

CORAL REEF ACTION

SUSTAINING COMMUNITIES WORLDWIDE





THE INTERNATIONAL CORAL REEF ACTION NETWORK (ICRAN)

The International Coral Reef Action Network (ICRAN) was formed to address the disturbing decline in coral reefs and its impact on the world's communities. ICRAN is working to halt and reverse the declining health of the world's coral reefs.



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“Maintaining the biological diversity, condition, resources, and values of coral reefs and related ecosystems is a matter of global urgency.”

– From the International Coral Reef Initiative Framework for Action

CASE IN BRIEF

Coral reefs are one of the most spectacular underwater environments, benefiting people and the natural world far beyond their boundaries. They safeguard lives, economies and cultures, stimulate tourism jobs and opportunities, act as safe harbors, protect against erosion, provide food to sustain local diets, contain 10 percent of the world’s fishing harvest, play a key role in nutrient cycling, and hold the prospect of scientific and medical advances we are only beginning to comprehend. Yet 60 percent of reefs are either severely damaged or threatened with immediate damage unless we act now.

The International Coral Reef Action Network (ICRAN) is working to halt and reverse the declining health of the world’s coral reefs.

ICRAN is a strategic alliance acting worldwide to address the management needs of coral reef ecosystems and their relationship to the communities that depend upon them. ICRAN operates by sharing and building traditional knowledge, current research, and the lessons of practical experiences to strengthen reef management through peer-to-peer communication. ICRAN’s holistic approach to reef management serves not only to ensure the future of these valuable ecosystems, but also to ensure the future of the communities coral reefs sustain. This holistic approach includes alternative livelihoods, training, capacity-building, and the exchange of current scientific, economic, and social information.

ICRAN also educates decision-makers and raises public awareness of the value of coral reefs and their importance to the planet’s health by working with local communities, national governments, and global organizations.

The ICRAN partnership seeks \$30 million in funds for current programs and the establishment of a Coral Reef Fund that will ensure sustainable financing for coral reef conservation and management. The Fund’s purpose is to develop flexible financing and innovative public-private partnerships to help sustain coral reefs and the people who depend upon them across local, regional, and global levels.

Current ICRAN Program: The First Four Years

The United Nations Foundation (UN Foundation) has made an historic grant of \$5 million to initiate ICRAN’s current four-year strategic plan. To complete the remainder of the present program, a further \$10 million is required, of which the UN Foundation has agreed to match \$5 million of the funds raised during this campaign.

Coral Reef Fund: Building Toward the Future

To build on this initial program, ICRAN aims to raise an additional \$20 million to continue expansion of reef management and conservation activities over the next generation.



REEFS, PEOPLE, AND POVERTY

The Remarkable Biodiversity of Coral Reefs

Coral reefs are among the world's most spectacular underwater environments. Like rainforests, these natural wonders are complex ecosystems supporting a remarkable diversity of life.

Although coral reefs cover less than one percent of the ocean floor, they are home to more than 93,000 plant and animal species, and sustain more than 35 percent of marine species in shallow ocean waters. In fact, it is estimated that more than one million coral reef species remain to be identified. These undiscovered species may hold the key to medical advances in the treatment and cure of widespread diseases like cancer and HIV/AIDS.

The Important Role Coral Reefs Play in Sustaining Local Communities

In more than 80 developing countries, countless communities rely heavily on coral reefs for income security and nutritional sustenance. In fact, 20 percent of the world's population relies mainly on coral reefs for food. Indeed, one square kilometer of healthy coral reef can produce 15 tons of food per year – enough for more than 1,000 people. Sustaining the health of coral reefs is, therefore, critical to sustaining these communities. However, pollution, destructive and non-sustainable fishing, reclamation, coral mining, and other threats are taking their toll on coral reefs and the people who depend upon them.

Coral reef species contain valuable compounds and genetic materials that may hold the key to medical advances.

The Economic Benefits of Healthy Coral Reefs

Coral reefs and related marine life are often the only natural assets for many people living on tropical islands and coastlines. Reef decline is directly related to the loss of economic opportunities and, not surprisingly, often accelerates the rate of poverty in these areas. As a result, these communities face increasing challenges. For example, when sustainable fishing methods yield an insufficient catch, unsustainable and destructive fishing methods are often used. This can start a spiral of increasing reef damage, reducing productivity and increasing destructive methods. In Indonesia, overfishing and blast fishing are estimated to result in a net loss of more than US\$1.3 billion over the next twenty years. Communities that are unable to sustain themselves through fishing are subsequently forced to produce or import other food – further displacing local opportunities for generating revenue.

Healthy coral reefs offer relief from hunger and environmental degradation and have significant economic value. For instance, in Indonesia, healthy coral reefs are estimated to have an annual value of US\$1.6 billion. Southeast Asia's coral reef fisheries are also greatly valued at US\$2.4 billion annually. When other reef services such as tourism, the aquarium trade, and shoreline protection are included, the economic potential of coral reefs can be enormous.



Healthy reefs can also provide economic opportunities far beyond the fish and aquarium trades. Their captivating beauty can sustain a growing and increasingly diverse tourism market that has the power to generate income and create employment opportunities. Specifically, sustainable tourism can create a marine and coastal environment wherein coral reefs can thrive, and food-producing and revenue-generating resources can be protected.

The Threats to Reef Communities

Although coral reefs have coped with changes in the global environment for millions of years, their capacity to continue doing so is now seriously threatened by human impacts, such as coastal development, destructive fishing techniques, the souvenir trade, and pollution. As a result, 60 percent of the world's coral reefs have been seriously damaged or completely destroyed.

In most coral reef areas around the world, damage to marine environments is contributing to increased poverty levels at an alarming rate. In addition to the human toll, the loss or destruction of reefs means the loss of a natural supply of coral sand to sustain beaches that underpin the tourism industry, as well as the loss of natural breakwaters to protect coastlines from storm waves.

We must act today to halt the degradation and destruction of coral reefs. Otherwise, coral reefs and the communities that depend upon them will continue to suffer.

ICRAN – AN INTERNATIONAL PARTNERSHIP IN ACTION

ICRAN is a strategic alliance focusing on the management needs of the world's coral reef ecosystems and their relationship to the communities that depend upon them. ICRAN operates by exchanging traditional knowledge and current research, and by sharing experiences to strengthen reef management through peer-to-peer communication.

Coral reefs benefit people and the natural world far beyond their boundaries. Reefs also provide food, income, and employment for many of the world's poorest communities through tourism, marine recreation, and fishing.

ICRAN focuses on three main objectives: coral reef management, assessment, and education.

ICRAN's strategic alliance approach to reef management and assessment has been developed to ensure the future of these valuable ecosystems, as well as the future of the communities they sustain. This strategy includes alternative livelihoods, training, capacity-building, and the exchange of current scientific, economic, and social information.



“Coral reef management and sustainability are pressing challenges for the international community. ICRAN’s approach is an example of the kind of public-private partnership that is needed to effectively respond to new and emerging threats to marine habitats.”

– Timothy E. Wirth, President, United Nations Foundation

ICRAN also educates decision-makers and raises public awareness of the value of coral reefs and their importance to the planet’s health by working with local communities, national governments, and global organizations.

ICRAN brings together managers of marine protected areas to learn from each other and to share common experiences. Miguel Alamilla, Hol Chan Marine Park, Belize, and Oscar Alvarez, Sian Ka’an Biosphere Reserve, Mexico, recently met at an ICRAN meeting and discovered that they face similar reef management challenges. ICRAN provides the forum for them to share knowledge and solutions.

A Call to Action

ICRAN is a public-private response to the International Coral Reef Initiative’s (ICRI) Call to Action to protect coral reefs worldwide. ICRI, established in 1994, serves as the convening mechanism for governments and coral reef advocates. The Call to Action is now endorsed by more than 80 countries and is supported by local communities, and national and international groups.

MANAGING CORAL REEFS: SHARING EXPERIENCES TO SUSTAIN COMMUNITIES

ICRAN’s present financial resources target four threatened coral reef regions: the Caribbean; East Africa; East Asia; and the South Pacific. Within these regions, ICRAN is creating a network of sites to highlight successful examples of coral reef management and extend sustainable management practices to other sites. With additional funding, ICRAN will expand its partnership to include other reef regions, such as the Middle Eastern and South Asian Seas. *ICRAN has initially chosen thirty-two sites to highlight examples of effective reef management in four coral reef regions. The full list is included on pages 10-12.*

Examples of ICRAN’s current management programs include:

- Conducting marine management training programs for marine park authorities throughout the Caribbean, so that experiences and knowledge can be applied to other less developed but equally critical marine protected areas.
- Providing training in alternative livelihoods, such as ecotourism practices, to local communities involved in reef conservation efforts.
- Working to empower key local stakeholders in marine protected areas in East Africa to manage sites and minimize human induced degradation.



“Humanity’s immediate health and long-term well-being are indivisible from that of other species and systems sharing and shaping our planet. We are living proof that biodiversity matters. ICRAN is helping to focus world attention on the connectivity between natural resources and human development.”

– Mohamed El-Ashry, CEO, Global Environment Facility

- Enhancing public participation in integrated coastal management and providing training in Southeast Asia.
- Improving the capacity for exchanging experience and expertise in coastal and coral reef management in 26 countries and territories of the South Pacific region.
- Supporting local efforts to maintain the ecological integrity of coral reefs while encouraging initiatives that provide communities with sustainable economic benefits through activities such as responsible tourism and non-destructive fishing practices.

ASSESSING CORAL REEFS: USING SCIENCE TO SUPPORT LOCAL ACTION

ICRAN is based on the principle that effective management depends upon traditional knowledge, current scientific, social, and economic information, and peer-to-peer communication. Through the ICRAN network, reef managers use the latest scientific information and research for planning, training, community awareness, and education activities – helping to expand the number of sites where coral reefs and associated ecosystems are managed effectively. ICRAN then uses this local and regional information to maintain awareness of the global status and management needs of coral reefs and associated ecosystems.

Examples of ICRAN’s current assessment programs include:

- ReefBase: The completely revised version of ReefBase, an important coral reef information system, has already been developed with ICRAN support. ReefBase will be expanded and updated to provide managers, policymakers, and ICRAN partners access to information on coral reef status, threats, and management solutions.
- Reefs at Risk: The Reefs at Risk Southeast Asia report has been successfully launched. Other regional Reefs at Risk analyses will follow.

EDUCATING COMMUNITIES ABOUT CORAL REEFS

The ICRAN education program identifies and addresses specific educational needs for communities living near coral reefs and other target audiences. ICRAN develops, collects, and distributes coral reef information and resources locally, regionally, and globally. ICRAN also promotes awareness about the threats to coral reefs, and engages governments and corporations in dialogues about best practices and policies for coral reef conservation.

ICRAN’s public awareness resources and networks are supported by the International Coral Reef Information Network (ICRIN) and other partner outreach efforts.



The International Coral Reef Information Network (ICRIN) is a source of information on coral reef outreach and education materials and techniques. ICRIN uses a broad range of electronic and print media and local community events to educate people about the benefits of sustaining coral reefs.

ICRAN PARTNERS

Each ICRAN partner brings special skills to coral reef conservation. The current ICRAN partners include:

[Coral Reef Alliance \(CORAL\)](#) supports ICRAN through local coral reef conservation initiatives by raising public awareness about coral reefs and using the power of coral reef tourism to keep coral reefs alive.

[Global Coral Reef Monitoring Network \(GCRMN\)](#) supports ICRAN through its activities to assess how, where, and why coral reef damage is occurring and the effectiveness of management.

Coral reefs provide nurseries and shelter for juvenile fish and other important reef creatures.

[Secretariat of the International Coral Reef Initiative \(ICRI\)](#) mobilizes governments and a wide range of other stakeholders in an effort to improve management practices for coral reefs and associated ecosystems (i.e. mangroves and seagrasses).

[South Pacific Regional Environment Programme \(SPREP\)](#) promotes cooperation among countries and implements ICRAN activities for the South Pacific region.

[United Nations Environment Programme \(UNEP\)](#), through its Regional Seas Programmes, is responsible for conserving, managing, and sustaining marine and coastal ecosystems.

[UNEP-Regional Seas Programmes for the Caribbean, Eastern Africa and East Asia](#) are implementing the ICRAN activities for their respective regions.

[United Nations Foundation \(UN Foundation\)](#) is providing initial support and leverage opportunities for ICRAN, as well as on-going communications support.

[UNEP-World Conservation Monitoring Centre \(UNEP-WCMC\)](#) supports ICRAN through database and research products with an emphasis on the mapping of coral reefs and associated ecosystems and protected areas.



[ICLARM-The World Fish Center](#) supports ICRAN through database and information systems, fisheries research products, and socio-economic assessment with an emphasis on the needs of coastal communities.

[World Resources Institute \(WRI\)](#) supports ICRAN with analyses of threats to coral reefs, valuation of ecosystem goods and services, and in determining priority areas for management.

[World Wildlife Fund USA \(WWF\)](#) supports ICRAN through a network of management site activities in coral reef and associated ecosystems.

OUR CHALLENGE

We must take action today to ensure the future of coral reefs and the communities that depend upon them.

We must work together to channel, coordinate, and build expertise, as well as community awareness and involvement, to save the world's reefs and the communities they sustain.

But we need your help.

Help Us Sustain Healthy Corals and Their Communities

With the necessary funding, ICRAN can expand its network to strengthen and sustain key activities to preserve coral reefs. With your support, ICRAN can ensure the sustainable financing of coral reef conservation through the establishment of a Coral Reef Fund.

Please join us in our fight to sustain healthy coral reefs and the communities worldwide that depend upon them for food and other resources.

Goals of the ICRAN Campaign

Current ICRAN Program: The First Four Years	\$10 million
Coral Reef Fund: Building Toward the Future	\$20 million
Total	\$30 million



"ICRAN is like the organized conductor of an orchestra comprised of excellent players."

– Jean-Michel Cousteau, President, Ocean Futures Group

APPENDIX

ICRAN Board of Directors

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Ghislaine Llewellyn | World Wildlife Fund USA (WWF)



"The world's small-island developing states are front-line zones where, in concentrated form, many of the main problems of environment and development are unfolding."

– United Nations Secretary-General Kofi Annan

SITE SUMMARY OF ICRAN DEMONSTRATION AND TARGET SITES

Region/Country	Site/Area Name	Primary Site Objective and Highlights	Demonstration or Target Site
CARIBBEAN			
Belize	Hol Chan Marine Reserve	Multiple use Marine Protected Area (MPA), fishing, tourism, Belize Barrier Reef	Demonstration
Bonaire	Bonaire Marine Park	Island-wide management and diving, tourism	Demonstration
Mexico	Sian Ka'an Biosphere Reserve	Coastal and marine reserve management, tourism	Demonstration
St. Lucia	Soufriere Marine Management Area	Fisheries, tourism	Demonstration
Jamaica	Portland Bight Protected Area/Negril Marine Park	TBD	Target
Dominican Republic	Parque Nacional del Este	TBD	Target
Venezuela	Parque Nacional Archipelago Los Roques	TBD	Target
Columbia	Providencia	TBD	Target
Cuba	Parque Nacional Marino Punta Frances	TBD	Target
Tobago	Bucco Marine Park and/or Speyside Marine Park	TBD	Target
EAST AFRICA			
Kenya	Malindi-Watamu National Park and Reserve	Coastal, community-based management, fisheries	Demonstration



Region/Country	Site/Area Name	Primary Site Objective and Highlights	Demonstration or Target Site
Seychelles	Cousin Island Marine Protected Area	Avian Fauna, ecotourism	Demonstration
Seychelles	St. Anne Marine Park	Ecotourism	Demonstration
Madagascar	Nosy Atafana Marine Park	Marine biodiversity conservation and management	Demonstration
Tanzania	Dar es Salaam Marine Reserve	Coastal and reserve management	Demonstration
SOUTH PACIFIC			
Western Samoa	Savai'i & Upolu Islands	Community-based management, marine tenure	Demonstration
Republic of Marshall Islands	Jaluit Atoll Conservation Area	Marine conservation, fisheries, ecotourism	Demonstration
Fiji	Vitu Levu and Vanu Levu Islands, multiple villages	Sustainable management of aquarium harvesting operations	Demonstration
Fiji	Cuvu Tikina (Coral Coast)	Coral Gardens, transplanting	Demonstration
Solomon Islands	Langa Langa Lagoon, Malafe Island	Coral Gardens, transplanting	Target
Tokelau	Tokelau Marine Conservation Area	Atoll, first MPA for Tokelau	Target
EAST ASIA			
Indonesia	Bunaken	Ecotourism	Demonstration
Thailand	Mo Koh Surin	Multiple use MPA	Demonstration

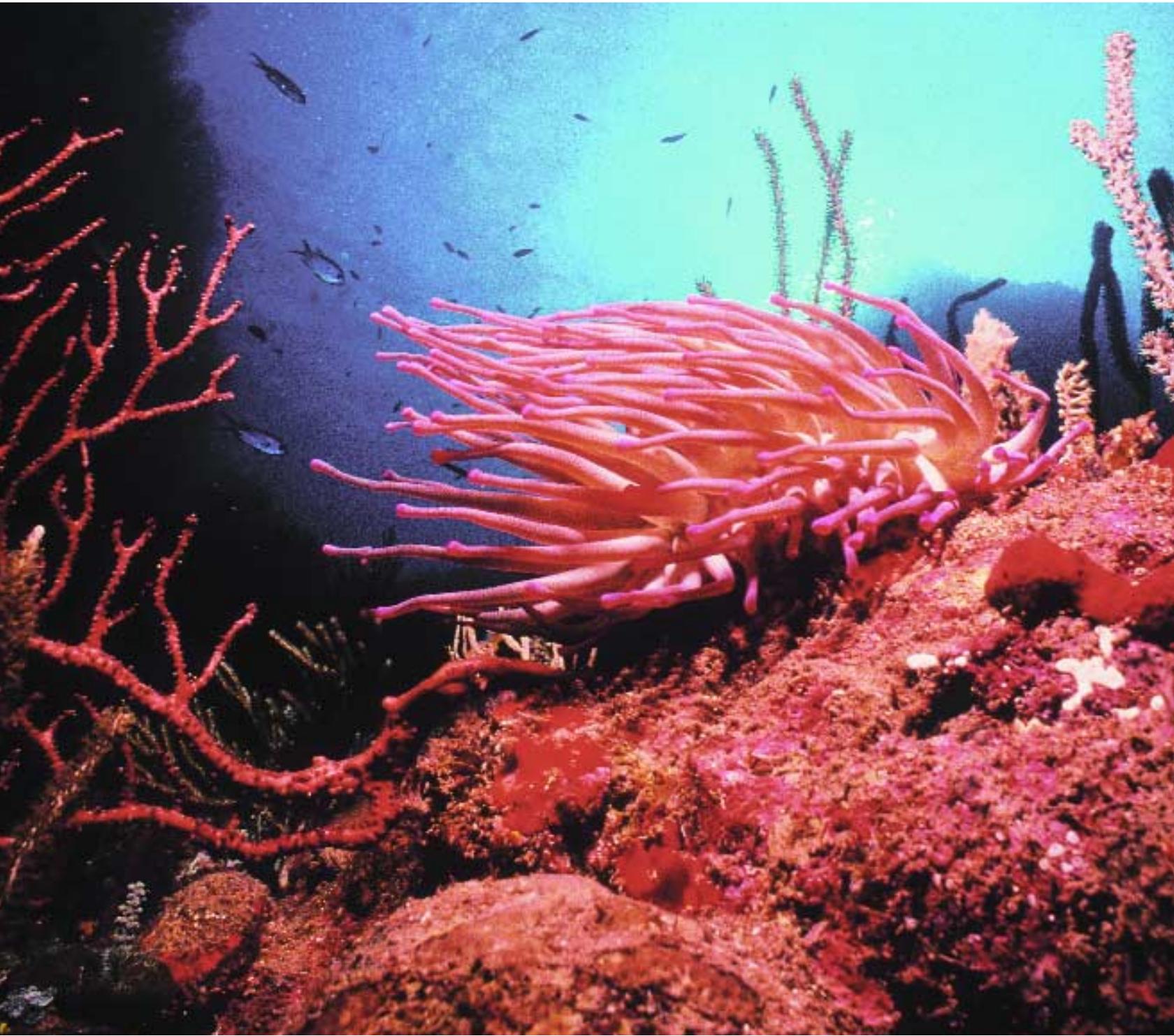


Region/Country	Site/Area Name	Primary Site Objective and Highlights	Demonstration or Target Site
Phillipines	Apo Island	Community-based management	Demonstration
Indonesia	Komodo	Multiple use MPA	Demonstration
Vietnam	Ninh Thuan	Community-based management	Target
Vietnam	Nha Trang	Ecotourism	Target
China	Sanya	Multiple use MPA	Target
Cambodia	Koh Rong & Rong Samlim	Multiple use MPA	Target
Malaysia	North Borneo Islands	Transboundary with Palawan Philippines, multiple use MPA	Target
Indonesia	Kapoposang Islands	Community-based management	Target
Indonesia	Gili Islands	Ecotourism	Target

Coral reefs safeguard lives, economies and cultures, stimulate tourism jobs and opportunities, act as safe harbors, protect against erosion, provide food to sustain local diets, contain ten percent of the world's fishing harvest, play a key role in nutrient cycling, and hold scientific and medical advances we are only beginning to comprehend.

"ICRAN is taking the urgent, practical action necessary to conserve healthy and sustainable coral reefs. Our challenge is to secure the support we need to expand our programs to save these valuable and irreplaceable ecosystems."

– Richard A. Kenchington, ICRAN Board Chair



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UNITED NATIONS
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GCRMN
Global Coral Reef
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