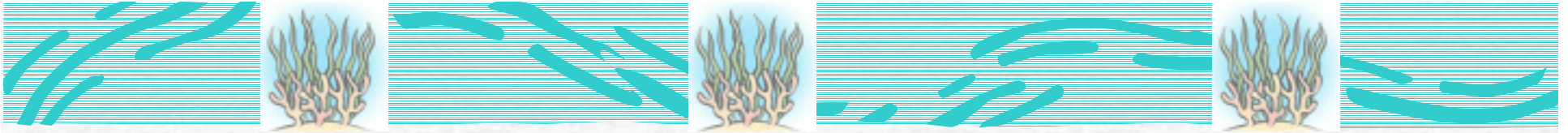


International Trade in Coral Reef Animals: Causes, Consequences and Courses of Action



Barbara Best
U.S. Agency for International Development





Trade is Driven by “Consumer” Demand

→ **Create incentives for responsible trade**

Individual collectors

Individual consumers

Consuming countries

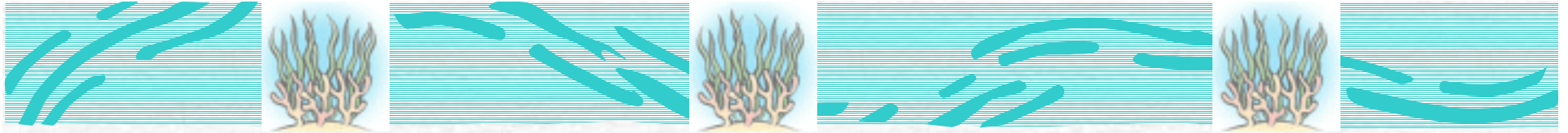




Trade Drives Destructive Fishing and Overfishing

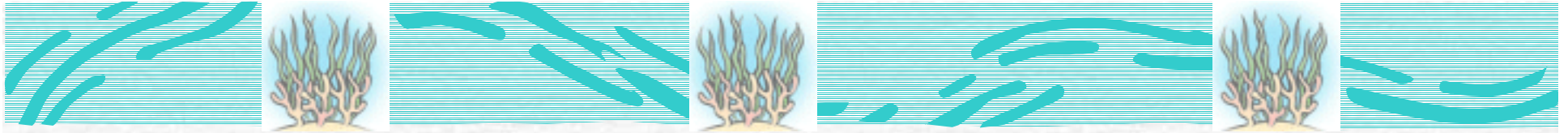
- poisons (cyanide)
- stuns some fish
- kills coral, non-target animals, fish
- prohibited in most countries





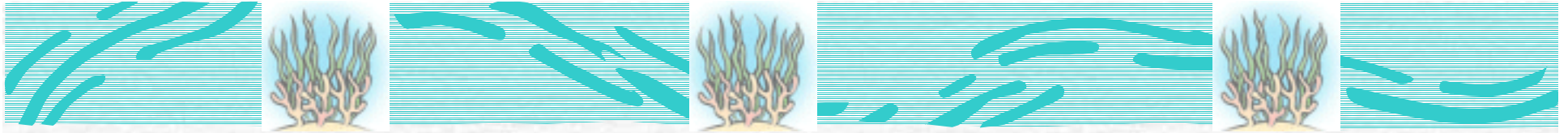
Major Issues

- ❖ **Trade drives destructive practices and overfishing**
 - Use of poisons (cyanide)
 - Removal of reef base (live rock), essential fish habitat (coral)
 - Unsustainable collection, targeted groups
 - ❖ **Collecting from deeper reefs - beyond management**
 - ❖ **Expanding ornamental trade, commercial uses**
 - home, office, restaurant, public aquaria
 - ❖ **Ethical concerns - wild animal and pet trade**
 - ❖ **Largely unregulated trade; illegal, unreported**
-



Socio-economic Consequences of Destructive/Unsustainable Fishing

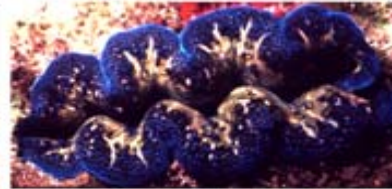
- ❖ **Reduces value of reefs to local communities**
- ❖ **Threatens food security and livelihoods**
- ❖ **Few incentives for long-term sustainable use:**
 - highly mobile, few benefits for communities
- ❖ **Health impacts on divers/collectors:**
 - paralysis/death from the “bends”
 - paralysis in 20% of divers, 4% mortality



Contribution of International Trade to Coral Reef Crisis

- ❖ **Over 90% of reefs are missing some species of high economic value**
- ❖ **Overfishing and Destructive Fishing are principal threats to reefs in SE Asia - Indonesia, Philippines**
- ❖ **Localized depletion of major groups**
- ❖ **Impacts on remote reefs**

**INTERNATIONAL TRADE IN CORAL AND CORAL REEF SPECIES:
THE ROLE OF THE UNITED STATES**



All photos by Andrew Bruckner



*March 2, 2000
Washington, D.C.*

**Report of the Trade Subgroup of the International Working Group
to the U.S. Coral Reef Task Force**



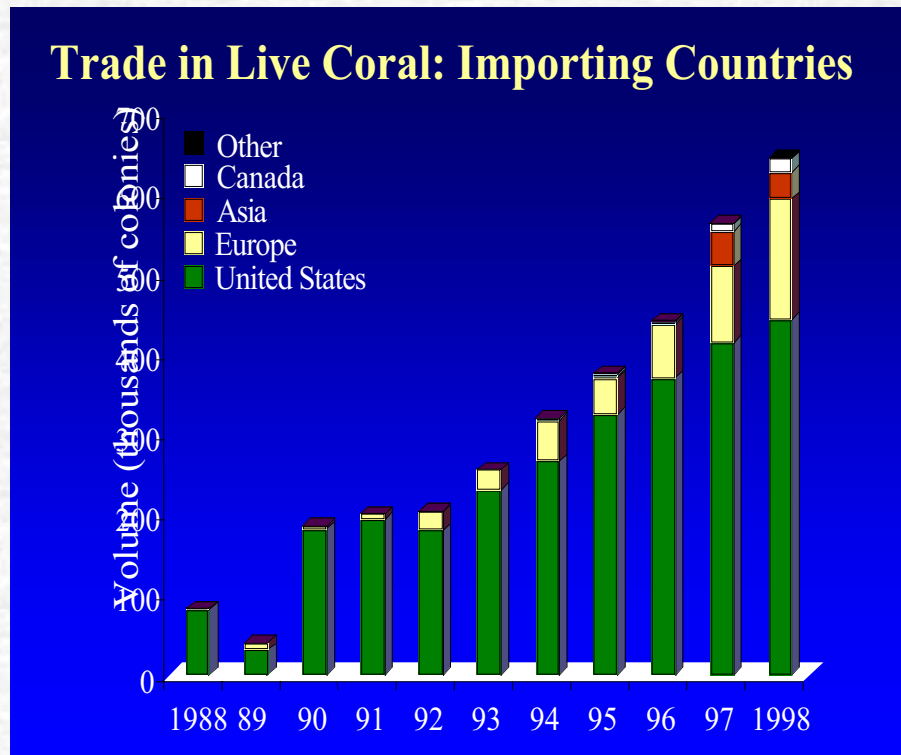
International Trade and U.S. Role

- ❖ **Live food fish trade** → to Asian markets
 - ❖ **Medicinal/food trades**

 - ❖ **Marine ornamental trade** → to U.S. markets
 - **U.S. major consumer for aquarium trade**
 - **- live coral, marine fishes, live rock**

 - **U.S. major consumer for curio, jewelry trade**
 - **- coral skeletons, precious corals, shells**
-

U.S. Role in Aquarium Trade



U.S. imports:

~ 80% of all live corals.

~ 95% of the "live rock"

~ 50% (8 million) marine aquarium fish per year.

~ Concerns: over fishing, cyanide, handling, transport practices.



U.S. Efforts to Address International Trade Impacts

- ❖ Retrain fishers in use of nets, not poisons**
 - ❖ Reduce spread of cyanide use - East Africa, Pacific**
 - ❖ Strengthen management, enforcement capacity**
 - ❖ Generate alternative livelihoods - tourism, seaweed**
 - Development assistance undermined by economic incentives of trade**
-



Potential Solutions and Approaches

- ❖ **Create incentives for sustainable use**

- ❖ **International Mechanisms**

- ❖ **Exporting Countries**

- ❖ **Importing Countries**

- **Private sector**

- **Governments**

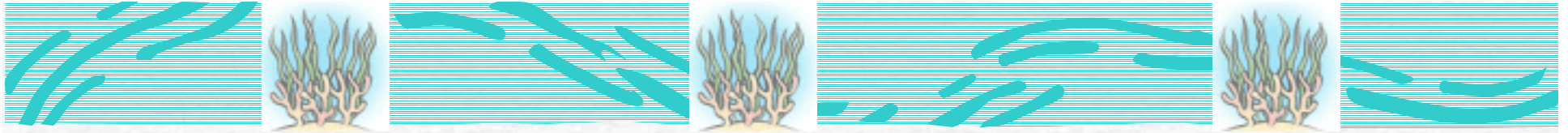
- ❖ **Mariculture**





Potential Solutions: International Mechanisms

- ❖ **Convention on International Trade of Endangered Species (CITES)**
 - 20 years ago, international concern on coral trade lead to listing on Appendix II
 - most developing countries lack capacity and will
 - ❖ **International arena (CITES, WTO)**
 - create incentives for responsible trade
 - promote mutually supportive trade and environment policies
-



Potential Solutions: Exporting Countries

- ❖ **Create incentives for responsible collection, management, regulation**
 - ❖ **Establish cyanide testing facilities**
 - ❖ - require random fish testing, paid by export fees
 - ❖ **Promote use of individual “concessions”**
 - ❖ - strong stewardship incentive, Australia
 - ❖ **Explore use of replenishment reserves**
 - “Hawaii” major exporter of aquarium fish
-



Potential Solutions: Importing Countries

- ❖ **Assist source countries in achieving effective management, institutional strengthening**
 - ❖ **Create market incentives by shifting the**
 - ❖ **“burden of proof” of sustainable use**
 - ❖ - **Burden to prove that no harm done by those who profit**
 - ❖ - **Private sector, eco-certification**
 - ❖ - **National governments, creative trade measures and self-certification**
 - ❖
-



Potential Solutions: Private Sector

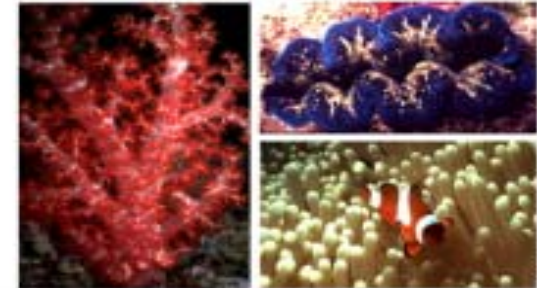
- ❖ **Marine Aquarium Council (1998)**
 - create market incentives to reform industry
 - promote eco-certification and labeling
 - harness market forces of individual consumers
 - create documentation from collector to retailer
 - ❖ **Remove inappropriate species from trade**
 - Aquarium hobbyists and dealers created list of animals that do not survive in aquaria
-



U.S. Coral Reef Task Force

- ❖ **Consultations**
- ❖ **Issues identified**
- ❖ **Comprehensive trade strategy**
- ❖ **Recommendations for new trade measures**

INTERNATIONAL TRADE IN CORAL AND CORAL REEF SPECIES: THE ROLE OF THE UNITED STATES

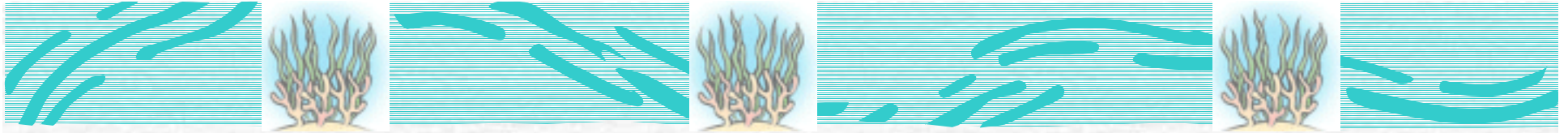


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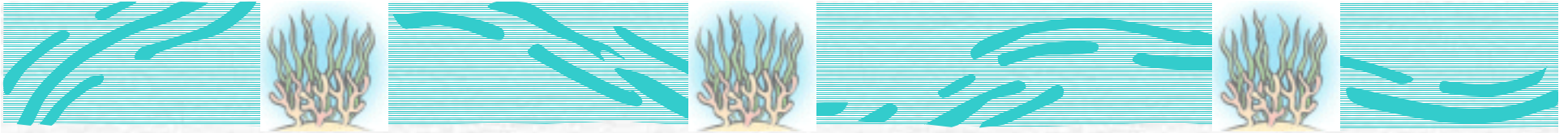
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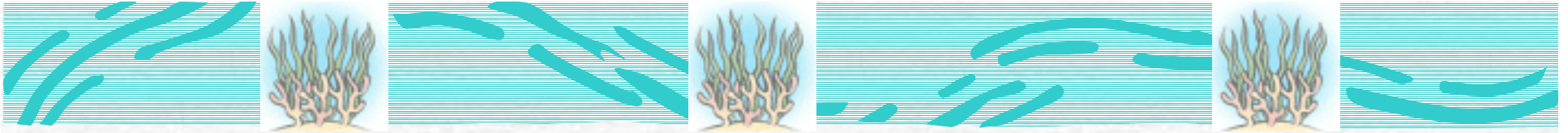
Task Force Recommendation: New Authorities to Reduce Impacts and Encourage Responsible Trade

- ❖ Establish advisory council**
 - **Work with industry, environmental groups, scientists**
- ❖ Prohibit trade in CITES species unless accompanied by demonstration of sustainable management**
 - **Require demonstration of sustainable management in defined collection area**



New Authorities to Reduce Impacts and Encourage Responsible Trade

- ❖ Prohibit imports/exports of all coral reef species unless accompanied by certification of non-destructive collection**
 - ❖ Develop national strategy for ecosystem-based sustainable management of coral reefs**
→ “Lead by example”
 - ❖ Work with international community to develop criteria for sustainable management of reefs**
-



Create Incentives for Sustainable Use

❖ Eco-certification and labeling by industry

- promotes responsible consumer choice
- targets individual consumers

❖ Importing countries take responsibility

- require certification of imports
- target individual importers
- support eco-certification and labeling
- level the playing field, speed up process

→ Consumers, industry and government can work together to ensure responsible trade



Potential Solution: Mariculture

- ❖ **Freshwater aquaria:**
 - ~ 2% wild, 98% cultured
 - ❖ **Marine aquaria:**
 - ~ 98% wild, 2% cultured
 - ❖ **Replace wild animals with maricultured**
 - ❖ **Promote mariculture in source country**
 - ensure benefits to local communities
 - prevent release of exotic or invasive animals
-



