also provide an incentive for the coastal communities to act as active reef stewards. Extending the certification system to cover the live fish food trade is being considered.

- Strong support from the countries of the region to **implement the certification system for marine aquarium trade** is vital if a sustainable trade is to be realized.

Promoting public awareness

A well-informed public is said to be powerful. The public can be made aware of the nature and impacts of international trade and their role in helping regulate the trade through a variety of:

- **public awareness programs** such as consumer awareness campaigns and enlisting the support of the media to develop public support in species conservation.

Humphead Wrasse a.k.a. Maori or Napoleon Wrasse:

Fast Facts

- One of the most wanted species for the live fish food trade.
- Prices have risen by more than 300% since 1995.
- Included in the IUCN Red Data List as vulnerable to extinction.



Humphead wrasse, *Cheilinus undulatus*, adult male, Malaysia.
(Photo: Doug Pemine/Seapics.com)

Influencing consumer's choices in particular, by making them aware to buy eco-certified products only, attesting that harvest of products were done in a sustainable manner, is one of the effective measures to instill awareness and promoting sustainable trade.

- **Creating partnerships** with international organizations, scientists, exporters, importers, NGOs and civil society to counter illegal trade and improve enforcement of regulatory measures does not only foster cooperation but reduces duplication of efforts and poor coordination, thus promoting the efficient use of time and resources.

Policy Implications and Challenges

Regulating the trade in endangered species is a daunting task as it occurs extensively within East Asia and other geographical areas. Recognizing that the region has so much to offer in terms of its marine resources, it is perhaps timely for the governments to consider the recommended set of actions presented to address the problems of marine endangered species trade.

Ensuring sustainability requires concrete actions to conserve species and eliminate illegal trade by promoting cooperation and partnerships, stepping up capacity building measures and raising public awareness at each step of the trade, from harvest through export and import, to the consumer market. As our body of knowledge on endangered species trade increases and initiatives in making it a sustainable industry are growing, the time has come for the countries in the region to consider reviewing existing policies and laws including institutional arrangements and update or formulate where necessary, appropriate policies and regulations that govern endangered species trade. Establishing a sustainable industry means providing steady and permanent income to the coastal communities, thus securing their future while protecting the environment at the same time.

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Live fish at Hong Kong restaurant. (Photo: TRAFFIC / N. Bentley)

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