Sustainable Coastal Communities and Ecosystems Program (SUCCESS)

A Component of the Integrated Management of Coastal and Freshwater Systems Program (IMCAFS)

Semi-Annual Report

July 1 – December 31, 2008





















Integrated Management of Coastal and Freshwater Systems Leader with Associates Cooperative Agreement for Sustainable Coastal Communities and Ecosystems (SUCCESS)

Semi-Annual Report July 1 – December 31, 2008

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A partnership between:

Coastal Resources Center
University of Rhode Island
and
United States Agency for International Development
Bureau for Economic Growth, Agriculture and Trade
Office of Natural Resource Management

in association with:

University of Hawaii Hilo, Pacific Aquaculture and Coastal Resources Center
Western Indian Ocean Marine Science Association (WIOMSA)
EcoCostas
Universidad Centro América
Conservation International
The Nature Conservancy
World Wildlife Fund
The Sea Grant Network

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INTRODUCTION

The University of Rhode Island (URI) was awarded a Leader with Associates (LWA) Cooperative Agreement in Coastal Management, Fisheries and Aquaculture in 2004 for a five-year program with core annual funding of \$750,000. This is the Sustainable Coastal Communities and Ecosystems (SUCCESS) Program.

The Coastal Resources Center (CRC) at the URI is the Leader of this Agreement. The Pacific Aquaculture and Coastal Resources Center at the University of Hawaii (PACRC/UHH) is the sub-recipient. The Program's strategic partners are the Sea Grant Association of Universities, through the Rhode Island Sea Grant College Program; the Nature Conservancy (TNC); World Wildlife Fund (WWF); and Conservation International (CI). Regionally, implementation partners include the Western Indian Ocean Marine Science Association (WIOMSA) based in Zanzibar, Tanzania; the Center for Ecosystem Research (CIDEA) at the University of Central America (UCA) based in Nicaragua; and EcoCostas, a nongovernmental organization (NGO) based in Ecuador.

The SUCCESS Program's goal is to provide global leadership in integrated coastal management through innovative approaches in a participatory, issue-driven and results-oriented process to:

- Promote sustainable use of marine resources
- Conserve marine biodiversity
- Improve food and income security

The Program goal is achieved through four major components:

- Achieving Tangible On-the-Ground Results
- Increasing Capacity through Certification Initiatives and On-the-Ground Training
- Establishing Regional Learning Networks Supported by Knowledge Management
- Applying Science to Management and Good Governance

In each region where the LWA Program operates, these components come together to make a coherent, mutually re-enforcing set of strategies. These strategies ensure that community-based demonstrations of successful natural resources governance are connected to supporting actions and policies at the provincial, national and regional scales. This integrating, cross-sectoral and multi-scaled approach has proven to be adaptable to a wide range of settings.

The Program's work makes significant contributions to biodiversity conservation and plays a role in raising awareness of the need to adapt coastal policies, plans, and practices in the face of global climate change.

Biodiversity Conservation and the Sustainable Coastal Communities and Ecosystems (SUCCESS) Program

The Sustainable Coastal Communities and Ecosystems (SUCCESS) Program falls under the Congressional biodiversity earmark secondary code. These are programs and activities—site based or not—that have biodiversity conservation as an explicit, but not primary, objective. The following section provides information on how SUCCESS meets the biodiversity earmark criteria.

1. The Program must have an explicit biodiversity objective. It is not enough to have biodiversity conservation results as a positive externality from another program

The SUCCESS Program's overarching goal is to help the people of a place improve both their quality of life (health, income, education) and biodiversity through good governance. To meet this goal, the Program promotes community-based demonstrations of successful natural resources governance. Examples of this include co-management areas that are connected to supporting biodiversity conservation-related actions and policies at the local, national and regional scales.

The SUCCESS emphasis on integrated coastal management (ICM) aims to achieve similar goals of most conservation programs. However, it does this while working both within and outside of formally designated marine and coastal conservation areas. While managing protected areas is an important approach to achieve biodiversity conservation, in and of itself it is insufficient unless areas outside of protected areas are also better managed. SUCCESS also emphasizes conservation approaches recommended by the United States Agency for International Development (USAID), including sustainable use, community based and cross-sectoral approaches, linking especially to the fisheries and mariculture sectors. In addition, SUCCESS operates under the premise that stakeholders in sustainable use and conservation efforts must see tangible benefits if these programs are to be effective and sustainable beyond the life of the USAID investments. Therefore, livelihood and enterprise development is a feature of all interventions of the SUCCESS Program and also helps address poverty issues—a key problem of communities in most places where this Program works.

2. Activities must be identified based on an analysis of threats to biodiversity

In FY06, assessments were conducted in all SUCCESS Program sites to identify biodiversity threats, evaluate current Program activities to determine their adequacy in addressing the priority threats, and decide the need for any changes to Program goals, objectives, or activities based on assessment results. The objective was/is to recognize not only major and direct threats to biodiversity, but equally important to both prioritize these threats and understand their context and root causes. These assessments also help in predicting which priority threats are likely to become even more severe in the future. For the past several years, activities implemented at the site level have addressed various threats in specific areas of biological significance including but not limited to unsustainable mariculture development practices, ineffective or lack of resource management regulations, lack of alternative livelihoods for resource dependent communities, degraded watersheds and poor farming practices, and poorly planned and regulated coastal development.

3. The program must monitor associated indicators for biodiversity conservation

On a quarterly basis, the SUCCESS Program monitors the number of hectares in areas of biological significance that are under "improved management". The term "improved management" signifies that the project or Program area is undergoing a management process that is laying the groundwork for

improving environmental and resource conditions. As per the Policy Cycle, this process often begins with conducting assessments and ends with implementing management actions. "Improved Management" includes activities that promote enhanced management of natural resources for the objective of conserving biodiversity in areas identified through national, regional, or global priority-setting processes as being biologically significant. Management should be guided by a stakeholder-endorsed process following principles of sustainable natural resource management (NRM) and conservation, improved human and institutional capacity for sustainable NRM and conservation, access to better information for decision-making, and/or adoption of sustainable NRM and conservation practices. The area claimed as "improved" is the area that has been defined by project staff as the boundaries for the ICM program and/or that will be covered through an ICM related plan.

In two SUCCESS Program field sites, Fumba in Tanzania and Padre Ramos in Nicaragua, improvements in biodiversity have been achieved as a direct result of the life-of-Program activities being carried out there. The Program's biophysical monitoring efforts help in determining if biodiversity conservation in the area under "improved management" is stable, improving, or is experiencing a slowing rate of decline.

4. Site-based programs must positively impact biologically significant areas

In both locations mentioned above (Fumba, Tanzania and Padre Ramos, Nicaragua), implementation of community-managed no-take zones are showing increasing abundance of cockles (key indicator species monitored) inside the no-take zones and adjacent areas compared to baselines taken prior to or at the beginning of implementation of the no-take zones.

Summary of the SUCCESS Program's biodiversity achievements in FY08

In FY 08, a total of 222,301 hectares in areas of biological significance have come under improved management (150,804 marine, 70,497 terrestrial) and over 14,000 hectares of intertidal areas of biological significance are showing improved biophysical conditions for selected parameters as a result of the SUCCESS Program.

Specific activities leading to improved management are:

- Formal establishment, management and community-based monitoring of permanent no-take zones for a three year trial period in the Menai Bay Conservation area of Zanzibar, Tanzania.
- Introduction of jewelry shellcraft and half-pearl aquaculture as a more eco-friendly alternative source of food protein (oyster) and income (sale of pearls) in communities on the Fumba Peninsula that exploit resources inside the Menai Bay Conservation Area.
- Reforestation and introduction of improved agroforestry practices in the watershed of the Cojimies Estuary, Ecuador including buffer areas of the Mache-Chindul Forest Reserve.
- Adoption of a code of conduct on best management practices for mariculture taking place inside the Estero Real Biosphere Reserve.
- At the regional scale, the Western Indian Ocean Certification Program for Marine Protected Area Professionals (WIO-COMPAS) has certified nine individuals at level 2; and Certification for Professionals in Coastal Ecosystem Governance in Latin America certified 22 individuals at a level 1, 2, or diploma level—all of whom are working in areas of important biodiversity.

Tanzania

The waters around Fumba village, located within the Menai Bay Conservation Area on Zanzibar Island of Tanzania, are rich with a biodiversity of fishes, coral reefs, and mollusks. Here, the

SUCCESS Program and its partners—including local bivalve collectors (mostly women)—are addressing the <u>accelerating</u> threat of a depleted bivalve population due to over-harvesting. At the root of the problem is poverty (little income to purchase other food protein); inequality (females have fewer alternative employment options than males); and local market forces (with little market for other income-generating products from Fumba, pressure on this one resource for food and income remains constant).

The fact that women need to venture farther and farther into the ocean to collect sufficient bivalves is testament to the overharvesting of this resource. Without intervention, the natural environment will be changed—including a loss of biodiversity—and future generations will lose a valuable food and income source. The SUCCESS Program is working to change this by introducing a zoning scheme—e.g., designating selected areas as "no-take" zones during certain periods—and by introducing half-pearl aquaculture as a more eco-friendly alternative source of food protein (oyster) and income (sale of pearls). Three no-take areas have been formally established by the district and endorsed by the Department of Fisheries in the Menai Bay Conservation Area. There is strong local commitment to implementing this zoning strategy as evidenced by documented improvements on cockle abundance. The jewelry shellcraft and half-pearl culture initiatives are already paying dividends to many local women, thereby improving their quality of life and reinforcing their commitment to protect the biodiversity of the Menai Bay/Fumba area.

Ecuador

In Ecuador, the SUCCESS Program and local partners are tackling accelerating threats to biodiversity of the Cojimies estuary and surrounding watershed. The estuary, islands within, and adjacent shoreline are nesting grounds for several species of marine turtles. The upper watershed includes a portion of a designated protected area (Mache-Chindul Forest Reserve), and comprises significant amounts of primary coastal forests. In spite of this richness, the estuary's overall health suffers from human-induced conditions: 1) the collapse of lagoon shellfisheries due to overfishing; 2) the exploitation of coastal timber resources from excessive cutting and the resultant sedimentation that changes the estuary's hydrology, pulsing, and water quality; and 3) the conversion of mangroves to shrimp ponds.

Poverty and a lack of governance are at the root of this situation. In a vicious cycle, poverty and a lack of recognized alternative sources for food and income have lead to the estuary's decline. That reduction in goods and services from what had been a historically highly productive ecosystem has, in turn, created even greater poverty. Add to this an absence of a governance system—a lack of laws and/or enforcement, of government support or revenues, and long term planning—and the estuary and its biodiversity finds itself at great risk. The SUCCESS Program is working to change this by introducing eco-friendly livelihoods such as a revived culture of the native fish *chame*, home gardening, and beekeeping/honey production. Perhaps even more importantly, the Program and its partners are working with the local communities to create a longer term vision for the future of their place—one that includes conserving the estuary's remaining resources and biodiversity, restoring what is possible to restore, and helping ensure the Cojimies provides food, income and biodiversity for today and tomorrow.

Nicaragua

In Nicaragua, the Estero Real estuary, its watershed, and its mangrove forests are *the* most intact coastal ecosystem in the entire Gulf of Fonseca. It is a designated RAMSAR site and areas of the watershed are included within a Nicaraguan protected area. The Program is also working in the Padre Ramos Estuary, which is designated as a reserve area by the government and co-managed by a local

nongovernmental organization (NGO) under agreement with the Nicaragua government. These biodiversity-rich areas are focus sites for the SUCCESS Nicaragua Program. Here, the Program team works with local and national partners to address a growing threat to this estuary's biodiversity from: 1) poor water circulation due to sediment inflows during Hurricane Mitch and the poorly-planned shrimp pond construction; 2) poor water quality due to inflows of sewage and agrochemicals; and 3) rapid deforestation of mangrove forests (left unchecked, the remaining stands are estimated to disappear within the next decade).

The Program team is addressing several causes of these threats to the estuary's biodiversity: 1) extreme poverty (rivaled in the Americas only by that of Haiti), 2) water quality impacts from poor mariculture practices, and 3) unsustainable harvest practices and unworkable regulations governing bivalve exploitation. Solutions include the national level adoption of a code of good practice for shrimp mariculture to reduce shrimp farming impacts, diversifying livelihoods of households bordering these estuaries to reduce their dependence on unsustainable resource exploitation practices, and introducing the use of permanent community-managed no-take zones as an alternative management strategy to centrally imposed seasonal closures which have not been effectively enforced.

Global Climate Change Adaptation and the Sustainable Coastal Communities and Ecosystems (SUCCESS) Program

For decades, CRC has been using an approach to integrated coastal management (ICM) that has anticipated the far-reaching and long-lasting impacts of global climate change on coastal areas. Adaptation measures that draw on the USAID and CRC portfolio of experience and tools—including experience and tools of the SUCCESS Program—can help coastal communities prepare for the changes that are already being felt today and will increase with time. This includes measures such as:

- Planning that anticipates sea level rise, including adjusted building codes
- Training in good practices that mitigate climate impacts
- Encouraging marine protected area development as refuges and habitat for fish
- Building shrimp farm resiliency to mitigate natural hazard damage
- Community-based disaster management planning

These measures have built-in, long-term uses that can help coastal communities cope with not just short-term, piecemeal problems, but form a natural, adaptive and coherent strategy for addressing the chronic and increasing impacts and pressures brought to bear on coastal residents, economies and ecosystems by global climate change. These principles are being mainstreamed within USAID through the assistance of the SUCCESS Program, and in partnership with USAID's Global Climate Change Program, to produce a programming guide. The purpose of this guide is for screening development projects in coastal regions to ensure they take into account and incorporate adaptations to the impacts of global climate change and mainstream adaptation strategies into government and community coastal development initiatives.

Overview and Summary of Accomplishments

This report covers work activities implemented July 1 to December 31, 2008. Summarized below are selected Program achievements to date. This is followed by sections that highlight achievements from each SUCCESS Program element and contacts made with USAID Missions during this reporting period. Appendix 1 provides a summary of the Performance Management Plan (PMP) report.

Cumulative Program Accomplishments (October 1, 2004 – December 31, 2008)

- Approximately 220,000 hectares in areas of biological significance under improved management (150,000 marine, 70,000 terrestrial)
- Over 14,000 hectares of intertidal areas of biological significance showing improved biophysical conditions for selected parameters as a result of no-take-zones established in Asseradores, Nicaragua and on the Fumba Peninsula, Zanzibar
- Over US \$1,440,000 leveraged in support of Program activities (approximately US \$908,000 for field activities and US \$502,000 for regional activities)
- 499 persons and 189 enterprises benefiting from sustainable natural resource enterprises
- Individual capacity built for 738 persons through implementation of 36 training courses that support better ICM enabling conditions and best practices
- Eleven US volunteer professionals fielded with a time commitment valued at over \$47,000
- Over 4,000 individuals participated in coastal resources and conservation planning meetings—44% were female, achieving a more equitable participation for this traditionally disadvantaged group
- 64% of sustainable enterprise beneficiaries are female, achieving more equitable distribution of benefits for this traditionally disadvantaged group
- SUCCESS investments generate total annual revenues of over US \$70,000 among small scale enterprises in Nicaragua and Tanzania

Program Highlights Current Reporting Period (July 1 – December 31, 2008)

- Over US \$792,000 leveraged to on-the-ground and regional activities. In Tanzania, three grants, totaling almost USD \$260,000 came from the European-funded Regional Coastal Management Program/ReCoMap program, funding half-pearl, milkfish, and WIO-COMPAS activities. Another large grant (US \$305,000) came from the US State Department. This grant will further the half-pearl enterprises in Fumba, Tanzania. In Latin America, over USD \$100,000 was leveraged from the Avina Foundation and LOICS for the LAC Certification Program. Almost 60,000 dollars was leveraged for activities related to climate change adaptation and planning.
- Significant advances were made on the WIO-COMPAS, with core competencies and standards finalized, Programme infrastructure established, and applicants accepted into the Programme for the first class of August 2008. The Latin America Certification in Place-Based Coastal Ecosystem Governance made similar advances, including development of a code of good practice and planning and design of the third and final certification training event for this first "class" in November 2008.

PROGRESS IN MEETING PLANNED OUTCOMES OF WORKPLAN PROGRAM ELEMENTS

2. Regional Capacity Building: Certification of MPA Professionals in Western Indian Ocean Region

2.1 Report Period Accomplishments (July 1 – December 31, 2008)

Significant progress was made this period on the Western Indian Ocean Certification of Marine Protected Area Professionals (WIO-COMPAS) Programme. This includes:

- Secured increased financial support from SIDA to WIOMSA for WIO-COMPAS
- Continued the process with the World Commission on Protected Areas (WCPA-IUCN) re their endorsement of the Programme
- Conducted the first Level 2 Certification with eleven candidates from five countries
- Certified nine candidates with two candidates offered the option of submitting additional evidence of competence within the year
- Conducted an Evaluation and Design meeting with assessors, candidates and regional partners to improve the programme and design all three levels of certification
- Produced an Evaluation Report based on the first Level 2 Certification
- Secured an educational assessment specialist to refine assessment instruments and tools
- Revised the Programme and Level 2 competences, assessment instruments and tools
- Scheduled the Certification offerings in 2009 as well as a Training for Assessors
- Dissemination of the innovative programme to international colleagues

In August, WIO-COMPAS successfully conducted the first certification of MPA professionals in the world. Thirty six applications were submitted for the Certification. Nine of the eleven candidates were certified. The candidates and assessors were supportive of the programme while also offering constructive comments for improving the process and competences. This feedback was used in the Evaluation Meeting conducted in November and the revisions of the assessment materials for 2009.

WIOMSA, as the Secretariat of the programme, is increasing its capacity to administer WIO-COMPAS through the development of procedures, policies and templates. The partnership with Rhodes University in South Africa will be strengthened through the contracting of one of the programme's initial and key assessors. IUCN-Marine continues to show interest in WIO-COMPAS and is circulating its materials to members for comment. WIOMSA will likely remain as the legal entity of WIO-COMPAS due to practical and financial reasons. Meanwhile, the programme's advisory board includes representatives from throughout the region and will likely expand to include government officials. The programme has focused on outreach to spread the word to its international colleagues through attendance at conferences and newsletter articles. This includes an article is in the November edition of MPA NEWS. Also, the WIOMSA Executive Director made a formal presentation on the programme at the IUCN Congress followed by more informal discussions with interested attendees.

2.2 Changes in Program Activities

Evaluations were conducted with both candidates and assessors as part of a process to improve the overall programme and also to provide input into the design of Levels 1 and 3. A South African educational assessment expert has been contracted to assist in refining the programme's assessment instruments, tools and guidance.

The major activities in 2009 will be an assessor training course, the second Level 2 Certification offered in French in Madagascar (tentative venue), and the first Level 1 Certification. Dates and assessor commitments are being confirmed in December. The second Level 2 Certification is slated for second or third quarter 2009, dependent upon quick confirmation of support from colleagues in Madagascar and assessor availability.

The business plan has remained in draft until more experience is gained and applied to the programme. Now that one "class" of individuals has been certified, and there is a clearer assessment of the true costs of running the programme, the business plans and marketing plans can be advanced.

2.3 Contacts with USAID Missions/Bureaus

Contact was made with the Regional Bureau and Kenyan Mission with a request to brief them on the then upcoming first Certification in August 2008. The briefings were cancelled due to flight delays. However, the Mission received materials and an invitation to attend the Certification Event, which they declined.

2.4 Priorities for Next Quarter (January 1 – March 31, 2009)

- Revise Level 2 materials
- Translate Program and Level 2 materials into French
- Confirm host country partners, assessors and dates for Level 2 Certification (in French) in Madagascar
- Continue to update and populate the WIO-COMPAS website
- Conduct outreach to promote the WIO-COMPAS Programme
- Conduct an Assessor Training Course (6-10 assessors)
- Advertise and review applications for Level 2 Certification
- Select candidates and begin the certification assessment process
- Develop and finalize Level 1 competences, process and materials

3. Regional Capacity Building: Certification of Professionals in Coastal Ecosystem Governance in Latin America

3.1 Report Period Accomplishments (July 1 - December 31, 2008)

The third and final event associated with the certification of practitioners of coastal governance was successfully completed in Lima, Peru, from November 19 through 21. Twenty two candidates drawn from eleven countries in the Latin American region will receive Level 1 Certification, Level 2 Certification or a Diploma of participation. Two levels

of certification will be awarded to participants who are found to meet the standards —1) senior professionals with the demonstrated ability to manage interdisciplinary teams and programs that have successfully made the transition from planning to full scale implementation of a plan of action, and 2) junior professionals who have less experience and responsibility but demonstrate a full grasp of the concepts and tools of ecosystem-based coastal stewardship and the capacity to apply such knowledge in real-world situations.

Three sources of evidence will be used when assessing each candidate against the six competencies in coastal ecosystem assessment and program design. These include: 1) a curricula vitae of each applicant that arrays their experience in the practice of the ecosystem approach to coastal governance, and 2) a practicum of governance, which follows a workbook that the participants have been developing over the past year to reflect upon past governance dimensions by "looking back" and strategically envisioning the future by "looking forward", and 3) the observations of the three evaluators of the candidate's performance in a sequence of small group exercises, simulations and group discussions over the three training events.

Final decisions on each applicant will be made by early January 2009 pending a detailed review of the materials generated at this final training event.

The twelve baselines that were developed as part of the practicum were analyzed in the November event to identify regional trends in governance. This synthesis, developed in collaboration with LOICZ, is underway and will be completed in early 2009.

The knowledge management system/KMS continues to provide a useful tool for communication and outreach as a complementary part of the LAC network ("Red de Gestión Costera Integrada de Latinoamérica y el Caribe") and certification program. The reorganization of the site has made it more accessible to members. Now that the baselines have been completed, they will be uploaded onto the website. A model approach for displaying this material was produced for Patagonia, and the members and staff will evaluate this before the remainder are put in a common format for upload to the web.

Core documents, including the good practices and code of ethics, and the certification program handbook were finalized (in Spanish) and adopted by the EcoCostas Network.

3.2 Changes in Program Activities

The Network and team has agreed that the needs for building capacity in LAC in integrated coastal management with an ecosystem governance and climate change focus should be accomplished through a package of training options. Different audiences (private sector, local government, national government) would require different levels of training. This would include a certification program (with three weeks of training), thematic workshops (three days), and executive seminars (three hours). Given the limited funds associated with this initiative, the network will not be expanded until additional colleagues are brought in through capacity building efforts.

3.3 Contacts with USAID Missions and Bureaus

There were no contacts with the USAID Ecuador Mission this reporting period.

3.4 Priorities for Next Quarter (January 1 – March 31, 2009)

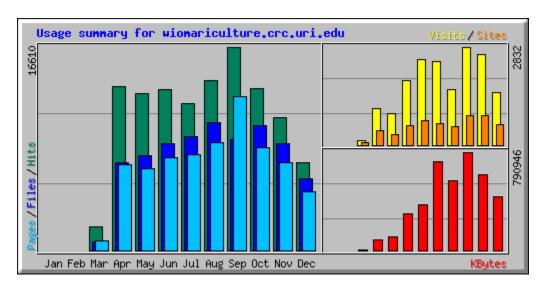
- Award of certification to the first cadre of participants
- Posting of all baseline summaries and documents on the EcoCostas and/or CRC website

4. Regional Networks and Knowledge Management

4.1 Report Period Accomplishments (July 1 – December 31, 2008)

East Africa/Western Indian Ocean

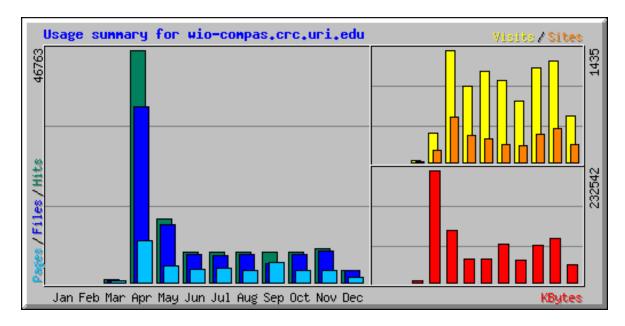
The CRC SUCCESS Program is partnering with the Western Indian Ocean Marine Science Association (WIOMSA) to assemble a Knowledge Management System (KMS) that serves the WIOMSA network of countries. The WIOMSA Board continues to support the operation of a Regional Mariculture Network and SUCCESS has continued to provide technical support. The following graphic shows the level of web hits for the WIO Mariculture site since its re-launch in April 2008 and shows significant improvements in discussions and interaction via this system (March versus April and beyond).



Proposals are underway to leverage additional funding outside of SUCCESS to continue support to the WIO Mariculture Network. Information on the progress of these efforts will be available in the next quarter.

Discussions are underway with WIOMSA to move the hosting of the KM system for the WIO Mariculture Network from CRC to a WIOMSA hosting solution. WIOMSA has staffed up to begin this transition and this transfer is scheduled for the next quarter. The WIOCOMPAS certification program website was established in the previous time period and

maintained throughout this six month reporting period. The website traffic is shown in the following graphic from its establishment in late March 2008 through the date of this report.



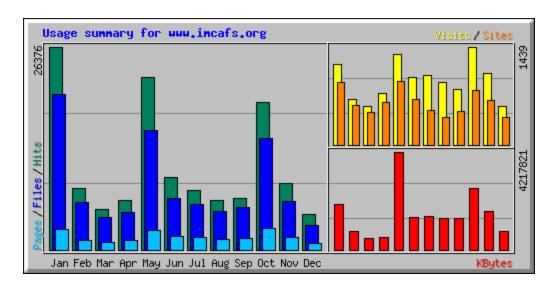
During this time period we began work on small enhancements and modifications to the site that will be implemented in the next quarter. It is anticipated the website will move to a hosting solution provided by WIOMSA.

Latin America

The EcoCostas Network website, which was initiated during the SUCCESS Life-of-Program, continues to receive enhancements. It no longer receives SUCCESS funding, however.

Global

The number of visits to the IMCAFS website spikes after the launch of each issue of the *Basins and Coasts* newsletter. While it drops afterwards, the visits per month in the interim period have been increasing. The October increase in the following graph tracks the publishing of issue 2.3 on the topic of "*Linkages between Ecosystem Health and Human Health*". This reporting period included drafting of articles for the next issue, 3.1, on "*Sustainable Small Scale Fisheries and Aquaculture*", which is scheduled for release in February 2009.



The development of <u>Cross Portfolio Learning Topics (CPLTS) on Livelihoods</u> has been completed and launched. An extension of the work on the Mariculture CPLT series continues, with Maria Haws developing an overview piece on *Mariculture Issues and Strategies for Sustainability*.

4.2 Changes of Program Activities

The WIO Mariculture Network and the WIO-COMPAS certification databases and websites have been hosted at CRC. This will change moving forward. Hosting will be transferred to a WIOMSA-provided solution and discussions have begun on the logistics of these moves. At this stage, the SUCCESS Program is leaving the remaining implementation issues for the mariculture network to WIOMSA.

4.3 Priorities for Next Quarter (January 1 – March 31, 2009)

- Launch *Basins and Coasts* issue 3.1 on the theme of "Sustainable Small Scale Fisheries and Aquaculture" in February 2009
- Transfer the KM systems for WIO-COMPAS and WIO Mariculture to hosting solutions provided by our WIOMSA partner

5. Learning and Science for Management

SUCCESS science for management includes two sub-components: 1) cross-project learning and, 2) site-level science for management. This work is linked closely to the knowledge management activities and the monitoring and evaluation components.

5.1 Report Period Accomplishments (July 1 – December 31, 2008)

In the final year, the focus of the SUCCESS learning and science agenda is to collect, analyze, and document the results and lessons from regional and site-level activities. The SUCCESS learning forum, which took place in Rhode Island in July 2008, was a key step in this process—helping harvest lessons, synthesize successes and failures, document the value

added of a global program, and discuss how to use learning to sustain key Program activities after the current cooperative agreement ends. The forum was a small gathering of key SUCCESS partners from the field, USAID, UHH, and CRC.

The learning forum generated key lessons that will be synthesized and presented to a wider audience throughout FY 09. Three major outputs will be:

- Final outreach event in Washington DC
- Special issue of the Coastal Management Journal (CMJ) comprised of six to eight individual articles on aspects of the SUCCESS Program
- Final issue of *Basins and Coasts* (electronic newsletter) focused on SUCCESS Program lessons learned

Planning for these outputs began during the current reporting period. As a first step, participants in the July Learning Forum agreed on nine articles to be included in the special issue of the Coastal Management Journal:

- Editorial: Overview of the SUCCESS Program and the articles (Crawford)
- Marine Protected Area Professionals: A New Paradigm for Developing Coastal Management Capacity (Squillante)
- A Regional Approach to Supporting Networks of Leaders for Sustainable Coastal Communities and Ecosystems (Robadue)
- Community-based Fisheries Management: Promoting Gender Equity, Sustainable Livelihoods and Biodiversity Conservation—Lessons from Tanzania and Nicaragua (Crawford)
- What We Are Learning about Implementation of Livelihoods Initiatives as Part of ICM and Marine Conservation Programs (Torell)
- Certification Initiative in Coastal Ecosystem Governance –(Olsen)
- Increasing Resilience Toward Climate Change Impacts and Coastal Hazards by Mainstreaming Adaptation into Coastal Planning (Tobey)
- Developing Sustainable Mariculture in Tanzania, Nicaragua and Ecuador (Haws)
- Moving from Chaos towards Order: Building Community Constituency for Community-based Management in the Cojimies Estuary, Ecuador (Olsen)

Other CRC and field staff share co-authorship of the papers. The deadline for the articles to be ready for review is extended to January 30, 2009.

5.2 Priorities for Next Quarter (January 1 – March 31, 2009)

- Submit draft journal papers for special issue on SUCCESS to CMJ (January 30th)
- Planning for Spring/Summer 2009 outreach event in Washington DC
- Planning for Basins and Coasts (electronic) issue on SUCCESS lessons learned

6. Global Leadership

6.1 Report Period Accomplishments (July 1 – December 31, 2008)

Adapting to Coastal Climate Change

"Adapting to Coastal Climate Change: A Guidebook for Development Planners" was completed after review of three drafts and inputs/feedback from different international venues. These include the 4th Global Conference on Oceans, Coasts, and Islands convened in Hanoi, Vietnam in April 2008; the EcoCostas Network meeting in Ecuador in May 2008; participants to the Summer Institute 2008 in Advanced Coastal Management at the University of Rhode Island; and the Workshop on Mainstreaming Climate Change Development Strategies, Programs and Projects held in Panama in October 2008.

By leveraging US State Department funds together with GTZ ¹(German international development agency) contributions for field-based activities, the team initiated the planning for a pilot application of the Guidebook. An evaluation of various sites and partners in the Pacific island region lead to the selection of the Republic of the Marshall Islands (RMI) as the pilot site. Several factors make this an ideal choice. Community-based conservation planning and management is promoted by the Coastal Management Advisory Council (CMAC), a cooperative multi-agency group that focuses on sustainable use of coastal resources, fisheries management and biodiversity conservation. Community-based fisheries management and conservation plans are being developed by communities. These holistic plans look at resources, livelihoods, etc., and are developed in a participatory mode, providing an excellent opportunity to incorporate an adaptation component.

The College of the Marshall Islands (CMI), the implementing partner, has an active presence at both the local and national level. The College, as a member of the CMAC, is one of the facilitators of the community-based process and will be initiating a Marine Conservation Certificate Program to build capacity for local practitioners to implement these plans. Don Hess, the counterpart in this pilot, is a URI Summer Institute alumnus, and has facilitated work with Hawaii Sea Grant for several years on coastal management and aquaculture issues.

¹ UNEP was originally to be the agency providing these contributions; deadline delays and other operational issues, however, resulted in the change to GTZ funds

Marshall Islands Proposed Activities

1. Increase the capacity of the CMAC and its members to introduce climate adaptation into their community-based resource management program

- 1a. Climate change adaptation Training-of-Trainers Workshop for CMAC agencies
- 1b. Contribute to community-based management curriculum

2. Facilitate development of recommendations for adaptation options in specific community-based management plans

- 2a. Assess community vulnerabilities to climate change
- 2c. Engage community in discussions on climate change issues, impacts and adaptations
- 2c. Design an early action to demonstrate a key adaptation measure

3. Identify options for incorporating climate change adaptation planning within the National CMAC program initiatives

- 3a. Conduct work session to review and evaluate the methodology
- 3b. Develop options for incorporating climate change adaptation into CMAC

4. Prepare and disseminate lessons learned to other communities and national counterparts in the region.

- 4a. Conduct workshop with CMAC agencies and other key RMI stakeholders from the government, private and non-profit community
- 4b. Share methodology of Climate Adaptation Guidebook and the case study from RMI with other communities and national counterparts in the Pacific Islands

In efforts to outreach the Guide, CRC has leveraged funding from other sources to collaborate in training events. This has helped build upon the training module that is part of the SUCCESS Program. These trainings include Panama (as mentioned above), as well as a *Planning for Climate Change in Coastal and Marine Environments* workshop, held in Hue, Vietnam in December. This NOAA collaboration builds upon their field assistance program in Vietnam and links coastal management, coastal community resilience and climate change into a 10-day training being delivered with the National Oceanic and Atmospheric Administration (NOAA) Marine Sanctuaries and Coastal Services Center, San Francisco Bay Commission (BCDC). NOAA sees additional opportunities to use this and build upon work in Philippines and Galapagos. This may be a good model to use for the Marshall Islands or Pacific Islands as well, although, the ten-day workshop would need additional funds to deliver. Finally, discussions with Summer Institute 2008 alumni working with the *Mangroves for the Future* project have initiated a discussion on how to bring the Guidebook, training and field application to their Indian Ocean communities.

Fisheries and Aquaculture Guide

The SUCCESS team made significant edits to and shortened the Fisheries and Aquaculture (F&A) Guide based on extensive comments from the USAID review team. Maria Haws and Kathy Castro provided several iterations of technical edits to the fisheries and aquaculture

sections, while Jim Tobey reorganized the content and pared back the length of the document. The revisions aim to make the tone more relevant to USAID programmers and less academic in nature. Editing of the Guide is almost complete, with Lesley Squillante and Brian Crawford providing final technical and copy edits and layout similar to that of the Biodiversity Guide, which remains the working model. The revised version also includes expanded lists of Web links for more information on the Guide's various topics.

6.2 Changes in Program Activities

Adapting to Coastal Climate Change

The addition of the field activity for the Republic of the Marshall Islands has extended this initiative and provides an opportunity to apply the Guidebook. The field application will be important in providing feedback on the information and guidance presented in the Guidebook. It will also give USAID and CRC an opportunity to outreach the Guidebook and the field results to other countries and stakeholders with the Asia-Pacific region.

Fisheries and Aquaculture Guide

Originally the revised draft was scheduled for completion by the end of 2008. As a result of the extra time needed to reorganize, re-edit and shorten the Guide, however, the new expected date of submission to USAID is January 2009.

6.3 Contacts with USAID Missions and Bureaus

In response to a request by the USAID Mexico Office of Disaster Assistance (OFDA), CRC delivered a one-day workshop on coastal community resilience for 40 federal and state hazard management officials. URI has been in contact with the RDMA office in Bangkok to exchange information and get their agreement on the Marshall Islands site selection. They were also informed of the Climate Training in Vietnam, in collaboration with NOAA. Finally, CRC joined the training team of the USAID Climate Office and the International Resources Group (IRG) to deliver the training in Panama on climate change. At that training, contact was also made with USAID program managers from Barbados, Panama, and the Central America Regional Mission.

6.4 Priorities for Next Quarter (January 1 – March 31, 2009)

Adapting to Coastal Climate Change

- Initiate field activities in the Marshall Islands with a Trainer-of-Trainers workshop; select a target community and scope the community activities
- Layout and electronic distribution of Guidebook
- Web page for project document, training modules, and related information

Fisheries and Aquaculture Guide

• Completion of final draft for submission to USAID in January 2009

• Final comments from USAID and final edited, layout, "publishing" (web upload of PDF) and distribution

7. Tanzania On-the-Ground Results

7.1 Report Period Accomplishments (January 1 – March 31, 2008)

Half-pearl (mabe) Farming and Jewelry-making

After the first half-pearl (*mabe*) harvest and sales of products, different members of the original pearl farming groups have started their own pearl farming initiatives. However, the pearl farmers and jewelry makers continue to share the equipment that was provided by the SUCCESS Program and to jointly market their products. While the shellcraft jewelry production has expanded and prospered, the half-pearl farming and jewelry-making was constrained. This was a result of the long period of time needed to produce the half-pearls—the raw material for the *mabe* jewelry. In response, the farming groups have accelerated their seeding of adult oysters—an effort has finally started to pay off. With the increase in the amount of raw product being produced, the group is now able to craft and sell more half-pearl jewelry. During this reporting period, several other individual entrepreneurs from Bweleo and Nyamanzi on Zanzibar, and Tawalani in Tanga began harvesting half-pearls. Farming success rates are variable with high differences among individual farmers in regard to the level of adult mortality, the number of half-pearls harvested, and the number of high-value top grade half-pearls produced. The following table provides data on some of the current harvesting and production rates.

Location	Shells seeded	Total half-pearls produced	Grade-1 half-pearls produced
Zanzibar	59	80	28
Tanga	137	n.a.	7
Tanga	60	76	34

As would be expected, as production has been increasing so too have revenues. For instance, seven of the best half-pearls harvested in Tanga in May were sold for a total of US\$ 350—four of these at US\$40 and three at US\$50 each.

The outlets for marketing the jewelry products are expanding. For instance, several women participated in the Zanzibar Film Festival and earned US\$ 200 in three days. One of the women (Safia Hashim of Bweleo) was nominated by the Zanzibar Chamber of Commerce and applied for the *Believe*, *Begin*, *Become* entrepreneurship program run by Google, TechnoServe and the University of Dar es Salaam Entrepreneurship Center (UDEC - www.believe-begin-become.com/tanzania/). Aided by the SUCCESS program, Safia wrote a concept note that was nominated for further development. She was selected for training in business development and attended the evaluation and training phase in November 2008 and invited to the second phase in December 2008. Safia is now on the shortlist of 150 individuals (from the original 700 submissions) being asked to write a full proposal due January 12, 2009. Safia's proposal seeks a loan of US\$ 100,000 to expand the pearl farming and shell polishing business, develop a shop for the women's farming/jewelry-making group

in Bweleo, and provide start-up capital to set the pearls in high quality silver and gold settings for high end marketing. Eighty of the 150 short-listed proposals will be funded. These 80 will receive private sector-driven business support services worth US \$5,000 to help them get their business plans funded, while the top ten winners will also receive <u>cash</u> awards ranging from US \$5,000 to 20,000. In December, Safia Hashim also attended the Zanzibar Government's Ministry of Industry, Trade and Markets sponsored training workshop on "Self Assessment as an Entrepreneur, Business Planning and Budgeting".

Registration of cooperatives

The three villages of Bweleo, Fumba and Nyamanzi have drawn up constitutions for business cooperatives. These were submitted to the registrar of cooperatives for formal registration. Registration should be complete by the end of January 2009.

Volunteers for Prosperity

As part of the SUCCESS Program's Volunteers for Prosperity effort, Prof. Erin Wilkinson of the University of Rhode Island was in Zanzibar from August 5 -17 preparing and executing a six-day training program ² on packaging, marketing and entrepreneurship. The training was aimed at enabling the women's group to sell their articles to foreign tourists on a nearby island tourist destination. This training included role plays and direct observations of tourist-seller interactions. Prof. Wilkinson's multilingual lecture and notes used in the training, helped teach the women how to bargain with tourists in four different languages—Swahili, English, Italian and Spanish. Wilkinson also drafted a marketing brochure that is now undergoing final edits.

Cockle Management

The bi-annual monitoring of the community structure of cockles in the Fumba Peninsula was continued in November 2008. A statistical analysis of the effect of the reserve areas on the community structure is on-going. However, in two of the four sites (Bweleo and Chalen) there is a clear increase in number of cockles. Results of the monitoring from the Bweleo site in September 2006 and November 2008 are included in the Figure below. Note that the scale of abundance of cockles (Y-axis) in 2008 is an order of magnitude greater than in 2006.

Seaweed Zoning Scheme

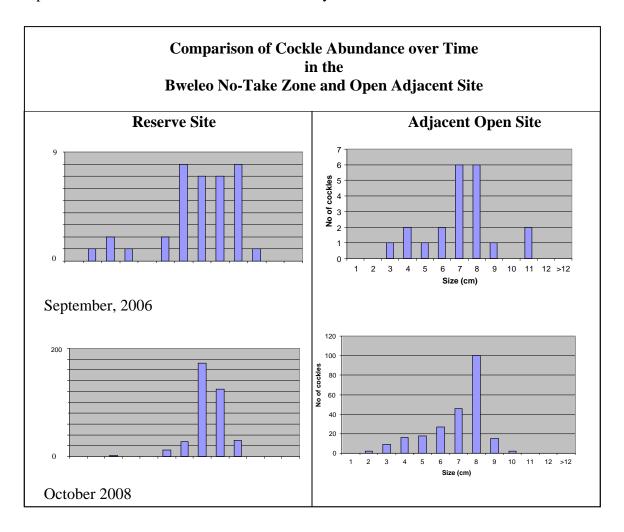
Early in 2009, the Mlingotini seaweed farming zoning plan and bylaws will be formally launched. This will be in tandem with the collaborative fisheries management plan prepared by TCMP.

Communications and Outreach

The University of Dar es Salaam presented the SUCCESS Program mariculture activities in the annual Dar es Salaam International Trade Fair in July 2008 where the Bweleo group was represented. The exhibition featured live milkfish, shell fish and pearl oysters, featured seven posters, and sponsored two scientists and three village women to be on-site and explain the

² At time of this report, the TraiNet data for this event is pending; will be included in quarterly report PMP data for next reporting period

mariculture activities. It also included displays of mariculture literature, half-pearls and shell ornaments, and seaweed and sandalwood soaps. The University pavilion won 1st prize in the Academic and Research Institutions category, 2nd prize in the Export and Trade category and 1st place overall in Good Displaying. By invitation, the exhibit was also featured at the University of Dar es Salaam Annual Consultative Meeting in August 2008—this meeting calls together stakeholders (including donors) to display what the University believes represent some of its best achievements of the year.



Leveraged Funding

ReCoMaP Milkfish Farming Project. WIOMSA, with assistance from CRC, developed a milkfish extension project that is funded with 109,000 Euros from the European Union and that builds from the milkfish efforts initially supported by the SUCCESS Program. This project will support development of pilot farms in Tanga, Pemba and Mtwara and 1ha of commercial ponds similar to the model developed by SUCCESS in Changwahela Bagamoyo. This private farm site will also be used to train new farmers and extension agents. The farms will be developed communally and with technical assistance provided by WIOMSA. For early adopters in each zone, the project will subsidize the cost of constructing the main gate to the ponds—a common financial constraint for many farmers. The project will use a step-

by-step training and execution approach to educate farmers on the main aspects of pond farming. This includes hands-on training in: 1) site selection and construction, 2) environmental and economic assessment of the baseline conditions in the villages and pond areas, 3) pond preparation and fingerling collection, 4) pond management, and 5) harvesting and marketing. The project is targeting production in the pilot farms at 3 tons/ha.

ReCoMaP pearl farming project. With the assistance of CRC and the University of Hawaii at Hilo, WIOMSA also won a 35,000 Euro project for "*Pearl Farming and Jewelry Making in Zanzibar: Empowering Women Economically in the Menai Bay Conservation Area*". The project, together with several others, will expand the SUCCESS effort of pearl farming and jewelry-making in the Fumba Peninsula. The project was launched in October 2008.

US State Department training and exchange visits on shell polishing and pearl ornaments. This program worth US\$ 305,000 is implemented by CRC/URI in partnership with the Institute of Marine Sciences and the University of Hawaii, and is aimed at youth entrepreneurship development and providing training to selected community members from among the pearl farmers and shell polishing entrepreneurs. It includes exchange tours with US professionals in the jewelry industry that allow Zanzibar entrepreneurs to gain exposure and training with US companies and specialists in Rhode Island and elsewhere in the US. It also provides US professionals with the opportunity to train emerging entrepreneurs on the Fumba Peninsula and at the same time learn more about Zanzibar culture and its business environment.

McKnight Foundation funded project on bivalve farming marketing & entrepreneurship

This three year US\$ 151,000 project is being implemented by the Institute of Marine Sciences and the Woodshole Oceanographic Institute and is financed by the McKnight Foundation. The project's main activities include bivalve farming in pens, and training and formation of working cooperative groups in the Fumba Peninsula.

The ecological effects of the floating line seaweed farming technique in the marine ecosystem. A one year WIOMSA Marine Research grant was awarded to Dr F.E. Msuya to study the effect of the floating line seaweed farming on the water and sediment quality as well as on the size, biomass and community structures of the biota. The \$US 6,000 project started in September 2008.

Milkfish fry and fingerling collection in Tanzania. A one year WIOMSA Marine Research grant was awarded to Mr. Masumbuko Semba to study the availability and seasonality of milkfish fry and fingerlings in the neighborhood of the growing finfish ponds. The \$US 6,000 project started in September 2008.

7.2 Changes in Program Activities

There have been no changes on program activities over this reporting period.

7.3 Contacts with the USAID Mission and Embassy

At the end of August 2008, the new Representative of the US embassy in Zanzibar visited the pearl farming project and then invited the local team to the official dinner for his introduction to Zanzibar four days later.

On November 25, 2008 three USAID mission personnel visited the project in Bweleo. They listened to presentations by the villagers and then engaged in discussion. The mission was strongly impressed by the activities taking place in the area. They were impressed to learn the leading entrepreneurs in the village are women. They were also impressed by the women's presentations on their activities and achievements.

7.4 Close-out

A close-out workshop for the Tanzania SUCCESS Program elements is scheduled for March 3, 2009. The goal is to celebrate with stakeholders the achievements, challenges and lessons learned during the Program's five years. Participants will also discuss the future of the SUCCESS activities and how best to link them to newly launched community, national and regional programs and environmental policy.

The USAID Tanzania Mission Director of Natural Resources and Environment will be invited open the workshop. Richard Volk, the SUCCESS Program CTO is also invited to attend. Volk is requested to provide an overview of the contributions of the Program to more effective ICM in the Western Indian Ocean Region and summarize some of the key lessons that USAID and the SUCCESS team will take away from the Program.

7.5 Priorities for the next quarter (January 1 – March 31, 2009)

- Establish additional long lines for pearl farming in Bweleo (delayed due to unavailability of local labor with appropriate skills)
- Work with the USAID SEMMA Project to establish continuity in pearl farming in Tanga (SEMMA extension staff trained previously by SUCCESS Program)
- Launch zoning plans and bylaws for Mlingotini Bay
- Develop a marketing plan for shellfish jewelry in Zanzibar
- Develop a Swahili manual for milkfish farming
- Transition the SUCCESS Program activities to the new ReCoMap and other newly obtained grants resulting from and building on the SUCCESS accomplishments
- Develop, plan and implement close out event for the SUCCESS Program highlighting the objectives, major achievements, challenges and relationship to newly developed projects

8. Nicaragua On-the-Ground Results

8.1 Report Period Accomplishments (July 1 – December 31, 2008)

Note: Nicaragua suffered considerable instability during the last quarter due to political unrest which resulted in riots and closures of major highways. The situation presented considerable risks to UCA personnel, particularly the largely female extension staff. The result was that UCA personnel and trainers were often unable to mobilize out of Managua and in rural areas. Some delays in project activities occurred, although most activities were completed in a timely fashion.

Alternative Livelihoods

Eco-tourism: The emphasis for this period was putting final touches on the eco-tourism infrastructure, developing a marketing strategy and materials, training community guides and building capacity in the community to carry out tourism activities on a sustainable basis. Two latrines were built at the Rosita and Cristo Rey Farms and signage for the various trails was completed. The Tourism Department at UCA finished the marketing strategy report, which was presented to the communities' board of directors. The tourism package was then presented to a group of tour operators with the objective of having FINCAMAR listed as a tourism destination by the operators. At the same time, tourism materials (brochure and CD) were designed, printed and distributed to FINCAMAR for their use. Materials were also distributed to hotels and other tourist locations in Chinandega and Leon, as well as to national tourism operators. A presentation was also made at the "Mangrove Event 2008". At this point, the eco-tourism development is essentially considered complete although UCA will continue to provide support to the community as it begins offering tourism services. Two events were also held for university students and instructors from the Tourism Department to use the FINCAMAR case study for teaching ecotourism development and also to raise awareness of the need for conservation and management as a key part of tourism development in general. Activities in the remainder of Year 5 will focus on publicizing the services now being offered and documenting results.

Bread making: Activities focused on completing the bread making infrastructure and improving production, business management and hygiene, as well as raising awareness of natural resources management related to biodiversity. For the El Realejo bakery, two events were scheduled in hygiene and best management practices. Due to political instability, these events are now rescheduled for January 2009. Meanwhile, the group continues to work regularly and enthusiastically, producing bread at least three times per week. The Puerto Morazan group completed the entire infrastructure for their bakery and eight events were held to build capacity for production, business management and conservation. Heavy rains prevented holding the other events, which are now rescheduled for February 2009. Now that both bakeries are in production and have completed the bulk of the training, the learning exchange event is scheduled for February 2009 for these two bakeries and also for the original bakery "La Felicita", which remains operating in FINCAMAR.

Alternative Management of the Cockle Fishery

Significant advances were made with the co-management of the cockle fishery in the last half of 2008. Sampling of the cockle population was conducted (23 months since establishment of the no-take zones). Results showed a significant increase in cockle numbers inside and outside the no-take zones. Signage of the no-take zones was replaced and maintained. Additionally, considerable community outreach and capacity building was conducted to ensure the community is willing and able to continue this work when the SUCCESS Program ends. Most importantly, outreach and awareness-raising was conducted to other coastal communities, government agencies and other researchers in the area. A key event was the "Exchange of Experiences in Diverse Ecosystems for the Management and Protection of the Black Cockle in Pacific Nicaragua". This event was attended by 104 representatives from the various stakeholder groups. The objective was to bring stakeholders together to resolve common issues related to cockle gathering—e.g., the legalization of co-management, the recent revocation of cockle selling licenses, other food security issues, and extension of the co-management efforts. Several advances were made during this conference. This includes: 1) a commitment from the government to work with the local Committees for Community Power (CCP) to authorize and control cockle commercialization permits (which were earlier revoked without legislative authority); 2) an agreement to work with the CCP to invite the Director of Fisheries to visit the community to discuss the management issues; 3) a decision to integrate the cockle gatherers into the "Zero Hunger" projects to resolve other community problems related to food security and the environment; 4) an agreement between UCA and UNAH to collaborate as universities on cockle research, management, food safety and community organization; 5) the decision to begin work with the cockle collectors to position Aserradores as a tourist destination similar to the cockle collecting community of Poneloya, representatives of which attended the event.

Communications and Outreach

- **Publications**: one article on synergies between economic development and coastal management is in draft.
- **Presentations**: Nine presentations were made on various topics including water quality and cockle sanitation, co-management, importance of mangroves, and eco-tourism at national and international events

Meetings and visits:

UCA has been in discussion with the European Union (EU) to expand and continue the SUCCESS work in Nicaragua. This included the recent EU agreement to fund work related to good practices and food safety for various products, community organization for cockle gatherers and construction of a collection and packaging center for cockles at Aserradores. Work with LORRNICA continues to provide food and clothing to poor children in the target communities. A visiting student who was included in the cockle population sampling was able to subsequently obtain a grant from the San Mateo Church for food and clothing. Also, UCA and the church are now developing a joint project for cockle management, mangrove protection and tourism for Aserradores. Work continues with the Aquaculture and Fisheries CRSP to continue work on water quality and shellfish sanitation. Biologist Erick Sandoval participated in a CRSP-sponsored international conference in Mexico and presented the joint shellfish sanitation work. Meetings were also held with the mayor's office in El Viejo to

obtain support for the community-based work. A report was submitted to MARENA on the cockle co-management and the research permit for this work was renewed for 2009.

8.2 Changes in Program Activities

Agnes Saborio, Director of CIDEA, resigned in August and was replaced by Carlos Rivas, previously of ADPESCA. This transition did not affect implementation of scheduled SUCCESS Program activities. There were, however, some minor delays in planned extension events due to weather or other unavoidable factors. Rapidly rising prices required adjustments to the budget and some events were combined to save funds, but the bottom line budget was not exceeded. In the last quarter of this reporting period, political unrest related to contested elections made travel within Managua and to the communities very difficult and potentially dangerous. As a result, a few activities were postponed until early 2009.

8.3 Contacts with USAID Nicaragua Mission

There were no contacts with the USAID Nicaragua Mission in this reporting period.

8.4 Close-out

Final arrangements for close-out events to celebrate the completion of the SUCCESS life-of-Program in Nicaragua are pending.

Meanwhile, the SUCCESS Program team at CIDEA continues to work diligently to build alliances with other groups in order to identify potential new funding sources to enable a continuation of the most successful and promising of its work begun under the SUCCESS Program. This has been especially challenging at this particular time, however, as Nicaragua's civil unrest due to election issues has caused donors to begin withdrawing funds—e.g., funds previously obtained from the Millennium Challenge Corporation for small business development at FINCAMAR were recently withdrawn.

8.5 Priorities for the next quarter (January 1 – March 31, 2009)

- Complete the capacity building events in Puerto Morazan and El Realejo for bread making that were delayed due to the riots and heavy rains
- Hold the bread bakers learning exchange
- Finish the publicity campaign for ecotourism in FINCAMAR with tourist operators and potential future sponsors
- Conduct a final population sampling for cockles at Aserradores, produce the final report and disseminate
- Conduct the reflection and learning events with the stakeholders and the institutional self-evaluation
- Hold the SUCCESS Program closing events* with the participating stakeholders

A SUCCESS STORY

Aserradores: Taking Steps Towards ICM

Aserradores is a community of fishers and cockle gatherers on the Pacific Coast of Nicaragua in Chinandega, where black cockles are an important fishery. To poor women and children, however, these cockles are more than just important, they are critical—often providing their sole source of income and food protein.

In 2006, Brian Crawford of the University of Rhode Island URI shared the idea of a strategy to improve management of this important fishery in Nicaragua. The strategy, modeled on one tested with success in Fiji, included working directly with the cockle gatherers. First, Crawford spoke with them about the benefits of establishing "no-take" zones—where cockles would not be fished, but instead allowed to grow and repopulate the no-take zones and the heavily fished adjacent areas.

Just three years later, there are significant improvements in the management of this important resource. Notake zones are in place and being protected, the cockle population is being monitored, and the community is self-enforcing compliance. Even during flooding that cut off other food sources and prompted a leptospirosis epidemic, the community agreed not to touch cockles from the no-take zones. Meanwhile, government regulatory agencies are supporting the effort, and have created a commission for granting cockle selling licenses in a way that both protects the resource and provides benefits to the community. Changes to the national regulatory systems, including a possible change in the seasonal ban on cockle collecting, are also underway. Meanwhile, the community and researchers are identifying areas with clean water quality that guarantees the cockles are safe to eat. The community is also working on packaging and labeling that lets consumers know the cockles they are buying are grown in clean waters. Such labeling also brings gatherers a price premium for these products.

The Asseradores story is an example of an empowered community protecting its important natural resources and biodiversity, and by so doing generating both economic and health benefits.



Community meeting of cockle gatherers at Asseradores. UCA Biologist Nelvia Hernandez working with cockle collectors to establish no-take zones





Director Carlos Rivas addresses the community



Women and children are the primary gatherers of cockles and depend on them as a daily source of food supply and income.

9. Ecuador On-the-Ground Results

9.1 Report Period Accomplishments (July 1 – December 31, 2008)

Zoning

The demand for ICM is gaining momentum in the Cojimies-Cañaveral area, as the stakeholders engage in the preliminary activities associated with zoning the shoreline. The participation in the process has allowed a broad group of users to express their interests and vision for how tourism can be promoted through land-use planning.

In a September workshop, 50 people came together to give input on proposed land use. The EcoCostas team used a "talking map" to describe a range of potential activities and options and provided opportunities for participants to do the same. This information was refined to develop a draft land use ordinance proposal that will be presented for community validation at a January 2009 workshop with key actors from the region.

Ubas propuestas Ubas p

This map shows proposed uses for the shoreline, compiled and translated from group input at a workshop. Uses include small cabanas, hotels, boardwalk, scenic overlook, boat launch, island ecotourism trails.

Reforestation

Ten new cacao nurseries were established with the indigenous Chachi community that resides within the Mache Chindul Reserve. Transplanting of these trees to farms and community lands began at the end of December 2008 and will continue through the beginning of January 2009.

The team visited the area along the Pedernales-Chamanga highway, where students from the Technical school together with four farmers planted 200 seedlings. The trees have remained healthy and have grown to a height of between .5 and 1 meters.

Water Quality Monitoring of Cojimies Estuary

In efforts to improve water quality in the estuary, the project team is collaborating with local officials to develop water quality guidelines for the region. A November workshop brought together 25 high level decision makers and various user groups, who actively participated in discussions and exercises to determine how to enhance management and conservation of the estuarine water quality. Decision makers included the mayor, council members, and lead staff from the Department of Environment and Tourism from Muisne and Pedernales as well as the President of the Pedernales Council. Proposals on good practices to be used in activities that are being implemented within and surrounding the estuaries were also put forth. These proposed good practices address issues around the disposal of solid waste and

sewage in the estuary, the use of chemicals and pesticides for agriculture, and runoff of boat motor oil. Once completed, the recommended good practices will be disseminated to different sectors and community groups. One of those groups, the shrimp farmers, has already begun using these good practices.

Alternative Livelihood Development

With continued interest in beekeeping as an alternative and sustainable livelihood, one additional entrepreneur has invested his own funds and has begun beekeeping. In November, Junior Mero—a shrimp farmer who has also been harvesting *chame*—placed his hives next to a small shrimp pond in Chamanga. Junior is the sixth beekeeper to be engaged in this successful enterprise. Meanwhile, three other producers each harvested 10 liters of honey—each receiving sales of approximately \$150 per each 10 liters.

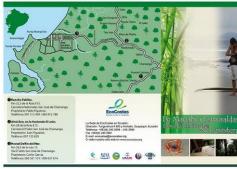
SUCCESS also supported a workshop in July on tourism business practices and one in November on tourism planning in coastal communities. These workshops have helped provide tourism providers and local officials in Pedernales with the skills necessary to plan tourism activities in the area and market these to potential clients locally and in Guayaquil.

Chame production has actively continued in the region. The November harvest yielded 350 pounds of fish with an average weight of 600 grams—the initial weight of the juveniles was

10 grams in May, when the ponds were seeded. This is a good growth and harvest weight. Three hundred pounds of the harvest were sold for \$210 with the remaining 50 pounds going to the farmers. At the end of October 1,400 juveniles were placed in two different ponds and another 500 placed within a shrimp pond to be grown within this polyculture.

In efforts to advance production of *Chame* larvae and juveniles, the USAID-CRSP program sponsored a visit from Dr. Rodgriquez, a researcher from Sinaloa, Mexico. Rodriquez gathered information from Cojimies and developed a research proposal to evaluate feeding and nutrition options for growing small juveniles under controlled conditions.

Looking towards the future, there has been interest in expanding livelihoods efforts to other local groups. Several nongovernmental organizations (NGOs) from the Muisne region expressed interest in expanding the alternative livelihood programs and in July visited the *chame* and beekeeping projects in AsoMache (Nuevo Milenio). Unfortunately, there has been instability in this area, which has threatened community safety and inhibited the ability of NGOs and other programs to gain access to the area.



Tourism brochures promote local tourism, culture and biodiversity



Environmental Education and Outreach

The EcoCostas team has attended several local events in Pedernales, Muisne, Chamanga, and Eloy Alfaro, and distributed 500 copies of the Cojimies comic book, *Desde Mompiche a Chamanga, desde Bolivar a Beche*. One indicator of the success of this document and its compelling message to protect the estuary is the high number of local officials and decision makers who have been actively participating in the development of the good practices for water quality, through the workshops and other meetings.

Communications and Outreach

Publications: Three brochures were produced to promote local tourism activities. They show local routes, as well as describe the culture and biodiversity of the area. These have been distributed to Guayaquil travel agents and hotels for their clients. Within the region, these brochures have been given to local tourist information centers operated by municipalities and the Mache Chindul Reserve.

9.2 Changes in Program Activities

During the preparation of the SUCCESS Year 5 workplan, the team discussions revolved around the process of getting the water quality guidelines and the land use ordinance adopted by the municipalities. Given the October elections and the change over in local government, the water quality guidelines and land-use ordinance will not be adopted before the end of the SUCCESS Program. Hence, they should be removed as PMP targets under indicator three (Number of policies, laws, agreements or regulations promoting sustainable natural resource management and conservation that are implemented as a result of USG assistance). The team is well on its way to getting both the proposed guidelines and ordinance developed, validated, and submitted to local officials. While discussions are underway for appropriate local follow-up, adoption will not occur until March 31, 2009.

9.3 Contacts with USAID Ecuador Mission

No contacts were made with the USAID Ecuador Mission during this reporting period. The Mission is invited, however, to the closing events, which will be arranged in early 2009.

9.4 Close-out

There are two planned events to formally conclude the SUCCESS Program field activities in Ecuador. The goal of each is to disseminate the Program's key outputs, advances, and lessons learned. The first event is in Cojimies—a public event with representatives of local governmental and nongovernmental organizations who work in the region, institutions of higher education, representatives of the civil society and the beneficiary groups of the SUCCESS Program. The event will include presentations or testimonials from those who have directly benefited from the Program. This event will also provide an opportunity for the working committees to officially present the land use zoning scheme to local officials. The second event is similar to the first and is planned for Guayaquil. Invitations will be extended to the appropriate individuals and groups at the national level as well as to regional groups engaged in coastal management and biodiversity conservation, including those from

institutions of higher education, governmental agencies and nongovernmental organizations. While the focus of this event is once again to share lessons learned, it also seeks to encourage future work in Cojimies and to offer tools for replication to other sites in Ecuador. USAID representatives are invited to join in one or both events, which are tentatively scheduled for the week of March 15, 2009. Final dates will be confirmed in the upcoming weeks.

9.5 Priorities for next quarter (January 1 – March 31, 2009)

- Validation workshop of the proposed zoning of Cojimíes-Cañaveral shoreline
- Finalization of the proposed land zoning scheme for Cojimíes-Cañaveral and formal submittal to local authorities
- Validation of the draft good practices related to water quality and socio-economic activities in and around the Cojimies Estuary
- Presentation and submittal of good practices document to local officials
- Planning and execution of closing events of SUCCESS

10. Monitoring, Evaluation and Reporting

10.1 Report Period Accomplishments (July 1 – December 31, 2008)

The web-based reporting system has functioned normally with field partners continuing to feed performance data through the <u>web-based PMP system</u>. A review was made of the PMP indicator data in conjunction with the July partners meeting. Results of this review were reflected in a PMP data quality assessment conducted in November 2008.

10.2 Priorities for Next Quarter (January 1 – March 31, 2009)

Collect final PMP data from field sites

MANAGEMENT ISSUES

With SUCCESS field activities slated to terminate by the second quarter of 2009, field sites are struggling to juggle three different but complementary efforts at the same time. These are to: 1) continue to maximize the progress being made on field-based activities financed by SUCCESS funds, 2) plan for close-out activities to celebrate that progress made, and 3) at the same time, identify potential other funding to keep the most promising of these activities ongoing with support from other donor sources. A similar challenge faces some of the knowledge management and certification efforts.

Dr. Lucho Arriaga's resignation as EcoCostas Executive Director, means the third change in leadership for that organization in just three years. While this is disappointing, it is not expected to disrupt SUCCESS Year 5 plans in Ecuador/LAC at this time. As an immediate step, Rafael Elao agreed to serve as Acting Director at least through the successful completion of the SUCCESS field-based activities that will conclude in March 2009, and may potentially remain in this role even beyond this date. Thus, plans to formulate a level 2 curriculum for the LAC Certification in Coastal Ecosystem Governance will continue. Meanwhile, there will be continued efforts to identify other institutions in the region that might be interested and viable as an alternative sponsor of the program should EcoCostas' dwindling financial base make its continuation in this role no longer possible.

As noted in section 8.0 of this report, the state of civil unrest in Nicaragua created unusual challenges during this reporting period, and this may continue. However, there is full expectation that tasks delayed in the last quarter and rescheduled to first quarter calendar year 2009 will move forward, along with those originally slated for this same period.

As is always the case, the SUCCESS Program Director is challenged to keep the full team motivated and energized on the heels of the Program soon ending. This is a familiar challenge for most projects and programs as they approach their final year.

UPCOMING CHALLENGES, CONSTRAINTS, AND OPPORTUNITIES

Interest in the global climate change adaptation Guide continues and may be parlayed into additional opportunities for its adaptation to other agencies and clients around the world. The next and final few months of the SUCCESS Program will continue to provide a springboard to explore these, with the hopeful result that the Guide and its application will continue to be adapted and tested for a wide range of coastal places, users, and uses.

The WIO-COMPAS Program continues to gain statements of interest from other donors. Meanwhile, efforts continue to translate those "expressions of interest" into hard dollars of financial support and/or public acknowledgements of endorsement (e.g., the WPCA/Marine).

Devaluation of the US dollar as well as rising fuel prices has put a strain on budgets for field activities as the cost of doing business outside the US increases. While this is a concern, the situation is currently manageable.

ASSOCIATE AWARDS

During this reporting period, no associate awards are ongoing.

APPENDIX 1: SUCCESS PERFORMANCE MANAGEMENT REPORT

This Performance Management Plan (PMP) Report shows the progress made by the SUCCESS Program to date towards its targets. The report is based on the Performance Monitoring Plan, which was revised in January 2007. This reflects recent changes in USAID's indicators and definitions.

The SUCCESS program's goal is to provide global leadership in integrated coastal management through innovative approaches in a participatory, issue-driven and results-oriented process to:

- Promote sustainable use of marine resources
- Conserve marine biodiversity
- Improve food and income security

This is a long-term objective (a third order outcome) that the project will contribute to over the life of the project. To achieve this goal, the program has established four Program Elements with underlying Intermediate Results (IRs) shown in Figure 1. These reflect the regional and global elements of the program as well as actions in three countries that are implementing innovative practices, adaptations, and learning across the place-based portfolio.

Figure 1. The SUCCESS Program Results Framework

Goal: Sustainable coastal communities and ecosystems: helping people of a place improve their quality of life (health, income education) and their physical environment through good governance

On the ground results

IR 1. Improving management and conservation across diverse landscapes through science, inter-disciplinary approaches, and the adoption of best practices.

- IR. 1.1. Governance of Coastal Resources Improved at Sites
- *IR. 1.2.* Biophysical Conditions Improved at Sites

IR 2. Promoting equitable coastal resources governance and management of natural resource conflicts.

- *IR. 2.1.* Policies formally adopted
- IR. 2.2. Funding secured
- *IR. 2.3*. Equitable participation achieved

IR 3. Increasing tangible and equitable economic benefits through sustainable production, marketing, and trade of natural resource-based products and services.

- *IR. 3.1.* A large number of stakeholders benefiting from sustainable enterprises
- *IR.* 3.2. Sustainable enterprises developed for a broad number of coastal residents.

Training, KM, and Science for Management

IR 4. Knowledge and best practices are widely shared to promote cross learning

- IR. 4.1. Regional Training Provided to Support Enabling Conditions and Share Best Practices
- IR. 4.2. Regional Coastal Governance Networks are Promoting Cross-Learning
- IR. 4.3. Impacts of good practices are documented and codified at the community scale

Cross-cutting themes: Gender and volunteers for prosperity

Overview of the Results for the SUCCESS Program to Date and the Current Reporting Period

This table gives an overview of the "rolled-up" results for SUCCESS to date, including the current reporting period. Detailed results per indicator and/or field site and quarter can be provided upon request.

	FY 05- 07	FY 05- 07	FY 08	FY 08	FY 09	FY 09 Results	FY 08Q4 FY 09Q1	LOP	Cum.	
Indicator	Targets	Results	Targets	Results	Targets	to date	results	Targets	Results	Comments
1. Number of biologically significant hectares	158,187	150,921	11,619	70,380	0	0	0	240,173	221,301	Do not expect additional hectares in FY 09.
Marine hectares	135,570	133,365	8,827	17,439	0	0	0	183,286	150,804	
Terrestrial hectares	22,617	17,556	2,792	52,941	0	0	0	56,888	70,497	
2. Number of hectares in areas of biological significance showing improved biophysical conditions for selected	no		no		no			no		The Fumba reef flats and no-take zones were monitored in November 2008. Results still being analyzed, but first impression is that the bivalve stocks are
parameter(s) 3. Number of policies, laws, agreements, or regulations promoting sustainable natural resource management and conservation	target	0	target	14,162	target	0	0	target	14,162	improving. The target for this indicator has been changed from seven to six because during the August PMP target review, we determined that given the October elections and the change over in local government in Cojimies, the water
implemented	3	3	2	3	1	0	2	6	6	quality guidelines and

	FY 05- 07	FY 05- 07	FY 08	FY 08	FY 09	FY 09 Results	FY 08Q4 FY 09Q1	LOP	Cum.	
Indicator	Targets	Results	Targets	Results	Targets	to date	results	Targets	Results	Comments
										land-use ordinance will
										not be adopted before the
										end of the SUCCESS
										Program.
										Funding was leveraged
										for field work in Tanzania
										from the EU and the US
										State Department.
4a Layeraged	no		20		20			20		Smaller grants were also received for field work in
4a. Leveraged funding (site level)	no target	219,193	no target	673,332	no target	16,245	510,536	no target	908,770	Ecuador and Nicaragua.
runding (site level)	larget	219,193	larget	073,332	larget	10,243	310,330	larget	900,770	Ecuador and Micaragua.
										Funding received for
										regional work and climate
										change adaptation from
4b. Leveraged	no		no		no			no	500 400	the EU and USAID
funding (regional)	target	250,597	target	222,726	target	58,779	222,726	target	532,102	(through IRG).
5. Number of										
persons participating in										Significantly over target.
coastal resources										Miscalculated number of
and conservation										meetings that would be
planning initiatives	1,498	2,286	245	1453	224	334	756	1356	4,073	held under SUCCESS.
6. Number of										
people with										
increased										
economic benefits										Below target. Reason: in
derived from sustainable										Year 3, changed focus of the program from on-the-
natural resource										ground/livelihoods to
management and										regional networks and
conservation.	614	429	60	70	0	0	15	674	499	capacity building.

	FY 05-	FY 05-	5 1/ 00	5 1/ 00	5 1/ 00	FY 09	FY 08Q4			
	07	07	FY 08	FY 08	FY 09	Results	FY 09Q1	LOP	Cum.	
Indicator	Targets	Results	Targets	Results	Targets	to date	results	Targets	Results	Comments
7. Number of new										
or improved										
enterprises	470	474		4.5				400	400	
developed	178	174	4	15	0	0	3	182	189	On target.
8. Monetary value										
generated from										
sustainable										
natural resources										
or conservation						Not	Not			
initiatives (USD or		.,	.,	v	.,	Not	Not	v	70,254	
equivalent)	X	X	Х	X	Х	measured	measured	Х	70,234	Over target. Exceeded
										target for this indicator
										due to change in focus in
9. Number of										Year 3 to emphasize
people trained	325	654	100	84	75	0	10	500	738	regional training.
	020	004	100	04	73		10	300	750	regional training.
10. Number of										
training courses	40	20	_					00	200	Over target. See previous
implemented	16	30	5	6	1	0	1	22	36	comment.
11. Number of										WIOMSA mariculture
active participants										network launched in FY
in web-based										08. Currently 66
regional networks	25	21	23	66	0	0	0	48	87	members in the network.
12. Publications										
documenting										EcoCostas produced
impacts of best	no		no		no			no		laminated poster about
practices	target	26	target	4	target	1	1	target	31	Chame and Trout.
13. Number of										
American										Last volunteer assigned
volunteers	6	7	2	4	0	0	1	10	11	to Tanzania August 2008.
										Over target. Reason: one
										volunteer more than
14. Volunteer										planned, and each
person days	72	202	24	55	0		15	120	257	volunteer worked more

Indicator	FY 05- 07 Targets	FY 05- 07 Results	FY 08 Targets	FY 08 Results	FY 09 Targets	FY 09 Results to date	FY 08Q4 FY 09Q1 results	LOP Targets	Cum. Results	Comments
										days than expected.
15. Value of volunteer time (\$)	29,219	39,112	3,722	8,616	0		2,341	18,166	47,728	
16. % females participating in coastal resources and conservation planning initiatives	50%	47%	48%	37%	50%	53%	46%	42%	44%	
17. % females with increased economic benefits	30%	69%	20%	34%	0%	0%	0%	27%	64%	Over target owing to successful strategy to engage women in livelihoods.
18. % females trained	30%	43%	30%	44%	30%	0%	10%	30%	41%	
19. Number of female participants in web-based regional networks	38%	40%	33%	35%	0%	0%	0%	38%	38%	
% female American volunteers	50%	29%	50%	50%	0%	0%	100%	50%	36%	

APPENDIX 2: LEVERAGED FUNDING TO DATE

Fiscal	Leveraging	Donor	Activity	Leveraged Funds
Year	Partner	<u> </u>		
	MERICA REGIO			
2006	EcoCostas	AVINA	Support for EcoCostas Director to launch on-the-ground	39,500
			projects and develop regional network	
2007	EcoCostas	AVINA	Business and communications plan	32,000
2007	EcoCostas	AVINA	ICM Certification training module	15,900
2007	EcoCostas	LOICZ	ICM Certification ToT	34,561
2008	EcoCostas	LOICZ	Governance baseline publication, governance manual finalization	32,235
2008	EcoCostas	AVINA	certification standards good practices	7,852
2008	EcoCostas	AVINA	Business plan	13,000
2008	EcoCostas	AVINA	Consolidate the EcoCostas network	47,628
ECUADO	R			
2005	EcoCostas	USAID Ecuador	Watershed characterization in the reserve and estuary	30,000
2006	EcoCostas	USAID	Chame extension	5,000
2006	EcoCostas	PMRC	Design training program for <i>chame</i> culture	4,000
2006	EcoCostas	URI WILD	Support for Ecuadorian participation in Summer Institute in Coastal Management	5,000
2006	EcoCostas	InWent	Eco Clubs	1,716
2007	EcoCostas	USAID Ecuador	Construct nursery	2,000
2007	EcoCostas	PMRC	Water quality survey Cojimies Estuary	20,000
2008	EcoCostas	PMRC	Coastal governance baselines	6,000
2008	EcoCostas	USAID Ecuador	Construct nursery	500
2008	EcoCostas	USAID CRSP	Mexico chame aquaculture research visit to Cojimies	5,000
NICARAG	SUA			
2006	CIDEA	OIKOS	Funding that complements training on aquaculture and integrated management	8,072
2006	CIDEA	Japan	Development of best management practices, training and materials	7,831
2006	CIDEA	UCRECEP	Cockle aquaculture development	3,384

Fiscal Year	Leveraging Partner	Donor	Activity	Leveraged Funds	
2006	CIDEA	Japan	Economist for shellfish economic and marketing study	1,128	
2007	CIDEA	OIKOS	Post Larvae collection training in Manzano and BMP FINCAMAR	2,400	
2007	UHH	CRSP	Shellfish sanitation monitoring in Nicaragua	37,000	
2007	CIDEA	contribution from other departments	Tourism—aquatic trail development and eco-tourism training	7,196	
2007	CIDEA	contribution from other departments	Bread production business plan and extension (Business School)	1,207	
2007	CIDEA	Japan	Water quality microbiology analysis and cockle HepA analysis	2,497	
2008	CIDEA	Lorrnica foundation	Support for development of bakeries in Puerto Morazan and El Realejo	3,593	
2008	CIDEA	CIDEA	Support to ICM training	1,000	
2008	CIDEA	CRSP	Linked to the research on the potential markets for bivalves in Aserradores	8,103	
2009	CIDEA	Lorrnica foundation	Support for development of bakeries in Puerto Morazan and El Realejo	225	
2009	CIDEA	CRSP	See CRSP 2008 entry above	4,020	
EAST AF	RICA REGION				
2005	WIOMSA	WIOMSA	WIOMSA director salary for time on SUCCESS	12,000	
2005	WIOMSA	ACDI VOCI	Training support	250	
2005	WIOMSA	IMS	Training support	600	
2005	WIOMSA	CRSP	Training support	2,600	
2005	WIOMSA	WIOMSA	Training support	12,636	
2006	WIOMSA	WIOMSA	WIOMSA director salary for time on SUCCESS	24,000	
2006	WIOMSA	ACDI VOCI	Training support	250	
2006	WIOMSA	IMS	Training support	500	
2006	WIOMSA	WIOMSA	Training support	800	

Fiscal Year	Leveraging Partner	Donor	Activity	Leveraged Funds
2006	WIOMSA	Commission for Science	Training support	500
2000	WIOWSA	and Technology	Training support	300
2007	WIOMSA	WIOMSA	WIOMSA director salary for time on SUCCESS	24,000
2007	WIOMSA	Sida	Certification workshop	35,000
2007	WIOMSA	Sida	KM - IT systems upgrade	15,500
2008	WIOMSA	ReCoMap	WIO-COMPASS	86,011
2008	WIOMSA	WIOMSA	WIOMSA director salary for time on SUCCESS	24,000
2009	WIOMSA	WIOMSA	WIOMSA sirector salary for time on SUCCESS	12,000
TANZANI	A			
2006	WIOMSA	School of International Training	Undergrad working with women in Fumba	600
2006	WIOMSA	Sida/SAREC	Two MARG 1 grants to study water quality and its suitability for shellfish farming and consumption on the Fumba peninsula and research on milkfish fingerlings in Bagamoyo and Mkuranga	12,000
2006	WIOMSA	Private source	Donation of half-pearls to Fumba micro-industry	900
2007	CRC	URI-IGERT	Fellow for economics analysis of seaweed farming	6,500
2007	CRC	URI-IGERT	Fellow for no-take reserve monitoring	6,500
2007	UHH	Amer. Pearls	Half-pearl donation for jewelry business development	1,000
2007	UHH	Packard	Summer MBA Interns for developing marketing manual	3,000
2007	UHH	Packard	Support for review of marketing manual	1,000
2007	WIOMSA	Sida/SAREC	MARG2 contract—milkfish research	5,800
2007	WIOMSA	Sida/SAREC	Master's scholarship for half-pearl research	8,562
2007	WIOMSA	Parliamentary Committee Social Welfare	Project support	200
2007	WIOMSA	UDSM; College of Engineers	Project support	200
2007	WIOMSA	WWF	Agency supported participant for milkfish training course	1,200
2007	WIOMSA	IUCN	Agency supported participant for milkfish training course	1,200
2007	WIOMSA	UNEP	Agency supported participant for milkfish training course	1,200

Fiscal Year	Leveraging Partner	Donor	Activity	Leveraged Funds
2007	WIOMSA	ReCoMap	Agency supported participant for milkfish training course	1,200
2007	WIOMSA	Sida	Milkfish manual preparation/printing	3,000
2007	WIOMSA	U.S. Ambassador to Tanzania	Grant in support of Mlingotini Seaweed	23,000
2007	WIOMSA	WIOMSA	Assessment of ongoing mariculture along the coast	3,700
2008	IMS	McKnight Foundation	Establish small-scale shellfish farming activities involving women residents of coastal villages on the island of Unguja, Zanzibar, in Tanzania	151,000
2008	WIOMSA	IMS	Travel to international trade fair in Dar for aquarium	4,041
2008	WIOMSA	SME competitiveness facility	Seaweed cluster grant agreement	18,000
2008	WIOMSA	ReCoMap	Half-pearl farming and jewelry-making scale-up	36,463
2008	WIOMSA	ReCoMap	Milkfish farming expansion	134,555
2008	IMS	US State Department	Half-pearl production, jewelry-making and marketing	305,077
2008	WIOMSA	Sida	Study on effects of the floating line seaweed farming	6,000
2008	WIOMSA	Sida	Study on availability and seasonality of milkfish fry and fingerlings in the neighborhood of the growing finfish ponds	6,000
GLOBAL				
2009	CRC	EU	Pacific climate change adaptation pilot project	34,000
2009	CRC	IRG/USAID	Funding to participate in planning for change in the coastal and marine environment training in Hue, Vietnam	5,515
2009	CRC	IRG/USAID	Panama workshop on mainstreaming climate change into IWRM projects in Central America and the Caribbean	19,264
LEVERAG	ED FUNDING TOT	AL		1,440,872