Sustainable Coastal Communities and Ecosystems Program (SUCCESS)

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

Year 4 Workplan

October 1, 2007 – September 30, 2008

Leader with Associates Cooperative Agreement
for
Sustainable Coastal Communities and Ecosystems (SUCCESS)

A component of
The Integrated Management of Coastal and Freshwater Systems (IMCAFS) Program

Year 4 Workplan

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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 America
and
Conservation International
The Nature Conservancy
World Wildlife Fund
The Sea Grant Network

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1. Introduction

On September 30, 2004, the University of Rhode Island (URI), Coastal Resources Center was awarded a five-year Leader with Associates (LWA) Cooperative Agreement in Coastal Management, Fisheries and Aquaculture—the Sustainable Coastal Communities and Ecosystems (SUCCESS) Program—with $750,000 annual funding. The University of Hawaii (PACRC/UHH) is the sub-recipient and strategic partners are the SeaGrant Association of Universities; The Nature Conservancy (TNC); World Wildlife Fund (WWF); and Conservation International (CI). Regional partners are the Western Indian Ocean Marine Science Association (WIOMSA), Zanzibar, Tanzania; Center for Ecosystem Research (CIDEA) at the University of Central America (UCA), Nicaragua; and EcoCostas, a Latin American regional nongovernmental organization (NGO) based in Ecuador. The Program's four linked components are:

Sound Science and Governance with a focus on the relationships between human activities and the condition of marine environments and resources

Increasing Capacity with a focus on certification programs to set standards for ICM professionals including those working in marine protected areas

Learning through generating and sharing ICM knowledge, technical expertise, and best management practices

Achieving Tangible Results through innovation of good practices for sustainable coastal fisheries and promotion of ecosystem-based low-impact aquaculture (focus on indigenous species), and biodiversity conservation

1.1 Program Strategic Context: Linking to Issues of Global Concern

SUCCESS builds institutional capacity for coastal extension and innovations and develops and promotes best practices for key issues of global concern to natural resources management:

- **nearshore and estuarine fisheries**
- **low-impact mariculture** (focus on native and/or long-proven successful mariculture)
- **alternative, sustainable livelihoods** (in biologically significant or designated protected areas), and
- **biodiversity conservation**

This last focus area, biodiversity conservation, is a thread that runs throughout all the others—owing to the fact that coastal ecosystems contain biologically productive habitat with disproportionate economic output per unit of area through fisheries and other activities.[1] Yet, these biodiversity-rich ecosystems are under increasing threat. SUCCESS, with its ICM basis, takes a different approach to biodiversity conservation than most conservation-oriented programs, but seeks similar goals. It works both within and outside of formally designated marine and coastal conservation areas—as managing protected areas is an important approach to biodiversity conservation, but alone is insufficient.

1.1.1 Natural Resources Management and Nearshore and Estuarine Fisheries

SUCCESS improves management of nearshore fisheries (emphasis on estuaries and their watersheds), a sector ignored in the recent past and critical to ecosystem health and biodiversity. SUCCESS has improved the management of 115,668 marine ha and 24,000 terrestrial ha—including biologically significant areas in or surrounding designated protected areas. Site-specific examples follow.

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[1] USAID. 2005. Biodiversity Conservation: A Guide for USAID Staff and Partners.

In Tanzania, SUCCESS and its partners are working in the Menai Bay Conservation Area—rich in biodiversity of fishes, coral reefs, and mollusks—to assist local bivalve collectors (mostly women) in addressing the threat of a depleted bivalve population due to over-harvesting. It is introducing community-managed, designated "no-take" zones to ensure the collection of bivalves are harvested in a sustainable way. It is also working with harvesters to develop alternative income generating activities so that their dependence on wild harvests is reduced..

In Ecuador, SUCCESS is working with farmers to improve agroforestry practices that generate more income with less watershed impact and assisting with reforestation to protect freshwater supplies and further encroachment in one of the last remaining intact Pacific tropical coastal forests in the Manche-Chindul Reserve. SUCCESS is working with communities to develop eco-tourism businesses that will help preserve and protect the natural biodovrsity of the area.

In Nicaragua, SUCCESS is demonstrating co-management methods for molluscan fisheries, focusing on the black cockle (*Anadara* sp). These fisheries are a food and income mainstay for poor coastal communities, and have national and regional importance—transported within the country and exported (illegally) to other Central American countries. The goal is to develop feasible co-management methods for the black cockle species that can provide a model for other Latin American countries.

1.1.2 Low-impact Mariculture and Biodiversity Conservation

By 2030, aquaculture will overtake capture fisheries as the world's major source of seafood—creating both a major threat and economic opportunity. SUCCESS promotes low-impact, sustainable mariculture (emphasis on native indigenous species) and promotes best practices that reduce mariculture impacts on biodiversity in coastal areas.

In Tanzania, SUCCESS is demonstrating the economic potential of farming milkfish—a native species that can be cultured in ponds located in low biodiversity salt pan areas behind mangrove forests and as an alternative use to low income generating salt production ponds. SUCCESS hopes to reduce chances the community will turn to more resource/biodiversity-destructive enterprises to generate income and produce their food. While milkfish farming has the potential to generate US$2,000/hectare in annual revenues, it can also threaten biodiverse estuarine areas if not properly conducted. Hence, SUCCESS is ensuring milkfish farmers are trained in best practices. In Bagamoyo, SUCCESS is also promoting one of the most low-impact forms of aquaculture—seaweed farming—working with growers to establish their own farms and market independently to seaweed buyers (as a way to break the dependence on buyers to provide capital inputs for farming). When grown on floating farms, rather than the traditional peg and line method, impacts of farming on seagrass beds can also be reduced. On these fronts, SUCCESS is also working with Tanzanian national agencies on policies that will allow these industries to grow and prosper—contributing significantly to employment, income generation, and food production in coastal communities—but, in a sustainable manner that ensures adoption of responsible mariculture practices that limit negative impacts on the environment and biodiversity.

In Nicaragua, the majority of shrimp production takes place legally in protected areas. SUCCESS is working with small scale shrimp farmers to adopt best management practices that can reduce farming impacts on surrounding mangroves and adjacent estuarine water bodies.

1.1.3 Livelihoods Linked to Natural Resource Management and Biodiversity Conservation

Before people will act as responsible stewards of their natural resources, they must first be able to earn a

living. SUCCESS helps them do just this by introducing them to alternative, sustainable livelihoods that use natural resources in a more ecologically sustainable way.

In Ecuador, SUCCESS works with local partners to develop much-needed economic opportunities for communities using approaches that 1) increase the community's capacity to produce, utilize, and market agricultural products, 2) are cost effective, 3) are environmentally sustainable, and 4) encourage the biodiversity needed to keep healthy the ecosystems on which these income generation enterprises depend.

The upper watershed of the Cojimíes estuary, a designated protected area, is biodiversity-rich and comprises significant amounts of primary coastal forests. It is one of the few remaining areas where *Chame*—a locally cultured and native species of food fish—breeds and where wild fingerlings can be found. However, the estuary's health suffers from human-induced conditions: 1) the collapse of lagoonal shell fisheries and, 2) the exploitation of coastal timber resources from excessive cutting and the resultant sedimentation that changes the estuary's hydrology, pulsing, and water quality. SUCCESS is working to reverse this situation. It is assisting shrimp producers to adopt code of practice that will reduce impacts on estuarine wwater quality, suspected as a major cause of the decline of the wild shellfishery. It is also introducing eco-friendly and diversified livelihoods such as culture of the *Chame*, home gardening, beekeeping/honey production and ecotourism . It is working with local communities to create a long term vision for their place—one that conserves the estuary's remaining resources and biodiversity, restores what is possible, and ensures the Cojimies provides food, income and biodiversity today and into the future.

In Nicaragua, the communities in the Padre Ramos Estuary—a designated natural reserve—rely heavily on fishing and cockle collection, however, restrictions on harvests are now negatively impacting their ability to earn a livable income from this activity. Meanwhile, the site has several under-exploited economic opportunities that could relieve pressure on the estuarine resources and thus the biodiversity of the estuary. Combined with improving current management practices of the cockle fisheries, SUCCESS is: 1) introducing best manageemtn practices among existing shrimp farmers in the protected area as a way to reduce environmental impacts as well as improve business profitability. and 2) introducing ecotourism, and other alternative income-generating enterprises

None of these—nearshore fisheries management, low-impact and sustainable mariculture, livelihood diversification, and biodiversity conservation—operate independently of each other, but rather are elements of an integrated system. Yet, SUCCESS builds on decades of experience in ICM that posits there is an important sequence in which these issues are best addressed in order to achieve effective natural resource management and governance. As mentioned earlier, this sequence requires addressing people's quality of life issues (adequate food and income) as a first step toward building the trust and gaining the interest of communities to address natural resource management and conservation issues. Once the link is recognized between the health of the ecosystems and the health of peoples' quality of life, the next issue to address is how to sustain these management and conservation efforts over time, which in turn is the key to long term biodiversity health. Toward this end, SUCCESS is training local extension workers so that after the SUCCESS Program ends, they will be capable of providing on-going local technical support to advise the communities on how best to continue producing food and income while protecting the estuary's biodiversity. This means that extension topics are not limited to technical topics, but equally important include topics around small business enterprise management, financing and entrepreneurship.

For example, in Zanzibar Tanzania, SUCCESS has introduced half-pearl culture as a means of alternative, non-resource extractive enterprise. Extension services have trained women in how to implant, monitor, and harvest these half-pearls and then market and sell them unembellished and/or in a value-added form by crafting them into fine jewelry settings such as necklaces, broaches, and other jewelry pieces. This "technical" training, however, has been supplemented with training in small business skills ranging from identifying and tapping into markets, to selling techniques, to bookkeeping and financing.

1.1.4 Building Capacity

Whether focused on fisheries, low-impact mariculture, livelihoods, or biodiversity conservation. SUCCESS builds capacity through multiple approaches—providing on-the-ground mentoring and hands-on extension services to partners and clients in the field and in partner institutions; and conducting technical and management training programs as well as professional certification programs. The latter is described in more detail in section 4 of this report. In brief, it can be described as an approach that responds to the global recognition within the ICM practice that while one-off training programs and/or project-long mentoring have value, alone they are insufficient in building the capacity needed for long-term sustainable ICM. As well, it addresses the pressing need for a program with more rigorous professional standards by which performance can consistently be measured across the practice/profession.

1.1.5 USAID Strategic Goals and Regional Priority Interests

SUCCESS contributes to USAID strategic goals, especially #2-4, "Governing Justly and Democratically" (focus on good governance, concensus-building, and civil society), "Investing in People" (focus on issues of health, and education services especially for vulnerable populations), and "Promoting Economic Growth and Prosperity" (focus on the environment). SUCCESS also addresses the USAID regional priorities in East Africa and Latin America where SUCCESS focuses its work, including an emphasis on:

Prosperity—by helping **reduce poverty** in communities through development of alternative **livelihoods** that provide food and income and also sustain the health of the biodiversity-rich resources upon which this food and income depend.

Management and conservation of natural resources through development of new and implementation of proven best practices; through the use of sound environmental and social science; through an approach that marries short term needs with longer term vision; and through recognition that human quality of life and environmental health are intertwined and actions can be taken that consider the needs of both.

Unsound/contradictory/nonexistent policies by identifying where these are either absent and/or contradictory. This means "filling in" policy gaps and/or **promoting best practices** that "support" policies that should be in place. SUCCESS recognizes that properly practiced fisheries can be a form of sustainable use of biodiversity[2] and thus the Program promotes good fishing practices including the design and implementation of zoning plans that reduce pressures on specific fishing areas or fish populations and shape policies and laws which promote sustainable fisheries.

Food security by identifying ways to better manage the nearshore fisheries upon which so many coastal communities in the Americas and East Africa depend, but which unless better managed are in rapid decline as a food source; and by introducing alternative food sources such as low-impact mariculture options and other non-extractive enterprises such as beekeeping/honey-making and family gardening.

Local capacity by identifying where poor practices create stresses on marine/coastal resources and biodiversity and then documenting, educating others about, and promoting the use of alternate, eco-friendly practices. The SUCCESS Program is doing this through an intensive training-of-trainers effort targeted at local extension officers and providing them with the knowledge, skills, and tools to bring more biodiversity-friendly activities, approaches, and technical support to communities. As extension information is refined through training and extension services in the field, it is being more widely disseminated through "how to"

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[2] USAID, op. Cit., p. 90.

manuals and through the SUCCESS knowledge management system. Targeting an even broader audience and applying a more long-term capacity-building strategy, SUCCESS is also working in both regions to implement certification programs that will advance the "practice" of ICM (including marine protected area management) in the "profession" of ICM.

Inequality—by promoting stakeholder participation especially of the disenfranchised, including women. SUCCESS works with local citizens, organizations, and government to address their conservation challenges and identify actions to reduce or eliminate impacts on marine resources and biodiversity. Also, drawing on local resources provides a low cost approach to solving problems, taps local knowledge of the ecology of the place, and helps ensure best practices are sustained after the Program end.

Local and global health crises of HIV/AIDS—by identifying alternative income-generating activities that acknowledge victims' loss of stamina for more traditional and energy-demanding jobs. Research shows those suffering from HIV/AIDS are often "driven" to destructive use of marine/coastal resources primarily[3] because they perceive this as the only way to reduce the time required to secure their food or income through more traditional means.[4] SUCCESS is helping raise communities' awareness that there are other options available.

1.2 Program Description

SUCCESS comprises four key synergistic elements: capacity building, applied research toward a learning agenda, development of learning networks and knowledge management systems to share this learning and other experience, providing global leadership in key issues of concern to ICM, and generating on-the-ground results (living laboratories of applied research and action to inform the global practice of ICM and related subtopics (e.g., small scale fisheries management, low-impact mariculture, non-extractive income generating livelihoods, etc.). Each Program elements builds from and supports the others.

1.2.1 Capacity Building

There is international recognition that the lack of human capacity is a, if not *the*, key factor limiting forward progress in ICM. While SUCCESS and its partners will continue to conduct in-the-field mentoring and limited training, it is now going a step further and expanding its capacity building strategy to include a professional certification scheme—designing and delivering certification programs for individuals working in coastal management, including in marine protected area (MPA) management, starting with regional programs in Latin America and the Western Indian Ocean Region (see section 4 of this report for details). Both certifications follow a core program structure focused around four "E"s of education, experience, examination, and ethics and share the goal of seeking to advance what is now the practice of coastal/MPA management into the profession of coastal/MPA management.

In the Western Indian Ocean region, this certification initiative targets individuals working in marine protected areas, while *in* ***Latin America*** it targets those working in coastal management at the municipal scale. These certification programs are designed to be replicated in other regions.

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[3] Bishop-Sambrook, C. and Tanzarn. "The Susceptibility and Vulnerability of Small-scale Fishing Communities to HIV/AIDS in Uganda" p. 8

[4] ABCG, HIV/AIDS and Natural Resources Management Linkages: Workshop Proceedings. Conservation International: Washington, DC. 19 pp.

1.2.2 Regional Networks, Knowledge Management, and Learning

Networks: With over three decades of international experience in ICM and its related areas of discipline, the role of networks of practice becomes ever more essential in helping ensure greater efficiency and effectiveness of work in this field. SUCCESS has taken an active role in supporting the EccNet (Latin American based network of ICM and ICM-related practitioners in multiple countries in the region) and in the Mariculture Network in the Western Indian Ocean region.

Knowledge Management: With the maturing of the practice of ICM and its related disciplines, the wealth of information, data, experiences, case studies, articles, etc. on the practice is growing exponentially. In parallel, technology is making access to this information ever easier. The challenge is in sifting through this plethora of information and data to extract what is the "best of". Knowledge generation and development of systems to manage the information that goes into knowledge, has been and continues to be an objective of the SUCCESS Program. The Program does this through its *Basins and Coasts* electronic newsletter, theme based pages/portals on the SUCCESS and CRC websites, and through stories from the field.

Learning: SUCCESS is generating knowledge to inform ICM regionally and globally. This includes implementing a cross-portfolio learning agenda that focus on improving knowledge on the factors that lead to successful livelihood components of ICM initiatives. By the end of the SUCCESS Program, there will be a well documented assessment of the impacts of project livelihood strategies on coastal households and ICM initiatives; and there will be a package of livelihood-related materials and events geared to development project designers and implementers—e.g., a web-based information portal, a publication on good practices, a module to be incorporated into MPA certification curriculum, and selected outreach events.

The SUCCESS learning strategy is to:

- Conduct applied research on learning topics linked to key ICM-related issues of global concern
- Form regional learning networks that can share in the results of this applied research and through which network members can also share their own experiences and knowledge on select topic areas
- Develop, populate and maintain a knowledge management system that can serve as the collection vehicle for new information and the dissemination vehicle for sharing "the-best-of" information on a wide range of key ICM-related topics with a wider audience

1.2.3 Global Leadership

SUCCESS works internationally to help set agendas and develop strategies that inform and help shape the practice of ICM and ecosystem-based governance. This includes work with the Land-Ocean Interactions at the Coastal Zone (LOICZ) program of which Stephen Olsen, CRC Director, chairs the committee on coastal governance. Both LOICZ and the InterAmerican Institute for Climate Change Research (IAI) are providing leveraged funding to the SUCCESS work on governance baselining. Work also continues with the United Nations Environment Programme (UNEP) Global Program of Action (GPA), which has accepted the CRC-led effort to define "Markers for Progress in Ecosystem Based Management." SUCCESS also plays a leadership role with its USAID partner—through publication of a developing country capture fisheries report which identifies potential future opportunities for development assistance investments. Several new initiatives are being launched to help guide USAID program staff and its development partners in the design of prospective fisheries and mariculture initiatives as well as to build the understanding of the need to incorporate considerations of global climate change (GCC) and adaptation in all Agency-funded program design and implementation.

1.2.4 Practical Innovations On-the-Ground

Underlying the SUCCESS approach is the belief that it is the testing and application of initiatives on-the-ground—whether they be microenterprise, mariculture, or certification endeavors—that create the models for replication in other places and at other scales and which can inform the practice of ICM and its related disciplines writ large. These on-the-ground sites serve as "living laboratories" that provide the litmus test for innovations and best practice. Such feasibility testing is essential in this age of knowledge management to ensuring that what gets replicated is the "best of" and goes beyond theory or academics. Over the course of the first three years of the SUCCESS Program, the focus has evolved from emphasizing site-based activities to using these sites as demonstrations of broader lessons learned, testing grounds for new tools and techniques, models for best practices, etc. that can inform ICM writ more broadly.

1.3 The Program Results Framework

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 goal to which the Program will contribute over its five-year lifetime through its 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.

1.3.1 Expected Life of Project Results

A summary of the Results Expected over the life-of -Program <u>in relation to Program indicators</u> are:

- Over 240,000 hectares in areas of biological significance under improved management
- Seven policies, laws, agreements, or regulations promoting sustainable natural resource management and conservation implemented
- Over 1,900 persons participating in coastal resources and conservation planning initiatives
- Over 700 people with increased economic benefits derived from sustainable natural resource management and conservation
- Over 180 new or improved enterprises developed
- 500 individuals trained (at least 50% women)
- 22 training courses implemented
- 48 active participants in web-based regional networks
- At least 10 American volunteers (50% women) donating at least 12 days each to work on SUCCESS field activities.

Each program element contributes to the summary results above. Specific contributions are:

Capacity building

- 500 individuals trained (at least 50% women) over 22 training courses in LAC and WIO regions
- At least 6 extension manuals on topics related to small-scale, sustainable, low environmental impact income generating enterprises that can be replicated in other countries, regions, globally
- At least 2 "classes" of graduates from the two certification programs in LAC and WIO regions

Applied learning

- Model governance baselines

- A suite of microenterprise learning mini-case studies based on initiatives in Tanzania, Thailand, and Nicaragua and published on SUCCESS microenterprise interactive web-site

Knowledge management

- A website containing documents generated by SUCCESS and maintained at CRC
- Mariculture, microenterprise, and marine protected area KM portals on the SUCCESS website
- Eight issues of *Basins and Coasts newsletter* on marine and fresh water management topics
- A WIO Mariculture web portal with an online data system maintained at WIOMSA
- An active website for the EcoCostas-CRC Network of practitioners (maintained with funding leveraged by the SUCCESS Program)

Networks:

- A web-based system for linking an extensive network of ICM practitioners and leaders in 11 countries in LAC in sharing their ICM governance baselines, case studies, experience, tools, etc.
- A web-based system linking practitioners of ICM in the WIO region to share their experiences and knowledge on various ICM-related topics, beginning with the topic of mariculture

Global leadership:

- A fisheries assessment report that identifies the status and trends of capture fisheries in USAID-supported countries and recommendations for potential USAID interventions
- Increased capacity of USAID program personnel and development partners in understanding of the need for and the mechanics of including issues of GCC into USAID-funded programs

On-the-Ground Results

- Over 240,000 hectares in areas of biological significance under improved management
- Seven policies, laws, agreements, or regulations promoting sustainable natural resource management and conservation implemented
- Over 1,900 persons participating in coastal resources and conservation planning initiatives
- Over 700 people with increased economic benefits derived from sustainable natural resource management and conservation
- Over 180 new or improved enterprises developed

1.3.2 Accomplishments to Date

- Over 158,000 hectares in areas of biologically significant hectares under improved management (over 129,000 marine hectares and almost 29,000 terrestrial hectares)
- Three policies, laws, agreements, or regulations promoting sustainable natural resource management and conservation implemented
- Over 300,000 dollars of leveraged or complementary funding contributed to on-the-ground implementation
- Over 2,200 persons (48% women) have participated in coastal resources and conservation planning on-the-ground
- Over 450 persons (68% women) have realized increased economic benefits from sustainable natural resource management and conservation efforts
- Over 200 new or improved enterprises have been developed
- Over 650 persons (44% women) have been trained
- Thirty training courses have been implemented
- Twenty one active participants (38% women) in web-based regional networks
- Twenty six publications documenting impacts of best practices
- Seven American volunteers (two women) have contributed a total of 130 days valued at over 28,000 dollars to SUCCESS activities on the ground

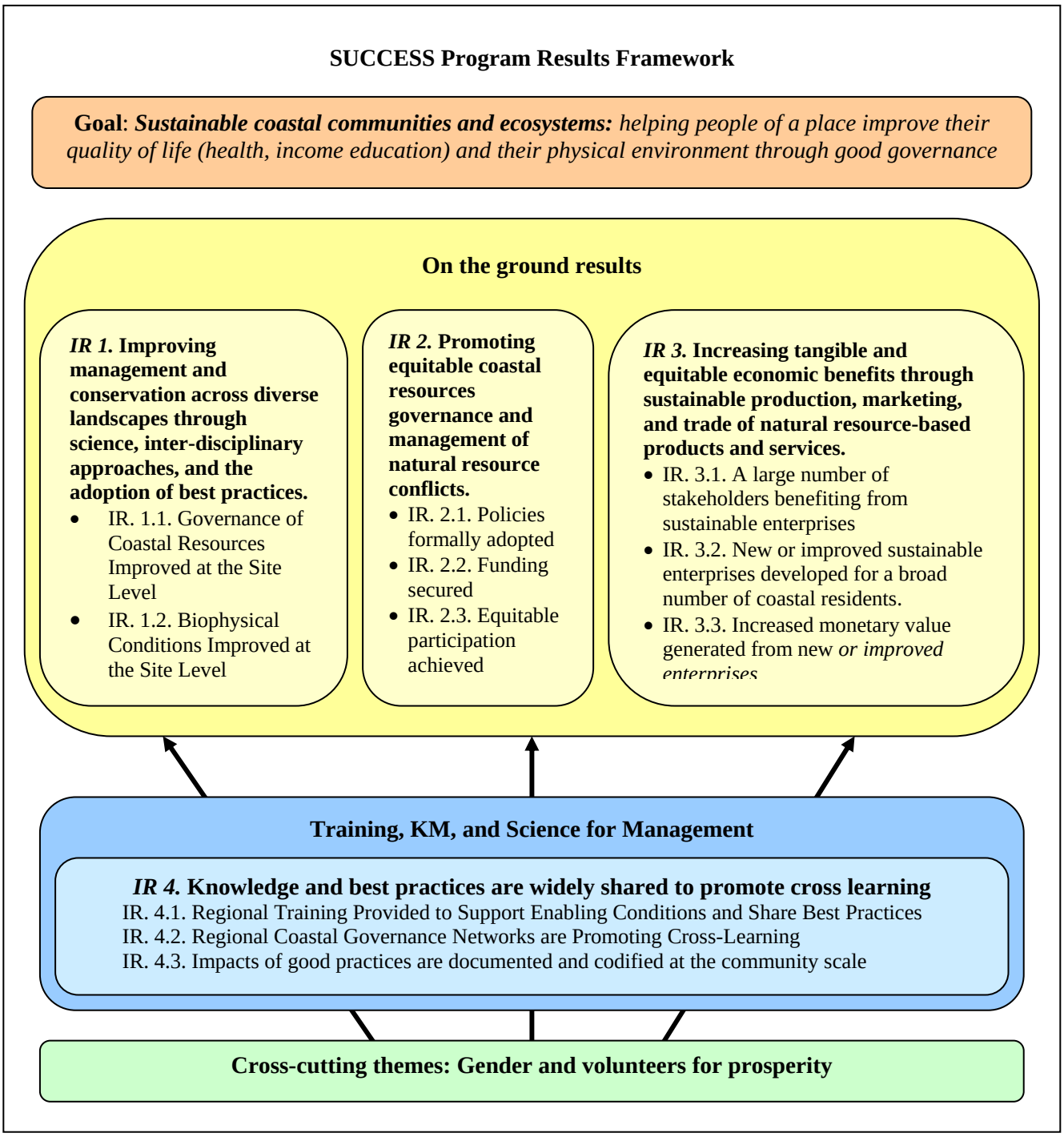

Figure 1. The SUCCESS Program Results Framework

2. Adjustments in Program Strategy

When the SUCCESS Program was initiated three years ago in 2004, Program activities were focused on site-based activities with an emphasis on livelihoods development. This was complemented by goals and activities aimed at building capacity, learning, knowledge management and global leadership. The SUCCESS strategy has evolved—partly owing to evolutions in the USAID areas of interest/focus in their investments in developing country programs and also owing to evolutions in the practice of ICM itself. These have prompted the Program to "refocus" its areas of programmatic emphasis rather than eliminate any one Program component. The result is a greater emphasis on initiatives that promise greater impact on the global practice of ICM/ecosystem governance rather than those that promote largely site-specific advancement as well as a greater emphasis on biodiversity conservation objectives. This does not eliminate site-specific activities, but rather looks to use them to identify lessons learned, successful strategies, tools, techniques and best practices "proven" at the site level and to disseminate these (from both the SUCCESS and other programs) through learning networks, knowledge management systems, and a longer-term capacity building initiative focused on certification programs to reach a more global audience and to inform the practice of ICM writ large.

3. Year 4 Activities

Reflective of the above-described change in strategy, the SUCCESS Program components are described in more detail as follows and in order of their increased emphasis within the overall Program portfolio.

3.1 Building Capacity

While the past decades have seen many one-off training courses in ICM and MPA management around the world, these alone have not produced the level of capacity needed to practice ICM effectively. It is now time to build on these stand-alone trainings and create a Program of greater rigor—one that sets standards of performance and evaluates the skills of a given ICM practitioner and their ability to effectively apply those skills in addressing real-life ICM challenges facing us today and tomorrow.

The SUCCESS Program response is to design and deliver Ecosystem Governance and MPA certification programs— the first in Latin America, the latter in the Western Indian Ocean region. Both pilot programs are designed to be adapted and then replicated in other countries/regions.

3.1.1 Marine Protected Area Certification in the Western Indian Ocean Region

Scale of intervention:	Regional Western Indian Ocean
Lead Implementing Organization:	WIOMSA
Other Partnering Organizations:	CRC, potentially WWF, TNC, Kenya Wildlife, IUCN, etc.
Activity Coordinator:	Julius Francis
US Liaison:	Lesley Squillante, Glenn Ricci

Background

Regional interest, need, and potential support for an MPA Professionals Certification Program was assessed through two desktop surveys, first person discussions, and regional workshops that brought together MPA practitioners, representatives of government agencies and donors funding MPAs, and individuals previously involved in developing certificate courses with standards, practicum, and examination. A draft framework for the certification was circulated months prior to and then vetted and further detailed at a February 2007 regional workshop, where agreement was reached on having a three-level program where a level one would target those working in an MPA who have fewer years of experience and supervisory responsibility (e.g., a park warden), while a level two or three would target those with more experience and responsibility (including up to an MPA manager).

Part of the strategy to “springboard” this initiative is to handpick a cadre of the 10-12 talented and experienced individuals working in MPAs in the region for the first level 3 class. This first class then becomes “advocates” for the program and may serve as future trainers, and/or hosts of the practicum for participants of future classes. The coursework for the first class will be held in one country only while bringing in participants from throughout the region. Later, groups in other countries around the region will be “approved” as national delivery venues.

This initiative places equal or greater emphasis/weight on the practicum element vs. the coursework. The use of standards implies a performance expectation—i.e., participants must demonstrate a minimum level of knowledge and ability to apply skills at a certain level (standard) of proficiency. The program’s ethics component requires those being certified to abide by a set of professional behaviors. Further, to ensure certified MPA professionals stay current on issues of import, there is a requirement to take a number of continuing education courses in every three year period in order to renew their certification.

This certification initiative approximates a "small business" start-up venture and has received seed funding from the SUCCESS Program and others (the Swedish International Development Agency/SIDA; and the European Union funded Regional Coastal Management Program/RECOMAP). However, research shows that such certification programs (as with most small businesses) usually require at least five years to break even or turn a profit. It is unlikely that tuition and renewal fees alone will be sufficient to cover costs. Hence it is essential that the Program secure external funding if it is to be sustained.

Another challenge is to find the right balance of simplicity vs. complexity of the program design framework—neither designing the program to be so simple that carries no professional credibility nor so complicated that it becomes either too difficult to administer or discourages applicants.

Several strategic decisions have been made and include: 1) certifying MPA professionals vs. limiting the program to MPA managers only; and 2) creating three levels of certification with each level progressively more advanced in its entry requirements and its program content and performance expectations.

The life of project legacy and final outcomes to be achieved by this program element are:

- Full program content (4 Es) and administrative framework developed as a model for replication
- One class of level 3 certified MPA professionals graduated; possibly one class of a level 2
- "How To" guide outlining the process for establishing a certification program modeled on the SUCCESS Certification Programs

Year 4 Objectives, Tasks and Schedule

Year 4 objectives of the Certification Program in the WIO region are to ensure that the:

- Certification leadership and management structure is in place
- Program structure and content is developed and approved by the Certification Board
- Certification levels are defined; entrance requirements, curriculum, standards and practicum are developed; examination formats/venues/deliverers are identified; roles of players in Program are defined; and the Ethics statement is developed by the Board
- Marketing and recruitment is underway
- The coursework and practicum are delivered for at least one class
- Knowledge management system on MPAs is in place
- Plan for financial sustainability of the program is finalized, including a business plan to include revenue streams/financial sustainability projections
- Proposals for funding are submitted and additional funders secured

Certification Leadership, Management, Financial Structures: Sound leadership and management structure are essential to ensuring both the longer-term sustainability of the Program and efficient and day-to-day operations.

Assemble a Program Advisory and Leadership Board: Develop a board of individuals with experience and regional and/or global recognition as ICM and/or MPA experts and who also have a cross-section of skills in fund-raising, marketing, business entrepreneurship, etc. This Board shall provide leadership and guidance in the continued strategic development of the Program and its sustainability, including financial sustainability; curriculum approval, examination and experience (internship guidelines), and the content of the overarching ethics statement.

Structure and Systems for Day-to-Day and Long-term Management Designed: An Education Specialist is being hired in Year 4 to serve in the WIOMSA office as the coordinator of this initiative. He/she will oversee the players, administrative, and fiscal management and marketing of the certification initiative as

well as to provide substantive input into curriculum/content. In addition to this key position, administrative, marketing and recruitment, application, fiscal, and alumni-tracking *systems* (including materials and databases) will be designed to promote and advance the certification program.

Business Plan for Financial Sustainability of Program: Develop a five-year business plan that projects revenue streams, outlines options for fundraising, identifies marketing and program niches that should be exploited to secure a continuing flow of participants and donors to the certification program.

Program Structure and Content Developed and Approved by the Certification Board: A consultant from the region and with experience in developing similar programs is detailing out the program, which will then be vetted and approved by WIOMSA and CRC, the Certification Board, and then by a subset of the larger group of stakeholders who have been involved in this initiative to date.

Define Program elements in detail: Define certification levels, entrance requirements, curriculum, standards, practicum, examination formats/venues/deliverers, roles of Program players, and ethics statement

Marketing and Recruitment: A proactive marketing and recruitment effort will begin to identify and secure a continuing base of "classes" to enroll in the program and will require the steps listed below.

Develop marketing brochures and website: Design and circulate (hard-copy and electronic) marketing materials to explain and promote the program. Electronic marketing will include sharing with relevant listserves and websites and posting on the MPA Certification Program website hosted by WIOMSA.

Identify and enroll first class; recruit second class: A first class will be "hand-recruited" from professionals working in MPAs in the region and already recognized as having a standard of performance that makes them ideal candidates for this program. This first class will serve as "ambassadors" for future classes. In tandem, marketing materials will be circulated to promote the program and encourage enrollment of the second and future "classes".

Course Design and Delivery: Complete all logistics for preparation and implementation of first course. Using the curriculum and standards developed (writ large) by the consultant, the course planning and delivery team will sequence the individual modules or session plans that comprise a course, and select specific case studies and background materials.

Knowledge Management: Develop MPA thematic web page. SUCCESS will help build an MPA website that shares training materials, articles and case studies from others, and other interactive features and will link to other regional and global sites with a focus on MPAs.

Tasks and Milestones	***Date***
Certification Leadership, Management, Financial Structures	
Education Specialist to manage certification program in place	December 2007
Design "blueprint" for systems needed for program management: administrative, fiscal, marketing, alumni tracking, etc.	November 2007
Program Structure and Content Developed and Approved by Board	
Submission of consultant report (L. Sistka)	November 2007
Hire consultant to prepare business plan and Board statutes	November 2007
Review and approve consultant report which outlines all of the above items in detail (WIOMSA, CRC, then the Board, then others review)	November-December 2007
Construct website for marketing of Program and database for information input and tracking	November/December 2007

Tasks and Milestones	*Date*
Identify and secure MPA Certification Program Board	December 2007
Business plan and Board statutes completed	January 2008
Board approves business plan and preparation of fundraising plan (below)	February 2008
Board develops statement of Ethics	February 2008
Fundraising strategy and plan prepared based on business plan scenarios	March 2008
Conduct second Board meeting	August 2008
Marketing and Recruitment	
Marketing brochure in hard- and electronic-copy prepared	December 2007
Identify and recruit first class	December 2007 – February 2008
MPA Certification ***marketing*** website goes live	January 2008
Enroll and orient first class	April – May 2008
Identify and recruit second class	June – August 2008
Course Design and Delivery	
Identify and secure commitment of trainers	January – March 2008
Conduct training of trainers refresher course	April 2008
Finalize course overview and schedule, modules, session plans, materials	May-June 2008
Identify, secure and ready the training venue	June 2008
Conduct first course* (likely a "sandwich" model with course work interspersed with practicum and spanning several months)	July – September 2008
Knowledge Management	
Design architecture of an MPA theme web page/site (WIOMSA will then take over the task of populating and going live)	April – May 2008

Outputs

- Refined job description for Education Specialist with emphasis on Certification Program
- Administrative, financial, database, and web systems
- Certification Program Board
- Minutes of first Board meeting
- Business plan
- Board statutes
- Fundraising plan
- Consultant report
- Statement of ethics
- Marketing materials
- Website
- First class roster
- Trainers list
- Modules, session plans, training materials
- Evaluations from first course
- MPA theme page on website

Results Expected

Indicator	*Year 4 Target*
9. Number of candidates for the certification (gender disaggregated)	15
10. Number of training courses implemented	1

3.1.2 Certification Program for Coastal Ecosystem Governance in Latin America

Scale of intervention:	Regional Latin America and Caribbean
Lead Implementing Organization:	EcoCostas
Other Partnering Organizations:	The AVINA Foundation; the international Land Ocean Interactions in the Coastal Zone (LOICZ) Program; InterAmerican Institute for Climate Change (IAI)
Activity Coordinator:	Paola Garzon, Emilio Ochoa
US Liaison:	Pam Rubinoff, Stephen Olsen

Background

The *Certification Program for Coastal Ecosystem Governance* (CEG) is designed help leaders engaged in improving the governance of coastal ecosystems in the LAC region. The overarching goal is to contribute to improving the effectiveness of ongoing efforts to attain sustainable levels of use of these systems.

The initial training effort will comprise a portion of the education component for certifying a *first cohort of 15-25 senior level practitioners working in coastal ecosystems.* This cohort will play a key role in refining the design of the second training series, which will be offered to future certification candidates.

The *LAC Certification Program* is made operational through the regionally based EcoCostas Board. The network of practitioners is expected to grow over time and include an increasing number of people working at the municipal level to improve the governance of specific coastal systems. To assist in the information exchange, curriculum development and longer term learning process, a key component of the capacity building effort is to assemble enough information about the past environmental, social and governance changes in the places where network members work to allow for documentation and lesson learning. A portfolio of governance baselines will be assembled and analyzed as the basis for proposing goals and strategies for future management initiatives at each site.

To date, SUCCESS Program investments in capacity building in Latin America have been limited to specialized training sessions for those working in the Program field sites in Ecuador and Nicaragua. However, the current focus is turning to the Certification model and progress includes having established:

- An active network of 22 senior professionals working in coastal ecosystems
- First draft of the CEG Code of Good Practices prepared (foundation for certification program)
- Materials on governance baselines assembled for three sites
- An outline of an EcoCostas Business Plan with a focus on certification as its key business service
- Sufficient leveraged funding through grants from AVINA Foundation and International Land Ocean Interactions in the Coastal Zone (LOICZ) Program, and the InterAmerican Institute for Climate Change (IAI) to support the initial workshops that comprise the education components of the program.

The goal in Year 4 is to undertake all the activities necessary to be able to graduate the first cohort of certified individuals by the first quarter of Program Year 5, and to develop a transition strategy for Year 5 and post-SUCCESS. Additional funding is being sought to recruit and train a second cohort of applicants for certification in Year 5. The EcoCostas Strategic/Business Feasibility Plan will serve as a useful tool in identifying potential models for sustained financing for the initiative.

At end of the field project, the key outcomes of this program element will be:

- An *CEG Code of Good Practices and a Code of Ethics have been developed* and refined through consultation with individuals recognized for their CEG knowledge and leadership in the LAC region

and globally. It is the foundation for the certification program and its certified practitioners working at the municipal and small-to-medium sized coastal watersheds scale.

- The *Certification Program has been designed* for practitioners working in coastal ecosystems around the LAC region.
- The *first cohort of 15-25 senior level practitioners have graduated and received their Certification.* Many of these are engaged in university-based education programs or site programs, which will be integral to future cohorts of ICM Certification candidates.
- The LAC *Certification Program is operational,* and the EcoCostas Board has endorsed the program and its associated Codes.
- *A portfolio of governance baselines has been assembled* and analyzed as the basis for proposing goals and strategies for future management initiatives at each site. These sites are being monitored for governance advances; they are candidate practicum sites for future Certification candidates and the story of their progression can provide the program with rich case studies.
- The Spanish language *knowledge management system (KMS) operated by EcoCostas is facilitating communication and cross- program learning* among EcoCostas members and is serving as a mechanism for disseminating good practices among other practitioners in the region.

Year 4 Objectives, Tasks and Schedule

Design the Certification Program for an Initial Cohort of Senior Practitioners:

Coastal Ecosystem Governance Code of Good Practices: A Code of Good Practices is typically associated with professional certification programs. In this certification initiative in Latin America, the Code is directed at individuals, not at businesses, agencies or nations. It draws upon the CRC three-decade repertoire and focuses on the attributes of a practitioner that enable working effectively as a member—or leader—of an interdisciplinary team. The Code does not attempt to detail the good practices that have emerged for the innumerable individual issues or coastal activities that may be significant in an integrated management program. It does draw upon recent Guides and Handbooks on ecosystem-based management practices developed by CRC and the Global Environmental Facility (GEF), the UNEP/GPA program and The Nature Conservancy. The Code will be peer reviewed by internationally recognized ICM professionals.

Certification Program Standards: These standards define the attributes of a certified practitioner and will be based largely on the CEG Code of Good Practices. They parallel those proposed for the East Africa Program:

- **Experience**: the successful applicant must have minimum of three years experience in a leadership role in a coastal governance project or program and demonstrates an ability to analyze the trajectory of change and the existing governance system in a site through preparation, presentation and analysis of a governance baseline

- **Education**: a minimum of a Bachelor's degree or equivalent to enter the program; and must attend three certification events

- **Ethics:** before "graduating" and becoming certified, individuals must sign a pledge to abide by a professional Code of Ethics

- **Examination**: exams are designed to verify that each applicant has mastered the knowledge, skills and attitudes as outlined in the CEG Code of Good Practices and detailed in the certification standards

In Year 4, more explicit standards for each of the four E's will be developed[5] , the number of program hours will be identified, and requirements for renewal (e.g. continuing education hours) determined. Also, the experience requirements will be codified and the examination and scoring methods designed.

The first cohort of certification graduates comprises senior practitioners operating largely at the municipal and small-to-medium sized watershed scale and in programs that have biodiversity conservation as a central theme. It also includes senior members of the teams that will be preparing scenarios for climate change in coastal watersheds and estuaries in the Caribbean—an effort funded by the IAI. This first cohort will help recruit more junior candidates for future classes and will help refine the curriculum and overall program.

Develop and Deliver the Curriculum for Educational Standards:

For the initial class, deliver the curriculum for the Education component through three sessions—a six day event (November 2007) on the essential features of coastal ecosystem governance and application to a project or program through the preparation of a governance baseline; a four day event (May-June 2008) featuring the ethical dimensions of coastal governance, consensus building, outreach and communication; and a third session (October-November, 2008) on cross-project learning; selection of goals, strategies, and key partners; and identification of variables to assess progress in a specific project or program

Make Operational the Certification Program:

Strategic/Business Feasibility Plan for EcoCostas that features certification. A consultant will facilitate development of a Strategic/Business Feasibility Plan for EcoCostas (funded primarily by the AVINA Foundation through EcoCostas), but which will have as a key focus area, this certification program. The goal of this Plan is to consolidate EcoCostas as a center of regional excellence in the governance of coastal ecosystems. The plan will identify business opportunities by exploring core competencies, products, services and target markets, and will identify financing options for the certification program by assessing the needs, sources, and methods for engaging philanthropy, international organizations, and market-based instruments.

Systems in place for implementing the first Certification cohort through EcoCostas: EcoCostas will provide direct logistical support for events and overall implementation of the certifiation program—building off elements of systems being developed for the MPA certification program. Efforts include:

- Prepare logistics for delivery of training
- Develop and package curriculum materials and post on the web-based KMS
- Identify public relations opportunities and produce materials
- Develop marketing strategy and produce advertising materials to recruit new participants
- Fundraise (as needed) to supplement program revenues
- Support the Board and keep them informed of certification activities

Develop Governance Baselines as a Tool for Experience Development and Exchange:

Part 1 of each governance baseline documents the features of the locale in which a program/project or initiative is operating, the trajectory of ecosystem change, and the existing governance system as revealed by past and current responses to important resource management issues. Part 2 defines the desired outcomes of each initiative and the variables to be monitored in order to assess progress and learning. Members of the first cohort of the certification program, will complete a governance baseline that documents and analyses

[5] Standards for the first cohort will be somewhat different from those for subsequent training, as the first class is comprised of senior practitioners—principally leaders of projects and programs in the EcoCostas regional network.

the context in which their project or program is operating. These will later be viewed within the broader context of coastal governance investments in the region—as an essential part of cross-project analysis that is part of Event #3. While these baselines will constitute fulfillment of the Experience standard for the first cohort, future "classes" (more junior) will instead complete a "practicum" and prepare a written analysis of their experience.

SUCCESS will provide modest funding for the development and maintenance of the web-based system at EcoCostas that contributes to the sharing, analysis and learning from the case studies and associated materials developed for use in future certification classes.

Tasks and Milestones	***Date***
Design Certification Program for senior practitioners.	
Certification and Curriculum Design work session (for First Event) complemented by email communication and individual tasks of training team. *Funded by LOICZ & SUCCESS. Team: Emilio, Don, Stephen and Stella*	October 2007
Develop certification standards, determine program hours, experience requirements, design of exams and their scoring *Funded by SUCCESS & AVINA. Team: Emilio, Don, Stephen and Stella*	March 2008
Draft Code of Ethics (team) and review (Network) *Funded by AVINA. Team includes AVINA staff, Emilio, Don, Stephen*	July 2008
Draft Code of Good Practices (team) and review (international peers), and endorse (EcoCostas Board) *Funded by AVINA and SUCCESS. Team: Stephen, Emilio, Agnes, Patricia*	August 2008
Development and Delivery of the Curriculum for Educational Standards	
Conduct first Event (6 days) (Essential features of coastal ecosystem governance and application to a project or program through the preparation of a governance baseline) *Funded by LOICZ & SUCCESS. Team includes Emilio, Don, Stephen.*	November 2007
Conduct second event (4 days) Features ethical dimensions of coastal governance, consensus building, outreach and communication (EcoCostas Assembly meeting will meet two days prior) *Funded by AVINA & SUCCESS. Team: AVINA staff, Emilio, Don, Stephen*	May-June 2008
Make Operational the Certification Program	
Complete EcoCostas Strategic/Business Feasibility Plan (Provides direction and strategies for funding models/financing options for program) *Funded by AVINA and SUCCESS Team: Glen Page, Emilio, Stephen*	December 2007(draft), May 08 (final)
Provide logistical support for events (training venue, equipment/supplies, travel, housing, assembly and packaging of course materials, coordination of resource people or trainers, compilation of data for TrainNet). *Funded by AVINA, SUCCESS, LOICZ Team: Paola, Matilda, Kim*	November 2007 – May 2008
Develop systems for implementing the Certification Program *Funded by SUCCESS Team: to be determined/hired by EcoCostas*	September 2008
Develop Governance Baselines as a tool for Experience Exchange	
Complete governance baselines (use model baseline as training tool and work with practitioners to complete their baselines, as part of the Experience standard for Certification) *Funded by AVINA Team: Stephen, Emilio, members of the Network*	September 2008
Refine web-based system at EcoCostas for sharing information case study materials as part of the certification curriculum effort (increase functionality, utility, access)	September 2008

Tasks and Milestones	*Date*
Funded by AVINA and SUCCESS Team: EcoCostas staff	

Outputs

- CEG Code of Good Practices
- Code of Ethics
- Certification Standards
- Curriculum and materials for the Educational component
- TraiNet materials for 2 training events
- Strategic/Business Feasibility Plan

Results Expected

Indicator	*Year 4 Target*
9. Number of candidates for the certification (gender disaggregated)	25
10. Number of training courses implemented	2

3.2 Regional Networks, Knowledge Management, Learning, Communications and Outreach

Scale of intervention: GLOBAL
Lead Implementing Organization: CRC
Other Partnering Organizations: WIOMSA, EcoCostas
Activity Coordinators: Bob Bowen, Lesley Squillante, Elin Torell
US Liaisons: Same as above

Background

In spite of almost four decades of experience, ICM programs and practitioners are often isolated from or unaware of other efforts in their own country and region. As a result, programs often reinvent the wheel or repeat mistakes that others have learned to avoid. The SUCCESS Program is helping to make the "best of" information and experience on selected ICM-related topics more accessible to others through its knowledge management systems and learning networks, such as the SUCCESS mariculture thematic site, the emerging WIOMSA-based mariculture and marine protected area thematic sites, and the EcoCostas network.

Networks: The EcoCostas network, partially funded by SUCCESS, the AVINA Foundation, the LOICZ program and others, is a learning network of ICM practitioners, leaders, and experts. It operates through both in-person interventions and an electronic system for inputting governance baseline data, analysis, and case studies that span regional projects, programs, and initiatives for intra-region comparison. Another nescient learning network being spearheaded with the SUCCESS program is the mariculture learning network in the WIO region. Much like the EcoCostas network, it promotes both in-person and electronic sharing through a web-based system of information, data, trends, case studies, tools, etc. related to mariculture issues within the broader context of ICM. Raw data for the system has been collected in Year 3, with the web-based system being developed and the site populated in Year 4.

Knowledge Management: Knowledge management systems provide for documenting, archiving and making available both the SUCCCESS Program's working and final documents in a variety of formats as well as those of other programs and projects that are at the forefront of the key ICM-related topics. Documentation is supported by electronic services including internal and external web sites, CD-ROMs, and electronic collaborative workspaces for project teams. CRC uses open source servers and software and a

database-driven system for its public and restricted-access web sites. This allows project teams to upload and manage their own content, permitting information services to focus on maintaining core systems, data bases and programming that meet the needs of different work groups. This approach is low-cost, flexible and readily extensible.

Learning: The SUCCESS learning strategy captures lessons that cut across Program sites and initiatives. A SUCCESS premise is that tangible benefits to quality of life through a livelihoods approach are a necessary (but not alone sufficient) condition to sustained success of ICM programs. Unfortunately, growing anecdotal evidence suggests many livelihood activities do not increase household income in coastal communities, or reduce pressure on coastal and marine resources. Since SUCCESS sites (and the associate award site in Thailand) have significant livelihood components, addressing this topic as a CPLT is timely. These sites provide living laboratories for learning, and local partners involved in their implementation are clients for the learning outputs. As done previously in Thailand and Tanzania, a study of factors that lead to the success or failure of microenterprises will be conducted in Nicaragua in Year 4.

Communications and Outreach: The knowledge management, networks, and learning agenda are closely linked to communications and outreach. However, the former is oriented to learning from not only SUCCESS, but other programs and initiatives around the world on themes and topics of concern to the ICM practice, and then disseminating that information widely. The communications and outreach efforts are focused more on sharing information on the SUCCESS Program more specifically.

It is only at the end of SUCCESS Year 3, that significant results, success stories and lessons learned have begun to emerge and these must be disseminated for a variety of audiences in a variety of different mediums, while emphasizing that the USAID investment in the people and countries where it works is helping bring about change. These stories also illustrate how even small interventions can have significant returns on investment and how small beginnings can have a multiplier effect. In Year 4 and 5, each country program is also committed to "stepping up" its communications and outreach efforts through a variety of media.

The SUCCESS Program has already created a number of pathways for information dissemination sharing and learning—the SUCCESS website at http://www.crc.uri.edu/SUCCESS/ , the website for the umbrella program, I*ntegrated Management of Coastal and Freshwater Systems* (IMCAFS) at http://www.imcafs.org/ ; and the online newsletter, *Basins and Coasts*. SUCCESS has also contributed to establishment of the EcoCostas-CRC Network (ECCNet) in Latin America, which links ICM coastal and marine leaders from 13 countries.

Development of Cross Portfolio Learning Topics (CPLT) under the Mariculture theme began in FY07. One topic, General Approaches to Addressing Mariculture as an Element of Integrated Coastal Management Programs, has been fully developed and is online on the CRC website. Two additional topics under the Mariculture theme, Managing Open-Water Mariculture Systems in the Coast and Ocean (Seaweed, Molluscs) and Managing Pond-Based Mariculture Systems in the Coast (Shrimp, Fish) are have been drafted and will go online during the first half of FY08.

Completed governance baselines, biodiversity threats assessments, and micro-enterprise cross-site studies in Tanzania and Thailand have both informed the SUCCESS Program and provided useful new tools for use in and applied research findings for ICM writ more broadly.

Over the life of the project, the following results are expected:

- Suite of microenterprise learning case studies produced and disseminated based on field work in Tanzania, Thailand, Nicaragua
- Three web-based cross portfolio learning topics (Mariculture, microenterprise, MPAs) launched.
- Online newsletter, *Basins and Coasts*, published three times per year

- Two web-based network systems functioning in East Africa and Latin America

Year 4 Objectives, Tasks and Schedule

Year 4 objectives for SUCCESS Networks, KMS, Learning, and Communications and Outreach include:
- Develop and launch the WIOMSA web-based learning network systems
- Refine and expand the cross portfolio learning topics web system on mariculture and livelihoods
- Analyze, document, and share applied research findings on SUCCESS microenterprise learning topic
- Enhance dissemination of SUCCESS results and programmatic news, events, and stories from the field

Develop a WIOMSA Web-based Network Systems: Building an online data system to support the WIO Mariculture Network will expand upon efforts begun in Latin America to support learning networks. Countries in the WIO region will share data and information on mariculture initiatives, best practices, and regional expertise to assist with the sustainable development and build-out of this alternative livelihood. This will be accomplished through a web-based information system on mariculture projects and information from the region as well as through a discussion forum on the WIOMSA web-site.

***Cross – Portfolio Learning Topics (CPLT)*:** The CPLT for general approaches to mariculture will be complemented with three more topics—two on the specifics of small scale sustainable mariculture in open water and in ponds, and a third will address issues and strategies for sustainable mariculture (will address the broader adoption of mariculture activities as they support ICM and coastal biodiversity conservation and provide for low impact alternative livelihoods). These learning topics will be accessible directly on the SUCCESS website. Another CPLT will be developed as part of the livelihoods learning outreach agenda and made accessible on the SUCCESS and CRC websites. In order to assure that the information put on line is used by the expected targeted audience, an advertising strategy will be implemented as these are launched. Assessments of all our KM web-based information systems will be undertaken quarterly on both accessibility of information and usage, and then used to adjust strategies accordingly.

Analyze, Document, Share Applied Research Findings on SUCCESS Livelihoods Learning: Results of the study of livelihoods in the Nicaragua site (Year 4) as well as the earlier studies in Tanzania and Thailand will be written up in a series of case studies and published on the SUCCESS and CRC website as another livelihoods cross portfolio thematic learning topic. Since most local-level ICM and conservation initiatives include livelihood components and are struggling to make them successful, the case studies and website should be valuable and useful to ICM program managers around the world. In conjunction with the FY 08 annual partners meeting, SUCCESS will conduct a workshop to synthesize the key learning points from the Program, with a focus on lessons that lie in the nexus between natural resource management including biodiversity conservation, mariculture extension, and microenterprise development. Study results, along with commissioned papers on the topic, will be presented and invited speakers will include partners with unique experiences in linking biodiversity conservation and enterprise development.

Enhance Dissemination of SUCCESS Results, Programmatic News and Events, Stories: In Year 4, the SUCCESS website will take more of a 'story telling' approach to communicating, including storytelling through podcasts and multimedia. Three new issues of *Basins and Coasts* newsletter will be produced with the SUCCESS and the GLOWS teams alternately serving as managing editors of the different issues, with highlights from these two Programs supplemented by articles from other programs, projects, or authors with relevance to the issue themes. With more results and information to share from the SUCCESS Program, in Year 4 highlights of these will be "gleaned" and crafted into engaging stories, and disseminated widely through *Basins and Coasts*, posting on the SUCCESS and country partner websites, and through USAID formats for success stories, cases studies, etc, country newspapers, radio, and television and, potentially, and potentially *Frontlines.* Although "stories from the field" are included in quarterly and semi-annual report

submissions from the field, in Year 4 these will be adapted to fit the USAID formatted styles of "Telling our Story."

Tasks and Milestones	*Date*
Improve and Help Build WIOMSA Web-based Network Systems	
Complete mariculture data collection from WIO countries *(conducted by WIOMSA and WIO Mariculture network)*	October 2007
Design web-based system for WIO • Draft data system and web front-end • Website draft on-line for review by WIO mariculture coordinators • Present and review draft at WIOMSA Science Symposium • Revise and install website at WIOMSA	November 2007
WIO-Mariculture Network website designed and online	December 2007
Mariculture discussion forum on WIOMSA web-site goes live	November, 2007
Cross Portfolio Learning Topics	
Open Water Mariculture	December 2007
Pond – Based Mariculture	December 2007
Issues and Strategies for Sustainable Mariculture	April 2008
Qualitative assessment of web-based KM instruments	June & Sept 08
Analyze, document, share applied research findings on SUCCESS the livelihoods learning topic	
Complete Tanzania and Thailand case studies	December 2007
Conduct surveys and qualitative case studies in Nicaragua	February 2008
Complete Nicaragua case study	April 2008
Develop livelihoods website (a CRC cross portfolio learning topic)	June 2008
Draft microenterprise overview paper synthesizing field studies results	June 2008
Commission papers from the field or partners (if needed)	May 2008
Facilitate learning workshop	July 2008
Publish learning workshop report on livelihoods web	September 08
Develop and launch thematic web page on livelihoods	September 08
Enhance dissemination of SUCCESS results, programmatic news and events, stories from the field	
Basins and Coasts Newsletter	
Issue 2.1	December 2007
Issue 2.2	May 2008
Issue 2.3	September 2008
SUCCESS and IMCAFS Website upgrades	
News and Events	February 2008
Stories from the Field	April 2008
Multimedia Story and Podcast	June 2008
SUCCESS Website upgraded to display CPLT topics	January 2008
Generate and Disseminate Communications and Outreach Materials	
1 SUCCESS story/brief/article every month (for web posting, Basins & Coasts newsletter, hardcopy, USAID electronic submission)	October 2007 – September 2008

Tasks and Milestones	*Date*
Candidate article for *Frontlines*	October. 2007, January, May, September 2008
Bi-monthly contact with field to solicit raw material for stories (see above)	October, December 2007; February, April, June, August 2008
Request monthly updates on media contacts, articles, releases from field; request if any upcoming events to which media might be invited	October 2007 – September 2008

Outputs

KM, Networks, Communications and Outreach

- Refined web-based KMS systems for WIO Mariculture networks
- Upgrades to IMCAFS website (http://www.imcafs.org/) to include news and events listings
- Three issues of *Basins and Coasts* newsletter will be produced and posted online
- SUCCESS website (http://www.crc.uri.edu/SUCCESS/" upgraded to include stories
- Multimedia story from the field developed and posted on SUCCESS website
- WIO-Mariculture Network website established and data on regional mariculture activities, specialists, and publications posted online
- Two qualitative assessments of KM systems

Learning

- Tanzania microenterprise studies (FINCA and report based on quantitative survey)
- Thailand microenterprise study
- Nicaragua microenterprise study
- Synthesis paper from microenterprise studies comparing results across the SUCCESS sites
- Report from final learning workshop
- Thematic web page on livelihoods

Results Expected

Indicator	*Year 4 Target*
1. Number of participants in web-based regional networks Latin America and Caribbean, and, East and Southern Africa	23
12. Publications documenting impacts of best practices Learning case studies	4

3.3 Global Leadership

Background

Over the past three decades, CRC—often working under the support of USAID—has had a major influence on the framing of the initial call for ICM programs in all coastal nations endorsed at the Rio Conference in 1993. It has also contributed to the statements that emerged a decade later from the Johannesburg Conference. Since then, CRC has continued to be active in these fora and increasingly is sought as an institution with unrivaled experience in the application of ICM principles in a wide range of settings. The SUCCESS team at CRC and in the Program countries will continue to participate in global leadership

activities, building where possible on innovations, tools, techniques, and approaches emerging from the SUCCESS Program and to respond to USAID requests for assistance.

Publications

In Year 4, the *Capacity Building for Ocean and Coastal Stewardship* publication will be disseminated. This document has been developed with support from The National Academy of Sciences Committee on Capacity Building for Ocean and Coastal Stewardship, and CRC Director, Stephen Olsen is lead author of the two final chapters. While the SUCCESS Program and USAID have not directly supported this work, much of what Olsen has written has derived from his three-plus decades of work in coastal management—much of it funded through partnership programs with USAID. Further, selected of the recommendations reinforce the direction SUCCESS is taking in capacity building and certification.

Key Global Committees

As a member of the executive committee and leader of the Land Ocean Interface in the Coastal Zone (LOICZ) committee on coastal governance, Olsen has garnered support for a three-year effort to design governance baselines in different regions beginning with Latin America in 2007. LOICZ will provide the bulk of financial support for at least the first training event in the SUCCESS LAC certification program for ecosystem governance.

Year 4 Objectives, Tasks and Schedule

3.3.1 Mainstreaming Adaptation to Climate Change and Variability: Guidance for Coastal Development Planning

According to the Intergovernmental Panel on climate Change (IPCC), the leading international scientific body on climate change, climate change is already happening, and will intensify in the years to come even if global greenhouse gas emissions are curtailed significantly in the short to medium term. The IPCC Fourth Assessment Report finds that global climate change will severely impact coastal communities and ecosystems—with massive coral-reef mortality, intensification of coastal storms, inundation, coastal erosion, and threats to marine habitat, vital infrastructure, settlements and facilities that support the livelihood of coastal communities. The IPCC identifies tropical and developing coastal nations as the most vulnerable, owing to their socioeconomic status, multiple stressors, and low adaptive capacity.

In Year 4, SUCCESS will begin a global activity on assessing vulnerability and identifying and implementing climate change adaptations (V&A) to future climate change and climate variability on coasts and near shore marine ecosystems. This builds on the USAID Global Climate Change Office and program of activities and its report “Adapting to Climate Variability and Change: A Guidance Manual for Development Planning.” While tools and strategies for V&A are available, there is little experience in the ‘how to’ of mainstreaming these into development decisions, coastal planning, and policies and strategies of individual sectors.

USAID program designers and their national level counterparts are often unaware of the unique challenges of climate change in coastal regions and how to incorporate adaptation strategies into their portfolios. In response, SUCCESS will produce training modules and a Guidance Manual to help USAID and the development community—in particular, program designers—to understand how climate will affect the performance of development projects in coastal areas, and how to adapt project design to moderate harm or exploit beneficial opportunities from climate variability and future climate change. The Manual will follow a similar design and format as the current USAID base document on adaptation mentioned earlier and will be the first of a series of sector specific addendums to the base document.

The V&A activity has three broad primary objectives for Year 4

- Advance understanding by USAID and its development partners in the practical aspects of incorporating adaptation strategies into development projects occurring in coastal and marine areas
- Develop tools and guidance for adapting projects to climate change
- Develop and test training modules on CCA

The following activities are designed to support these objectives:

Desktop review of climate change V&A: Collect and review reports, case studies, and guidance manuals from similar initiatives. The goal is to identify past, current and planned work on the theme of climate change mainstreaming, and identify how this activity will contribute to furthering the good work that has gone on before. A compilation of materials and web sites will be developed and packaged on a CD and made available online for internal use.

Training modules: Training modules on mainstreaming adaptation to coastal climate change in development projects will be designed and tested. The first training is a one-day event held back-to-back with the USAID regional EIA workshop in Bagamoyo, Tanzania in February 2008. If this add on is not possible, another venue will be identified. An early emphasis on training modules is intended to force a rapid learning curve on practical guidance on tools and procedures for development professionals and program designers on mainstreaming adaptation to climate change and variability. The training module will form the contents of the Guidance Manual, so feed back from the training course is also feed back for the manual. The training is also intended to increase awareness of the coastal zone and its services and values, and increase understanding of the importance of mainstreaming climate change adaptations into development projects in coastal areas. A second regional feedback workshop or training event could be held in FY08 with additional funding and in collaboration with regional USAID missions. RDM/A has, for example, expressed interest in this area. The second training module on climate change adaptation in coastal regions will be developed and tested in the CRC Summer Institute in June 2008—an advanced course aimed at experienced coastal practitioners.

***Development and review of proposed structure and contents of Guidance Manual*:** In tandem with working on developing the training modules, a detailed outline of the Guidance Manual will be prepared with an initial outline shared with USAID Water Team and Global Climate Change Office partners for input and comments in November 2007. By January 2008, an outline sufficiently advanced for peer expert review by the development community will be presented in a meeting in Washington, D.C.

Guidance Manual: The text of the Manual will be constructed after feedback from the review panel on the detailed outline. A first full draft is targeted for May 2008, three months after the Bagamoyo training course. Another four months is planned for internal review, revisions and additions, and production in Quark (to follow the template of the base USAID document).

Communications and outreach: A Fact Sheet on this activity will be prepared and information and resources on this activity will be placed on the SUCCESS web site. The December issue of Basins and Coasts will feature climate change.

Summary of Tasks and Schedule

Tasks	Date
Desktop review	Oct 2007 – Jan 2008
Training Course Design	“
Development of draft tools and procedures for Training module	“

Annotated outline for internal AID Review	November 2007
Fact Sheet	November 2007
Basins and Coasts featuring climate change	December 2007
Panel Review/Input to annotated outline in D.C.	January 2008
Guidance Manual full draft for review	May 2008
CCA training (at USAID EIA workshop in Bagamoyo)	February 2008
Summer Institute training module	June 2008
Final Guidance Manual, delivered in digital format	September 2008

Outputs

- Two training modules
- Digital collection of resources (for internal use)
- Approved outline of the Guidance Manual
- Fact Sheet
- Basins & Coasts Issue on Climate Change, December 2007

Results Expected

Indicator	***Year 4 Target***
12. Publications documenting impacts of best practices (Guidance manual and fact sheet)	2

Proposed activities in FY 09 if additional funding is available will include:

- Presentation of the Guidance Manual to USAID and development community in DC
- Print and distribute hard copies of the Guidance Manual
- Second regional workshop or training course in a location to be determined by interest of regional USAID missions and other partners
- Implementation of the Guidance Manual by providing direct assistance to USAID missions and development partners in applying the Manual to new or ongoing programs. This could be done through training or mentoring
- Communication and socialization of the Guidance Manual through targeted conferences and meetings
- A theme based web-portal on coastal climate change adaptation in the IMCAFS knowledge management system or SERVIR web portal structured around the outline of the Guidance Manual and designed as a portal for resources, training, links, and case studies

3.4.2 Secur ean Initiative on Small-Scale Fisheries

Small-scale capture fisheries are of critical importance to developing countries because:

- Fish are the most heavily traded food commodity and fastest growing international “agricultural” commodity and developing countries provide 77% of global fishing production
- Supply-demand relationship is “south” to “north”
- Net exports of fish in 2002 earned $17.4 billion in foreign exchange for developing countries—greater than combined net exports of rice, coffee, sugar & tea!

In Year 4, CRC will work with the SUCCESS CTO to identify and secure opportunities for working in small-scale capture fisheries. Such an effort would link /complement SUCCESS initiatives in sustainable, low-impact mariculture—which can serve to reduce some of the current pressures on fisheries and which is expected surpass fisheries in its economic dimensions by 2030.

3.3.3 Development of a Programming Guide for Fisheries ands Mariculture

Within USAID, capture fisheries is emerging as an issue of increasing importance for natural resources management, impacts on biodiversity as well as from a trade, income generating and food security standpoint. Already, USAID missions are starting to invest in sustainable fisheries initiatives (e.g. FISH Philippines and MACH Bangledesh) and there is increasing interest in promoting sustainable fisheries GDA programs as well. In addition, aquaculture worldwide is growing faster than any other food commodity and is expected to overtake capture fisheries by 2030. While it represents a significant opportunity it can also be a significant threat to biodiversity conservation. Seafood is a highly traded world food commodity with increasing movement of product from developing to developed nations. Due to this increasing interest in capture fisheries and aquaculture and due to the growing environmental and economic issues surrounding these sectors, SUCCESS will work with USAID EGAT water team to develop a programming guide for fisheries and mariculture. This guide will be modeled after the USAID biodiversity guide and targeted at USAID program staff and partners. SUCCESS will work closely with the CTO to prepare this guide. Team members will include a fisheries management and extension specialist from URI (Kathy Castro) as well as the SUCCESS mariculture specialist from UHH (Maria Haws).

Tasks and Milestones	**Date**
Initial meeting with USAID water team to develop draft outline	November 2007
Developing a first draft	Dec 07 – Feb 08
Second meeting in DC to review first draft	March 08
Revisions to first draft	May – June 08
Second review meeting and planning of naxt steps…	July 08

Outputs

- Draft guidance document

Expected Results

Indicator	***Year 4 Target***
12. Publications documenting impacts of best practices (Draft Guidance manual)	1

3.4 Practical Innovations On-The-Ground

3.4.1 In Tanzania

Scale of intervention: District level
Lead Implementing Organization: WIOMSA
Other Partnering Organizations: Institute of Marine Science, University of Dar es Salaam, TCMP, UHH
Activity Coordinator: Aviti Mmochi
US Liaison: Brian Crawford, Maria Haws

Background

SUCCESS is improving coastal community livelihoods through sustainable utilization of marine and coastal resources as part of broader ICM programs. In Zanzibar, the Menai Bay Conservation Area (MBCA) has a draft management plan but specific issues concerning wild shellfish harvests and culture are not specifically

addressed. Nevertheless, SUCCESS activities in Menai Bay are in accord with numerous proposed strategies identified in the draft plan, including the promotion of alternative income generation activities (including mariculture) to broaden the income base and lessen involvement in unsustainable resource use activities. SUCCESS is also assisting the MBCA address the declining stocks of cockles, harvested primarily by women gatherers on the reefs flats. SUCCESS has worked with MBCA and four local communities to establish several no-take zones, an associated co-management plan and village bylaws—which have already been adopted by the individual villages and endorsed by the MBCA. The plans are ready for submission to the District Commissioner for the West District where the four villages are located. Linked to the implementation of the MBCA management plan SUCCESS is also implementing a diversified livelihood strategy for the women shellfish harvesters. This involves the culture of half-pearls, introduced in Bweleo, with an expected first commercial harvest and sale in Year 4, as well as development of shellcraft businesses. SUCCESS will continue, as needed, to provide the villagers who are growing, harvesting, and turning half-pearls, into jewelry—including helping them refine their small business management and marketing practices so they can realize increased sales and income from their products. Support for these livelihood ventures has also increased villagers' cooperation and enthusiasm for the cockle management program.

SUCCESS has also developed a low cost, low intensity, environmentally low impact milkfish farming method. These pilot milkfish ponds have been developed by modifying existing salt producing ponds for fish culture purposes. In Year 4, the Program will address how to increase production levels through improved stocking and management practices—enabling the farmer to repay construction and management costs and earn profit in the first cycle of production. SUCCESS will also continue working on fry/fingerling collection methodologies–a potential constraint to rapid expansion—and is working with government on policy issues to support a sustainable brackish water fish farming industry. The pilot/demonstration results have already led to adaptation of this farming method in other areas in Tanzania and the East African Region.

Another example of an innovative low-impact sustainable mariculture practice being piloted by SUCCESS is seaweed farming. Although this activity has been operating since the 1990s, the production of the more highly valued *Kappaphycus alvarezii* species in the mainland had been hampered by die-offs and there is increasing concern about impacts on seagrass beds from current farming methods. Seaweed farming is practiced widely throughout Tanzania including within the MBCA. In response, SUCCESS adapted from Southeast Asia, the floating line seaweed farming system in deeper waters—making year-round production of seaweed possible. Nearer shore seaweed methods such as peg-and-line experienced die-offs seemingly related to farming in too shallow areas where the water quality varies greatly. This floating line method has proved more productive and economical, lessens environmental impacts on seagrass beds, and results in fewer die-offs. Local communities have embraced the method and this new type of seaweed farming has now expanded to Pande, Kondo and Changwahela villages. However, we do not expect that farmers will necessarily stop using the peg and line method, but we will advocate that further expansion of farms use the floating line system given its economic advantage and lesser environmental impact. Since the floating line system is also a fish aggregating device, it attracts fishnet fishers. Hence, SUCCESS has developed village by-laws and an associated zoning plan to help reduce conflicts between these fishers and seaweed farmers.

Changes in strategy for SUCCESS Tanzania include working more closely with village and district stakeholders to ensure approval and implementation of the village by-laws and other management programs in Mlingotini and Menai Bay. SUCCESS will phase out of mariculture activities on the mainland and turn over dissemination activities to the TCMP and MACEMP programs to allow for greater focus by SUCCESS on key policy issues for sustainable mariculture, integrated co-management strategies, and livelihood initiatives in Menai Bay.

By the end of the SUCCESS Program, expected results will include:

- Demonstrated improvement of sustainable coastal livelihoods through small scale, low cost sustainable milkfish farming in Mkuranga and Bagamoyo and expansion into other coastal areas in Tanzania.
- Demonstrated improvement of sustainable livelihoods through year round production of seaweed by using both peg and line and floating line system and capture of foraging fish using basket traps.
- New businesses and business associations created and improved entrepreneurial skills and livelihoods of the people in the Fumba Peninsular through pearl farming and shell handicraft production.
- Improved national policies and district bylaws to ensure sustainable development of mariculture that minimizes the impact on the environment
- New models for co-management of marine resources demonstrated that protect bio-diversity, improve the sustainability of fisheries and reduce sea use conflicts.
- Empirical evidence that demonstrates the conservation and fisheries benefits of small-scale no take zones for cockle fisheries.
- Field results contributed to the regional mariculture network.

Year 4 Task Objectives

Promotion of sustainable, low tech, mariculture practices appropriate in the East Africa Region as diversified livelihood option for coastal communities.

The Program is working to improve technologies to address several key constraints for additional expansion and improved production in the established seaweed farming sector and alternatives to inter-tidal/sub-tidal farming, which suffers from occasional die-offs and raises many concerns about impacts on seagrass beds.. While the pilot schemes for milkfish farming and seaweed farming are completed, those for half-pearl farming will be completed in the first and second quarters of Year 4. For milkfish farming, a focus will be on improvements in fry and fingerling collection, addressing related policy issues, and disseminating pilot/demonstration methodologies nationally through outreach workshops and region-wide through the regional web-based mariculture network.

Piloting of sustainable low cost techniques for milkfish and seaweed farming in East Africa: While piloting of sustainable low cost techniques for milkfish and seaweed farming in East Africa have demonstrated the positive potential of these two activities, the challenges now are to 1) connect the findings on economic and technical feasibility with sound policies that allow for responsible expansion of these activities within Tanzania in an environmentally sustainable manner, and 2) secure more information on and develop methods for milkfish fry and fingerling collection—a potential bottleneck to industry expansion.

Policy Development and National Outreach on Milkfish and Seaweed Farming: The Tanzania Department of Fisheries is in the process of developing an aquaculture strategic plan which includes a mariculture component. The SUCCESS team has already been active in providing recommendations and inputs to this strategy, particularly in the area of pond mariculture and milkfish farming and our team is represented on the committee drafting the mariculture component of this strategy. Policy issues were highlighted in the recently completed milkfish economics report and include proper pond siting and construction, fingerling collection, as well as the need for ecosystem-based zoning of pond mariculture and improved permitting procedures. SUCCESS will continue to work with the Dept. of Fisheries to ensure that sound development policies and adoption of best practices are incorporated into the strategy to ensure promotion of sustainable and environmentally low impact mariculture activities along the Tanzania coast. SUCCESS will also scale up its extension strategy to include a series of local training workshops. A guide to farming milkfish and the report of milkfish economics and policy regulations with the experiences emanating from the trials previously developed and will be distributed and made available on the appropriate websites (WIOMSA and CRC). The guide and the economics reports on milkfish and floating seaweed farming, along with the pilot/demonstration farms, will serve as the basis for more extension training courses

expected to be carried out in 3 coastal zones in Tanzania namely Tanga, Pemba and Rufiji. Already there is estimated to be about 100 milkfish ponds country wide at different stages of development. Training of extension agents is now considered critical to ensure that best practices are followed which allow the industry to grow without creating any significant environmental impacts. A forum for discussion on mariculture issues will be launched in year 4 (see knowledge management and regional networks workplan section).

Shellfish, pearl farming and development of capacity for entrepreneurship for women groups in the Menai Bay: SUCCESS will make the first commercial harvest of half-pearls in November, 2007 followed by polishing of the pearls and an official launching of the initiative by auctioning off the jewelry-set pearls to selected elites in Zanzibar. The Program will also install a more stable underwater long line system for the pearl farm; continued work with women's shellcraft and peal farming group to develop a Savings and Credit Cooperative (SACCO); and assist them with developing markets—including but not limited to tourist sites and trade conventions—for their pearls and other jewelry.

Promoting community-based and district scale resource management and zoning policies

Numerous activities are competing for space in Mlingotini and Menai Bay, leading to current and potential future conflicts between fishermen and seaweed farmers there. Hence, sustainable development of seaweed and pearl farming will require that management and zoning policies are developed. These have the potential to reduce conflicts as well as ensure sustainable management of the resources. For the policies to be effective, however, the communities need to know and understand the need for policies and assist in their enforcement.

Zoning plan for seaweed farming in Mlingotini Bay: Maps of the Bay developed in Year 4 will be used in discussions with the district officials and attached to the bylaws before they are launched. Other activities include putting up signboards and buoys demarcating the different zones as per the map/zoning scheme and official launching the by-laws.

Establishment of improved harvest practices (no-take zones) for cockles in Menai Bay: For sustainable collection of cockles from the wild, no-take areas have been identified; and the rules, penalties, and roles of village management committees defined (including primary enforcement by the communities themselves) ; village by-laws formally approved; and maps drawn of the no-take zones. Community monitoring is ongoing with baseline information already collected. The monitoring is designed to assess the impacts of the no-take areas, looking specifically for the expected recruitment effect. Year 4 will continue the monitoring and will oversee endorsement of the by-laws by the district to ensure they have full legal weight for enforcement by the village management committees. SUCCESS will also work with communities on improved local enforcement of no-take rules by installing sign boards and marker buoys as well as disseminating results of monitoring to highlight economic advantages of high compliance. SUCCESS will also advise MBCA on policies for future mariculture development in Menai bay as well as on scaling up strategies for the no-take zones.

Expand communication and outreach

Two pilot programs (floating seaweed farming and milkfish ponds) developed in the first three years of SUCCESS are ready for dissemination to extension agents and coastal communities. This is timely as the Department of Fisheries is developing its strategy on mariculture development in Tanzania, and has included SUCCESS team members Aviti J. Mmochi, Nariman Jiddawi and Brian Crawford in selected strategy meetings. A SUCCESS-developed mariculture manual is earmarked for use in training grass root and district level extension agents.

Articles about SUCCESS will be published in the quarterly WIOMSA magazine and newsletter, national dailies and magazines (e.g., *Kakakuona/*Tanzania wildlife magazine). The Program will continue meetings with district fisheries officers to disseminate experience and results of SUCCESS pilots on milkfish and floating line seaweed farming. One media person will attend these meetings and communicate key findings to the larger public. In October 2007, SUCCESS will launch the Western Indian Ocean mariculture forum. Later in the year, a press release will announce the event to auction SUCCESS-produced half-pearls.

Tasks and Milestones	**Date**
Piloting of sustainable low cost techniques for milkfish and seaweed farming in East Africa	
policy development on mariculture – contribute to Department of Fisheries activities on mariculture policy development	Ongoing
Determination of the best areas, methods and tide times for collection of fry/fingerlings in the rainy seasons.	July 2007
Report on fry/fingerling collection program	August 2008
Conduct study on fry and fingerling abundance and seasonality (leveraged funds from MASMA)	On-going
Develop marketing strategy for milkfish	July 2008
Mariculture policy development through the DoF national aquaculture strategy	• On-going
Conduct Regional and National Outreach on Milkfish Farming • Conduct 4 zonal milkfish and floating line seaweed farming dissemination workshops/trainings at Farmer centers (Rufiji workshop dependent on co-sponsorship by WWF) o Tanga o Pemba o Rufiji	• January to March 2008 • Jan • Feb • March • March
• Launch and implement mariculture discussion forum	• October 2007
Shellfish, pearl farming and development of capacity for entrepreneurship for women groups in the Menai Bay	
Pearl Floating Farms	
• Monitor survival and nacre production in pearl oysters	On-going
• Establish and test the use of long lines for half pearl farming	October, 2007
• Continue collection and seeding of adult Pteria and Pinctada both on floating systems and long lines	August 2007-July 2008
• Check oysters to determine if they are ready for harvesting	September, 2007
• Harvest pearls (tentative)	November, 2007
• Second harvest for Pinctada	June 2008
• Second harvest for Pteria	October 2008
• Work with Menai Bay and Fisheries Department, Zanzibar to develop guidelines for oyster collection and pearl production	May 2008
Mabe and shell polishing and marketing	
• Public sale of pearls in festival in 2007/8 to include politicians, traders and USAID Tanzania	To be decided
• Develop marketing plan for pearls and other polished shells	Ongoing
• Produce and market shell handicrafts	Ongoing
• Develop product packaging and advertisements	November 2007
• Develop and implement marketing strategy for pearls and shell artifacts	December 2007

• Conduct the third pearl farming and processing workshop	October – November, 2007
Development of a cooperative or SACCO depending on what is most appropriate - to be conducted by extension officers of the Agriculture Department	January 2008
Develop methods and conduct spat collection experiments	Aug 07 – July 08
Zoning plan for seaweed farming in Mlingotini Bay	
• Discuss zonation scheme at district level: one meeting	October 2007
Conduct combined district/village zoning meeting: one meeting	TBD if needed
• Submit zoning plan to district council for endorsement	November, 2007
• Install marker buoys and signboards	December, 2007
• Launch the bylaws	January, 2008
Establishment of improved harvest practices (no-take zones) for cockles in Menai Bay	
Continue monitoring of the cockle no take zones	Ongoing
Put up signboards to indicate the presence and use of the no take zones	November 2007
Put markers and signboards to show the no take zones	Ongoing
Bi-annual monitoring of the cockle community structure in the no take zones, collection areas and control sites	October 2007 and May 2008
Approve map and incorporate no-take areas into the MBCA draft management plan	September 2007
Launch the management plans and the bylaws	November, 2007

Expand communication and outreach	
News paper articles in the local news papers one every 3 months	December 2007 March, June, September 2008
One article in each issue of quarterly WIOMSA newsletter and WIOMSA magazine	October 2007 February, May, August 2008
Launching of the Western Indian Ocean mariculture discussion forum	October 2007
Four zonal training programs to disseminate milkfish and floating line seaweed farming methods	January February, March 2007 (2 in March)
Press release re launch of sale of half-pearls produced in Zanzibar	November 2007 March 2008

Outputs

- DoF aquaculture strategy document with policies and best practices for milkfish farming incorporated
- TrainNet data for milkfish training workshops
- Milkfish manual
- Report on pearl production (May)
- Half pearls sold – number and value
- TrainNet form for pearl processing workshop
- Approved Mlingotini zoning plan including associated use zone maps
- Map designating no-take areas
- Village by-law concerning zoning scheme management
- Draft section of MBCA management plan w/ no-take areas incorporated
- Report on the no-take zone – cockle abundance and size frequency inside no take zones, in adjacent

areas and at control sites

Results Expected

Indicator	*Year 4 Target*
Number of biologically significant hectares	5,800
Marine hectares	5,800
Terrestrial hectares	0
Number of policies, laws, agreements, or regulations promoting sustainable natural resource management and conservation implemented	1
Number of persons participating in coastal resources and conservation planning initiatives	100
Number of people with increased economic benefits derived from sustainable natural resource management and conservation.	30
Number of new or improved enterprises developed	1
Number of people trained	90
Number of training courses implemented	5
Number of active participants in web-based regional networks (gender disaggregated)	15
% females participating in coastal resources and conservation planning initiatives	50%
% females with new full time jobs in excess of two weeks created	67%
% females trained	30%
Number of female participants in web-based regional networks	33%

3.4.2 In Nicaragua

Scale of intervention: Municipality level
Lead Implementing Organization: Centro de Investigación de Ecosistemas Acuáticos de Universidad Centro America (CIDEA – UCA)
Other Partnering Organizations: the Pacific Aquaculture and Coastal Resources Center at the University of Hawaii; and local NGOs for diversification of livelihoods and health (LORNICA, OIKOS, SIFE); and the Ministry of the Environment and Natural Resources (MARENA)
Activity Coordinator: Agnes Saborio
US Liaison: Maria Haws

Background

SUCCESS is creating the enabling conditions for ICM with coastal communities; forming small businesses based on sustainable natural resources use; developing best management practices to reduce environmental risks for enterprises such as shrimp farming; and promoting co-management for the regionally important cockle fishery and mangrove conservation. SUCCESS activities build community and institutional capacity for biodiversity conservation, using a targeted approach to addressing key threats to biodiversity of natural/coastal resources in the region.

An array of alternative livelihoods (e.g., ecotourism and breadmaking) for communities and individuals otherwise reliant on natural resource extraction has been successfully implemented and surrounding communities are now requesting assistance in replicating these in their areas.

CIDEA, working with Asseradores and surrounding communities, has successfully established a model of co-management for the regionally important black cockle fishery. While biological results remain pending, the buy-in, participation and leadership of the community has made this effort one of the first successful fisheries co-management efforts in the area and this social capital provides the basis for additional management activities. SUCCESS has also laid the foundation for community-based ecotourism in the Padre Ramos Protected Area—an activity identified in the area management plan as an alternative to natural resources extraction activities.

CIDEA has led an innovative effort in water quality and microbial research to inform the development of shellfish sanitation plans for coastal areas dependent on the harvest of shellfish—many of which many be contaminated with dangerous human pathogens such as Hepatitis. Determining the areas for safe harvest will help protect those consuming Nicaraguan shellfish locally, nationally, and for export.

CIDEA assisted the government in drafting the Estero Real Management Plan, which has now been approved, and an array of implementation projects is now underway. In the Estero Real and Padre Ramos, development of Best Management Practices for shrimp farming is crucial in Nicaragua given that approximately 60-70% of shrimp farming takes place (legally) in protected areas, having been grandfathered into the area plans. CIDEA has worked with shrimp farmers for over 10 years to improve the environmental aspects as well as to improve production efficiency for the benefit of small, poor farmers. CIDEA has also worked with the Nicaraguan Association of Aquaculturists to develop and promote the National Code of Practice for shrimp farming—now adopted by government.

Several lessons have emerged from the progress made to date. SUCCESS is essentially the first ICZM program to work long-term in the area. The culture in local coastal communities can make work there slow and challenging (e.g. trying to convert post larvae fishers who previously worked only eight days/month but who in this new livelihood need to work every day) and is complicated by their lack of previous experience with participatory management and general lack of technical skills. Implementation is significantly more effective when working with small vs. large groups, particularly in those cases where organizations are weak. Practical, hands-on training is also more effective with community groups than training that is too conceptual or theoretical. In addition, synergies with other partners can make work more efficient. With respect to seeking broader ICM goals, it is often more successful to work in a participatory approach on first reaching “indirect” objectives—such as promoting alternative livelihoods and addressing food source concerns. These are quality of life issues, which must first be addressed before communities can address ICM and biodiversity conservation considerations.

Implementation strategies, as outlined next, are evolving as experience and insights are gained.

***Mariculture**:* Two shrimp farms working with CIDEA in the Padre Ramos protected area have adopted BMPs as far as possible given their financial limitations. Practices such as routine record-keeping, improved use of feeds and fertilizers, and the ability to calculate proper stocking densities have yielded multiple benefits—improved revenues, reduced threats to natural resources, and the lowered risks. Farmers are on a stable and sustainable footing, but will continue to receive limited technical support to ensure that adoption of these practices continues. Continued extension visits by CIDEA will be financed through other projects. No further work with tilapia is planned though the SUCCESS program.

Alternative livelihoods: Alternative livelihoods activities include follow-up support for the existing bakery and start-up of three new ones—with funding from the French NGO Lorrnica and the Campa shrimp farms

and with technical support from SUCCESS. In all cases, the focus is on women currently making their living from natural resource extraction activities (illegal collection of shrimp post-larvae). Our expectation is that as they gain confidence and continued income from this alternative livelihood, dependence on illegal resource harvest practices will decline.

Ecotourism development continues at FINCAMAR—working with the community and tourism specialists to develop marketing strategies, including development and pricing of tourist packages, make contacts with embassies and NGOs to encourage tourism among their personnel, establishing links on popular tourism web pages, and development of strategies that FINCAMAR can implement once SUCCESS has ended.

Co-management for the cockle fishery: This work continues as planned with regular visits for monitoring, technical assistance and community meetings. The second bi-annual sampling should confirm results of these trials. Once known, these results will be presented to others working on similar issues.

Development of shellfish management plans through water quality monitoring and microbiological analysis of cockle tissues will continue through 2009 with new funding leveraged from the AquaFish CRSP and will include drafting preliminary shellfish sanitation plans for the study areas.

Support to Protected Area Management: SUCCESS activities are directly related to priorities outlined in the municipalities annual work plans. For example, in the protected areas of Estero Real and Padre Ramos, SUCCESS is helping communities that currently are dependent on subsistence fishing, employed on shrimp farms, or working in the commercial extraction of mangrove wood, to develop alternative livelihoods. This includes ecotourism, which the municipality of Padre Ramos and SELVA (the NGO holding the management contract for the protected area) have also identified as a priority.

CIDEA-UCA has strengthened its own capacity in ICM and created synergistic relationships with governmental agencies and NGOs with presences in the coastal zones of Padre Ramos and Puerto Morazan. With the help of several major grants it has recently been awarded, CIDEA will be able to continue its work with local fisheries management, shellfish sanitation and similar activities.

By the end of the Program in Year 5, the following results are expected:

- CIDEA staff capacity as extension specialists on a wide range of ICM topics established
- New co-management regime for cockle fishery being effectively implemented—one that is scientifically valid; has legal basis, institutional partners, technical tools, and constituencies; has been tested; and serves as the first successful model of fisheries management in the Golf of Fonseca area
- Improved legal and technical framework to implement best management practices for shrimp farming including a National Code of Practice for Shrimp Farming adopted by government
- Feasible and profitable alternative livelihoods for communities previously dependent on natural resources extraction established
- Improved water quality management and reduction of negative environmental impacts
- Shellfish sanitation plans for three estuaries and their surrounding communities developed
- Elements of the Estero Real Management Plan will have been successfully implemented including improvements in the scientific data base for decision making,

Year 4 Objectives, Tasks and Schedule

Continue technical support to alternative livelihoods to reduce pressure on natural resources

Continue technical assistance to the women's group producing bread. SUCCESS will continue providing follow-up support to improve methods, increase profits and production and ensure sustainability of the

bread-making livelihood activity. This includes promoting efficient use of raw materials, streamlining record keeping and working on food safety issues. As the bakeries generate more income, these women should be able to leave or significantly reduce their illegal fishing activities.

Reactivate the bakery in Alemania Federal, El Realejo and start two new ones in El Congo, (funded by CAMPA S.A., a large shrimp farm) and in Puerto Morazan (funded by Lorrnica, a French NGO). Based on the success of the Padre Ramos bread baking business, stakeholders in other communities have requested support from SUCCESS to start bakeries. Interested stakeholders are women fishers (for cockles and shrimp post larvae) or women working on shrimp farms and seeking alternatives to these activities. Leveraged funds from a private shrimp farm and the NGO Lornica will support much of this work. In addition to developing small businesses, this is an opportunity to raise community awareness of the need for biodiversity conservation, hence the inclusion of this topic in the training plan.

Promote ecotourism in FINCAMAR as a way to generate income through non-extractive uses of natural resources and promote awareness and conservation of the area's biodiversity. Upgrades to the terrestrial and aquatic trails will be made in order to improve their attractiveness and access. Two volunteers will assist with identifying birds in the area—as bird watchers may be among the groups that find this area appealing. SUCCESS will produce a brochure on local birds and train local guides in the birds' life history and how to identify them. Marketing will emphasize the variety of ecosystem attractions found in Padre Ramos area. This work will result in stable and sustainable eco-tourism in Padre Ramos—providing the community with income without having to resort to extraction of natural resources. It will also build community investment in the ongoing protection of their natural resources.

Community-based Resources Management

Continue supporting and monitoring co-management of the black cockle fishery in the Aserradores community and disseminate preliminary results. The Ministry of the Environment and Natural Resources established a closed season for fishing cockles between April 15 and July 15 of each year, however this ban is only partially effective in protecting this important (and declining) fisheries resource. Also, the ban creates a hardship for the communities, which depend on the resource for their daily food and income.

Under the auspices of MARENA, CIDEA was granted permission to test an alternative means of co-management for the fishery in the Asseradores estuary. Sections were designated as voluntary "no-take" zones and the community has demonstrated high interest and high voluntary compliance with this agreement. Sampling to detect whether cockle populations are increasing as a result of the no-take zones is ongoing and definitive results will be available by SUCCESS Year 5. If the no-take zones prove to be an effective means of protecting cockle populations, this work can serve as a new model for Nicaragua and the entire LAC region—where shellfish populations are threatened. Work in Year 4 focuses on maintaining community interest through outreach and participatory research in the form of sampling the cockle populations and taking growth measurements in the no-take and allowed fishing zone.

Work related to cockle management including the sampling of water and cockle tissues for human pathogens, will be continued under new funding from the AquaFish CRSP.

Expand Communications and Outreach

The SUCCESS Program now covers much of the Northern Nicaraguan Pacific Coast, working in two major protected areas and other estuaries. An important element of this work is diffusion and public outreach to publicize the results of the SUCCESS work and to promote replication and public support. UCA uses a variety of media to achieve this—national press, university press, magazines, radio, or other available means. Target audiences include rural stakeholders, government agencies and civil organizations. UCA also

regularly invites visiting foreign experts, including SUCCESS personnel, to give seminars at UCA. These are usually covered by the press and result in newspaper articles. In Year 4, public outreach efforts will continue with a focus on the success of cockle co-management and the ecotourism efforts.

Tasks, Milestones and schedule

Tasks and Milestones	***Date***
Continue technical assistance to the women's group producing bread	
Short event in accounting and costs	October 2007, January and May 2008
Shorts events of technical attendance (review and improvement of production process)	February, June 2008
Short event in hygiene and good practices of manufacture	March, May 2008
Reactivate the bakery in Alemania Federal, El Realejo and start two new ones in El Congo and in Puerto Morazan	
Infrastructure preparation	October 2007
Feasibility study of bread production for each site	October-November 2007
Short events in the process of bread production (8 per site)	November-December 2007 February-May 2008
Short events (feasibility, costs, entrepreneurial motivation and vision, beginning book keeping) (5 per site)	September-December 2007; February 2008
Short events in hygiene and good manufacturing practices (2 per site)	January 2008
Learning exchange between bakeries of Fincamar and Alemania Federal	November 2007, June 2008
Learning exchange between bakeries of Fincamar and Puerto Morazan.	November 2007, June 2008
Learning exchange between bakeries of Fincamar and El Congo	November 2007, June 2008
Short events in environment and biodiversity (2 per site)	July–September 08
Monitoring and pursuit by project personnel (6 per site)	October 2007- Sept 08
Follow-up by project personnel (3 per site)	Oct 2007, September 2008
Promote ecotourism in Fincamar as a way to generate income through non-extractive uses of natural resources and promote awareness and conservation of the area's biodiversity	
Conduct monitoring and follow-up (project personnel: 3 visits)	October 2007 – September 2008
Identify birds (volunteers for the prosperity) and train community guides	November 2007
Post signage and interpretation materials for terrestrial aquatic tourist trail at Rosita farm (small bridges, labels, banister railing, latrine)	November 2007 - March 2008
Post signage and interpretation materials for aquatic tourist trail and acquire minor equipment for observation of birds, bird identification brochure	November 2007 - March 2008
Develop tourist packages	January - June 2008
Develop marketing strategies	January - June 2008
Make contacts with potential clients and tourist operators, establish links to popular tourist websites	January - June 2008
Continue supporting and monitoring co-management of the black cockle fishery in the Aserradores community and disseminate preliminary results	

Tasks and Milestones	*Date*
Meet with community to evaluate results of samplings	October 2007- April 2008
Continue activities to raise awareness and share results with neighboring communities that also extract black cockles in the study zone (2)	October 2007 March 2008
Continue monitoring and follow-up by project personnel (3 visits)	October 2007- September 2008
Conduct follow-up by project personnel (2 visits)	October 2007- September 2008
Conduct visits to collect information on commercialization of black cockle (2)	November 2007
Sample population density at 18 and 24 months from the time no-take zones declared (2 samplings)	March 2008 September 2008
Conduct visits to work with community to re-install signage in no-take zones (3).	January 2008 May 2008 August 2008
Conduct videos presentation and short event in environment and biodiversity (2)	February 2008
Expand Communications and Outreach	
Write two articles for UCA magazine on cockle co-management and bivalve sanitation initiative	December 2007, March 2008
Write one article on cockle co-management for the UCA newsletter	April 2008
Publish one article on cockle co-management in the newspaper	April 2008
Write and publish a newspaper article on the tourist destination at FINCAMAR and also publish in the UCA press	May 2008

Outputs

- Feasibility studies for bakeries
- Document of the market strategy for ecotourism
- List of contacted clients and operators for tourism
- Tourism interpretation materials (brochures, maps, website mentions)
- Report on black co-cockle management results
- Articles on SUCCESS efforts

Results Expected

Indicator	*Year 4 Target*
Number of biologically significant hectares	4,031
Marine hectares	*2,323*
Terrestrial hectares	*1,708*
Number of persons participating in coastal resources and conservation planning initiatives	45
Number of people with increased economic benefits derived from sustainable natural resource management and conservation.	30
Number of new or improved enterprises developed	3
% females participating in resources and conservation planning initiatives	38%
% females with new full time jobs in excess of two weeks created	30%

3.4.3 In Ecuador

Scale of intervention:	Municipal level
Lead Implementing Organization:	EcoCostas
Other partnering organizations:	University of Hawaii at Hilo
Activity Coordinator:	Rafael Elao
U.S. Liaison:	Pam Rubinoff

Background

SUCCESS is assisting EcoCoastas to improve management of the Cojimies estuary a biologiocally significant estuary located on the northern coast of the mainland. Our goal is to avoid a repeat of previous ecological and economic collapses of coastal estuaries in Ecuador such as Bahia de Caraquez. EcoCostas provides technical assistance to local groups in the Cojimies estuary and watershed area that are testing and implementing alternative livelihood activities, promotes new forms of sustainable production and improves existing livelihoods—e.g., beekeeping, family gardens, tree crops for reforestation, and ecotourism. These non-resource extractive activities help conserve biodiversity in these resource rich areas of the Cojimies Estuary and its surrounding watersheds. EcoCostas has successfully created enabling conditions for ICM involving major stakeholders and user groups. Before SUCCESS, there were no activities addressing serious natural resources threats in the Cojimies area; now stakeholders are active in conservation and management efforts and demanding further support. The site-specific focus in Ecuador is providing process models that are useful and can be replicated locally, regionally, nationally, and in other developing countries.

Accomplishments to date have included:

- Strengthening of coastal livelihoods, food security, and income through alternative income-generating activities for residents otherwise dependent on natural resources extraction
- Nuevo Milenio farmers adopted a soil conservation/alternative livelihood strategy of multi-cropping
- *Chame* production has been researched and documented; *chame* culture is a regular farming activity in the Cojimies; increased awareness of the need to protect this at-risk species and its wetland habitat
- Innovative scientific studies conducted on the conditions and trends of the ecology, flora, fauna, water quality, and other aspects of the Cojimies Estuary and Mache-Chindul Ecological Reserve
- Constituencies built among stakeholders, networks established with specialists and institutions, and alliances built with government agencies to create demand for ICM and provide technical assistance
- Leveraged funding has been secured to continue and expand work in the Cojimies area
- Area shrimp farmers are now willing to engage in ICZM efforts in Ecuador, paving the way for developing best management practices for shrimp farming and water quality management

Since EcoCostas has raised awareness of the need for coastal management and biodiversity conservation, and demonstrated practical methods to achieve goals, it can now accelerate efforts working towards ICM. In Years 4 and 5, SUCCESS will focus on working more directly with local municipal governments to implement activities leading to zoning, or guidelines related to use of natural resources to preserve biodiversity in the Cojimies Estuary and surrounding areas. SUCCESS will work to ensure livelihoods efforts in the rural areas of Cojimies are self-sustaining by the end of the Program.

Shrimp farming is a major economic activity in Ecuador that has dramatically altered the estuaries and surrounding lands and affected local communities. Involving the shrimp culture sector of the Cojimies Estuary as key stakeholders for the development of Best Management Practices (BMPs) for the estuary

shrimp ponds has been a significant accomplishment. In Year 4, the shrimp farmers will play key roles in the working groups which will develop guidelines for water quality and shrimp farming. These farmers have indicated willingness to support adoption of the guidelines as municipal ordinances.

In Year 4s and 5, SUCCESS will provide technical support to the alternative livelihood efforts, including continuing to strengthen the local promoters group. Since most of the livelihood activities are solidly grounded, the Year 4 emphasis will be on working with the tourist operators in the Mompiche-Bolivar corridor on the final training and preparation needed to make their eco-tourism efforts sustainable.

SUCCESS will provide technical support to the reforestation effort in Nuevo Milenio where cacao/passionfruit multi-cropping continues.

A new activity has developed in response to growing public demand for improved ICM. The municipality has requested assistance in developing zoning and guidelines for tourism development for the Cojimies-Cañaveral corridor, a pristine beach fringed with forest threatened by uncontrolled tourism development.

By the end of the SUCCESS program, expected results in the Cojimies field site include:

- Leaders and inhabitants of the Cojimies Estuary who belong to various community associations (e.g. Mompiche Committee for Tourism Development, Nuevo Milenio) have developed sustainable economic activities that reduce pressures on resources and contribute to biodiversity conservation
- *Chame* aquaculture is a sustainable production activity for Cojimies inhabitants-with 6 ha of ponds and natural bodies of water dedicated to *chame* production in Cojimies; and 20 ha near the mouth of the Mache River used for polyculture of *chame* and shrimp on a regular basis
- Four beekeeping enterprises—a low-technology business that sustainably utilizes tropical forests and benefits agriculture—will be producing and selling Cojimies brand honey
- Nine small businesses in Mompiche, Bolivar and Mache will offer ecotourism services; models will be in place for zoning and planning for tourist areas such as popular beaches
- Fifteen ha of passion fruit and 15 of cacao are in full production (also serving as ground cover and shade trees to conserve soil in areas previously deforested and eroded).
- Reforestation in three critical areas in Nuevo Milenio completed.
- Guidelines produced on water quality management in shrimp farming to reduce system wide impacts
- Zoning and improved organization of tourist activities for the Cojimies-Cañaveral beach areas to prevent undesirable effects of tourism development including preservation of natural areas

Year 4 Task Objectives

Develop a dialogue between key stakeholders on the most pressing themes related to the condition and management of the Cojimies estuary and the Mache-Chindul Ecological Reserve leading to development of strategies for the sustainable use and conservation of biodiversity in the area

ICM is a process that requires the participation and interaction of the key stakeholders utilizing the best information available in order to make good management decisions that balance conservation and socioeconomic development. The aim is to share with stakeholders—in a format easily understood by the general public—the results of three years of studies of the Cojimies watershed; and results of the pilots in *chame* culture, beekeeping, and sustainable agriculture systems.

Distribute the publications (see above) and the scientific and economic studies to local authorities, groups, stakeholders in the area, and donors. In order to increase interest among community members, the comic, brochures and compiled studies will be disseminated in meetings attended by authorities and representative of producer groups and civil society. This will be coordinated with the Environmental

Management Units (UGA) of the Municipal Governments of Muisne and Pedernales. A media campaign will also used as a dissemination vehicle. EcoCostas will use the release of the outreach materials as a final event with the EcoClubs of the Scholar's Network in Chamanga and will stage a contest among the clubs on the knowledge gained through reading of the outreach materials.

Support the development of management guidelines for the key topics of water quality and aquaculture in the Cojimies Estuary. At the June 2007 ICM workshop, conducted with the Municipal Governments of Muisne and Pedernales, a decision was made to form a permanent working group of experts to guide decision-making to improve stewardship. This group will now assist in making connections between existing and desired uses in the estuary, and the present and future conditions needed. They will establish the scientific basis for characterizing current conditions and identifying causes of degradation and impairment to estuary functioning and strategies will be developed to address critical management issues.

This work will produce two sets of inter-related guidelines for water quality and aquaculture management—which identify improved practices that benefit stakeholders, reduce externalities to other users and provide for long-term improvements. Although these are initially voluntary guidelines, SUCCESS will work towards official adoption by the municipalities and private sector organizations such as the shrimp farmers. Development of protected areas will likely emerge as one of the management guidelines based on past dialogues—hence, this effort to promote adoption by local authorities.

Contribute to implementation of local planning initiatives for non-extractive, sustainable uses in the Cojimies area and recuperation of critical habitats for biodiversity in areas surrounding the buffer zone of the Mache-Chindual Ecological Reserve

The Pedernales and Muisne *canton*s have extensive stretches of beautiful beaches that are ideal for tourism and related activities. The municipal governments in both *canton*s are trying, however, to prevent uncontrolled development of tourism here and have requested assistance with planning. The Municipal Government of Pedernales is already beginning an initiative with other institutions and organizations to zone the rural beaches, particularly those near the village of Cañaveral and Cojimies Parish. In Years 4 and 5, EcoCostas and partner institutions will assist with these planning efforts, especially for those areas with high biodiversity or where development otherwise threatens natural resources.

Deforestation is a major threat to the Cojimies Watershed and is a key topic for SUCCESS work in Years 4 and 5. EcoCostas, CEDERENA and the members of the El Carmen and Mache Associations are working together to reforest the borders of the Mache River, selected areas of forest on private lands, along the highway between the Pedernales-Chamanga Highway and on the Nuevo Milenio land.

Support zoning initiative for beach and tourism development for between Cojimies and Cañaveral
Reconstruction of the old road linking Pedernales and Cojimies is accelerating a real estate boom in the coastal area between Cojimies Parish and Cañaveral village, with large parcels of land being divided for sale to those building vacation houses on the beach, particularly attracting people from the upper socioeconomic classes in the Quito area., which also affects the socioeconomic character of the area.

The Pedernales Municipal Government recognizes that the rapid development of this relatively pristine coastal area will rapidly increase the demand for basic services. Hence, they are seeking assistance with a planning initiative for land use and for regulating development with the objective of providing adequate basic services, avoiding collapse of services in other areas, preventing the restriction of public beach access, loss of the scenic beauty and impacts on natural resources in this area. SUCCESS will provide technical assistance in planning and zoning, assist with compiling information on existing and proposed projects and uses, formulating scenarios illustrating a range of use types and densities, assessing the impacts and costs of these alternative formulations and assisting participating groups with weighing the benefits and

disadvantages of different development scenarios. Ordinances will be drafted and EcoCostas will work with officials to review, modify and promote adoption of these. The Municipal Ordinance will help in controlling development and will promote sustainable forms of coastal development that favor economic returns and reduce impacts on sensitive coastal habitats and resources.

Contribute to improving the skills and abilities of ecotourism operators for members of the Tourist Development Committee of Mompiche and Cojimies area residents. In Years 4, EcoCostas will continue providing technical assistance and training to groups that SUCCESS has supported in the Program's first years. This includes individuals from Bolivar and Mompeche who are now ecotour-guiding; and Ricarte Zambrano who is now providing tours through parts of the tropical forest being managed by Nuevo Milenio as a reserve. These ecotourism businesses, provide direct benefits to local residents, promote sustainable use of natural resources and raise awareness of the value of biodiversity.

Conserve and restore the REMACH forest and specific areas in or near the Reserve buffer zones: The freshwater supply to the estuary communities depends largely on maintaining and conserving the forest cover of the Mache Chindul mountain range—the last relatively intact tropical coastal forest in Ecuador. Recent and drastic reductions in freshwater flows are of great concern, however, and solutions are being sought. Ecocostas will continue working with Nuevo Milenio residents in the El Carmen and Mache Associations to develop a reforestation initiative for Nuevo Milenio. Nuevo Milenio and SUCCESS will use the multi-purpose nursery developed in earlier SUCCESS years to supply plants for reforestation, orchards, ornamental plants for sale and medicinal plants. The area along the Pedernales-Chamanga highway—an area highly susceptible to erosion during the rainy season—will also be planted. Nuevo Milenio members will also continue collecting seeds from native forest species and germinating them in the nursery. As part of the reforestation campaign, SUCCESS will also monitor survival rates of the trees.

Continue and stabilize alternative livelihood activities, strengthen the local promoters group and finalize the documentation of lessons learned. In Year 4 and as needed, SUCCESS will continue to provide as follow-up, technical assistance to those who have been trained in previous years in alternative livelihoods and it will complete documentation of the experiences.

Expand communications and outreach

Diffusion of SUCCESS activities and achievements helps link stakeholders and critical issues, and also builds constituency with diverse audiences. To further expand outreach on SUCCESS Program activities in Ecuador, during Year 4 SUCCESS will develop and present to national newspapers, magazines and radio press releases on SUCCESS activities, with an emphasis on analyzing the status and condition of the Cojimies Estuary area and relevant resource use issues. Program brochures and other informational documents will also be sent to the major media outlets in the Cojimies area, and throughout the country.

Tasks and milestones	***Date***
Increase understanding of estuary and watershed issues, and create new possibilities for dialog	
Selection of relevant information to be included in the design and preparation of the comic and brochure by a communications professional	October 2007
Drafting of the text and art work	November 2007
Printing of materials	December 2007
Distribute the publications (see above) and the scientific and economic studies	
Conduct planning meeting with Pedernales Municipal authorities to present outreach materials	December 2008

Tasks and milestones	*Date*
Meet with press and radio personnel in the region to present materials and plan media campaign	January 2008
Conduct interviews with leaders and key stakeholders to present outreach materials in Pedernales	January 2008
Hold event to present comic and brochure to Pedernales key stakeholders and media	February 2008
Distribute materials to donors, NGOs and other agencies within Ecuador	February 2008
Conduct visits to the media to plan a media campaign in Muisne	February 2008
Conduct interviews with leaders and Muisne key stakeholders to present outreach materials	February 2008
Hold event to present comic and brochure to Muisne key stakeholders and media	March 2008
Meet with President of management of REMACH Committee to present materials	February 2008
Present outreach materials to Development Committee of REMACH in Eloy Alfaro de la Iguana	March 2008
Meet with Director of Scholar's Network in Chamanga to coordinate launching of EcoClubs competition	June 2008
Hold contest among the EcoClubs on the theme of applied management	July 2008
Support the development of management guidelines for the key topics of water quality and aquaculture in the Cojimies Estuary	
Contact national experts in water quality and aquaculture to identify working group members	February 2008
Hold meeting between working group leaders and officials from Muisne and Pedernales municipalities	March 2008
Conduct interviews with key stakeholders in estuary communities to identify representatives for the working groups	April 2008
Hold working group meetings to develop guidelines for water quality and aquaculture	May 2008
Hold working group meetings to solidify agreements and develop guidelines	June 2008
Prepare draft guidelines for managing water quality and aquaculture	August 2008
Hold working group meeting to review and revise draft guidelines	September 2008
Present guidelines to local authorities	October 2008
Conduct interviews with the members of *Canton* Councils of Muisne and Pederanles to promote adoption of guidelines and supporting policies for development of protected areas within the Cojimies area	November 2008
Support a zoning initiative for the beach and tourism development for the beach between Cojimies and Cañaveral village	
Meet with the Tourism Department of the Pedernales Municipality to coordinate the zoning initiative, "Cojimies- Cañaveral"	October 2007
Identify key stakeholders for this process	October 2007
Hold meeting for socialization of the initiative with stakeholders	November 2007
Conduct workshop for rapid participatory assessment of the state of "Cojimies- Cañaveral"	December 2007
Hold working meeting to identify and prioritize solutions and alternatives for zoning	January 2008
Hold working meeting to prepare draft of municipal ordinance to zone the "Cojimies- Cañaveral" sector	February 2008
Hold meeting to review draft municipal ordinances	April 2008
Hold meeting to present draft ordinances to local authorities	May 2008

Tasks and milestones	*Date*
Conduct interviews with members of the Canton Council of Pedernales to promote expediting the official adoption of ordinances	May 2008
Improve the skills and abilities of ecotourism operators for members of Tourist Development Committee of Mompiche and Cojimies area residents	
Prepare materials and course content for training in hotel management	July 2008
Conduct visit to Mompiche to organize training	July 2008
Hold training event in hotel services	August 2008
Hold training event in hotel administration	September 2008
Conserve and restore the REMACH forest and specific areas in or near the Reserve buffer zones	
Hold planning meeting with the Mache Association (Nuevo Milenio) for field activities for reforestation	October 2007
Collect tree seeds for germination in tree nursery at Nuveo Milenio	October 2007
Germinate and tend young trees in nursery	November 2007
Transplant young trees to critical areas in Nuevo Milenio	December 2007
Monitor health and growth and irrigate young trees	January - June 2008
Re-plant trees that die	April 2008
Continue and stabilize the alternative livelihood activities, strengthen the local promoters group and finalize the documentation of lessons learned	
Coordinate follow-up activities with groups participating in alternative livelihoods	October 2007
Conduct visits for follow-up and documentation of productive activities	Nov07–Sept08
Conduct technical assistance visit by beekeeping and organic agriculture specialist	Dec07 – Sept08
Expand communications and outreach	
Press releases sent periodically to national media outlets on the progress of the Cojimíes–Cañaveral planning initiatives	Jan, March, May, July 2008
Comic publication and brochures sent to national media outlets	February 2008
Press releases written to announce sessions in which the comic publication and brochures will be presented to public; send to media outlets in Pedernales, Muisne and La Laguna (Eloy Alfaro)	March 2008
Press releases written and sent to national media outlets on progress on working group discussions on water quality and impacts on the estuary	June, August, October 2008
Press releases written and sent to national media outlets to advertise the EcoClub competition on application of environmental knowledge	July 2008

Outputs

- Draft guidelines for management of water quality and aquaculture in Cojimies
- Zoning plans and guidelines for proposed municipal ordinances for land use and construction for the Cojimies-Cañaveral coastal corridor in Pedernales *Canton*
- Materials from ecotourism training in Mompiche
- Progress report on the reforestation
- Report on lessons learned from alternative livelihoods including statistics on production and users
- Outreach publications on findings of previous studies, key recommendations for improved management
- Press releases
- Radio spots
- Outreach materials

- Publication of 500 brochures and 500 comics with information relevant to outreach on the condition and use of resources of the Cojimies Estuary and REMACHE

Results Expected

Indicator	***Year 4 Target***
Number of biologically significant hectares	1,788
Marine hectares	*704*
Terrestrial hectares	*1,084*
Number of policies, laws, agreements, or regulations promoting sustainable natural resource management and conservation implemented	1
Number of persons participating in coastal resources and conservation planning initiatives	100
% females participating in coastal resources and conservation planning initiatives	50%

3.5 Volunteers for Prosperity

Scale of Intervention: Global
Lead Implementing Organization: Coastal Resources Center
Other Partner Organizations: Western Indian Ocean Marine Science Association (WIOMSA), EcoCostas and the University of Central America (UCA)
Activity Coordinator: Kimberly Kaine

Background

CRC has set up an efficient system for recruiting and placing professional volunteers within its USAID-supported SUCCESS Program sites. After becoming a member of USAID's VfP program, CRC was invited to participate in the beta test of VfP's on-line giving portal. Following completion of the beta test, CRC was invited and agreed to be a member of the Giving Portal—allowing corporations and individuals to make on-line donations to CRC's volunteer program. A CRC volunteer web page was also developed and posts descriptions of volunteer opportunities, stories of volunteer experiences, and volunteer deliverables. Year 3 volunteers (one each to Thailand, Nicaragua and Ecuador) provided most of their own funding. Year 3 Giving Portal donations totaled over $380, which will be spent in Year 4 to subsidize a volunteer. To date, seven VfP volunteers (2 female; 5 male) have been deployed to Program sites for a total of 1,551 hours of donated time valued at approximately US$38,417. In addition, two of the three volunteers in Year 3 raised their own funds for their assignment and was an effective way to subsidize additional volunteers and lengthen the volunteer time in the field

The volunteer program has faced several challenges. More than once, volunteer descriptions were advertised and then changed after a qualified volunteer was recruited (based on the advertised description) and assigned—resulting in wasted time and a loss of credibility when advertising for future volunteers. In some cases, Program managers negotiated in advance with a potential volunteer to pay all costs associated with the assignment. This made it difficult—if not impossible—for the volunteer coordinator to negotiate with volunteers to assume some of the costs themselves. Lastly, the role and duties of the volunteer coordinator at CRC was not adequately explained and reinforced to in-country volunteer coordinators/supervisors. Having a clear description of everyone's roles, tasks, and schedules prior to starting an assignment is critical.

Several lessons were learned about implementing volunteer programs. All concerns and questions should be

discussed prior to the posting a volunteer. Do not overlook the potential for volunteers to partially or fully fund their assignments—in many cases volunteers are willing to share the costs of their assignment with the hosting agency (e.g. CRC). Put more attention to developing the duties of and time frame for the assignment. Research places to advertise the volunteer assignments months in advance of the date they are needed in-country. In-country staff needs to actively supervise volunteers once they are on assignment. The goal of having a specific percentage of male and female volunteers—e.g., attaining a 50% female volunteer population—is not realistic. Who ends up being assigned where and when is driven by the pool of volunteers who apply, how their skills match the skills needed for the assignment, and when the applicants are *available* to volunteer vs. when the field *needs* the services.

Katie Wolff in Thailand, obtaining GPS data points from a fish raft

Year 4 concludes the use of international volunteers for the SUCCESS Program, with the assignment of two volunteers to Nicaragua in November 2007. However, by Program end the outcomes and legacy will be:

- 9 volunteers assigned in three programs sites as well as in Thailand (Associate Award site)
- 1,951 volunteer hours (1,010 from females) contributed to the Program and valued at $45,923

Year 4 Objectives, Tasks and Schedule

In Year 4, the first task is to successfully complete the last two assignments (two specialists in Ornithology to train local community members and tour guides to identify and describe various bird species in the Matting Father Branches Reserve in Padre Ramos and Puerto Morazon). Other tasks are to: 1) conduct an external evaluation of the SUCCESS Volunteer Program, 2) post volunteer stories on the SUCCESS and CRC websites, and 3) notify the VfP of the conclusion of the SUCCESS volunteer initiative.

Tasks and Milestones	***Date***
Volunteers assignments to Nicaragua completed	November 2007
VfP contacted as follow-up and notified of program end	January 2008
Volunteer stories, photos and reports posted on web sites	July 2008
External evaluation of SUCCESS Volunteer Program conducted	September 2008

Outputs

- Final technical reports of volunteers (Jurij, Lehr,Wolff) posted on the websites
- Volunteer stories written and posted (as available)

Results Expected

Indicator	***Year 4 Target***
Number of VfP volunteers assigned overseas	2 (1 – male, 1 female)

4. Associate Awards, Leveraged and Complementary Activities

In March 2005, URI received an Associate Award—the *Post-Tsunami Sustainable Coastal Livelihoods Program* in Thailand—under the SUCCESS Leader Award and USAID country Missions are also supporting and funding complementary activities in Tanzania and Ecuador. These are considered *leveraged and complementary* funding for SUCCESS activities. The goal is to secure additional associate awards, which would provide opportunities for additional engagement by the family of SUCCESS partners. The LWA Associate and non-associate USAID supported activities in SUCCESS countries are outlined below. Performance management and reporting on USAID indicators and Life-of-Program (LOP) indicators for the Leader award do ***not*** include data from associate awards. Such data is reported to the Missions issuing the associate award with copies furnished to the cognizant technical officer (CTO) for the SUCCESS Leader Award. Following is a summary of past and projected Year 3 results for the Thailand Associate Award.

4.1 Thailand Associate Award

The Post-Tsunami Sustainable Coastal Livelihoods (SCL) Program is an innovative model Program to demonstrate how coastal communities that can build their resilience to economic and environmental shocks. It was created in response to the December 26, 2004 tsunami disaster through a US $3.26 million SUCCESS associate award funded by the USAID Regional Development Mission/Asia (RDM/A). The goal is to rebuild and diversify sustainable coastal livelihoods of severely affected fishing communities on the Andaman Coast of Thailand and to demonstrate effective practices for building and strengthening community-based disaster preparedness. The program is implemented in partnership with the Asia Institute for Technology (AIT) and the University of Hawaii-Hilo. The program ends on March 31, 2008.

The SCL program seeks to build coastal community resilience through an approach that focuses on rebuilding the economic basis of livelihoods rather than on physical reconstruction. A key feature of such resilience is the emphasis on building livelihood opportunities that do not degrade the natural environment, and that protect the ecosystems, reduce vulnerability to natural hazards, and strengthen local governance. Program interventions combine ICM and hazard management frameworks. It emphasizes providing coastal people with the skills and resources for self-recovery. Program objectives are to:

- Establish a common vision and coordinated approach to rehabilitation
- Restart and diversify livelihoods, especially those that rely on healthy coastal resources
- Build capacity for planning and decision-making in the coastal zone
- Promote learning and share experience in Thailand and the region

Selected program highlights in Year 3 include:

- Opening of the Kamphuan Community Learning Center (KCLC) featuring the KCLC Tsunami Museum with touch screen computer kiosks
- KCLC made operational: equipment, director/staff, business plan
- Community level evacuation drill completed
- Analysis of data and report of findings from second socioeconomic assessment and livelihood and microfinance assessment
- Study tour for microfinance village committee members to observe Cooperative Banking systems in Nakorn Srithamarat and Surathani provinces
- Exchange visits between Thailand and Indonesia

The project has faced numerous challenges including as program close out approaches. First, creating a foundation under Thai law to provide an autonomous body to oversee the long-term governance and fiscal management of the Kamphuan Community Learning Center has been more difficult and time consuming than anticipated. Secondly, financing a program of activities through the Learning Center after the project

ends with a revenue base generated mainly from the services it can offer is not considered feasible and the operations will likely need some level of base support from the Tambon local government budget.

Lessons learned from this program include:

- Rural communities struck by natural disasters have a unique context for development work. Disaster breaks down social capital and multiple and uncoordinated post disaster relief efforts create confusion in rural villages making it difficult at the onset to build a common vision and work with local leaders
- Community credit schemes, if done well, can be successful, reduce a family's economic vulnerability, and help support the reestablishment of livelihoods
- Increasing livelihood diversity requires long term investments in training, extension and start up capital

The SCL field office will close at the end of the first week in September 2007, at which time field staff contracts also expire. The Bangkok project office will remain open through February 29, 2008 (end of no-cost extension period) and the project Chief of Party and administrative assistant will continue working on the project part-time through that time. Extension project elements that incur costs will end on February 29, 2008 to allow time to close all financial accounts before the end of March.

The project legacy includes the Learning Center and numerous and valuable extension materials (in Thai) for community use.

4.2 Leveraged and Complementary Activities

The SUCCESS Program has leveraged over a half million dollars (US) for its activities (see page 64 for more detail). An interesting example of this is the leveraged funding being secured by other donors and programs interested in the SUCCESS Certification Program models in the Latin America and Western Indian Ocean regions. In the former, over $60,000 is being provided by the Avina Foundation and LOICZ, and in the latter, a similar amount is being provided by the Swedish International Development Agency (SIDA) and the European-Union funded Regional Coastal Management Program (ReCoMap). (The SIDA funds are already committed, while the ReCoMap funds are verbally committed but awaiting agreement between WIOMSA, CRC and ReCoMap as to which specific activities of the initiative are best funded).

Equally impressive is the over US $4 million that has been secured and that clearly complements—sometimes building upon, sometimes feeding back to—SUCCESS funding and activities. This includes but is not limited to:

In Tanzania, the USAID Mission funds a broad portfolio of ICM activities being implemented by the Tanzania Coastal Management Partnership (TCMP) and which compliment those of SUCCESS. This includes but is not limited to activities in biodiversity conservation; microenterprise development; small-scale, sustainable, native species mariculture; developing and disseminating good practices; influencing policy; etc. ***In Ecuador***, the USAID Mission provided funding directly to EcoCostas for mapping the Cojimies watershed as well as tapped EcoCostas and CRc expertise to assess its portfolio of Galapagos activities. In addition the PMRC (national ICM agency) has funded Ecocostas to conduct a water quality study in the Cojimies Estuary, a SUCCESS Program site; and the European Union-funded Prodonera project is funding the reforestation of the coastal forest that is also part of the SUCCESS work site area. Meanwhile, ***in Nicaragua*** the SUCCESS partner UCA has secured funding from a range of private sources as well as international bi-lateral development agencies for work on issues around shrimp and cockle farming—two issues also being addressed by SUCCESS. UCA-CIDEA and UHH have also partnered to expand water quality and sanitation efforts with funds leveraged from the AquaFish CRSP program.

5. Program Management

5.1 Key Staff

Directors		
Brian Crawford (Program Director)	CRC	brian@crc.uri.edu
Maria Haws (Deputy Director)	UHH	haws@aol.com
Lesley Squillante (Deputy Director)	CRC	lesley@crc.uri.edu
Tanzania on-the-ground		
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Nicaragua on-the-ground		
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Maria José Almanza	UCA	mar@ns.uca.edu.ni
Maria Haws	UHH	haws@aol.com
Ecuador on-the-ground		
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Learning and KM		
Elin Torell	CRC	elin@crc.uri.edu
Bob Bowen	CRC	bob@crc.uri.edu
Lesley Squillante	CRC	lesley@crc.uri.edu
GCC Team		
Jim Tobey	CRC	tobey@crc.uri.edu
Don Robadue	CRC	robadue@crc.uri.edu
Pam Rubinoff	CRC	rubi@gso.uri.edu
WIO Certification Team		
Julius Francis	WIOMSA	Julius@wiomsa.org
Lesley Squillante	CRC	Lesley@crc.uri.edu
Glenn Ricci	CRC	gricci@crc.uri.edu
LA Certification Team		
Emilio Ochoa	Ecocostas	Emilio@ecocostas.org
Pam Rubinoff	CRC	rubi@gso.uri.edu
Stephen Olsen	CRC	sbo@crc.uri.edu

5.2 Project Internal Communications

To maximize efficiency of team communications while minimizing costs, SUCCESS relies heavily on a suite of electronic media including email and Skype (free-of-charge phone/chat system). SUCCESS also developed remote-entry data systems. One example is the system which allows PMP data to be input remotely from the field to a secure, centralized data management system. Such electronic communications are complemented by the SUCCESS Annual Partner's Meeting, which brings together key partners from the field, the USAID CTO, the CRC Director, and leaders of the SUCCESS program components. Further, ICM experts from CRC and UHH provide on-site technical assistance throughout the year.

5.3 Key Products and Reports

The following table lists key products and reports that will be produced in Year 4 along with the deadline or expected completion dates and key individuals at USAID who will receive copies.

Key Products and Outputs	*Schedule*	*Recipient*
Program Reports		
Year 4 Workplan	1 October 2007	Richard Volk, CTO and Joseph Schmidt, AO
PMP report	30 October 2007	Richard Volk, CTO and Joseph Schmidt, AO
Semi-annual Report & PMP Report (July 06–Dec 07)	30 January 2008	Richard Volk, CTO and Joseph Schmidt, AO
Progress Report (December – March 07)	30 April 2008	Richard Volk, CTO and Joseph Schmidt, AO
Semi-annual Report & PMP Report (Jan 07–July 07)	30 July 2008	Richard Volk, CTO and Joseph Schmidt, AO
Financial Reports		
Forms SF 269, 269a	quarterly	Richard Volk, CTO
Forms SF 272,272a	quarterly	R. Volk, CTO & www.dpm.psc.gov
TraiNet Data	30 days post event	USAID TraiNet database
Volunteers for Prosperity	upon request	VfP Coordinator
Publications	30 days post publication	Richard Volk, CTO and USAID Clearinghouse

Tentative International and US Travel Schedule1

	Program Element					
MONTH	**On-the-Ground**	**Building Capacity**	**Networks, KM, and Learning**	**Global Leadership**	**Volunteers**	**Monitoring & Evaluation**
Oct-07		Olsen-CRC Ecuador	Bowen-CRC S.Africa/ Tanzania	GCC Team-CRC to DC		
Nov-07	Haws-UHH Tanzania	Olsen, Rubinoff, Robadue –LAC			Ornithology Volunteers Nicaragua	Haws -RI/DC Crawford-DC
Dec-07						
Jan-08	Crawford-CRC Tanzania			GCC Panel RI		
Feb-08	Haws-UHH Nicaragua/ Ecuador	EA Cert. Board Member-CRC East Africa	Herrera-CRC Nicaragua			
Mar-08				GCC trainer-CRC - Tanzania		
Apr-08	Torell-CRC Tanzania	Bowen-CRC Tanzania				

[1] Dates, traveler and purpose are estimates based on the workplan activities. All travel assumes a multi-purpose agenda with an emphasis of each trip on one of the program elements. Traveler name and primary trip purpose may change based on workplan schedule and progress.

	Program Element					
		Olsen, Rubinoff, Robadue-LAC				
May-08	Haws-Nicaragua					
Jun-08						
Jul-08	Haws Tanzania	MPA Trainer-CRC-E. Africa		GCC Trainer-CRC- Thailand		
Aug-08			Learning Wkshp, RI			
Sep-08	Torell Tanzania					

5.3 Monitoring, Evaluation and Reporting

There will be no major changes to the monitoring, evaluation, and reporting system in Year 4. The web-based monitoring system will continue to be used to feed information to the quarterly and semi-annual reports. This system works well, allowing partners to input data and documentation into the system remotely. Data entered go through quality control checks by the M&E coordinator at CRC. Once information is cleared and loaded into the database, partners with access to this internal system, including key USAID personnel, can generate summary reports. The report writing function continues, however, to undergo refinements in Year 4.

In Year 4, the field coordinators will continue uploading new data on the web-based system. The CRC M&E coordinator will contact the field coordinators quarterly to ensure data is entered and current for each reporting cycle. As necessary, the M&E coordinator will provide technical assistance to the field coordinators to ensure the results framework is properly monitored. This will help ensure that similar approaches are being used to capture information for in-Program adaptations and cross-Program learning.

In conjunction with the final learning workshop, which will be held at the end of Year 4, planning will begin for the final report and other end-of-project monitoring, evaluation, and reporting activities to take stock of the achievements and lessons learned.

Tasks and Milestones	***Date***
Collect PMP data	Quarterly
Prepare and submit quarterly and semiannual reports to USAID	Quarterly
Develop additional indicators to reflect regional KM and learning work	October 2007
Refine electronic web-based report generation function	December 2007
Organize a SUCCESS field partner retreat	August 2008
Prepare and submit Year 5 work plan	September 2008

5.4 Issues and Challenges

USAID's current strategy for funding is that the Global Bureau will fund primarily (if not exclusively) activities with at least regional and preferably global relevance and impact, while country missions fund country/local focused initiatives. Unfortunately, USAID missions in two SUCCESS Program countries—Ecuador and Nicaragua—have significantly reduced budgets for the environment component of their portfolio. This seriously limits opportunities for Associate Awards in these countries, now or in the future, should the SUCCESS Leader Award be renewed. The Tanzania Mission has continued to invest in activities

that were initiated by the SUCCESS Program as well as other Global Bureau initiatives (freshwater to estuaries, linking HV/AIDS to conservation). However, these have not been funded through the LWA mechanism but through a direct cooperative agreement with CRC and through a contract with the GETF.

The refocusing of strategic goals and priorities for the USAID Washington Bureau has required the SUCCESS Program to refocus its programmatic emphasis from one seeking site-based results focused on livelihoods to one with greater emphasis on ICM-related issues writ more broadly and globally—issues such as biodiversity conservation, challenges in capture fisheries, the emergence of mariculture as an economic powerhouse, value-added market chains (vs. microenterprise-specific), and innovative models for replication globally. All the SUCCESS site initiatives link to these issues, however must now put an increased emphasis on how this site-based work can inform the issues more globally with models, best practices, tools and techniques that can be shared and have value more broadly.

A subset of this same challenge is that as USAID goals and priorities have evolved so have their indicators—making it difficult to set SUCCESS Life-of-Program targets in this shifting strategic paradigm. Additional and more specific challenges are cited in each of the earlier sections of this report.

6. Budget

This section provides details of the annual budget aggregated in several different ways as illustrated in the figures below. The budget assumes a carryover of Year 3 funds of $ 271,802 plus an additional Year 4 obligation of $ 1,088,400 for a grand total of $ 1,360,202.

Budget by Line Item

Item	*USAID*	*CRC Cost Share*	*UHH Cost Share*	*Total*
Salary	358,565	41,000	11,709	411,274
Consultants	57,236			57,236
Fringe Benefits	141,028	18,450	2,576	162,054
Other Direct Costs	31,289			31,289
Travel	83,973			83,973
Sub-agreements	466,538			466,538
Direct Costs	1,138,629	59,450	14,285	1,212,364
Indirect @32.8%	221,573	19,500	3,928	245,001
Total	1,360,202	78,950	18,213	1,457,365

Budget by Program Element

Program Element	*USAID*	*Cost-Share*	*Total*
Building Capacity	333,221	9,716	342,937
Networks, Knowledge Management, & Learning	302,057	9,716	311,773
Global Leadership	148,964	38,865	187,829
On-the-Ground Results	352,811	19,433	372,244
Volunteers	16,926		16,926
Communications and Outreach	75,734	19,433	95,167
Monitoring and Evaluation	53,747		53,747
Program Management	76,742		76,742
Total	1,360,202	97,163	1,457,365

The following table reflects estimated expenses for on-the-ground work and training in each of the respective countries and international travel to those countries for program work. The total does not equal the entire budget for SUCCESS Program activities, as many budget line items are not country-specific.

Budget by Country

Country	*Total*
Ecuador	148,555
Nicaragua	93,576
Tanzania	180,916

The following table provides a summary of the travel budget for all international travel and US based travel. Travel is broken down by Program element and by the partner organizations initiating the travel.

International and US Based Travel Budget

Program Element	*CRC*	*UHH*	*UCA*	*ECC*	*WIOMSA*
Building Capacity	38,439			7,920	
Networks, KM, & Learning	12,557	2,168	2,202	2,644	3,240
Global Leadership	10,986				
On-the-Ground Results	11,737	16,154			
Volunteers	8,000				
Monitoring and Evaluation	2,254	2,050			
Total	83,973	20,372	2,202	10,564	3,240

Leveraged Funding

The SUCCESS Program team has been very aggressive and very successful in securing leveraged, complementary and in-kind support for its work. This includes contributions from bi-lateral and multi-lateral donors, NGOs, private business, and even individuals (through VfP). True leveraged funds alone total US $614,523 since Program startup (see table below). This achievement may be key to sustaining into the future many of the initiatives that were started with core funding from SUCCESS.

Fiscal Year	*Leveraging Partner*	*Donor*	*Activity*	*Supported Program Elements*	*Leveraged Funds*
LATIN AMERICA REGION					
2006	EcoCostas	AVINA	Support to launch on the ground projects and develop regional network	1,3	24,500
2007	EcoCostas	AVINA	Business and Communications Plan	2	53,000
2007	EcoCostas	AVINA	ICM Certification training module	2	10,000
2007	EcoCostas	LOICZ	ICM Certification ToT	2	53,000
2007	EcoCostas	Assorted sources	ICM training/framework design workshops	2	20,000
ECUADOR					
2005	EcoCostas	USAID Ecuador	Watershed characterization in the reserve and estuary	4	5,000
2006	EcoCostas	PMRC	Design training program for Chame culture	1	10,000
2006	EcoCostas	URI WILD	Support participation in Summer Institute in Coastal Management	2	5,000
2006	EcoCostas	Volunteers	Volunteer xtension in sanitation and agriculture microenterprise	1	7,467
2007	EcoCostas	USAID Ecuador	Construct nursery	1	2,500
2007	EcoCostas	PMRC	Water quality survey Cojimies Estuary	4	30,000
NICARAGUA					
2006	CIDEA	OIKOS	Funding that complements training on aquaculture and integrated management	1	8,072

Fiscal Year	*Leveraging Partner*	*Donor*	*Activity*	*Supported Program Elements*	*Leveraged Funds*
2006	CIDEA	Japan	Development of best management practices, training and materials	1	7,831
2006	CIDEA	UCRECEP	Cockle aquaculture development	1	3,384
2006	CIDEA	Japan	Economist for shellfish economic and marketing study	4	1,139
2007	CIDEA	OIKOS	Post Larvae collection training in Manzano and BMP FINCAMAR	1	2,400
2007	UHH	CRSP	Shellfish Sanitation Monitoring in Nicaragua	4	37,000
2007	CIDEA	other departments	Aquatic trail development and eco-tourism training	2	7,196
2007	CIDEA	contribution from other departments	Bread Production Business Plan and Extension (Business School)	2	1,207
2007	CIDEA	Japan	Water quality microbiology analysis and cockle HepA analysis	4	2,129
2008	CIDEA	Shrimp farm private interest	Bread making expansion	1	undetermined
EAST AFRICA REGION					
2005	WIOMSA	WIOMSA	WIOMSA Director Salary for time on SUCCESS	6	12,000
2005	WIOMSA	ACDI VOCI	Training Support	2	250
2005	WIOMSA	IMS	Training Support	2	600
2005	WIOMSA	CRSP	Training Support	2	2,600
2005	WIOMSA	WIOMSA	Training support	2	12,636
2006	WIOMSA	WIOMSA	WIOMSA Director Salary for time on SUCCESS	6	24,000
2006	WIOMSA	ACDI VOCI	Training Support	2	250
2006	WIOMSA	IMS	Training Support	2	500
2006	WIOMSA	WIOMSA	Training Support	2	800
2006	WIOMSA	Commission for Science and Technology	Training support	2	500
2007	WIOMSA	WIOMSA	WIOMSA Director Salary for time on SUCCESS	6	24,000
2007	WIOMSA	Sida	Certification Workshop	2	35,000
2007	WIOMSA	Sida	KM - IT systems upgrade	3	15,500
2008	WIOMSA	WIOMSA	WIOMSA Director Salary for time on SUCCESS	6	24,000
2009	WIOMSA	WIOMSA	WIOMSA Director Salary for time on SUCCESS	6	12,000
TANZANIA					
2006	WIOMSA	School for Intl Training	Undergrad working with women in Fumba	2	600

Fiscal Year	*Leveraging Partner*	*Donor*	*Activity*	*Supported Program Elements*	*Leveraged Funds*
2006	WIOMSA	Sida/SAREC	Two MARG 1 grants (Milkfish and Fumba water quality)	4	12,000
2006	WIOMSA	Private source	Donation of half-pearls to Fumba micro-industry	2	900
2007	CRC	URI-IGERT	Fellow for economics analysis of seaweed farming	1,2	6,500
2007	CRC	URI-IGERT	Fellow for No-Take Reserve Monitoring	1	6,500
2007	UHH	Amer. Pearls	Half Pearl donation for jewelry business development	2	1,000
2007	UHH	Packard	Summer MBA Interns for developing marketing manual	2	3,000
2007	UHH	Packard	Support for review of marketing manual	2	1,000
2007	WIOMSA	Sida/SAREC	MARG2 contract -milkfish research	4	5,800
2007	WIOMSA	Sida/SAREC	Master's scholarship for half-pearl research	4	8,562
2007	WIOMSA	Parlimentary Committeee Social Welfare	Project support	1	200
2007	WIOMSA	UDSM; College of Engineers	Project support	1	200
2007	WIOMSA	WWF	Agency supported participant for milkfish training course	2	1,200
2007	WIOMSA	IUCN	Agency supported participant for milkfish training course	2	1,200
2007	WIOMSA	UNEP	Agency supported participant for milkfish training course	2	1,200
2007	WIOMSA	RecoMap	Agency supported participant for milkfish training course	2	1,200
2007	WIOMSA	Sida	Milkfish manual preparation/printing	3	3,000
2007	WIOMSA	U.S. Embassador to Tanzania	Grant in support of Mlingotini Seaweed	1	5,000
THAILAND					
2006	AIT	CocaCola	Learning Center construction and outfitting	2	100,000
TOTAL LEVERAGED FUNDING					614,523

Annex A: Performance Management Report: Overview of Results to Date

The following table gives an overview of the results to date on the indicators and targets established in the Performance Management Plan. Detailed information on each indicator and field site can be provided upon request.

indicator	FY 05 Targets	FY 05 Results	FY 06 Targets	FY 06 Results	FY 07 Targets	FY 07 Results	FY 08 Targets	LOP Targets	Cumulative Results
1. Number of biologically significant hectares	no target	0	no target	123,107	35,080	35,048	11,619	240,173[6]	158,155
Marine hectares	no target	0	no target	111,668	23,901	17,459	8,827	183,286	129,128
Terrestrial hectares	no target	0	no target	11,439	11,179	17,589	2,792	56,888	29,027
2. Number of hectares in areas of biological significance showing improved biophysical conditions for selected parameter(s)	no target					80			80
3. Number of policies, laws, agreements, or regulations promoting sustainable natural resource management and conservation implemented	0	0	1	1	2	2	2	7[7]	3
4a. Leveraged funding (site level)	no target	5,000	no target	121,778	no target	137,694	no target	no target	199,087
4b. Leveraged funding (regional)	*no target*	*28,086*	*no target*	*50,550*	*no target*	*210,500*	*no target*	*no target*	*289,136*

[6] The Target for FY 07 was reduced as we decided not to pursue district scale zoning for milkfish ponds in Mkuranga. However, the LOP target has remained almost constant as we have added additional target hectares in Menai Bay for FY 08.

[7] The LOP target has been reduced from 9 to 7 because the amount of policy related activities in Ecuador turned out to be less than expected.

indicator	FY 05 Targets	FY 05 Results	FY 06 Targets	FY 06 Results	FY 07 Targets	FY 07 Results	FY 08 Targets	LOP Targets	Cumulative Results
5. Number of persons participating in coastal resources and conservation planning initiatives	123	123	620	1,164	755	999	245	1967	2,286
6. Number of people with increased economic benefits derived from sustainable natural resource management and conservation.	118	124	241	180	255	55	60	709	465
7. Number of new or improved enterprises developed	46	47	72	146	60	28	4	182	203
8. Monetary value generated from sustainable natural resources or conservation initiatives	no target								
9. Number of people trained	75	93	150	468	100	93	100	500	654
10. Number of training courses implemented	3	6	10	20	3	5	5	22	30
11. Number of active participants in web-based regional networks	0	20	17	1	8	0	23[8]	48	21
12. Publications documenting impacts of best practices	no target	3	no target	8	no target	15	no target	no target	26
13. Number of American volunteers	2	2	2	2	2	3	2	10	7

[8] The target for FY 08 has been increased

indicator	FY 05 Targets	FY 05 Results	FY 06 Targets	FY 06 Results	FY 07 Targets	FY 07 Results	FY 08 Targets	LOP Targets	Cumulative Results
14. Volunteer person days	24	24	24	46	24	147	24	120	202
15. Value of volunteer time ($)	12636	12,636	12,952	6,603	3,631	22,073	3,722	18,166	39,112
16. % females participating in coastal resources and conservation planning initiatives	74%	74%	78%	60%	42%	42%	48%	42%	47%
17. % females with with increased economic benefits derived from sustainable natural resource management and conservation.	75%	75%	51%	71%	47%	24%	20%	27%	66%
18. % females trained	40%	30%	40%	37%	30%	54%	30%	30%	43%
19. Number of female participants in web-based regional networks	50%	40%	50%	38%	38%	38%	33%	38%	38%
% female American volunteers	50%	0%	50%	50%	50%	33%	50%	50%	29%

Sustainable Coastal Communities and Ecosystems Program (SUCCESS)
A component of the Integrated Management of the Coastal and Freshwater Systems Program (IMCAFS)