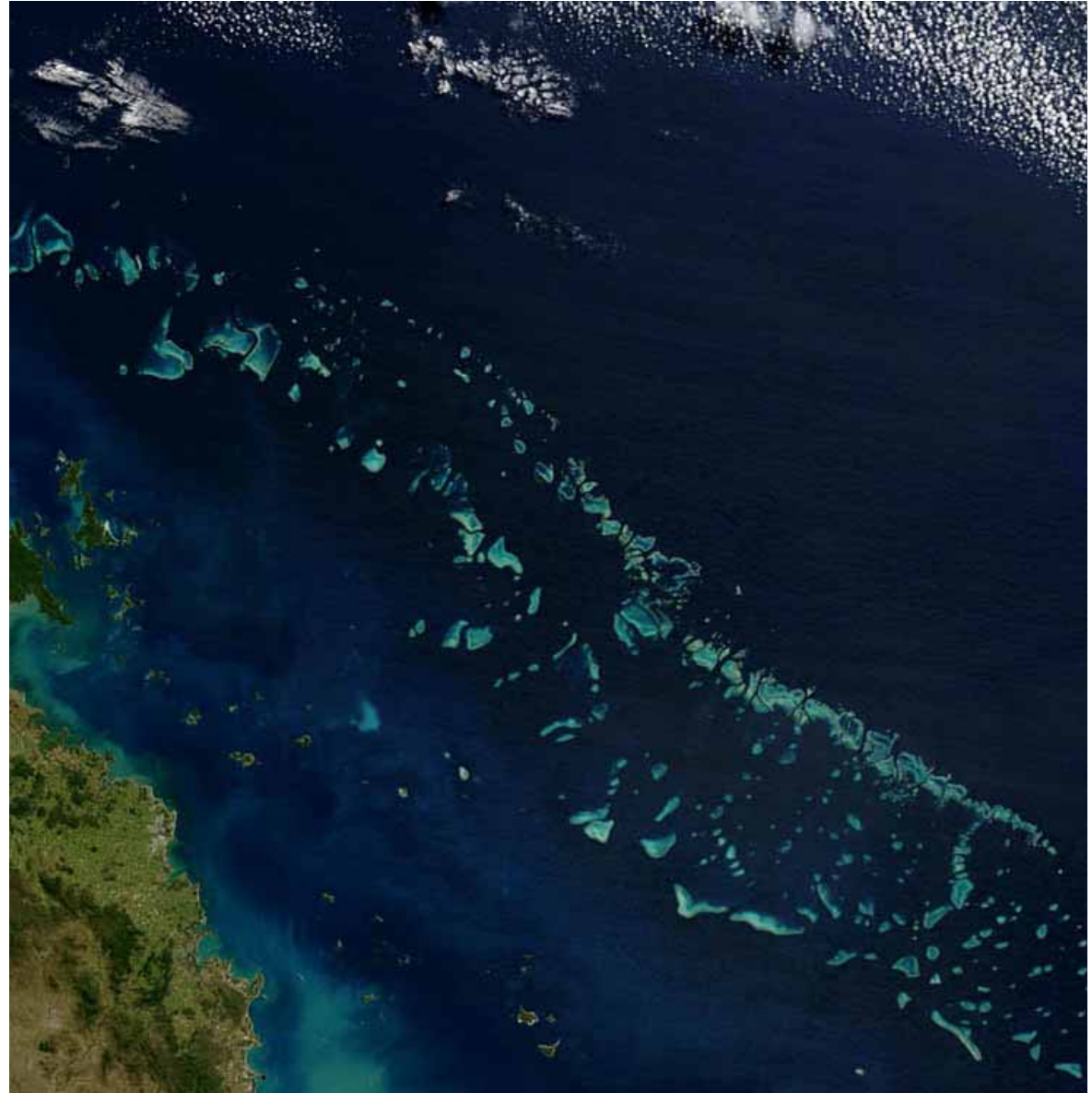
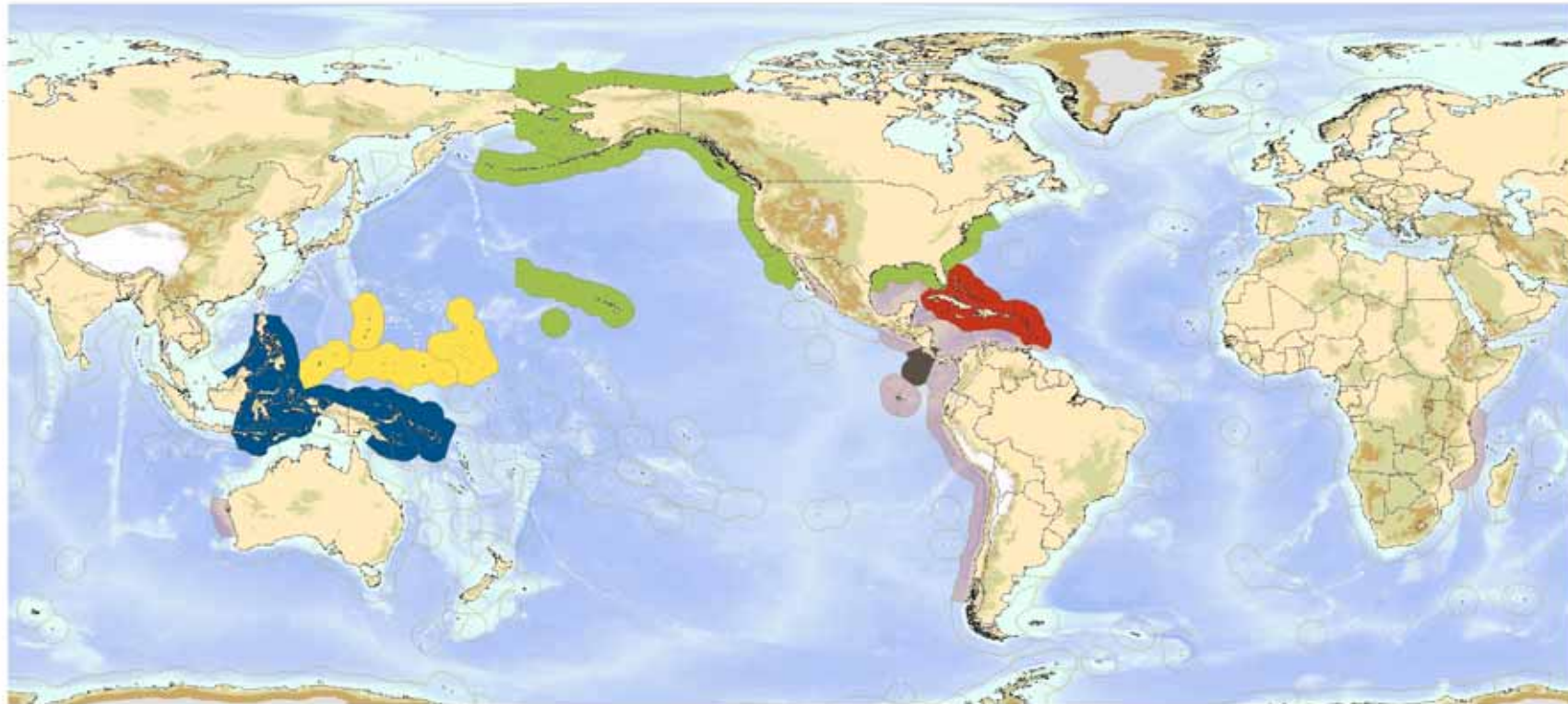


Strengthening collaboration between The Nature Conservancy and Regional Seas




Current TNC Geographic Priorities for Marine Conservation



Current TNC Priority Marine Projects

-  U.S. Coasts and Oceans
-  Costa Rica
-  Caribbean
-  Pacific Islands
-  Coral Triangle

Additional TNC Marine Programs

-  Mexico Mosaics, Western Caribbean, Eastern Tropical Pacific, Humboldt Current, Mozambique, Western Australia



habitat loss



**sea level rise
& storms**



**destructive
&
over fishing**



warming waters



**nutrients &
sediments
from land**



**ocean
acidification**

Large Scale Ocean Management

(Marine Protected Area Networks, Marine Spatial Planning)

Critical Marine Habitat Protection & Restoration

(Coral Reefs and Shellfish Reefs)

Climate Change Adaptation

Sustainable Fisheries

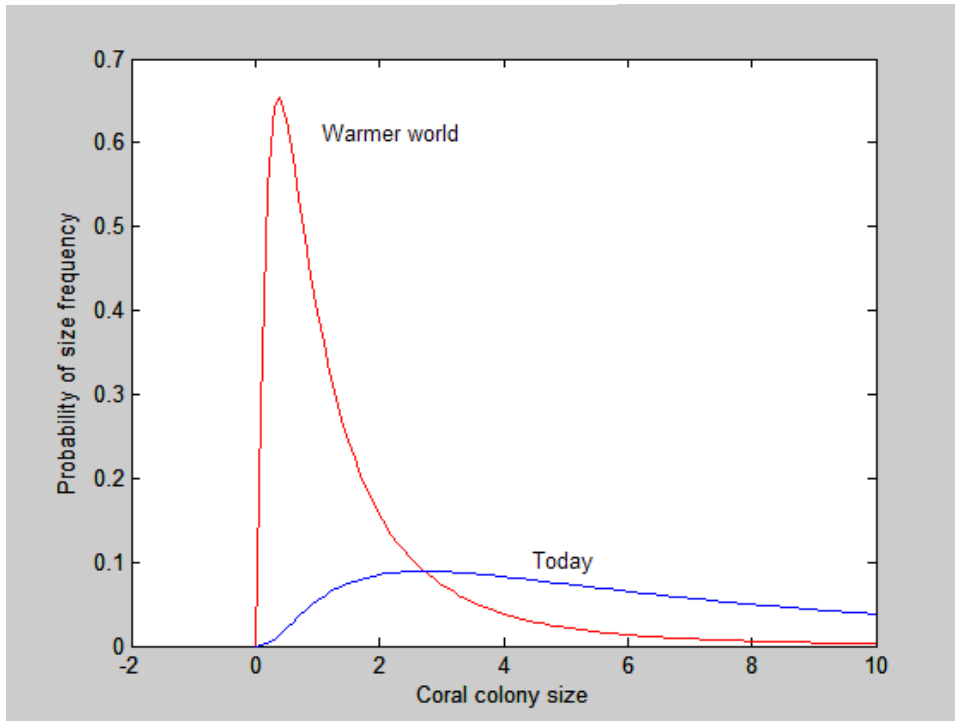


Conserving critical habitats



Reef Resilience Program

Joint
Research - to understand impacts &
Actions - protection to restoration
Training

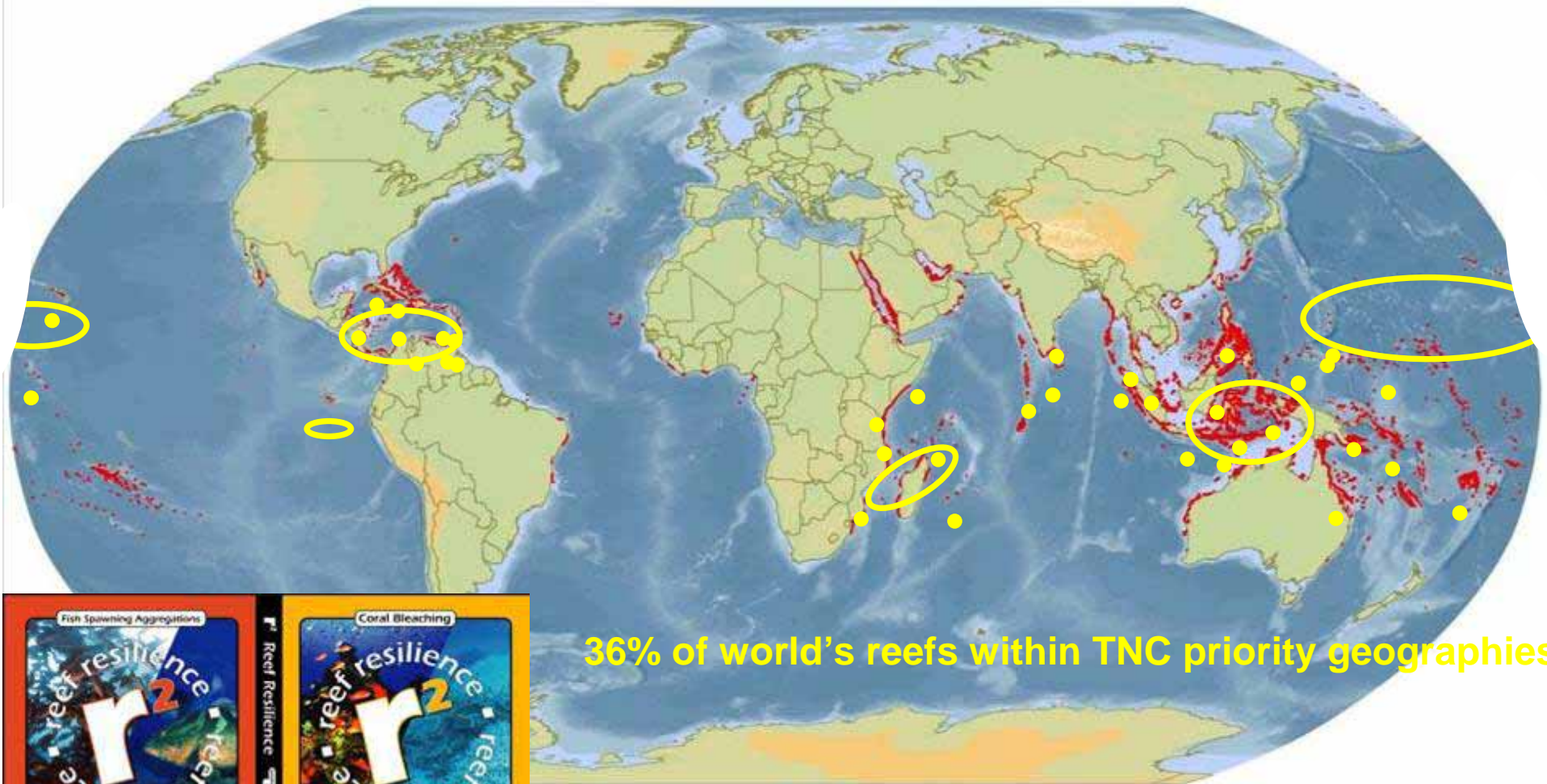


Climate change causes partial coral mortality- changes coral size



Going to Scale: Coral Reef Conservation

Global extent of coral reefs: 284,300 sq km



36% of world's reefs within TNC priority geographies



- Reef Resilience site
- TNC Platform



Welcome to Reef Resilience, the place to find information about building resilience into your coral reef management strategies. Our goal is to keep information as current as possible, so please check back often.

Site last updated: September 2008

See the **June 2008 Reef Resilience Review**

Get earlier newsletter issues, sign up to receive the quarterly newsletter by email, [here](#). >>



Reef Resilience Toolkit



The 2008 version of the **Reef Resilience (R2) Toolkit** is now available. The Toolkit provides coral reef managers with guidance on building resilience to climate change into the design of MPAs and daily management activities. Check it out for updated recommendations based on new science and lessons learned direct from coral reef managers.

Upcoming Events

- **4th IUCN World Conservation Congress**, Oct 5-14, 2008, Barcelona, Spain

See the [Event Calendar](#) >>



Introduction to Resilience



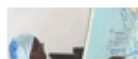
What do we mean by Reef Resilience? What are the four principles of resilience? What is the difference between resilience and resistance? [Get the basics](#) in this section before exploring further.

Resilience Discussion Forum

Find any of the MPA resources useful? Have questions? Share your comments, experiences, or ask questions regarding building resilience into your management strategies [here](#). >>



Resilience Training



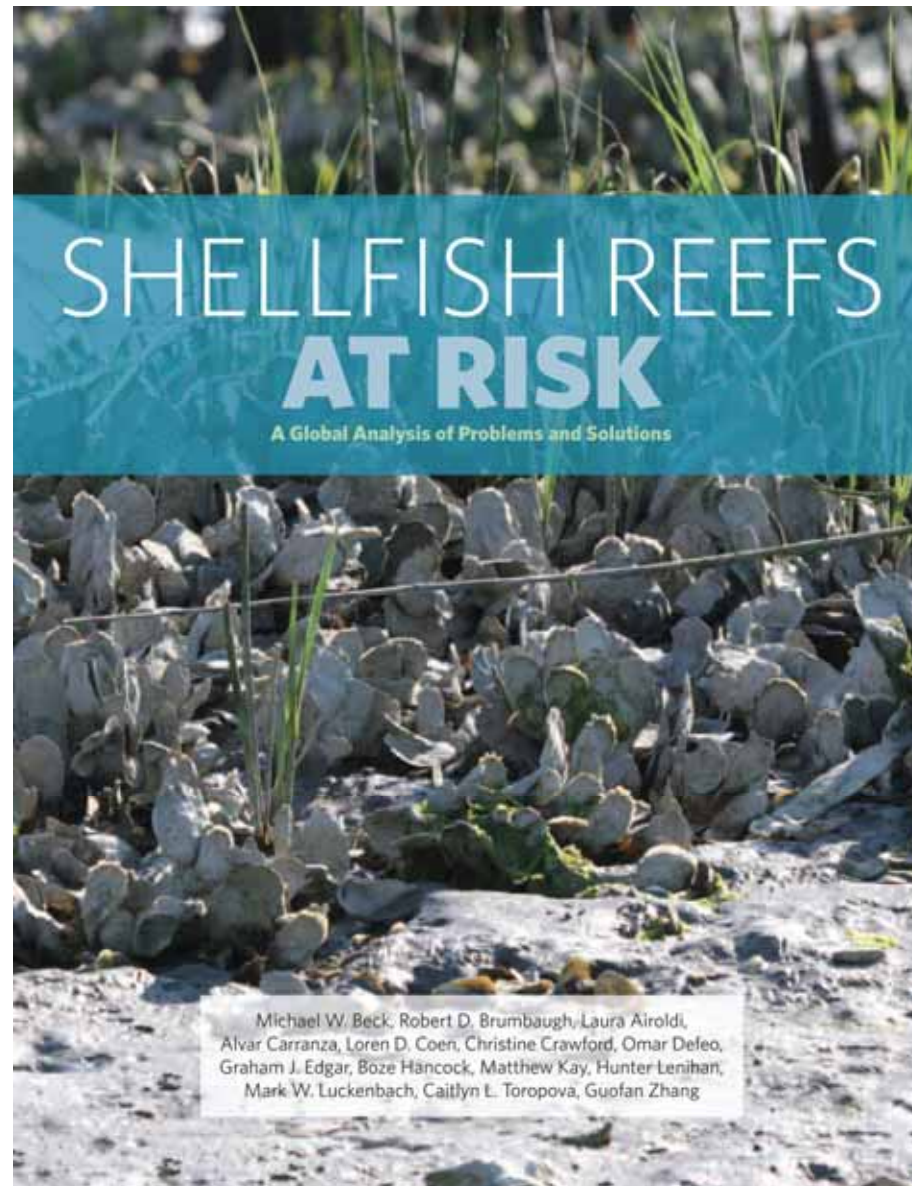
The Resilience Partners have led regional Reef Resilience Training Workshops in the Caribbean and Indo-Pacific. More

Case Studies

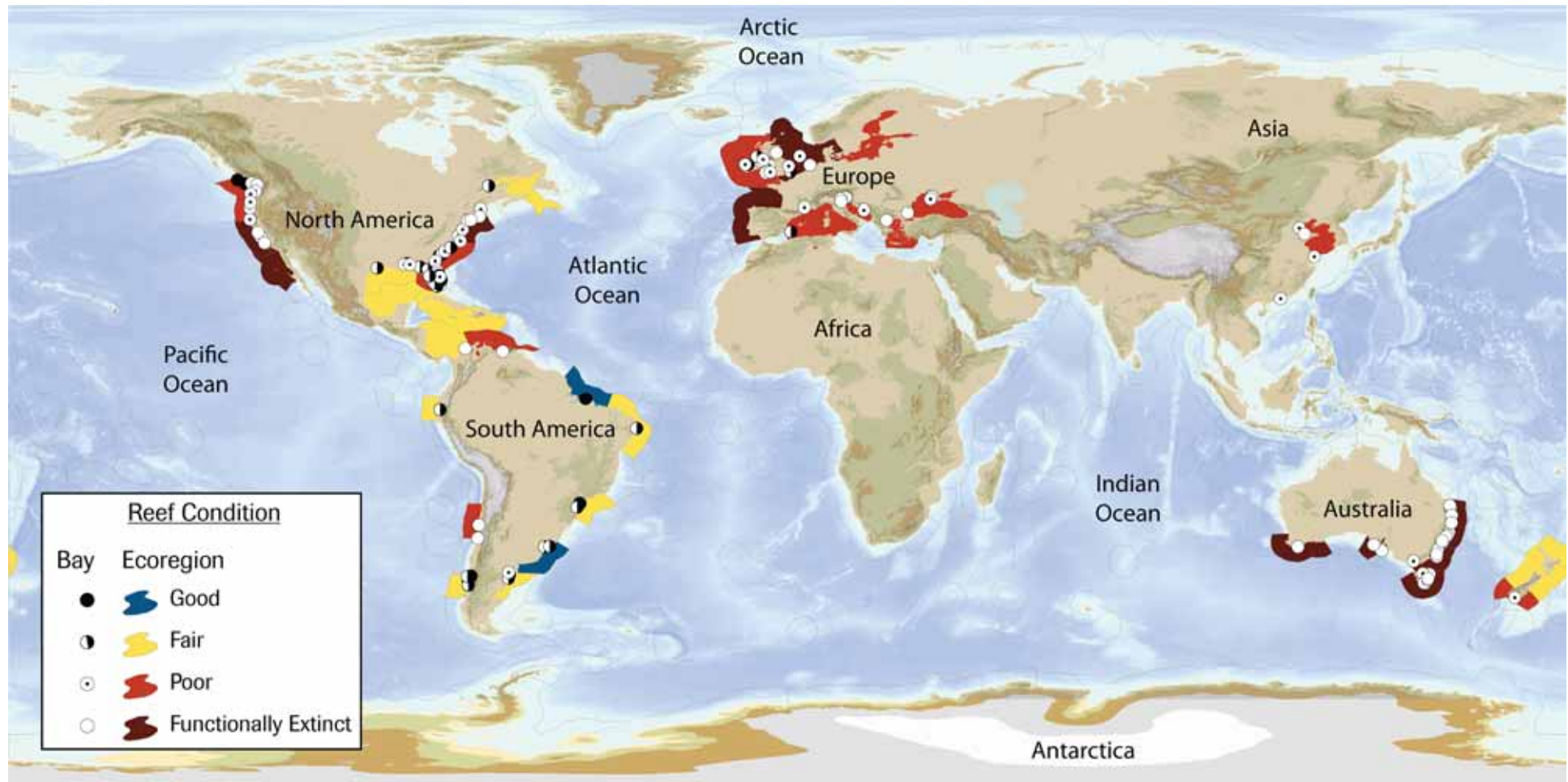
Practitioners around the globe have been working to integrate resilience principles into their reef management activities. Check out this section to find case studies and



Conserving critical habitats

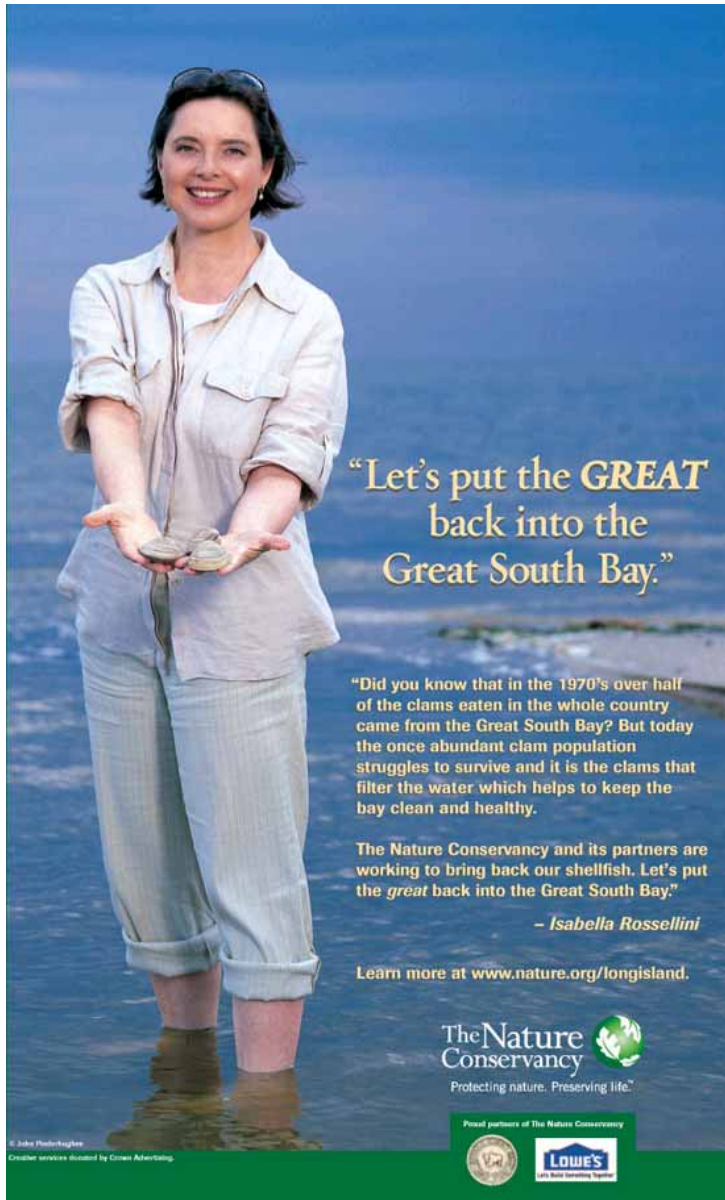


Shellfish Reefs at Risk



85% loss of oyster reef ecosystems in bays and ecoregions;
mangrove and saltmarsh (~50%) and coral reef (~20%)

Communicating the Challenges



“Let’s put the **GREAT** back into the Great South Bay.”

“Did you know that in the 1970’s over half of the clams eaten in the whole country came from the Great South Bay? But today the once abundant clam population struggles to survive and it is the clams that filter the water which helps to keep the bay clean and healthy.

The Nature Conservancy and its partners are working to bring back our shellfish. Let’s put the *great* back into the Great South Bay.”


– Isabella Rossellini

Learn more at www.nature.org/longisland.

The Nature Conservancy
Protecting nature. Preserving life.™

Proud partners of The Nature Conservancy

© John Penderknight
Creative services illustrated by Green Advertising



- Perception that there is not a problem
- Shellfish not appreciated as ecosystem
- Services not well measured
- Significant pressure to spread non-natives
- Disease
- Few shellfish in conservation areas
- Estuaries in decline

Recommendations

Stop Overfishing

Conserve Remaining Reefs

Restore Reef Services

Stop Spread of non-natives

Improve Water Quality

Manage reefs as ecosystems
see the forest not just the trees



- Develop MPAs & expand shellfish sanctuaries
- Include reefs in representative protected area policies
- Protect best remaining reefs
- Expand habitat & species at risk listings

*A paradigm shift:
oyster reefs managed not only for
fisheries production, but also
as habitats and for ecosystem services*



Use shellfish as bioindicators to measure water quality and estuarine restoration goals

Support sustainable aquaculture

Use partnerships to advance

- water quality goals &
- estuarine conservation goals



Services Being Valued & Enhanced



A 4.5 km² conservation area has been set up for the Jinjiang oyster in Nantong, Jiangsu Province. This is the first conservation area for the protection of marine shellfish in China



Restoration Activities Increasing in Scale Stimulating shellfish - Rebuilding 'green' infrastructure & creating jobs



Small

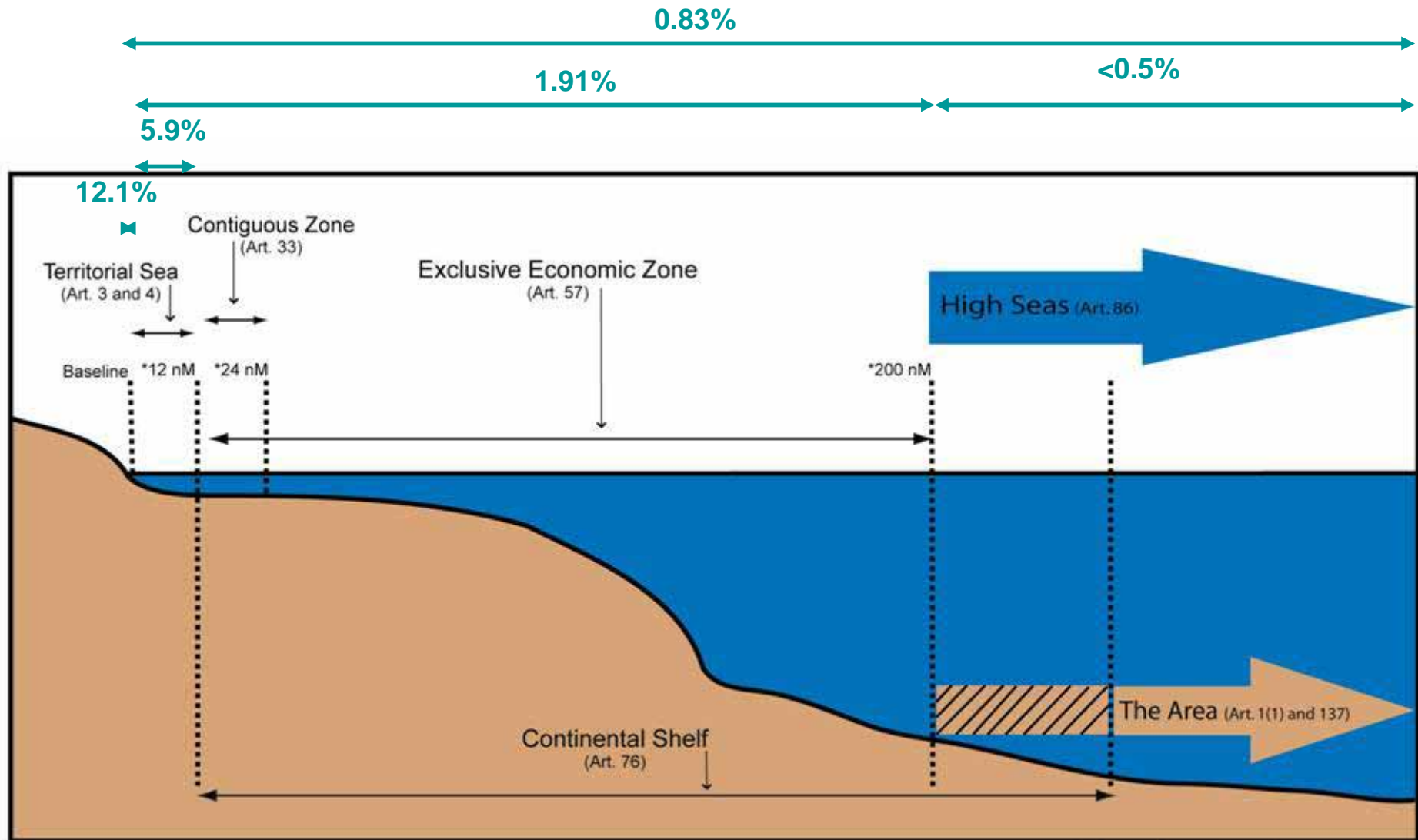


Medium



Large

Less than 1% of the Ocean is protected

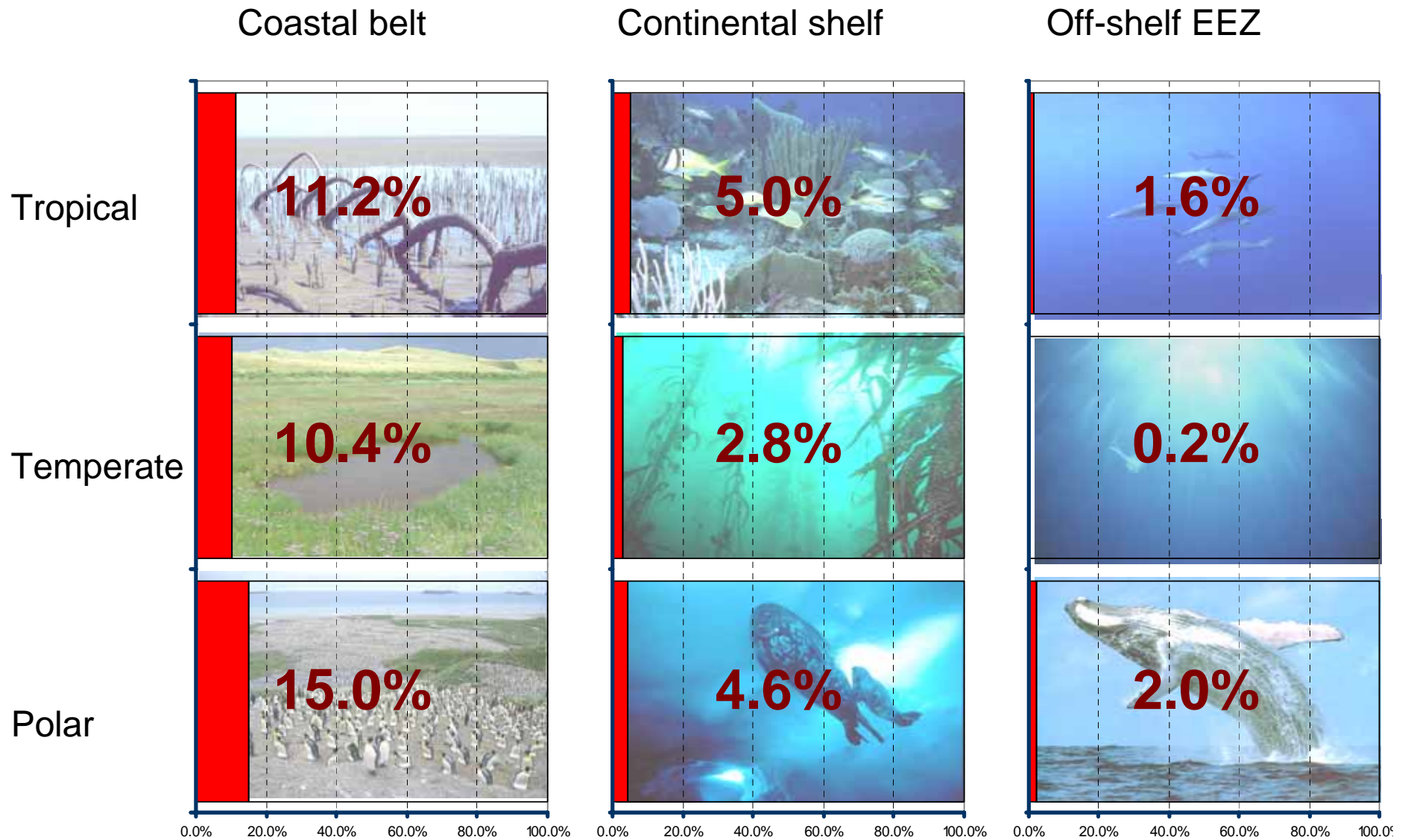


* up to

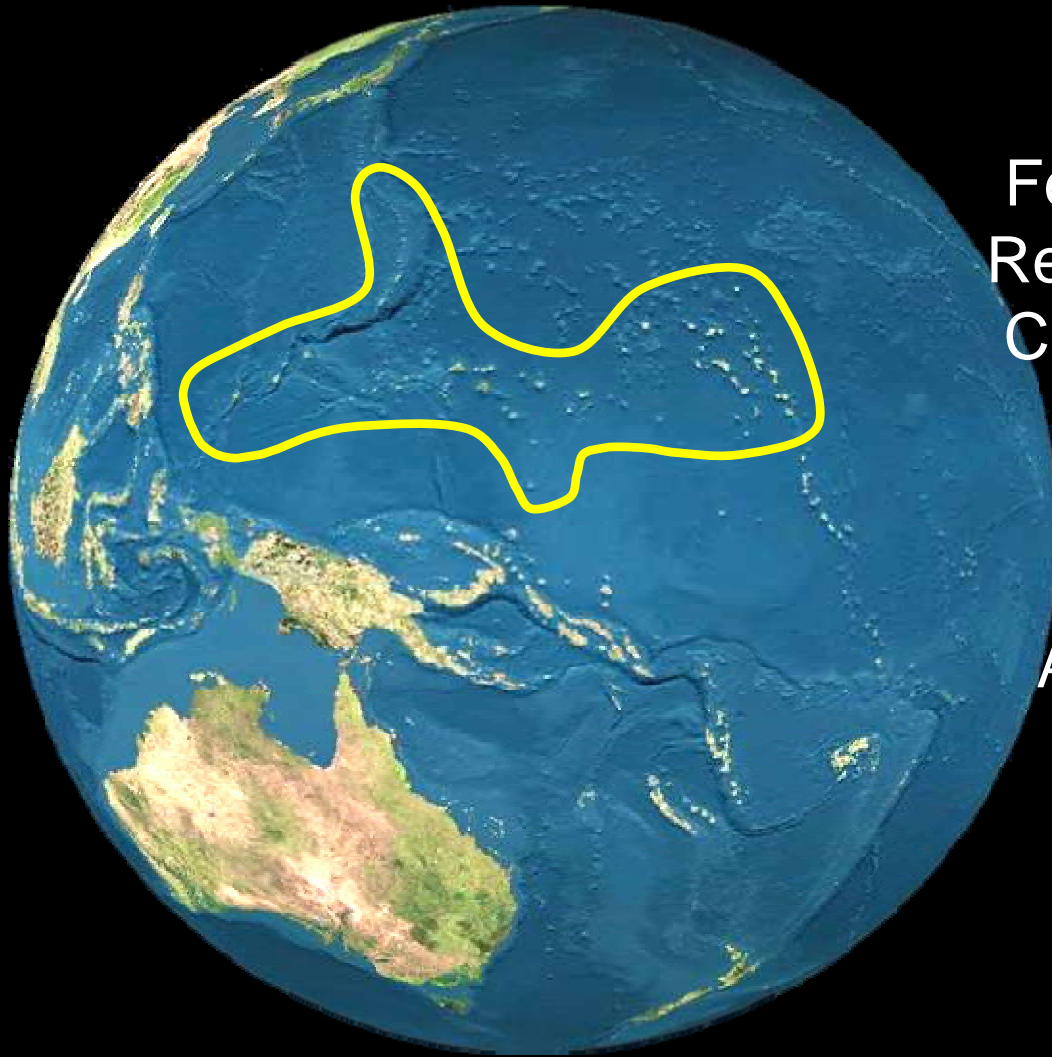


The Area starts at 200 nM from the baseline when the legal Continental Shelf (as defined in Art. 76) does not extend beyond that limit.

Less Than 1 % of the Ocean is Protected



The Micronesia Challenge



The Chief Executives of:
Republic of Palau
Federated States of Micronesia
Republic of the Marshall Islands
Commonwealth of the Northern
Mariana Islands
U.S. Territory of Guam

Agreed to effectively conserve
at least **30%** of the near-
shore marine resources and
20% of the terrestrial
resources

across Micronesia by **2020**

How it Happened



2004

- **Countries** commit to **Protected Areas (COP 7)**

2005

- **Palau and Seychelles Presidents** launch **Global Island Partnership & Finance Plan**
- **Micronesian** leaders sign-off

2006

- **CBD COP 8 Global Island Partnership event & launch of the Challenge**
- **TNC & CI and GEF** pledges
- **Micronesian Challenge** Support Team

2007 to present

- **Ongoing action** within each country for **implementation at scale**
- **MC Climate Change Conference, Majuro**

Why this Challenge Matters

- **Builds on on-going work in all jurisdictions**
- **Increases access to critically needed resources**
- **High level leadership support for the environment**
- **Increases regional cooperation and coordination**
- **Commitment to local people and cultures**
- **Puts Islands on the global stage**
- **Sets a benchmark for the world**



Building on regional experiences to influence global change



Two decades of marine conservation in Coral Triangle laid the groundwork for CTI

US government support

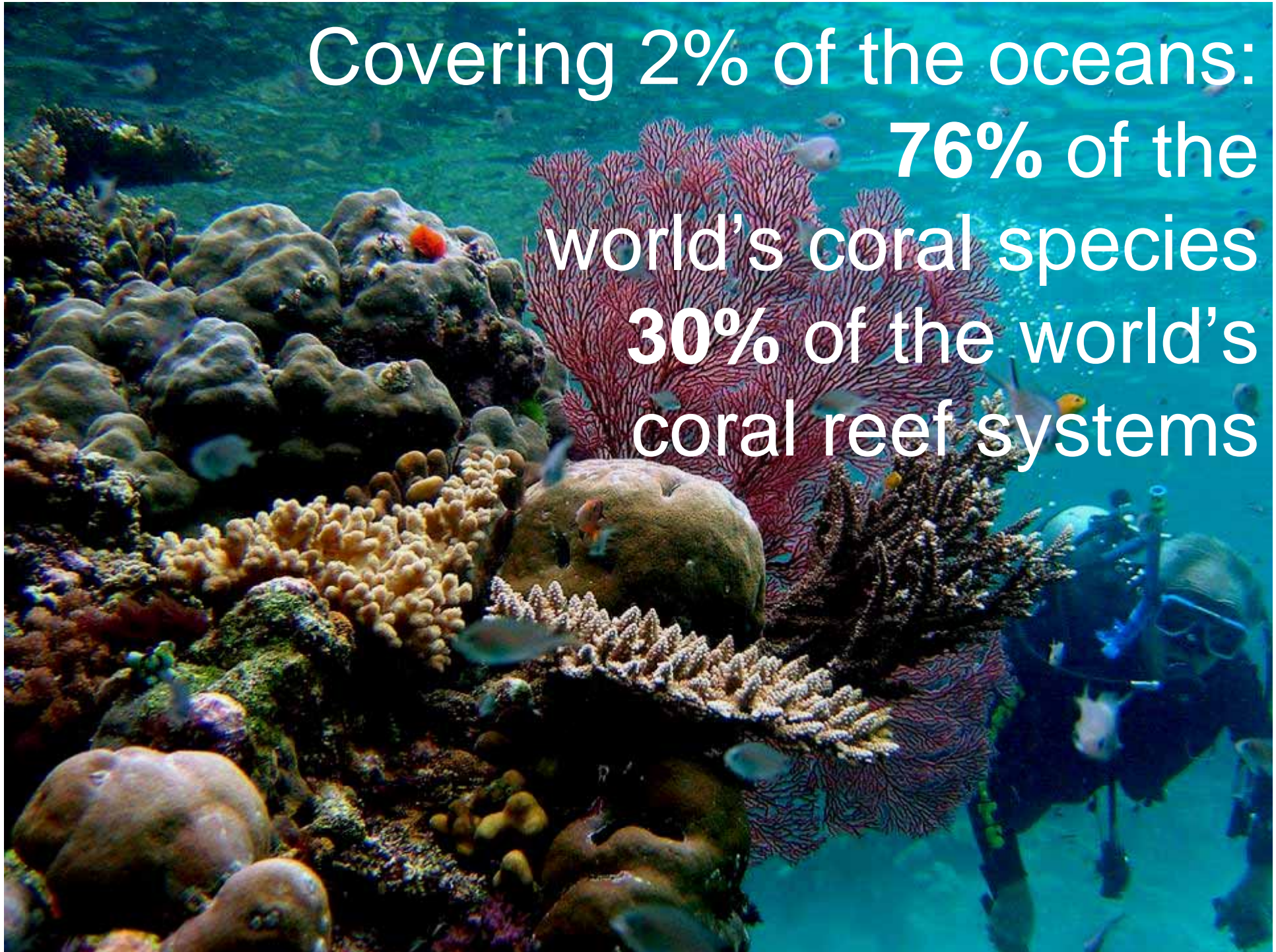
NGO programs

US-based foundations

The Coral Triangle



Covering 2% of the oceans:
76% of the
world's coral species
30% of the world's
coral reef systems



World's largest tuna fishery



Coastal resources
provide income,
livelihoods and food
security to over
120 million people

**Fish provide 65 –
90% of animal
protein in SE Asian
and Pacific Island**



Overfishing of coastal fisheries

Over-exploitation of limited resources



Targeting Spawning Aggregations



Destructive fishing practices



In coastal communities, population growth will increase pressures on marine resources



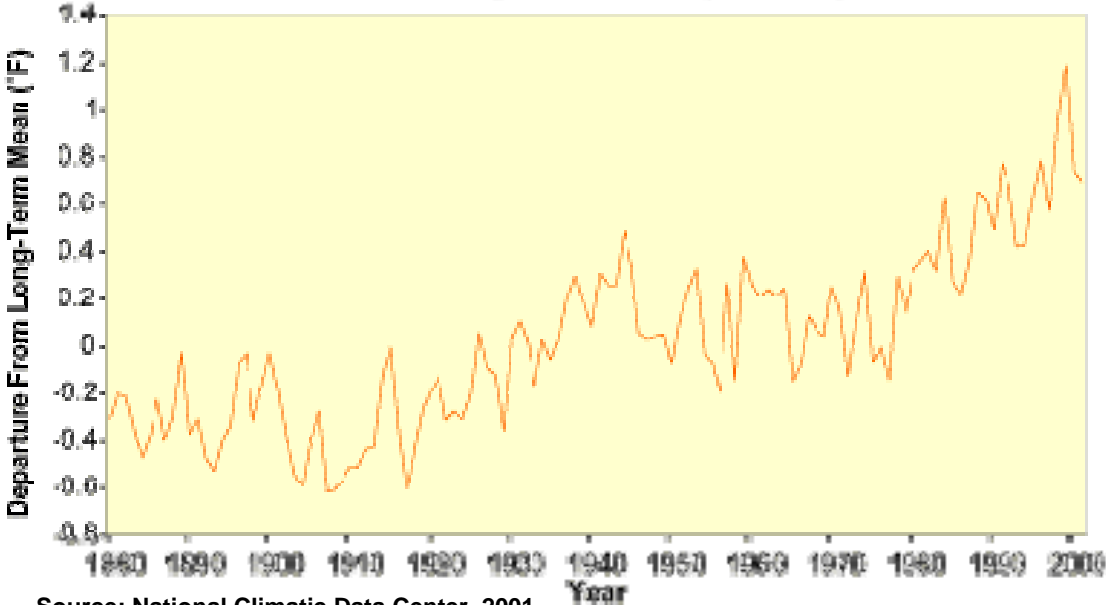
Pelagic fisheries:

**Overfishing of tuna:
Spawning / juvenile growth areas unprotected**



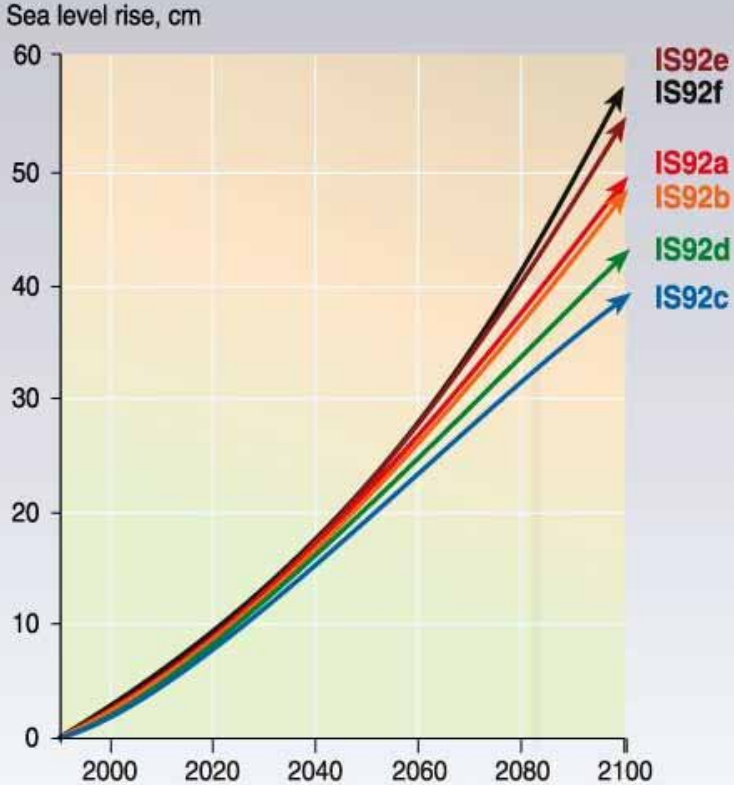


Global Temperature Trends (1880-2000)

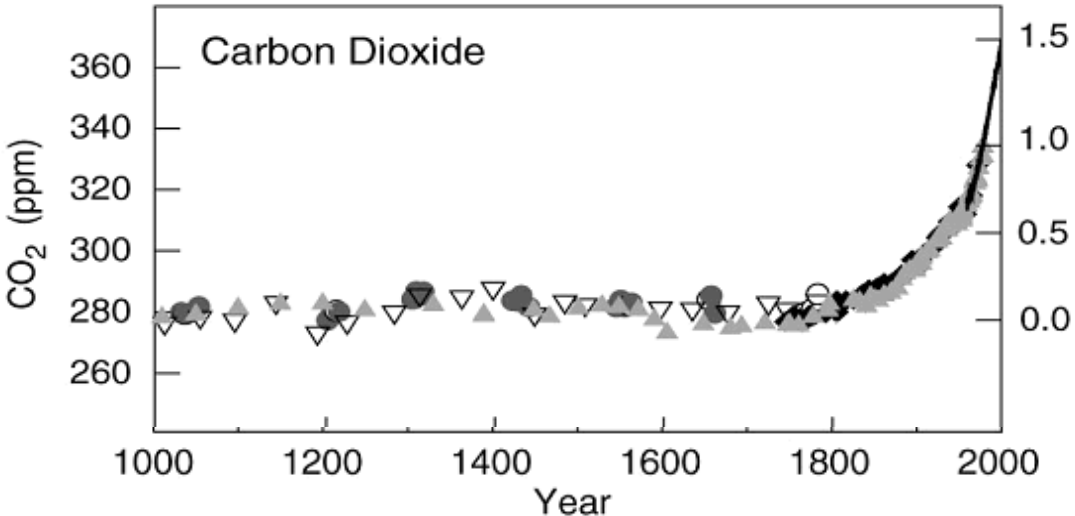


Source: National Climatic Data Center, 2001

Sea Level Rise Scenarios (IPCC)



Global atmospheric concentrations of CO₂



CTI SUMMIT

Coral Triangle Initiative
on Coral Reefs, Fisheries and Food Security

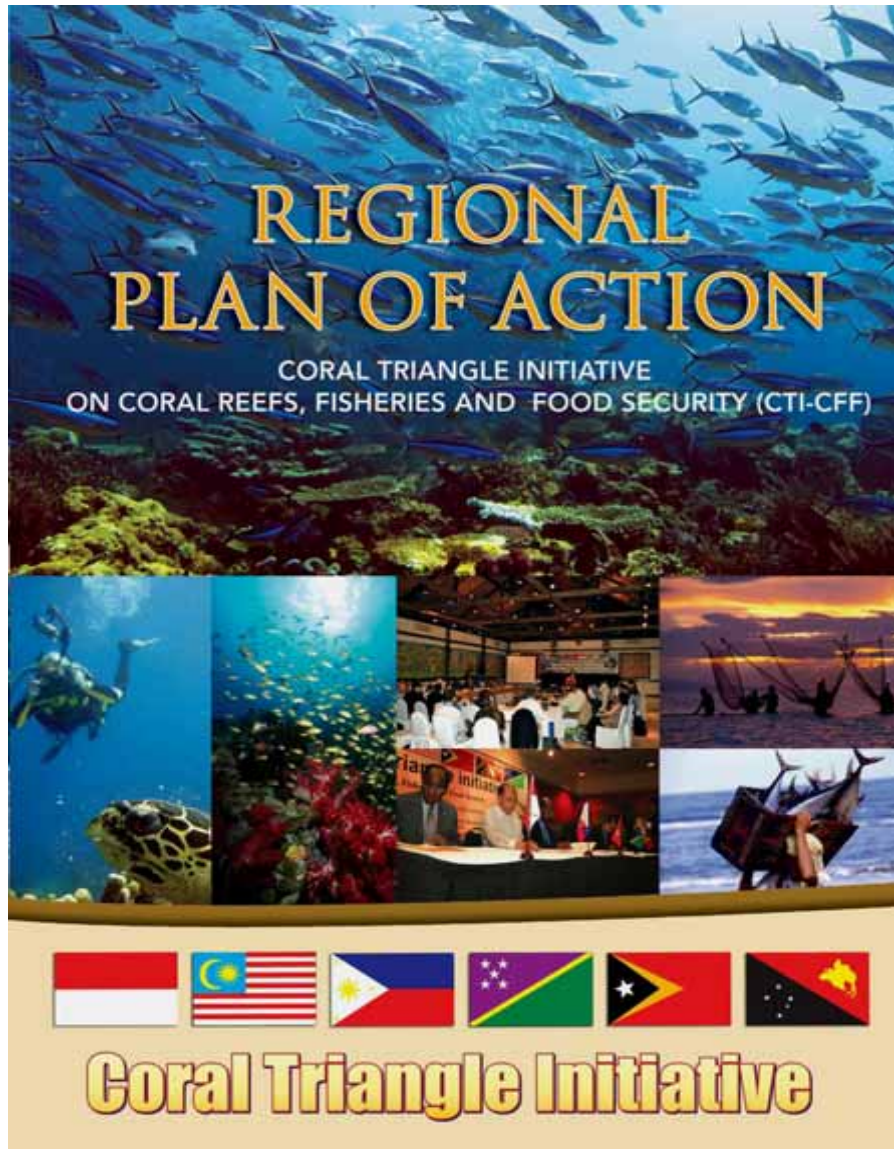
Manado, North Sulawesi, Indonesia
1 May 2009



Building the CTI Foundation. Government ownership



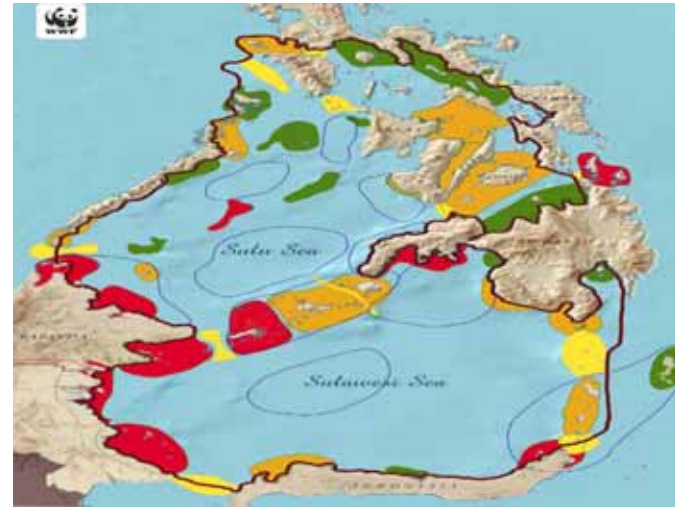
Building the CTI Foundation: Plan of Action



“The boldest and most ambitious marine action plan ever agreed by governments. This will transform the way we manage our marine and coastal resources, and reshape our future”

*President Yudhoyono of
Indonesia*

Priority Seascapes



Ecosystem approach to fisheries



Marine protected
areas



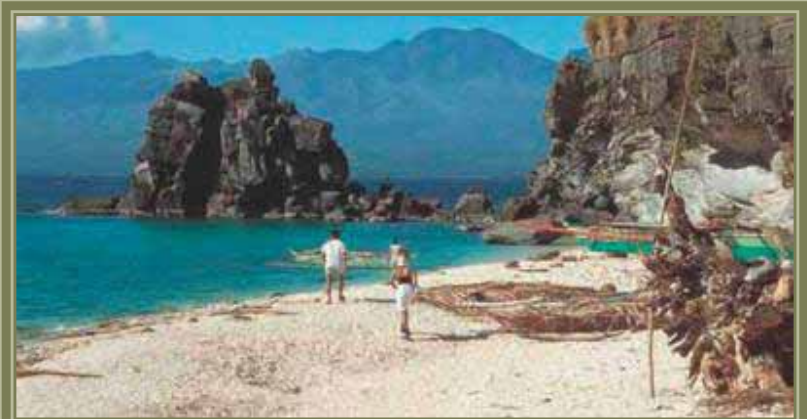
Climate adaptation

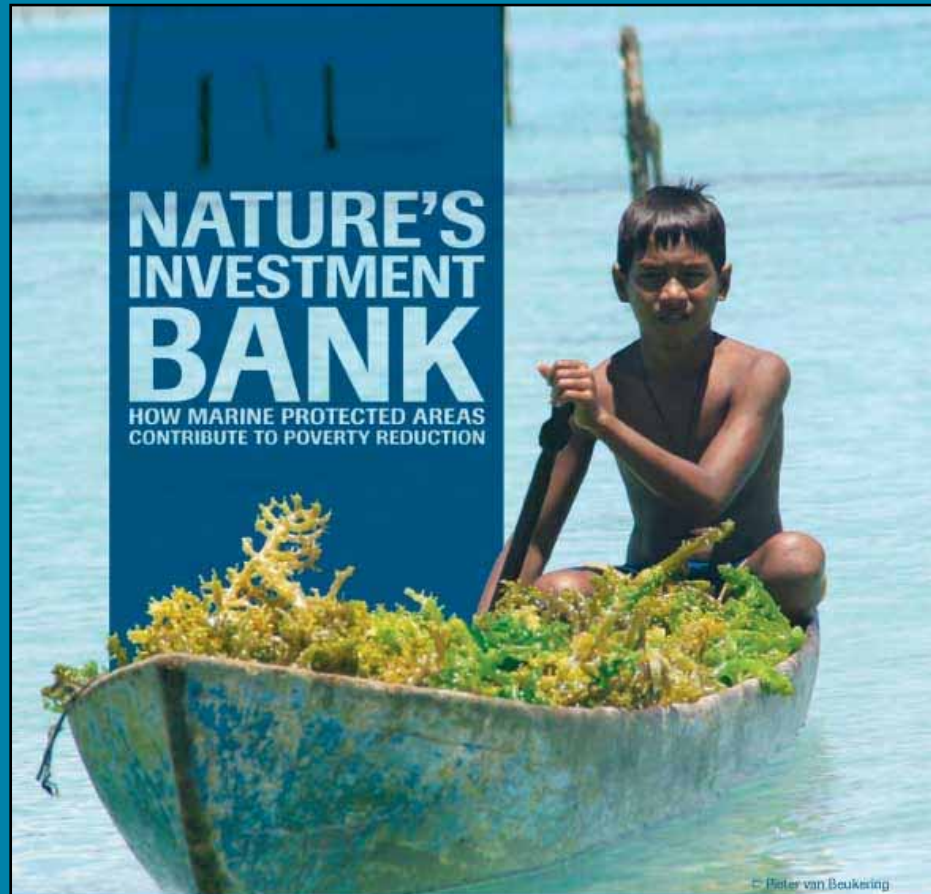


Threatened species



Protection = more fish
= greater incomes





Four countries, four marine protected areas, a strong study methodology, and more than 1,000 interviews with local people. The findings conclusively show that “people in the community are now better off and this is because of the marine protected area,” as a local person in the Philippines explained.

In one of the first studies of its kind, a large team including a top-tier economist and social scientist sought to determine whether four marine protected areas have contributed to poverty reduction, and if so, why. The study sites are in Fiji (Navakavu), the

the Solomon Islands (Arnavon Islands), Indonesia (Bunaken) and the Philippines (Apo Island). The sites are not a random sample but were deliberately chosen because local experts believe they have contributed to poverty reduction. The objective was to study potentially positive examples to see if there are common factors for success. There are in fact several shared reasons why these particular marine protected areas helped reduce local poverty. Replicating these success factors can help marine protected areas in general contribute more to reducing local poverty.

Protection of tuna spawning and growth areas – consumers could pay

Top Consumers: Japan, US, EU, China, Thailand



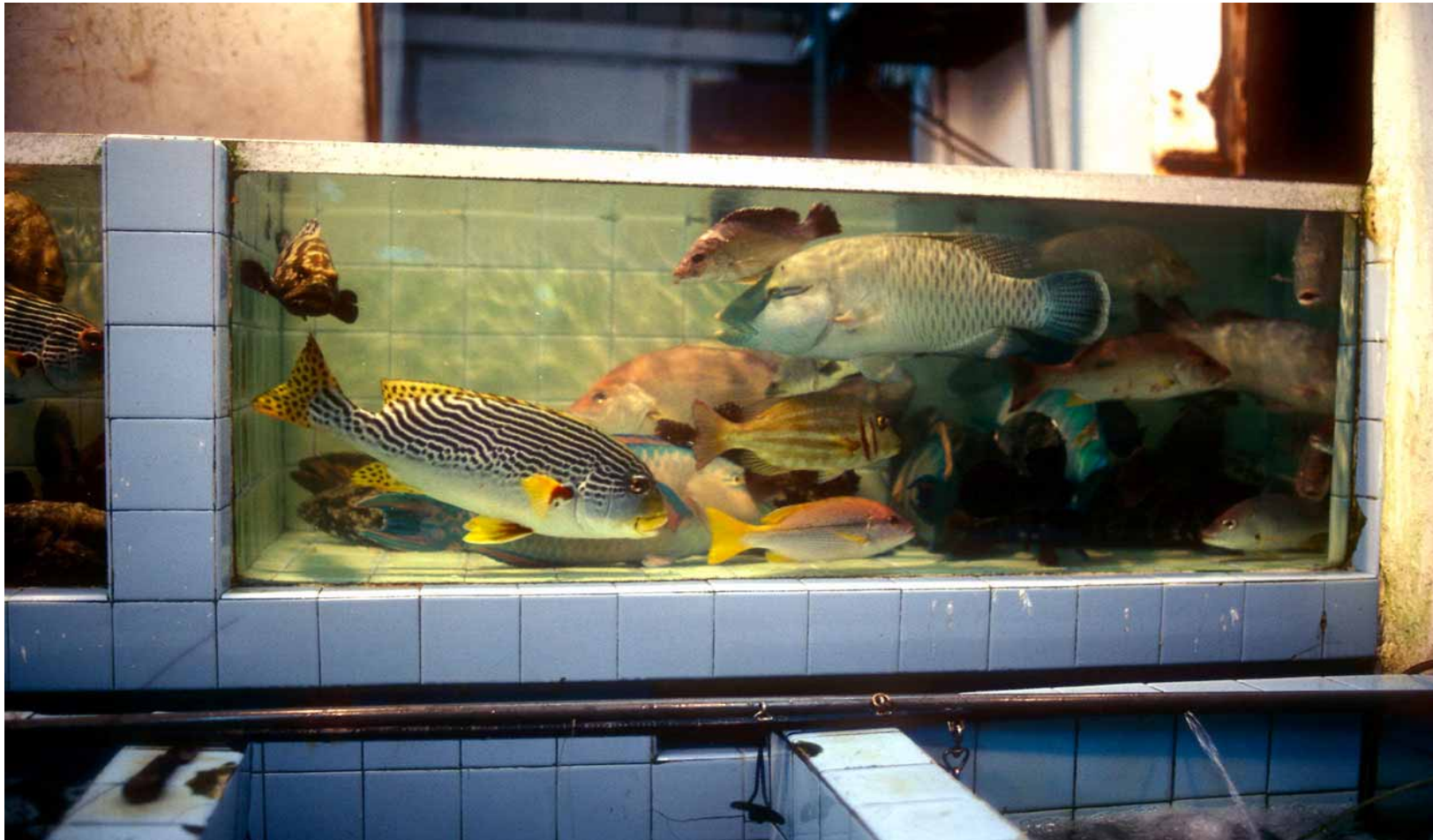
Local Fishing Communities



Fishing Fleets



Encouraging consumer demand for sustainable fish



Selected Indonesian Fisheries Subsidies: Quantitative and Qualitative Assessment of Policy Coherence and Effectiveness



Building the CTI Foundation: National Action Plans and Alliances

PNG example



Department of
Environment and
Conservation

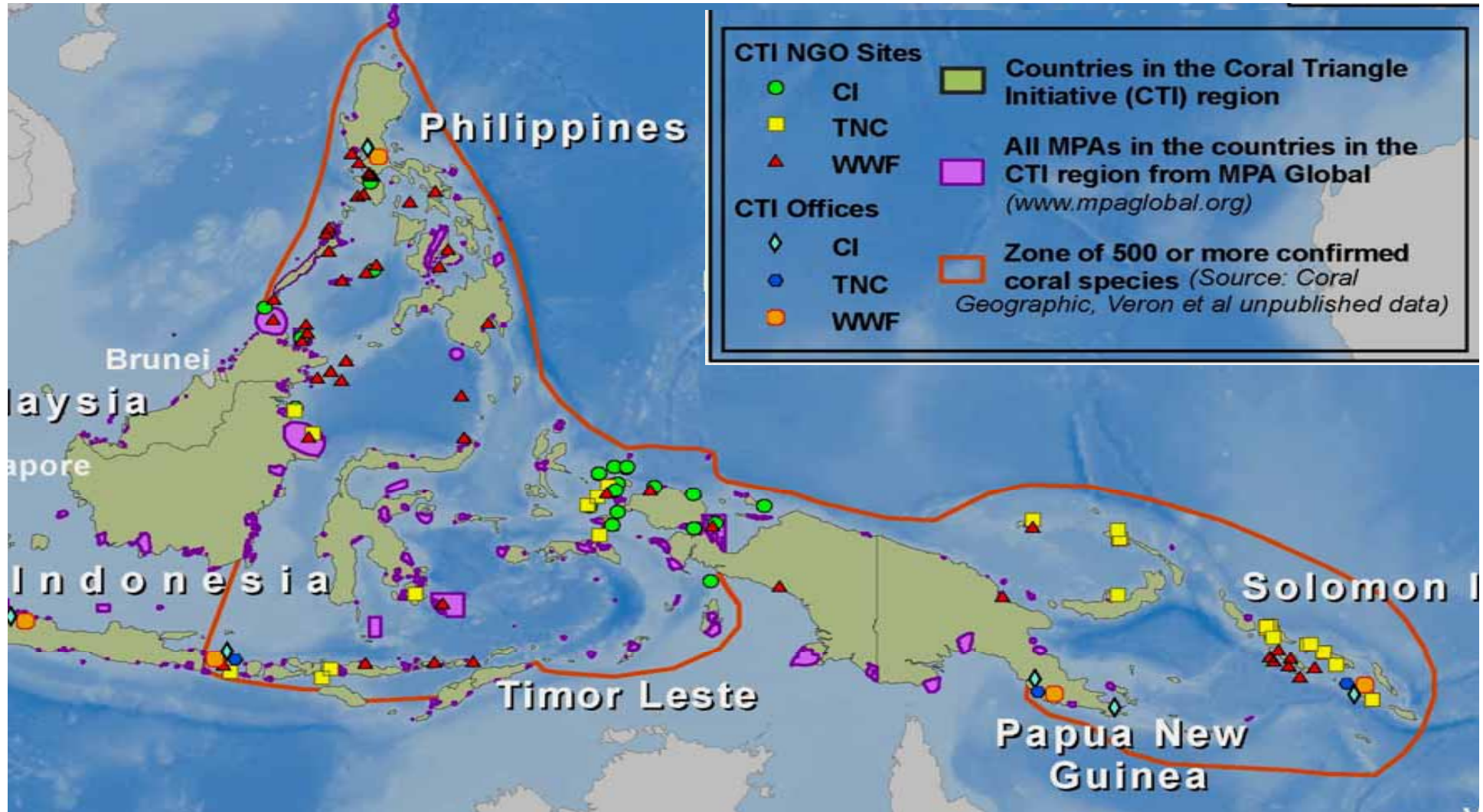
National Fisheries
Authority

Foreign Ministry



Mama Graun
Conservation Trust
Fund
Local NGOs

Building the CTI Foundation: NGO Consortium



Building the CTI Foundation: Early funding commitments



- \$110 million direct grants to CTI
- \$300 million co-financing package

Building the CTI Foundation: Partnership (CTIP)

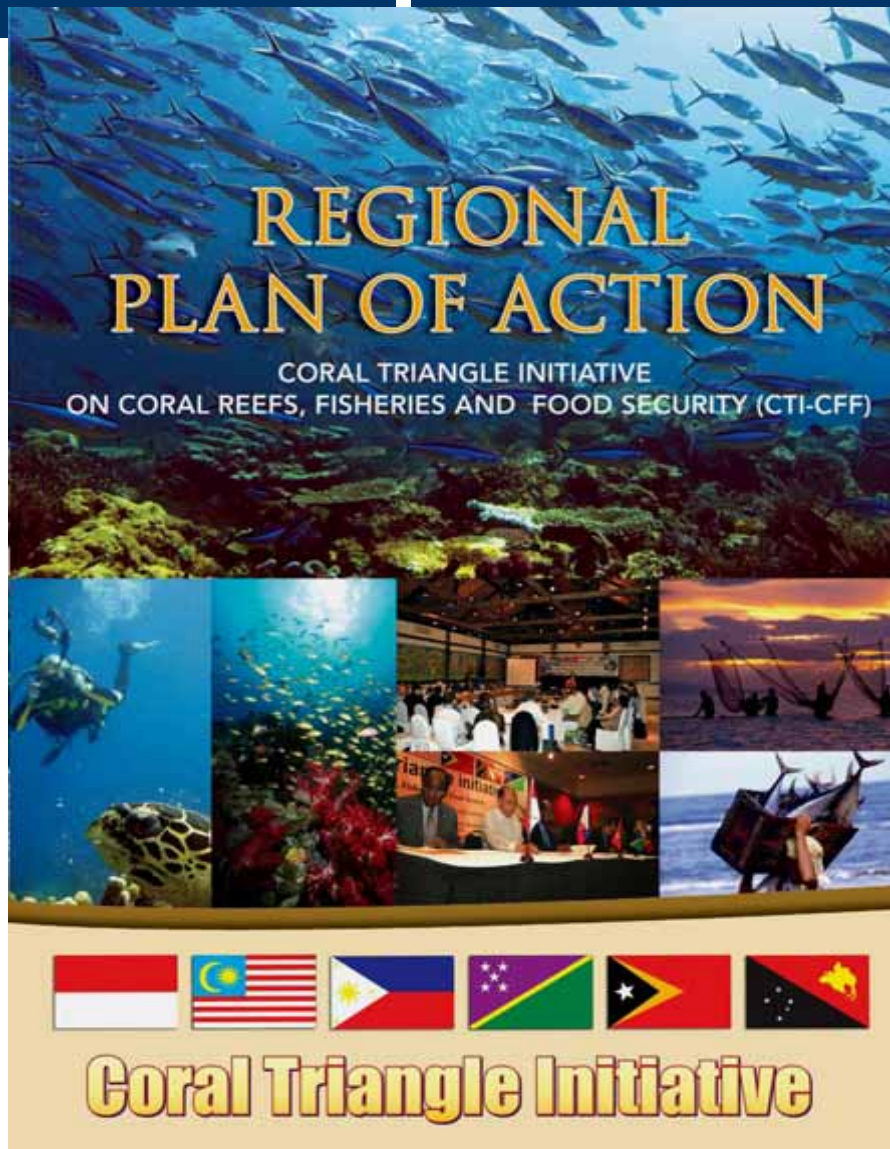
CTI



Summit outcomes

Unprecedented commitments





Regional action plan formally adopted by 6 leaders

Ministers tasked with ensuring implementation

National actions plans completed

Indonesia



- Committee of Ministers on CTI
- Savu Sea MPA (3.5m hectares)
- Pledge: 20m ha MPAs by 2020
- Double the budget
- Host CTI Secretariat
- \$5 million of new funding
- Unified CT6 position on ecosystem-based adaptation

PNG and Solomons



PNG

\$2 million of new funding
CTI will be integrated into
national policy (econ.
development plan)

Solomon Islands

New CTI Unit established with
staff
Cabinet endorsed CTI

Philippines, Timor Leste, Malaysia



Philippines

\$5 m pledge

New seascape program

New Executive Order endorsing
National CTI Plan of Action

New Presidential decree on ICZM
SSME as platform

Palawan – sustainable seafood

Timor-Leste

New Task Force on illegal fishing

Malaysia

\$1 m pledge

Marine scientific expedition

The “Challenge” Model



**Eastern Caribbean
Mexico
Western Indian Ocean**