Coastal Resources Management

Project II – 1999 Results

Increasing Conservation and Sustainable Use of Coastal Resources

The Coastal Resources Management Project II is a partnership between the U.S. Agency for International Development and the University of Rhode Island Coastal Resources Center.
<table>
<thead>
<tr>
<th>CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface .................................................. 1</td>
</tr>
<tr>
<td>Highlights ................................................. 2</td>
</tr>
<tr>
<td>CRM II Results Framework ................................. 6</td>
</tr>
<tr>
<td>Increased Regional and Global Commitment to Coastal Management ....................... 12</td>
</tr>
<tr>
<td>Improved Management of Coastal Resources in:</td>
</tr>
<tr>
<td>Indonesia ................................................. 20</td>
</tr>
<tr>
<td>Mexico ................................................... 26</td>
</tr>
<tr>
<td>Tanzania ............................................... 30</td>
</tr>
<tr>
<td>Kenya ................................................... 36</td>
</tr>
<tr>
<td>Providing Coastal Practitioners with the Skills They Need .................................. 38</td>
</tr>
<tr>
<td>Communications to Improve Global Awareness and Understanding of ICM .................. 40</td>
</tr>
<tr>
<td>Selected CRM II Publications ............................... 42</td>
</tr>
<tr>
<td>CRM II Team ................................................ 44</td>
</tr>
<tr>
<td>CRM II FY ‘99 Financial Overview ......................... 47</td>
</tr>
</tbody>
</table>
Preface

Development requires water – both fresh and marine. And in this past century, while world population has tripled to more than six billion, water use has increased more than six-fold, and finite water resources have become increasingly polluted.

When human activities damage freshwater ecosystems, they ultimately damage the coastal and marine environment as well. The importance of water for ecosystem health is now well understood. For example, we know that wetlands serve to filter pollutants from runoff and provide nursery refuge for many life forms. But in a few short decades, many coastal areas around the globe have suffered from reduced freshwater inflows, and the earth has lost more than half of its coastal wetlands. Meanwhile, coral reefs are under unprecedented threat from destructive fishing practices, unsustainable harvests for multiple uses and “bleaching” in response to elevated sea surface temperatures associated with global warming.

The Coastal Resources Management Project II (CRM II) – a major element of USAID’s water strategy – is dedicated to reversing or mitigating these trends by empowering coastal communities and nations with the capacity for self-governance of their coastal resources. The 1999 annual report draws from CRM II’s rich portfolio of field experience. It looks back as well as forward – featuring the proven approaches to good coastal governance pioneered by USAID and its partners over the last 15 years, and the promising new approaches to long-standing coastal problems that are now being tested in numerous field sites and in the global arena.

CRM II’s notable accomplishments highlight the benefit of linking community-level assistance to national coastal policy development. They also show that results are best obtained when the collective energies of governments, universities, non-governmental organizations and coastal resource users are harnessed to identify and solve coastal problems.

The report describes how CRM II is shaping national coastal policy in Tanzania and Indonesia while demonstrating how the values of participation, democracy and transparency can also be instilled in the process.

It shows how CRM II is increasing economic opportunity for coastal villagers in countries from Kenya to Mexico; helping to protect coral reef and associated marine ecosystems in Asia, Latin America and Africa; and building the capacity of individual coastal managers and institutions.

The CRM II-led, multi-donor Common Methodology for Learning continues to develop and gain momentum, thereby leveraging the impact of this work far beyond USAID.

USAID is proud of the leadership that our partners and we have brought to the important arena of coastal management. As we enter the 21st century, there is no doubt that sound management of water – and of coastal resources – must be at the forefront of sustainable development throughout the global community of nations.

Sincerely,

David Hales
Deputy Assistant Administrator
Global Environment Center
In 1999, CRM II... 

Shaped National Policy

The Tanzania Coastal Management Partnership (TCMP) made rapid progress towards the formulation and adoption of a national policy. The initial issues, goals and strategies for the country’s coastal policy were approved by the directors of all key government departments.

In Indonesia, “reformasi” (the populist term for government reform since the Soeharto era) is changing the political landscape at an unprecedented pace. Decentralization, participation and transparency are reformasi pillars, and projects launched at CRM II sites are making these values tangible. In Blongko, North Sulawesi, a community-based marine sanctuary has become a good practice model for replication nationwide. Likewise, the Lampung Coastal Resources Atlas, which was produced with unprecedented participation, is being hailed by the Minister of Home Affairs as a model that all provinces should follow. Complementing these on-the-ground activities, CRM II policy advisors and partners are playing a key role in formulating the implementation regulations for a new national law that grants power to the provinces to manage coastal resources out to a 12-nautical mile limit.

Increased Economic Opportunity

Tourism and fisheries are important economic development sectors in many places worldwide, but sometimes return few economic benefits to local residents. In Laguna Guerrero, Mexico, CRM II is working with the community to change this. This includes helping villagers form a guides group and local fishermen use their knowledge and skills to guide sport fishermen attracted to the area for recreation. As well, in the relatively undeveloped Costa Maya region, CRM II continues to work with the private sector and government to formulate and promote voluntary adoption of the low-impact tourism and development practices outlined in the Normas Practicas, or Best Practices, published by CRM II in 1998.

In Tanzania, mariculture is both an important coastal issue and economic opportunity. The Tanzania Mariculture Issue Profile, describing the issues and opportunities related to management and development of a sustainable mariculture industry in Tanzania, was
completed and published in 1999. The profile, which sets out a national agenda for the development of mariculture guidelines, was approved by directors from key government departments.

In **Indonesia**, Proyek Pesisir, working with industry, NGOs and government agencies, has played a lead role in assisting the Director General for Tourism in the formulation of national policy and guidelines for ecotourism, particularly in relation to marine ecotourism.

**Protected Coral Reefs and Critical Habitats**

In North Sulawesi, **Indonesia**, preliminary indicators from the community-based monitoring of the Blongko marine sanctuary suggest increased fish abundance due to habitat restoration. The provincial government and Minahasa Regency are requesting funds to start replication of this initial conservation success in other villages.

CRM II’s **Tanzania** project held two problem-solving workshops that linked national and local-level efforts to protect coral reef habitat. One workshop focused on reducing the damage to coral reefs from dynamite fishing, while the other focused on in-shore trawlers’ destruction of coral reefs and interference with artisanal gear.

**Served the Local Community**

CRM II helped **Kenya**’s Coastal Management Steering Committee protect Kenyatta Beach as a public use area. Kenyatta Beach is the only remaining public access site on the North Coast, an intensely developed tourism area north of Mombasa. It is where fishermen store their gear and land their catch, where local boat operators meet clients to take them into the adjacent marine park and where local residents go to relax. Yet, in spite of extensive public use of the beach, there was danger that rights to it would be allocated to a private developer.

The participatory, community-based strategies and practices piloted in Xcalak, **Mexico** are being noticed and replicated in neighboring communities with the support of CRM II and leveraged funds. The University of Quintana Roo (UQROO), a key CRM II Mexico partner, has initiated

---

The Blongko marine sanctuary in North Sulawesi, Indonesia is providing a model for replication throughout the nation.
the ICM process in two communities – Laguna Guerrero and Raudales – within the Chetumal Bay Manatee Sanctuary. UQROO is helping each community create a vision of the future they want for their community.

**Built ICM Capacity and Networks**

To enable universities to play a more effective role in coastal management planning, policy and education, 11 state and private universities in Indonesia, including Bogor Agricultural Institute and its Centre for Coastal and Marine Resources Studies – a key CRM II Proyek Pesisir partner – have established the Indonesian Coastal University Network (INCUNE). INCUNE, with leveraged support, is preparing a strategic plan and prospectus.

In Mexico, UQROO faculty and leaders are developing an ICM strategy to integrate research, academics, extension and outreach. CRM II has also supported a regional NGO network to

*Bogor Agricultural Institute’s Centre for Coastal and Marine Resources Studies is the hub of a national network of universities which will provide Indonesian students with enhanced educational opportunities in coastal management and related disciplines.*
promote community-based resource management in Quintana Roo.

CRM II, in partnership with the Western Indian Ocean Marine Science Association (WIOMSA) delivered a two-week ICM course. It was attended by 28 professionals from South Africa, Madagascar, Mozambique, Kenya and Tanzania; and featured Africa’s leading coastal management practitioners as trainers. Participants “learned by doing” and came to understand the elements of a strategically designed integrated coastal management program, and the strategies, tools and techniques that promote program effectiveness and sustainability.

**Fostered a Global Dialogue**

The CRM II-led, multi-donor Common Methodology for Learning initiative gained momentum and is having a positive impact on several developing nations and the donor community at large. The initiative produced English and Spanish versions of *A Manual for Assessing Progress in Coastal Management* that is based on an accepted set of ICM management principles and practices.

In FY ’99, CRM II continued to play a major role in worldwide corals and conservation efforts. CRM II staff was involved in planning the International Tropical Marine Ecosystems Management Symposium (ITMEMS) held in Townsville, Australia in November 1998, and its pioneering work on coral reefs in Mexico and Indonesia is helping inform other reef initiatives at the international level.

In FY ‘99, CRM II continued to play a major role in worldwide coral reef management and conservation efforts. CRM II staff was involved in planning the International Tropical Marine Ecosystems Management Symposium (ITMEMS) held in Townsville, Australia in November 1998, and its pioneering work on coral reefs in Mexico and Indonesia is helping inform other reef initiatives at the international level.
The end results CRM II seeks are a better life for coastal citizens and the well-being of future generations — results that depend on natural resources being conserved and used in a sustainable manner.
Significant CRM II project results and impacts for Fiscal Year 1999 (FY ‘99) are described in this report. The report builds on the CRM II Results Framework which provides insight into CRM II design. The strategic objective of CRM II is increased conservation and sustainable use of coastal resources. This objective is achieved through:

**Field assistance to key countries to improve:**

- Strategies and policies for integrated coastal management
- Stakeholder understanding and participation in integrated coastal management
- Human and institutional capacity for integrated coastal management

**Global technical leadership to:**

- Develop, disseminate and promote the broad adoption and use of effective coastal management concepts and tools
- Increase capacity of coastal management professionals

Synergies between field assistance activities and global initiatives are central to CRM II’s design. Field assistance results in real improvements in coastal governance and the well-being of coastal communities. Field sites also provide a “living laboratory” in which to develop, test and refine coastal management concepts and tools that in turn enrich CRM II’s regional and global leadership initiatives.

**Monitoring and Learning**

Each element in the Results Framework is monitored by indicators. CRM II’s top level indicators include area under improved and/or effective management, and policy successes. In all cases, however, numerical indicators only tell part of the story. CRM II has therefore also included...
Coastal Resources Center
University of Rhode Island

Coastal Areas Under Improved and Effective Management

CRM II field initiatives work toward meaningful improvements in the environment and in quality of life. This occurs through a sequential process that achieves outcomes at different geographic scales.

Those conditions change – is critical to integrated coastal management strategies and project outcomes. The goal, therefore, of the CRM II monitoring program is to measure real impacts, to learn from experience as initiatives move forward, and to improve the practice of integrated coastal management.

A qualitative element in its reporting to better explain why specific field project strategies were selected, how well they worked, and how and why they were incrementally revised over time. It is also recognized that understanding the context of a place – the social, political, economic and environmental conditions and how those conditions change – is critical to integrated coastal management strategies and project outcomes. The goal, therefore, of the CRM II monitoring program is to measure real impacts, to learn from experience as initiatives move forward, and to improve the practice of integrated coastal management.

CRM II RESULTS FRAMEWORK

Increased Conservation and Sustainable Use of Coastal Resources

Improved Integrated Coastal Management in Key Countries

- Improved strategies and policies for ICM
- Improved stakeholder understanding of and participation in ICM
- Improved human and institutional capacity for ICM

Increased Regional and Global Commitment to Coastal Management

- Dissemination of concepts and tools developed for ICM
- Increased capacity of ICM professionals
The number of hectares under “improved” management in FY ‘99 increased as a result of the rapid launching of ICM initiatives in two large field sites in Indonesia, and the substantial progress made on a coast-wide mariculture strategy for Tanzania. The numbers alone cannot, however, reflect the continued gains being made in locations that were counted previously; these qualitative gains are reflected in the country pieces that follow. CRM II sites that have achieved “effective” management remain at 227,863 hectares. But as revealed in each country’s story, the scope and significance of impacts at each site continue to expand, providing benefits to coastal inhabitants and generating experience that can better inform national efforts and promote replication.

Policy Successes

To be successful, coastal governance demands that effective ICM strategies and policies be in place. Hence, much of CRM II’s work is directed at formulating and implementing such strategies and policies – which once developed, adopted and implemented can serve as regional and global models.

The table on page 11 shows accumulated policy successes of the CRM II initiative. They are significant and diverse.

In Indonesia, during a period of rapid political change that is moving this nation from a highly centralized, authoritarian state to a decentralized democracy, CRM II’s pioneering Blongko marine sanctuary made tangible the meaning of local stewardship and governance of coastal resources. When provincial government endorsed the local ordinance making the Blongko sanctuary “legal,” Blongko became a policy success of national significance and a symbol for “bottom up” management in Indonesia.

Also, last year in the Costa Maya region of Mexico – a pristine area targeted for tourism development – guidelines for low-impact tourism development were produced, and their voluntary use promoted within government and the private sector. By the end of the year, substantial progress had been made in persuading government to consider these guidelines as more than advice, and instead to adopt them as regulation. Concurrently, in Xcalak, the sole community in Costa Maya, the residents contributed to and benefited from the area’s development by turning its community vision into meaningful management – implementing a fisheries management plan and developing and adopting a tourism strategy.

In Tanzania, a national ICM policy process is underway. Using mariculture as the topic for a “practical exercise” in policy
PERFORMANCE RESULTS

Improved and Effective Coastal Management

<table>
<thead>
<tr>
<th>Location</th>
<th>Cumulative Area (ha.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area Under Improved Management</strong></td>
<td></td>
</tr>
<tr>
<td>Ecuador (CRM I)</td>
<td>223,700</td>
</tr>
<tr>
<td>Thailand (CRM I)</td>
<td>162,500</td>
</tr>
<tr>
<td>Sri Lanka (CRM I)</td>
<td>308,200</td>
</tr>
<tr>
<td>Zanzibar (Chwaka-Paje)</td>
<td>25,000</td>
</tr>
<tr>
<td>Kenya (Nyali-Bamburi-Shanzu)</td>
<td>6,000</td>
</tr>
<tr>
<td>Mexico (Quintana Roo coastline and Xcalak Marine Park)</td>
<td>75,377</td>
</tr>
<tr>
<td>Indonesia, Bentenan and Tumbak</td>
<td>44,756</td>
</tr>
<tr>
<td>Indonesia, Blongko</td>
<td>16,096</td>
</tr>
<tr>
<td>Indonesia, Talise</td>
<td>32,567</td>
</tr>
<tr>
<td>Indonesia, Lampung Province</td>
<td>125,000,000</td>
</tr>
<tr>
<td>Indonesia, Balikpapan Bay</td>
<td>11,590</td>
</tr>
<tr>
<td>Mexico, Laguna Guerrero</td>
<td>13,121</td>
</tr>
<tr>
<td>Mexico, Raudales</td>
<td>2,200</td>
</tr>
<tr>
<td>Tanzania</td>
<td>142,400</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,260,63,507</strong></td>
</tr>
<tr>
<td><strong>Area Under Effective Management</strong></td>
<td></td>
</tr>
<tr>
<td>Ecuador (CRM I)</td>
<td>22,400</td>
</tr>
<tr>
<td>Thailand (CRM I)</td>
<td>2,500</td>
</tr>
<tr>
<td>Sri Lanka (CRM I)</td>
<td>61,167</td>
</tr>
<tr>
<td>Zanzibar (Chwaka-Paje)</td>
<td>25,000</td>
</tr>
<tr>
<td>Kenya (Nyali-Bamburi-Shanzu)</td>
<td>6,000</td>
</tr>
<tr>
<td>Mexico (Xcalak Marine Park)</td>
<td>17,377</td>
</tr>
<tr>
<td>Indonesia, Bentenan and Tumbak</td>
<td>44,756</td>
</tr>
<tr>
<td>Indonesia, Blongko</td>
<td>16,096</td>
</tr>
<tr>
<td>Indonesia, Talise</td>
<td>32,567</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>227,863</strong></td>
</tr>
</tbody>
</table>

Effective management of resources requires community involvement, such as this village-wide clean-up effort in Xcalak, Mexico after the coastal village suffered the devastating impacts of Hurricane Mitch.

development, CRM II has moved rapidly through the policy development cycle. In FY ‘99 this strategy began to pay real dividends. A national, multi-stakeholder working group successfully advanced through a participatory stage of issue identification, to planning and development of a national strategy for mariculture development – a strategy in turn endorsed and adopted by a multi-agency group. This same working group is now preparing mariculture development guidelines. The experience of integrated, multi-sectoral policymaking is nourishing the nation’s broader ICM policy agenda.
## PERFORMANCE RESULTS

**Improved Strategies and Policies for ICM**

<table>
<thead>
<tr>
<th>Country</th>
<th>Site</th>
<th>ICM Policy Initiative</th>
<th>Developed</th>
<th>Adopted</th>
<th>Implemented</th>
<th>Impacts Demonstrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>Blongko</td>
<td>Municipal Marine Sanctuary Plan</td>
<td>✓ ('98)</td>
<td>✓ ('99)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>Blongko</td>
<td>Marine Sanctuary Boundary Definition</td>
<td>✓ ('98)</td>
<td>✓ ('98)</td>
<td>✓ ('98)</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>Bentenan</td>
<td>Crown-of-Thorns Starfish Clean-up Management Strategy</td>
<td>✓ ('98)</td>
<td>✓ ('98)</td>
<td>✓ ('98)</td>
<td>✓ ('98)</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Tumbak</td>
<td>Strategy for Rehabilitation of Mangrove Forest</td>
<td>✓ ('98)</td>
<td>✓ ('98)</td>
<td>✓ ('98)</td>
<td>✓ ('98)</td>
</tr>
<tr>
<td>Indonesia</td>
<td>North Sulawesi</td>
<td>Village-Level Early Action Funding Procedures</td>
<td>✓ ('98)</td>
<td>✓ ('98)</td>
<td>✓ ('98)</td>
<td>✓ ('99)</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Manado</td>
<td>Reclamation Strategy of Manado Waterfront/Shoreline</td>
<td>✓ ('98)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>National</td>
<td>National Marine Strategy</td>
<td>✓ ('98)</td>
<td>✓ ('98)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>Xcalak</td>
<td>Fisheries Management Agreement</td>
<td>✓ ('98)</td>
<td>✓ ('98)</td>
<td></td>
<td>✓ ('99)</td>
</tr>
<tr>
<td>Mexico</td>
<td>Xcalak</td>
<td>Marine Park</td>
<td>✓ ('98)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>Xcalak</td>
<td>Community Development Strategy</td>
<td>✓ ('98)</td>
<td>✓ ('98)</td>
<td></td>
<td>✓ ('98)</td>
</tr>
<tr>
<td>Mexico</td>
<td>Xcalak</td>
<td>Tourism Strategy</td>
<td>✓ ('99)</td>
<td>✓ ('99)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>Costa Maya</td>
<td>Ecological Zoning Ordinance</td>
<td>✓ ('98)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>Quintana Roo</td>
<td>Low-impact Tourism Development Guidelines</td>
<td>✓ ('98)</td>
<td>✓ ('99)</td>
<td></td>
<td>✓ ('99)</td>
</tr>
<tr>
<td>Mexico</td>
<td>Quintana Roo</td>
<td>NGO Network Strategy</td>
<td>✓ ('99)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>Nyali-Bamburi-Shanzu</td>
<td>Water Conservation Strategy</td>
<td>✓ ('98)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>Nyali-Bamburi-Shanzu</td>
<td>Coastal Management Steering Committee Action Strategy</td>
<td>✓ ('96)</td>
<td>✓ ('96)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>Nyali-Bamburi-Shanzu</td>
<td>Beach Management Strategy</td>
<td>✓ ('98)</td>
<td>✓ ('99)</td>
<td></td>
<td>✓ ('99)</td>
</tr>
<tr>
<td>Tanzania</td>
<td>National</td>
<td>Capacity Building Action Strategy</td>
<td>✓ ('99)</td>
<td>✓ ('99)</td>
<td></td>
<td>✓ ('99)</td>
</tr>
<tr>
<td>Tanzania</td>
<td>National</td>
<td>Mariculture Action Strategy</td>
<td>✓ ('99)</td>
<td>✓ ('99)</td>
<td></td>
<td>✓ ('99)</td>
</tr>
</tbody>
</table>
Increased Regional and Global Commitment to Coastal Management

Working to preserve the unique biodiversity of coral reefs is part of CRM II’s global commitment.
Since the United Nations Conference on the Environment and Development (UNCED) in 1992, ICM has increasingly been recognized as a promising response to the accelerating deterioration of the environmental quality of the world’s coasts. Only after UNCED did many international donors, national governments, NGOs and universities add issues of coastal change and management to their agendas; and only then did many international agreements identify ICM as a way to address a wide array of critical coastal issues.

Advancing the Global Dialogue

CRM II actively participates in the expanding global dialogue on coastal management and leads numerous global activities. For example, the international journal *Ambio*, in its special edition on coastal management, led with an article on CRM II experience. The article spotlights successful coastal management principles as “hypotheses” for learning (see box this page).

CRM II continued to play a major role in advancing the International Coral Reef Initiative (ICRI), including providing important financial and substantive inputs to the International Tropical Marine Ecosystems Management Symposium (ITMEMS) held in Townsville, Australia in November 1998. These inputs contributed to the ICRI Renewed Call to Action that

**International Agreements Calling for ICM**

- Framework Convention on Climate Change (1992)
- The Jakarta Mandate Pursuant to the Biodiversity Convention (1995)

**CRM II Learning Hypotheses**

- Coastal management is most effective when it is tailored to the characteristics of individual places
- Sustained public support for coastal management policies requires a high degree of involvement of the major stakeholders in all phases of an open, participatory and democratic management process
- More effective responses to the many competing interests in coastal areas will emerge when planning is comprehensive and considers all existing and potential coastal uses and resources
- Initiatives that integrate local and national needs and interests in project design and implementation are stronger and have more lasting impact

reaffirmed participants’ commitment to conserving critical coral reef and related marine systems. Additionally, CRM II’s pioneering work in coral reef management work in Mexico and Indonesia was featured at the symposium and ITMEMS outcomes were published in the Spring 1999 InterCoast issue on coral reefs.

CRM II experience was also central to the bi-annual Coastal Zone ’99 conference held in San Diego, California in July 1999, and attended by coastal management practitioners from around the world. CRM II programs and partners were featured in conference papers, plenary talks and poster sessions. As well, CRM II partnered with the National Oceanic and Atmospheric Agency’s Office of International Affairs and the International Oceanographic Commission to host a two-day pre-conference workshop that developed recommendations for making marine protected areas more effective and incorporating them into broader ICM strategies. Over 100 coastal management practitioners attended this successful workshop.

Improving ICM Efficiency and Effectiveness

The CRM II-led multi-donor “Common Methodology for Learning” initiative picked up momentum this year and is having a positive impact on several developing nations and the donor community at large. The initiative has produced A Manual for Assessing Progress in Coastal Management that is based on an accepted set of ICM management principles and practices. The development and application of the manual to field programs and projects has been co-supported by the United Nations Development Program (UNDP), the International Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), the Global Environment Facility (GEF), the Inter-American Development Bank (IDB) and the Swedish International Development Cooperation Agency (Sida).

International support for the learning initiative was reinforced at the Fifth Fisheries Development Donor Consultation in Rome, Italy, held February 22-24, 1999. The learning initiative was featured on the meeting agenda and several donors expressed commitments of support. Particular interest was expressed in holding a regional experts’ workshop to develop common methods and best practices for integrating science and coastal management. With the help of leveraged funds, such a workshop will likely occur in FY ’00.
option for sustainable economic development – providing employment, foreign exchange earnings and income. But shrimp farming is also an environmental threat when sited, developed and implemented in locations and ways that are overly damaging to resources and environmental quality.

CRM II work in mariculture focuses on good environmental practices – as seen from both the private and public sector perspectives. Work continued in Honduras.
in partnership with the Honduran Association of Aquaculture Producers (ANDAH). A report on good mariculture practices was completed and featured as a keynote presentation at the August 1999 International Conference on Aquaculture held in San Pedro Sula, Honduras. Subsequently, a survey of over 70 percent of farms in the country was conducted to determine the level of adoption of priority good practices. The report and findings from this field work will be published in FY ‘00. Also, an April 1999 expert workshop in Costa Rica reviewed five Central American case studies on government policies on and regulation of shrimp mariculture. The group identified challenges and successes of managing shrimp mariculture development in neighboring countries, and shared lessons that group members could take back to their own country.

Synergies between field assistance and global programs are a vital element of the CRM II design, and a reason for its success. Mariculture is one area where the synergies are particularly strong. The knowledge and skills acquired through global work on shrimp mariculture and the environment have directly benefited the work of the Mariculture Working Group in Tanzania and are expected to be of great value to next year’s work in Lampung Province, Indonesia. Both field projects provide a “living laboratory” in which to test and refine concepts and tools that feed back to CRM II’s regional and global leadership initiatives.
**Regional Initiatives to Promote Improved Coastal Management**

The CRM II program works in three focus regions – Eastern and Southern Africa, Latin America and the Caribbean, and Asia. In each focus region CRM II implements:

- Catalytic activities to promote coastal management programs
- Cross-region learning activities
- Sustained field programs in “key” countries

**Africa**

CRM II is having a major impact on the development of coastal programs in Eastern and Southern Africa. In Tanzania and Kenya there has been sustained field support for pioneering coastal programs at both the national and local site levels. At a regional level, CRM II plays a central role in building professional ICM networks and capacity.

CRM II, in partnership with USAID’s Regional Economic Development Services Office for East and Southern Africa (REDSO-ESA) and other donors convened a regional course for ICM practitioners in February 1999. The course was organized and delivered by the Western Indian Ocean Marine Science Association (WIOMSA) and the University of Rhode Island’s Coastal Resources Center (URI/CRC). Africa’s leading coastal management practitioners were utilized as trainers. The two-week course was attended by 28 professionals from South Africa, Madagascar, Mozambique, Kenya and Tanzania. By the end of the course, participants had “learned by doing” and understood the elements of a strategically designed coastal management program, and the strategies, tools and techniques that promote their effectiveness and sustainability.

Building on this successful partnership, a second phase REDSO/ESA-supported regional capacity building program was designed for execution by WIOMSA and URI/CRC in FY ’00.

Lessons from CRM II field projects in Africa are also informing the regional ICM process. Of note was CRM II’s active participation in both the technical and ministerial portions of the July 1998 Pan-African Conference on Sustainable Integrated Coastal Management (PACICOM) meeting in Maputo, Mozambique, and the December 1998 Advisory Committee on Protection of Seas (ACOPS) meeting in Cape Town, South Africa where the region’s commitment to sustainable coastal resource use and management was reaffirmed.
Asia

CRM II strengthened its linkages with the expanding marine and coastal agenda of USAID, development banks and private foundations in the East Asia/Western Pacific region. CRM II staff actively supported formulation of new programs by multilateral agencies (e.g. the Asian Development Bank) and private foundations (e.g. the David and Lucile Packard Foundation) which address ICM needs both in Indonesia and regionally. In FY ‘99 CRM II also continued to reinforce long-standing relationships with Japan. This included presenting a keynote address to the Second International Oceanic Conference attended by 1,200 coastal management professionals and stakeholder group representatives, and briefing the Governor of Mie Prefecture on principles for improving stakeholder participation in local coastal management initiatives.

Also, collaboration between the Indonesian and Philippines Coastal Resources Management Programs expanded. Eighteen Indonesians traveled to the Philippines to study a range of mature bay management programs—an experience that prompted renewed interest in integrated watershed management in Indonesia.

Latin America and the Caribbean (LAC)

CRM II has expanded its partnerships with the LAC region’s other coastal programs, especially the USAID-supported PROAR-CA/Costas project. Through its flagship Mexico program, CRM II is providing value-added lessons on how to “operationalize” the promising Meso-American Reef Initiative.

CRM II has recognized the need for and made a concerted effort to get Spanish language material into the hands of Latin ICM practitioners. The Spanish language CD — PublicacionesSeleccionados de Manejo Integrado de Recursos Costeros — released by CRM II in late 1998, is providing previously unavailable information to large numbers of practitioners living in countries where Internet access remains difficult and/or expensive.
## PERFORMANCE RESULTS

**International partners adopting CRM II strategies, policies, concepts and tools**

<table>
<thead>
<tr>
<th>Partner</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COREMAP, Indonesia</td>
<td>Community-based ICM methodologies developed at CRM II field sites in North Sulawesi adopted by COREMAP.</td>
</tr>
<tr>
<td>Global Coral Reef Monitoring Network (GCRMN)</td>
<td>RAMP methods and socioeconomic indicators to be included in GCRMN guide.</td>
</tr>
<tr>
<td>Inter-American Development Bank</td>
<td>CRM II capacity assessment methods utilized in assessment of Ecuador’s IDB-funded Coastal Resources Management Program.</td>
</tr>
<tr>
<td>PROARCA/Costas, Central America</td>
<td>USAID/G-CAP Central American Regional Environment Program (PROARCA/Costas) implements CRM II training methods/materials in regional workshop.</td>
</tr>
<tr>
<td>Swedish International Development Cooperation Agency (Sida)</td>
<td>CRM II concepts utilized in evaluation of Sida’s marine science program in East Africa. Evaluation recommendations are adopted in new program design.</td>
</tr>
<tr>
<td>The David and Lucile Packard Foundation</td>
<td>CRM II experience utilized to develop conservation strategy for the Western Pacific.</td>
</tr>
</tbody>
</table>
Indonesia is a global center for biodiversity and presents an equally vast array of challenges and opportunities in all facets of coastal management: economic, environmental and social.
The 7.9 million square kilometer (km²) Indonesian archipelago is well known as a global center for biodiversity. Less well documented is the key role that coastal and marine resources play in the well-being of Indonesia’s 210 million residents. Some 24 percent of Indonesia’s gross domestic product is derived from coastal industries, 60 percent of Indonesians live within 60 km of the coast and more than 15 percent of all employment is in coastal industries.

In the wake of Indonesia’s dramatic political changes and the continued Asian economic crisis, the Indonesian Coastal Resources Management Project (Proyek Pesisir) and its partners have been well positioned to play a lead role in coastal governance reform. With the expertise of project staff, the trust of key government and NGO partners, and the experience gleaned from local field programs in three of Indonesia’s most diverse provinces, Proyek Pesisir has been able to provide unparalleled and authoritative policy advice. This advice is now guiding national priorities for coastal resources governance, decentralization and economic recovery as well as local (provincial) priorities for coastal resource use and community development.

Field-based Research and Learning

Proyek Pesisir emphasizes developing and using a wide range of ICM good practices – practices that can address both the ICM challenges common to much of Indonesia, local field programs in three of Indonesia’s most diverse provinces, Proyek Pesisir has been able to provide unparalleled and authoritative policy advice. This advice is now guiding national priorities for coastal resources governance, decentralization and economic recovery as well as local (provincial) priorities for coastal resource use and community development.

Field-based Research and Learning

Proyek Pesisir emphasizes developing and using a wide range of ICM good practices – practices that can address both the ICM challenges common to much of Indonesia,
Early implementation actions in North Sulawesi village sites resulted in substantive changes:

- Improved supply and distribution of drinking water
- Increased abundance of fish from Blongko marine sanctuary
- Reforestation of mangroves
- Reduction in coral mining and bomb fishing
- Reduced flooding on Kinbohutan Island
- Introduction of alternative/supplemental tourism livelihood opportunities
- Changes in behaviors concerning resource use and protection

Village Marine Sanctuary, has shown in tangible ways how community-based coastal resources management can occur in Indonesia. Since the sanctuary was established a year ago, there are preliminary indications from reef surveys and local fishers of an increased abundance of fish within and adjacent to the sanctuary. As a result of this success, the provincial government of North Sulawesi has proposed replicating this community-based coastal resources management model more widely throughout the province. Additionally, related initiatives such as Coral Reef Rehabilitation and Management Project (COREMAP) are incorporating lessons learned from community-based management into their national program plans.

The two other North Sulawesi field sites, Talise and Bentenan-Tumbak, focus on slightly different issues than Blongko, but along with Blongko have developed model village-level coastal resource profiles and are finalizing their community-based coastal resources management plans.

In Lampung Province, a two-track approach to coastal management is underway. At the provincial level this includes a coastal strategic plan slated for completion by mid-2000. The plan will build on the Lampung Coastal Resources Atlas — developed using a highly participatory process that helped define and gain consensus on coastal issues that need to be addressed. As with the process for developing the atlas, an unprecedented number of provincial residents are expected to engage directly or indirectly in this strategic planning.
Institutional Strengthening efforts focused on the Centre for Coastal and Marine Resources Studies. As a result of Proyek Pesisir policy advice, a decision has been made to place a moratorium on shrimp mariculture development in the Mahakam delta area until an integrated development plan is prepared.

Lampung Coastal Resources Atlas

Proyek Pesisir/Lampung and the Lampung Provincial Planning Board recently completed the Lampung Coastal Resources Atlas. Lampung, located at the southern tip of the island of Sumatra, possesses remarkable biodiversity. Yet the 700-mile Lampung coastline faces increasing pressure from a range of industries, especially aquaculture – the world’s largest integrated shrimp farm operation (18,000 ha) is located in Lampung.

Until the coastal atlas initiative, little was known about the extent or condition of coastal resources in the province. The atlas, containing 120 pages of text and 30 color thematic maps, shows the social, biological and physical resources of Lampung. It concludes with maps illustrating the major coastal issues of the province – issues that will serve as the focus of a strategic plan for the province’s coastal management program.

The atlas was prepared in a participatory process involving the Centre for Coastal and Marine Resources Studies at Bogor Agricultural Institute, plus approximately 270 local stakeholders and more than 60 government and non-government organizations. Since the Governor of Lampung formally launched the atlas at a ceremony in Lampung in July 1999, over 1,000 copies have been distributed – to every school, relevant government departments, industry associations, environmental NGOs and community development organizations in the province.

The atlas is a first for Indonesia and has already impacted national coastal policy. The Minister for Home Affairs sent a copy of the atlas to each of Indonesia’s 26 provincial governors requesting that a similar product be produced in their province in the next year. The atlas feeds into a provincial coastal strategic plan that is expected to have a significant impact on coastal land use policy and public works programs, on private sector investment in fisheries, aquaculture and tourism, and on community engagement in decisionmaking.

In East Kalimantan, the principal focus is on developing an integrated management plan for Balikpapan Bay and its watershed – a relatively undeveloped watershed with a major urban center and petroleum port at its entrance. The bay management plan is a first for Indonesia and is being accomplished through a participatory planning process – one that links closely to provincial level activities that provide policy advice on development hot spots and other key issues. As a result of Proyek Pesisir policy advice, a decision has been made to place a moratorium on shrimp mariculture development in the Mahakam delta area until an integrated development plan is prepared.

Institutional Strengthening

Institutional strengthening efforts focused on the Centre for Coastal and Marine Resources Studies.
“Reformasi” (the populist term for government reform since the Soeharto era) is changing the political landscape of Indonesia at an unprecedented pace. Building on this opportunity, Proyek Pesisir placed senior policy advisors in key ministries to catalyze and facilitate reforms in coastal resources governance, especially those relating to decentralized control of marine resources.

Proyek Pesisir staff is playing a key role in formulating the implementation regulations for Law 22 of 1999 on Regional Autonomy – which grants power to the provinces to manage resources out to a 12-nautical mile limit. Since passage of the law, Proyek Pesisir has facilitated a participatory approach to developing regulations – a first in Indonesia. A Proyek Pesisir adviser also assisted the Director General of Tourism with establishing new national policies and processes for ecotourism development. As founding members of

Increased Capacity Through Education and Training

The lack of skilled and experienced professionals continues to limit progress on ICM issues in Indonesia and has delayed implementation of a number of major new programs, including COREMAP. To contribute to building capacity, Proyek Pesisir trained 5,190 individuals (1,128 female) in the past year in aspects of coastal and marine resource management. This training has been delivered in a variety of ways – through on-the-job training of local government staff; through a nationally competitive internship program that placed Indonesian graduate students at field sites; through intensive training courses of local government officials and non-governmental partners; and through village-level training courses for resource users.

Project-derived training materials have been widely circulated nationally and regionally. Also, project staff are regularly invited to contribute to training activities and to improve training materials of other

Proyek Pesisir expanded its commitment to university strengthening by facilitating 11 of Indonesia’s leading universities in the formation of the Indonesian Coastal Universities Network (INCUONE). With a planning grant from the David and Lucile Packard Foundation, INCUNE will develop a strategic plan for strengthening the network and building member institution capacity. INCUNE promises to be an important vehicle for promoting the kind of dialogue and learning that will strengthen university capacity to make meaningful contributions to sustainable and equitable coastal and marine resource use. Already, one INCUNE member has established a multidisciplinary center similar to CCMRS/IPB and has attracted external support to undertake applied local research and policy studies on ICM issues.

Resources Studies at the Bogor Agricultural Institute (CCMRS/IPB). As a result of this effort, CCMRS/IPB has realized significant technical and institutional gains – with progress being tracked using an institutional development framework tool.
the National Ecotourism Advisory Committee, project staff worked with industry and NGO groups to formulate models for socially and ecologically responsible tourism. Similar policy support was provided to local government and community groups as part of project field program activities, thus coupling local and national track initiatives in tourism.

**Dissemination of Lessons Learned**

CRMP publications are in high demand. More than 200 Indonesian language and mixed language CRMP reports/articles are now in circulation in Indonesia and regionally. Of the 60 reports and articles published in FY ’99, several are of special note. These include the *Lampung Coastal Resources Atlas*; Indonesia’s first village-level profiles of coastal resources; three issues of the *Indonesian Journal of Coastal and Marine Resources*; six issues of the Indonesian language newsletter, *Warta*; and 14,000 copies of a special edition of the *Indonesian Travel and Nature* magazine (featuring CRMP programs) distributed by British Airways.

In addition to being disseminated in print media, information on CRMP is regularly featured on local and national radio and television. In 1999, a television news magazine feature on the Blongko marine sanctuary attracted such strong interest that it was replayed on the national news. Also, with support from Bank of America, the CRMP undertook a children’s’ education initiative, one of the first in Indonesia to engage the private sector in promoting marine

**CCMRS was created as a new organization within IPB in 1996. USAID-supported accomplishments to date include:**

- Production of a peer-reviewed Indonesian Journal of Coastal and Marine Resources
- Creation of a 5,000 volume national reference library on coastal resources
- Development of a web site for information on Indonesian coastal and marine resources management
- Initiation of a national internship program on coastal resources management
- Establishment of a learning group within CCMRS to document project experience and lessons learned in coastal management

While USAID support has been key to CCMRS during its early start up period, the Centre has in just a few years time demonstrated success in attracting other funding partners. In addition to Proyek Pesisir, CCMRS has over 40 coastal and marine resources management projects underway including preparation of the national coral reef management strategy (part of COREMAP).
Improved Management of Coastal Resources in Mexico

The relatively unspoiled coastline of the Costa Maya is attracting the tourism industry. Developers are working with CRM II and the government to adopt best management practices that promote environmentally sensitive tourism in the region.
The Project:
The Mexico project is a five-year USAID/Mexico-supported initiative to conserve Mexico’s critical coastal ecosystems. The project builds upon work underway in the State of Quintana Roo and expands to the Gulf of California region.

The Partners:
CRM II’s primary partners in Quintana Roo are the Amigos de Sian Ka’an A.C. (ASK), the Xcalak Community Committee and the University of Quintana Roo (UQROO). Conservation International (CI) is the primary partner in the Gulf of California.

The Financing:
FY ’99 financing was $350,000. Authorized funding through 2003 by USAID/Mexico is $1.75 million.

Coastal development continues to expand rapidly in Mexico. In the state of Quintana Roo on the Caribbean Sea, tourism development along the coastal zone has affected valuable reef and wetland ecosystems. In the Gulf of California, both tourism and key coastal industries of fisheries, agriculture and aquaculture are leaving their heavy imprint on the fragile systems of desert islands and mangrove-fringed estuaries. In both places the challenge is to balance the need for economic development with the need to responsibly manage the natural resource base on which sustained economic development depends.

Building on Mexico’s sophisticated legal framework for environmental management, the USAID/Mexico-supported project is working with its partners to establish participatory governance mechanisms to ensure that future development initiatives better account for environmental and social impacts and ensure a more equitable distribution of the benefits from resource use.

Community-based Management of Critical Coastal Areas

CRM II is helping Mexican civic associations work with public authorities to find practical ways to incorporate community interests into resource use decisions in the Xcalak region of Costa Maya, in Chetumal Bay and in the Bahia Santa Maria.

In Xcalak, fishers installed buoys to mark the community’s proposed marine reserve; developed a monitoring program and began enforcing use regulations adopted by the fisheries cooperative that has jurisdiction over fish capture in the zone; and leveraged funds to help RARE International train Xcalak community members as nature guides.

The participatory, community-based strategies and practices piloted in Xcalak are...
Community-government management initiatives that promote sustainable development in the Xcalak area include:

- Marine Park Proposal (Xcalak Community Committee, 1998)
- Urban Plan (Municipality, 1999)
- Draft Ecological Zoning Ordinance for Costa Maya (State/Federal Environmental Office, 1998)
- Xcalak Fisheries Agreement (Xcalak Community Committee, 1998)
- Xcalak Tourism Strategy (Tourism Cooperative, 1999)
- Chetumal Bay Manatee Sanctuary (State Environmental Office, 1999)

within the Chetumal Bay Manatee Sanctuary. UQROO is helping each community profile coastal management issues, articulate their vision for development and carry out early actions such as a latrine and septic system construction program for improved sanitation.

CRM II is initiating site-based work in the Gulf of California by supporting a bold initiative led by Conservation International (CI) in the Bahia Santa Maria, a site of extraordinary ecological importance. CI started work there in 1999 with major support from the North American
Wetlands Council. The CRM II team has supported CI in its desire to undertake a comprehensive, coastal governance approach. In FY ‘99, the project developed a web page: http://uib.gym.itesm.mx/stmaria, and a discussion group. The project team also held a workshop in Culiacan, Sinaloa in September 1999 – aimed at clarifying the steps in the bay planning process and engaging key government agencies in the bay management process.

CRM II staff also worked with the Loreto Marine Reserve staff and with ISLA, an emerging Mexican NGO dedicated to Gulf island conservation, on revising the marine and island plan and on communicating effectively with the local fishing communities concerned about the possible adverse affects of park regulations on their well-being.


As the tourism sector grows, so too do the demands on the coastal environment. In response, CRM II is working with the private sector and government to formulate and promote voluntary adoption of the low-impact tourism and development practices outlined in the Normas Practicas, or Best Practices, published in 1998. In FY ‘99 state and federal environmental and tourism officials were educated on the use of guidelines.

Strengthening NGO and Professional ICM Capacity

CRM II helps build the ICM capacity of its primary partners – ASK, UQROO and CI – to carry out community and policy-oriented ICM programs. In FY ’99, UQROO faculty and leaders formed a working group to investigate models for creating a new inter-disciplinary marine/coastal program within the university. CRM II assisted the group in this effort.

CRM II has also supported regional NGO networks involved in community-based resource management. A strategy for the Quintana Roo network was drafted in January 1999. Since then the group has held monthly seminars to exchange information and help each other address common challenges. A similar model is being followed in the Gulf of California.

Mexico Project Results are Informing the Global ICM Dialogue

Mexico continues its participation in the International Coral Reef Initiative and the Meso-American Reef Initiative. In November 1998, USAID/Mexico funded two Mexicans to attend the International Tropical Marine Ecosystems Management Symposium (ITMEMS) in Australia where they presented a paper on CRM II experience in Quintana Roo. The Xcalak experience was also used as a case study at the pre-Coastal Zone ’99 International Workshop held in San Diego, California.
Improved Management of Coastal Resources in Tanzania

Women will play an important role in Tanzania’s rapidly developing seaweed farming industry.
The coastal area that includes some of the most diverse and biologically important species on the planet. As the government works with the Tanzania Coastal Management Partnership (TCMP) to put in place mechanisms for sustainable coastal management, coastal stakeholders and local governments are demonstrating a shared vision for an ICM policy.

Formulating and Adopting Meaningful ICM Policies

Tanzania’s coast contains many riches. It is home to a quarter of the country’s population, houses 75 percent of the country’s industry and is the location of the largest urban centers. About eight million people inhabit the coastal area that includes some of the most diverse and biologically important species on the planet. As the government works with the Tanzania Coastal Management Partnership (TCMP) to put in place mechanisms for sustainable coastal management, coastal stakeholders and local governments are demonstrating a shared vision for an ICM policy.

The Project:
The Tanzania Coastal Management Partnership (TCMP) was established in 1997 with support from USAID/Tanzania. It is a two-phase, five-year project, extending through 2001. The TCMP’s goal is to establish the foundation for effective coastal governance.

The Partners:
CRM II’s primary partner is the vice president’s office, through the National Environment Management Council (NEMC). Together, CRM II and NEMC established the TCMP and a small support unit to provide day-by-day facilitation and coordination. The TCMP support unit works closely with issue-based, multi-sectoral working groups, the network of existing ICM programs and projects, and the private sector.

The Financing:
FY ’99 financing was $1 million. Authorized funding through 2001 from USAID/Tanzania is $3.3 million.

The coast is a precious heritage to humankind, but people, particularly in the coastal communities, are not equitably benefiting from the coastal values. This is only because the coast is a complex ecological system that requires a strategic management approach with a shared vision for sustainable management and development of the resources of the associated delicate environment.”

— Colonel Nsa Kaisi, Mtwara regional commissioner.
The Green Paper lays out the overall goal of the Tanzania ICM policy to preserve, protect and develop the resources of Tanzania’s coast for use by the people of today and for succeeding generations to ensure food security and to support economic growth.

The key principles and attributes of the proposed policy are:

- Coastal development decisions will be consistent with the government’s priority of poverty alleviation and food security.
- Local stewardship and decisionmaking will be promoted and supported as required by the Local Government Reform Programme. In cases where there is a clear and explicit national interest that overrides local decisions, a consultation process will occur to find an equitable balance among the interests.
- Integrated approaches to the development of major new economic uses of the coast will be promoted to optimize benefits and minimize negative impacts.

Coastal development and management of economic opportunities will be guided in a way that is compatible with national development goals and local needs and protect the environment from unnecessary and irreparable damage.

A Vision for Tanzania’s Coast

“We envision a coast with thriving coastal settlements where people who rely on the sea and its abundant resources for their food and livelihood are actively working to protect and sustain the resource base. We also envision the development of new coastal economic opportunities that sustainably contribute to both local and national development and new and diversified employment opportunities for coastal residents. Lastly, we envision a partnership between government and all segments of Tanzanian society - resource users, the private sector, academic and research institutions and others - working together to turn this vision into reality.”

- TCMP Green Paper
Development and conservation interests will be balanced by protecting areas of high biodiversity and cultural/historic importance, and identifying and steering large-scale economic developments to suitable areas.

Tanzania will adhere to the relevant regional and international ICM conventions to which it is a signatory.

Scientific information will be used to inform decisionmaking and re-adjust policy implementation as new information becomes available.

The capacity of Tanzania to sustainably manage the country’s coastal resources will be increased and strengthened by providing information and knowledge to resources users, decisionmakers and all stakeholders.

Coastal management activities in Tanzania will proceed incrementally and in step with the available human and institutional capacity.

The stage is now set for finalizing the national coastal policy in early 2000.

**Intersectoral Mechanisms for Addressing Emerging Coastal Economic Opportunities**

Mariculture, which is both an important coastal issue and economic opportunity in Tanzania, was selected as a practical exercise in developing and implementing intersectoral coastal policy. The Tanzania Mariculture Issue Profile, describing the issues and opportunities related to management and development of a sustainable mariculture industry in Tanzania, was completed and published in 1999.

This document is the first of its kind in Tanzania. It is unique not only in its content, but also in its manner of preparation. The profile was prepared over an 18-month period by the TCMP Mariculture Working Group that included representatives of a wide range of public sector agencies along with members of the private sector. Issue identification occurred through an open and consultative process at the national, district and local levels, and involved multiple resource user groups. Consultations in the field proved invaluable in providing factual information and in allowing diverse groups to express their views and opinions on how mariculture could, if properly developed, improve the collective quality of life in coastal areas. It is hoped the profile will provide a useful model for other nations struggling to address this issue.

The profile is a starting point for addressing mariculture issues in an integrated fashion. The TCMP Mariculture Working Group continues its work today writing the first set of mariculture guidelines for the nation — guidelines that will identify concrete means to promoting and regulating sustainable mariculture development.

Seaweed mariculture markets look promising for the future in Tanzania.
Coastal Resources Center University of Rhode Island and sustainable use of coastal resources. Prizes included bicycles and gardening equipment such as watering cans, spades and rakes. The scheme was implemented by the TCMP with GreenCOM, in cooperation with district-level committees. It reached over 15,000 people in four districts.

Building Human and Institutional Capacity for ICM

The TCMP continued its “learning by doing” approach to capacity building and over 50 individuals directly participated in the project’s working groups. This strategy was enhanced by providing in-country and experience. To build the network, the TCMP has supported semi-annual retreats, an ICM newsletter and an e-mail discussion group. The TCMP has also created mechanisms to resolve conflicts between locally based coastal management programs and central government.

A major focus this year was building a public constituency for policy adoption. In addition to focused media coverage, a coastal awards scheme identified and issued prizes to local individuals recognized for their environmentally friendly and sustainable use of coastal resources.

Improving Communication among ICM Practitioners at All Levels

An active network of ICM professionals is critical to successful policy implementation. In the past, locally based coastal management programs operated independently of one another and failed to learn from each other’s implementation experience.

From schoolchildren to community groups to entire villages, coastal residents responded to the TCMP’s coastal environmental awards scheme.

“USAID’s regional capacity building program is providing a major benefit to our project in Tanzania. By providing broad ICM training, the TCMP can focus on activities that directly promote policy implementation.”

— Jeremiah Daffa, TCMP Project Support Unit Leader
external training opportunities to over 30 participants from 11 different government institutions. This included sponsoring four participants in the REDSO-ESA-supported regional ICM course.

Additionally, a national needs assessment for formalized coastal management training in Tanzania was completed and a Memorandum of Understanding was signed with the Institute of Marine Science of the University of Dar es Salaam to deliver training on ICM at the national and regional levels.

Improving the Link between Science and Management

There is an urgent need in Tanzania to improve the use of science in coastal management. In response, an interim working group, the Marine Ecosystem Assessment and Monitoring Coordination Team, was created in a partnership between the University of Dar es Salaam’s Institute of Marine Science and the TCMP. The interim team held three meetings in FY ’99 and conducted an assessment that looked at availability of scientific information, gaps in information and ongoing monitoring initiatives. The team also developed a plan for coastal ecosystem monitoring designed around management issues and produced a directory of marine scientists. Recognizing the long-term significance of this work, the interim team was made a TCMP working group in July 1999 and was renamed the Science and Technical Working Group. This group will serve as a primary bridge between coastal managers and scientists studying coastal and marine issues at the local and national level.

Providing Regional Leadership

Tanzania is providing leadership in ICM in the region. The government is a party to several international and regional conventions that recognize the need for an integrated approach to managing the coastal area. The TCMP participated in key regional and international meetings and workshops in FY ’99 including the Pan-African Conference on Sustainable Integrated Coastal Management (PACSI-COM) held in Maputo, Mozambique in July 1998; the Conference on Cooperation for the Protection and Development of the Coastal and Marine Environment held in Cape Town, South Africa in November 1998; the Regional Experts Meeting for Reviewing the Nairobi Convention held in Mauritius December 1998; and the Regional Workshop on Marine Contingency Planning held in Cape Town in February 1999.

The persistent poverty in coastal villages is a challenge to government and all coastal stakeholders including communities. But for a long time we have not realized the need to use coastal resources sustainably. Now it is time we move with focused strategies to maintain and improve the coastal resource base on which both the rural and urban coastal economy development depends, while developing new economic opportunities in a way that benefits the people of the coast and the nation as a whole.”

—Ukiwaona Ditopile Mzuzuri, Lindi Regional Commissioner

Reviewing the Nairobi Convention held in Mauritius December 1998; and the Regional Workshop on Marine Contingency Planning held in Cape Town in February 1999.
Improved Management of Coastal Resources in Kenya

A successful collaborative effort by the local community, government and CRM II helped secure valued public access to Kenyatta Beach.
The CRM II project at Nyali-Bamburi-Shanzu (near Mombasa), a heavily developed tourism area called “North Coast” by local residents, attempts to demonstrate how an ICM approach can help all stakeholders define shared objectives, create mechanisms for addressing coastal issues and create forums for resolving conflicts. After development and adoption of an action strategy for the site, the Coastal Management Steering Committee (CMSC) Secretariat began implementing selected strategy elements.

Over the last two years, the CMSC has given priority to safeguarding public access points from private encroachment. Kenyatta Beach is the only remaining public access point on the North Coast. It is where fishermen store their gear and land their catch, where local boat operators meet clients to take them into the adjacent marine park and where local residents go to relax. On an average weekend afternoon, an estimated 1,500 people enjoy the beach. Yet, in spite of extensive public use of the site, there was danger that rights to it would be allocated to a private developer. The secretariat, through member and partner institutions, was able to protect the plot for public use and prepare and gain Mombasa Municipal Council approval of a site re-development plan.

The secretariat is currently working on improving the site’s public facilities. With cooperation from the Rotary Club and multiple self-help groups, several fish bandas (open-air work structures) have been rehabilitated, trees planted, food kiosks re-positioned, and the fish pavilion and enforcement tower repaired and moved – the latter two actions have improved the usability of the structures and have made the beach more accessible.

Next year, CRM II, working with USAID/Kenya, will carry out public education activities to broaden public support for the implementation of the Nyali-Bamburi-Shanzu action strategy and will design an expanded program to include other areas of the Kenya coast.
Providing Coastal Practitioners With the Skills They Need

One of the greatest challenges to effective coastal management is the lack of human and institutional capacity. While the need for skilled coastal managers continues to grow, so too does the number of training and education programs aimed at addressing that need. The capacity-building approach developed by CRM I and II continues to be recognized as among the most effective. It is an approach that targets individuals, organizations and educational institutions for coastal management, and helps ensure that the people of the place can sustain effective coastal management long after foreign technical assistance is withdrawn.

Training Coastal Management Professionals

Planning began for the sixth bi-annual Summer Institute in Coastal Management (SI2000). New curriculum topics such as equity and justice in development – issues that participants consistently cite as being critical to implementing effective coastal management in their countries – are under development.

The University of Quintana Roo (UQROO), Mexico, a CRM II partner institution, will be directly involved in all aspects of the design and implementation of SI2000 with the goal of building that institution’s capacity to design and deliver its own Summer Institute-like coastal management course or program.

Demonstrating Training Impacts

For the first time ever, CRM II designed and delivered post-course evaluations for alumni of the 1994, 1996 and 1998 Summer Institutes. The goal was to determine if what participants learned in the training was actually applied on-the-job; if what they learned influenced decisions and decisionmakers within their organization; and if participants were given greater responsibility and/or promotion as a result of the training. A 30 percent response rate for each year/group was achieved and substantial impacts were evident. For example, approximately 40 percent of respondents assumed greater job responsibility within their organization and over 80 percent increased their ability to influence decisions and/or decisionmakers about coastal management policy and programs. Evaluation results also are feeding the curriculum design for SI2000. A full results report will be produced and disseminated in FY ’00.
**Helping Universities Contribute to ICM**

In nations with effective coastal and marine conservation, universities play an important role in the development of successful coastal management initiatives. They educate future coastal scientists and managers, train and raise awareness of professionals and decisionmakers, provide extension services to communities and resource users, bring technical expertise and information to policy dialogue at all levels, and implement applied research and monitoring programs.

CRM II, building from institutional development tools created for NGOs, is developing a self-assessment and tracking tool for university-based organizations working to build and strengthen multi-faceted ICM programs. This tool is being used with Indonesia’s Centre for Coastal and Marine Resources Studies, the Indonesia Coastal Universities Network and with UQROO.

CRM II also explored preliminary collaborations with both the World Bank and the University of Western Cape, Southern Africa on a distance learning initiative for coastal management in South Africa – with opportunities to later expand the model to CRM II partner universities in other regions.

**CRM II Builds Partner Institution Training Capacity**

CRM II’s technique for building partner capacity to independently design and deliver all aspects of a coastal management training program is a successful, well-tested, multi-step approach. First, CRM II staff take the lead training role with the partner serving as a resource group, while receiving hands-on training of its trainers. Second, staff work hand-in-hand with the partner on all aspects of course design and delivery. Third, the partner leads all aspects of the training with CRM II trainers serving only as a resource or supporting group. Lastly, with its capacity developed, the partner becomes fully independent in all aspects of the training. This step-by-step approach has a proven track record with CRM II “graduates,” including the Prince of Songkla University, Thailand; Silliman University, Philippines; and Escuela Politecnica, Ecuador.

While demand for training increases, more and more potential participants forego courses because they either cannot afford the cost of the program and/or cannot afford an extended period of time away from their job. In response to this reality, CRM II’s SI2000 will incorporate a web-based distance learning component targeted at former Summer Institute alumni.
Communications to Improve Global Awareness and Understanding of ICM

The effective communication of experience, lessons learned, and concepts and tools developed from CRM II’s field and global activities is vital to the success of the program.

CRM II communications are targeted at four priority audiences: the development community with a focus on USAID staff worldwide; coastal management practitioners and planners; key decisionmakers; and the general public. Strategic distribution of CRM II products encourages cross-portfolio learning and initiatives within USAID; informs coastal managers worldwide about both tried and true practices and innovative tools and techniques for their on-the-ground projects; and helps inform the shaping of coastal management policy.

CRM II reaches these target audiences using a variety of media including its suite of coastal management reports and its global newsletter, InterCoast. Articles by CRM II staff also regularly appear in peer-reviewed and general consumption journals and magazines. CRM II field projects have used journalism, television and video to capture the firsthand experience of coastal residents — the coastal management challenges they face, the positive impacts of community constituency building and the results of coastal management initiatives. Together these media help present the “human” side of the coastal management story. “Putting a face” on the issues can gain support for coastal management initiatives — by helping government officials, funders and the general public better understand how effective coastal management improves economic, social and environmental well-being.

InterCoast

Since the mid 1980s, InterCoast newsletter has disseminated valuable, and often otherwise unattainable, information to coastal practitioners worldwide and has served as an active forum for directing practitioners to alternative resources. InterCoast regularly features CRM II work while also capturing news, information and articles on coastal management programs around the world. In FY ‘99, feature topics for InterCoast were implementation and compliance in coastal management, and coral reefs.

Publications

In FY ‘99, CRM II communications staff produced and distributed over two dozen publications documenting global and field activities. These ranged from highly technical, site-specific documents to publications with a far-reaching global impact (selected publications are listed on pages 42 and 43).
Spreading the Word Through the Web

CRM II’s web site is a resource and clearinghouse for information on coastal management, and provides links to other valuable coast-oriented sites and partners. In FY ‘99, CRM II’s web site was expanded to broaden and deepen its information on CRM II field programs, initiatives in research and learning, and activities in training and education. Access to CRC publications, including InterCoast, was made easier and faster – allowing users to download entire documents in their printed form. The CRC web site is at: http://crc.uri.edu.

Communications Staff From CRM II Field Sites Visit The US

In June of 1999, Ibu Kun Hidayat, head of publications for CRM II’s Indonesia Coastal Resources Management Project, Proyek Pesisir, visited the Coastal Resources Center in Rhode Island. Part of the learning exchange was a trip to Washington, DC with CRM II home office communications staff to visit international development and environmental groups. Discussions touched upon emerging communications campaigns and strategies, and the opportunities for partnerships worldwide. Upon returning home, Ibu Kun published a feature article about her US experience in Matra, a popular Indonesian magazine.

Similarly, in August, the Tanzania Coastal Management Partnership’s information officer, Gratian Luhikula, traveled to the US to visit with his Rhode Island-based counterparts and to make a presentation on how communications can shape national policy at Creating Environmentally Sound Policy: How Communications Can Make It Happen, an international symposium held in Cincinnati, Ohio.

InterCoast Readers Write...

“InterCoast is the best for providing cultural information and independent coastal management news sources.”
– Riga, Latvia

“InterCoast is a source of new ideas for the community.”
– Yogyakarta, Java, Indonesia

“InterCoast is interesting and useful in all aspects of coastal management.”
– Cancun, Mexico

“I am impressed with InterCoast’s content and layout – it’s excellent, and extremely clear,”
– Newcastle, United Kingdom

Building a Communications Network

CRM II effectively uses the media to inform the public about coastal management – what it is and why it is important. CRM II communications staffs have worked closely with the media to ensure the public receives messages about coastal management that are clear and consistent and that answer in a compelling way the question “How does this affect me?”

In FY ‘99 communications staff from the Tanzania and Indonesia field programs were invited to the CRM II home office where they were introduced to American governmental, business and grassroots communications professionals in an effort to further broaden the national and international coastal management network.
Selected CRM II Publications

**Global**


*Newsletters/Global*


**Mexico**


*Newsletters/Mexico*


**Indonesia — Proyek Pesisir**


Tanzania – Tanzania Coastal Management Partnership

CRM II Team

Coastal Resources Center
University of Rhode Island

Stephen Olsen ............... Director
Lynne Zeitlin Hale .......... Associate Director
Lesley Squillante .......... Assistant Director
Brian Needham .......... Executive Assistant
Cindy Moreau .......... Business Manager
Robert Bowen .......... MIS Manager

Field Programs

Mark Amaral ............. Africa Program
Brian Crawford .......... Asia Program
Donald Robadue .......... Latin America Program
Pamela Rubinoff .......... Mexico Program
Camille Coley .......... Africa Program
Joshua Cinner .......... Graduate Student, Latin America Program
Kathy Ciffo .......... Administrative Support
Wendy Courchaine .......... Administrative Support
Patty Harrington .......... Administrative Support
Diane Monaghan .......... Administrative Support

Research and Learning

James Tobey .......... Coordinator
Alan Desbonnet .......... Results Reporting
Jean Krul .......... Administrative Support

Training and Communications

Margaret Wood .......... Training Manager
Chip Young .......... Communications Manager
Noelle Lewis ............ Editor
Kimberly Kaine .......... Administrative Support
C. Suzanne Wood .......... Administrative Support

Ecuador

Luis Arriaga .......... Advisor, Ecuador Coastal Resources Management Program
Emilio Ochoa . Program Leader, PROARCA/Costas
Elizabeth De Silva . Outreach and Administration

Indonesia – Jakarta

Ian Dutton .......... Project Leader
Esthy Jonathan .......... Administrative Manager
Sjahira Idroes .......... Administration Assistant
Kun Hidayat .......... Publications Manager
Tammy Carolina .......... Secretary
Pasus Legowo . Graphics/Publication Specialist
Jacub Rais .......... Senior Policy Advisor–BANGDA
Kemal Taruc M. .......... Senior Policy Advisor–Tourism
Fara Sofa .......... Program Officer
Pahala Nainggolan .......... Senior Accountant
Dewi Setiani .......... Finance Officer
Vista Yuliati .......... Finance Officer
Prawoto .......... Driver
Sukino .......... Janitor

Indonesia – Manado

Johnnes Tulungen .......... Field Program Manager
Lissa Ingkiriwang .......... Office Manager
Daisy Malino .......... Secretary
Sesillia Dajoh .......... Secretary
Shirley Tulung .......... Administrative Clerk
Christovel Rotinsulu . Senior Extension Officer
Asep Sukmar .......... GIS Specialist
Mediarti Kasmedi .......... Extension Officer
Noni Tangkilisan .......... Extension Officer
Egmond Ulaen .......... Extension Officer
Theresia Dimpudus .......... Extension Officer
Priecielia Kussoy .......... Research Extension Officer
Augustinus Tabuni .......... Office Guard
Wasimin .......... Driver
Melki M. Maensiga .......... Janitor

Indonesia – Lampung

Budy Wirayawan .......... Field Program Manager
Revita Meuthia .......... Office Manager
Hermawati Poepitasari .......... Extension Officer
Handoko Adi Susanto .......... Extension Officer
Susana Rahayu .......... Junior Secretary
Odi Hartawan .......... Junior Accountant
Yudi Rahmadi .......... Office Assistant
Afif Koramudin .......... Office Guard
Sukatman .......... Office Boy
Efta Wintara .......... Driver
**Indonesia — East Kalimantan**

Ramli Malik .......... Field Program Manager
Audrie Siahainenia .......... GIS Officer
Ari Setiabudi Darmawan .......... Planner
M. Muhammad Zulficar. Research Specialist
Achmad Sehadi .......... Extension Officer
Lisa Angraini .......... Office Manager
Maureen Tuhatu .......... Secretary
Masyitah .......... Secretary
Rocsdin Abidm .......... Office Assistant
Budiman .......... Office Guard
Achirul Moeslim .......... Driver

**Indonesia — CCMRS**

Rokhmin Dahuri .......... Director
Dietriech Bengen .......... Program Coordinator
Sri Kholiyash .......... Office Manager
Meydia .......... Secretary
Wawan Hermanwan .......... Finance Clerk
R. J. Moermanto .......... MIS Officer
Yanthi G. Sudjana .......... Senior Librarian
Siti N. Khodijah .......... Journal Assistant
Pepen Abdullah .......... Publications Assistant
Fedi A. Sondita .......... Learning Coordinator
Amiruddin Tahir .......... Learning Team
Bambang Haryanto .......... Learning Team
Burhanuddin .......... Learning Team
Neviaty .......... Learning Team

**Mexico — Amigos de Sian Ka’an**

Juan José Di Donna Argüelles .......... Director
Juan Bezaury .......... Former Director
Jorge Carranza Sánchez .......... Project Director
Concepción Molina Islas .......... Project Coordinator
Carlos López Santos .......... Chetumal Coordinator
Frida May .......... Chetumal Assistant
Laura Susana Rivera .......... Xcalak Coordinator

**Mexico — University of Quintana Roo**

Efrain Villanueva .......... Rector
Natalia Armijo .......... Project Coordinator
Héctor Gamboa .......... Extension Officer
Alfredo Ramírez .......... Extension Officer
Magali Cabriolé .......... Participation Specialist
Bonnie Campos .......... Outreach Coordinator

**Tanzania**

Jeremiah Daffa .......... TCMP Support Unit Leader
Norbert Mwamakonda .......... Administration Officer
Mary Mwelba .......... Office Secretary
Magnus Ngoile .......... Senior Advisor
Gratian Luhihula .......... Information Officer
Abdillahi Chande .......... Policy Assistant
Godlove Mwamsojo .......... Mariculture Working Group

**USAID Partners**

Michael Philley .......... USAID/G/ENR
Richard Volk .......... USAID/G/ENR
Alan Hurdus .......... USAID/G/ENR
Barbara Best .......... AAAS Fellow, Water Team
Sharon Murray .......... AAAS Fellow, Water Team
John McMahon .......... USAID/LAC
John Wilson .......... USAID/ANE
David Hesens .......... USAID/Indonesia
Tita Pieter .......... USAID/Indonesia
Ron Ruybal .......... USAID/Tanzania
Gilbert Kajuna .......... USAID/Tanzania
James Ndarango .......... USAID/Kenya
Dennis McCarthy .......... USAID/REDSO-ESA
Daniel Evans .......... USAID/REDSO-ESA
Frank Zadroga .......... USAID/Mexico

---

**East Africa Region (WIOMSA)**

Julius Francis .......... Executive Secretary
Margareth Kyewalyanga .......... Executive Secretary

**Kenya**

Saeed Mwaguni .......... Coast Development Authority
B.A.J. Mwandotto .......... Coast Development Authority
R. Ruwa .......... Kenya MFRI
H. Ong’anda .......... Kenya MFRI
M. Mukira .......... Fisheries Department
A. Mohamed .......... Mombasa Municipal Council
M. Skanda .......... Mombasa Municipal Council
N. Muthiga .......... Kenya Wildlife Service

**Mexico – Amigos de Sian Ka’an**

Juan José Di Donna Argüelles .......... Director
Juan Bezaury .......... Former Director
Jorge Carranza Sánchez .......... Project Director
Concepción Molina Islas .......... Project Coordinator
Carlos López Santos .......... Chetumal Coordinator
Frida May .......... Chetumal Assistant
Laura Susana Rivera .......... Xcalak Coordinator

**Mexico – University of Quintana Roo**

Efrain Villanueva .......... Rector
Natalia Armijo .......... Project Coordinator
Héctor Gamboa .......... Extension Officer
Alfredo Ramírez .......... Extension Officer
Magali Cabriolé .......... Participation Specialist
Bonnie Campos .......... Outreach Coordinator

**Tanzania**

Jeremiah Daffa .......... TCMP Support Unit Leader
Norbert Mwamakonda .......... Administration Officer
Mary Mwelba .......... Office Secretary
Magnus Ngoile .......... Senior Advisor
Gratian Luhihula .......... Information Officer
Abdillahi Chande .......... Policy Assistant
Godlove Mwamsojo .......... Mariculture Working Group

**USAID Partners**

Michael Philley .......... USAID/G/ENR
Richard Volk .......... USAID/G/ENR
Alan Hurdus .......... USAID/G/ENR
Barbara Best .......... AAAS Fellow, Water Team
Sharon Murray .......... AAAS Fellow, Water Team
John McMahon .......... USAID/LAC
John Wilson .......... USAID/ANE
David Hesens .......... USAID/Indonesia
Tita Pieter .......... USAID/Indonesia
Ron Ruybal .......... USAID/Tanzania
Gilbert Kajuna .......... USAID/Tanzania
James Ndarango .......... USAID/Kenya
Dennis McCarthy .......... USAID/REDSO-ESA
Daniel Evans .......... USAID/REDSO-ESA
Frank Zadroga .......... USAID/Mexico
Investing in the future - the real beneficiaries of CRM II’s global coastal management work.
CRM II FY '99 Financial Overview

By Geographic Area
Total FY'99 Budget: $3,774,000

- Asia (40%)
- Latin America-Caribbean (9%)
- Africa (23%)
- Global (28%)

By Result Area
Total FY'99 Budget: $3,774,000

- Coastal Governance in Key Countries (83%)
- Management and Coordination (3%)
- Global Commitment to ICM (14%)
This publication was made possible through support provided by the Office of Environment and Natural Resources; Bureau for Global Programs, Field Support and Research; Center for Environment; U.S. Agency for International Development, under the terms of Cooperative Agreement No. PCE-A-00-95-0030-05.

This publication is available electronically on the Coastal Resources Center’s Worldwide Web site at: http://crc.uri.edu. For more information, contact: Coastal Resources Center, University of Rhode Island, Narragansett Bay Campus, South Ferry Road, Narragansett, RI, 02882; Tel: (401) 874-6224; FAX: (401) 789-4670.

Citation: Coastal Resources Management Project II 1999 Results: Increasing Conservation and Sustainable Use of Coastal Resources. 2000. Coastal Management Report #2222. Coastal Resources Center. Narragansett, RI.