The Locally-Managed Marine Area Network

Improving the practice of marine conservation

2010 Annual Report:

Defining our Future

Outrigger canoes, Bohol, Philippines (Photo: Wendy Tan)

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[1] For the purposes of this report, the term "Micronesia" refers to Micronesian Islands that are participating in the LMMA Network, including the Federated States of Micronesia (of which Pohnpei is one state) and the Republic of Palau.

I. Introduction

2010 marked the 10th anniversary of the Locally-Managed Marine Area (LMMA) Network. We have made tremendous achievements over the last decade in community marine resource management and conservation, and are carrying out various celebrations across the region to share experiences and learning gained during the past ten years. Due to the work involved in facilitating these important exchanges and to gather and compile lessons from them, we are scaling down the 2010 Annual Report to briefly highlight progress made in 2010, particularly in the country section. Next year we plan to produce an in-depth "***Decade of Learning***" report that will replace the 2011 Annual Report.

This year the Network engaged in a Strategic Planning process to define our future direction based on the learning gleaned from ten years of hard work and emerging challenges and opportunities. The overall strategic planning process, which continues in 2011, is helping us map out our new direction and enact structural changes in governance and operations, detailed in a new strategic plan that will take the LMMA Network into its second decade of leading community-driven marine conservation and management initiatives.

This report is primarily aimed at Network members – the people and organizations with whom we currently work – as the main communication tool to provide updates across the whole Network on an annual basis. It is also intended for others interested in our work specifically, or in community-based management and conservation generally. For those not already familiar with our work, please see our website www.lmmanetwork.org for background information.

Governance and operational changes

The LMMA Network has made significant advances in network organizational development and learning. Country Networks (CNs) continue to evolve institutionally and note accomplishments in expansion, capacity building, government relations and policy areas, and marine resource management at sites. As part of the strategic planning for the regional Network, following an organizational review, we conducted a pivotal meeting in June 2010 in Bohol, Philippines that resulted in significant governance and management decisions. We also convened a critical Learning Committee meeting in October to wrap up the Learning Framework (LF) review and map out the future of Network learning, which continues to be a key objective. As a follow up, we drafted a Learning Statement to share our broad lessons learned and advice to others, in particular to assist the Community Ecosystem Assisted Fisheries Management (CEAFM) discussions taking place in Pacific Countries.

At the Bohol strategic planning workshop, a new governance system was agreed upon to address the changed link between LF monitoring and membership, and the growing number of member sites, which had made it difficult to adhere to the original 'one vote per full member site' process. Under the new formalized structure, each Country Network would choose a representative using general criteria agreed upon in Bohol that CNs could add to as appropriate for their in-country selection process. These CN Representatives would then form the LMMA Network Council that would provide overall strategic direction and oversight to the Network. This change clarified governance and management responsibilities for the Network, which should increase our efficacy as a result. By January 2011, all CN Representatives were in place, and in May 2011 convened for their inauguration as the new Council and to continue the strategic planning process.

Site visits in Bohol

During the Strategic Planning meeting in Bohol, Philippines, participants took time out to visit some LMMA sites in the area to share and see firsthand what they are doing.

Left: Participants speaking with members of the fishers organization in Bingag Village; Center: Woman gleaning shells in mangrove forest at San Vicente Village; Right: Participants learn traditional dance in Punta Cruz Village. (Photos: Left and center by Toni Parras; right by CSP)

The operational arm of the Network that carries out the day-to-day work is also being revamped in 2011 to implement the new Strategic Plan. As a preliminary step, the previous "Network Coordination Team (NCT)" will become the new "Network *Support* Team (NST)". This subtle modification in wording reflects the more significant change in the group's essential role (from coordination to support), and is important to recognize our organizational changes and forthcoming adjustments to individual's and groups' roles and responsibilities that will take place in order to be more effective in meeting revised Network objectives.

We also discussed choosing an additional fiscal sponsor to give the Network more financial flexibility, exploring six organizational options. After considerable consultation and due diligence, we chose The Trust for Conservation Innovation, which agreed to fiscally host the "LMMA Network Coordination Support Project" grant funded by the Packard Foundation. The University of the South Pacific (USP) continues to act as a regional financial host for our MacArthur grant, and Foundations of Success hosts another smaller grant for the Network.

The LMMA Network 10th Anniversary

As the Network was officially formed in 2000, this year marked our 10th anniversary. We have developed a special project to commemorate this great landmark that will consist of reflective review and publications to highlight our achievements, as well as gatherings (primarily CN level) to celebrate and share a decade of learning; these will include exhibits to showcase members' activities and/or contests to highlight site work and accomplishments.

Founders, country reps and new Councilors cut cake at the regional 10th year anniversary launch in Fiji.

Tenth year events and activities will be carried out throughout 2011 in various countries. Some countries have already begun their celebrations and sharing. The regional launching celebration took place during the May 2011 Strategic Planning workshop while representatives from most CNs were present. Updates will be posted on our website, and a final report produced in 2012. Check our website www.lmmanetwork.org for updates.

Plans for 2011

The delay in issuing this report is due in part to our concentration on critical organizational activities. While some of these were carried out in 2011 and will thus be covered in more depth next year, we feel it is important to share the most important developments immediately.

Key Network-wide activities in 2011 include the official inauguration and initial meeting of the newly formed LMMA Network Council, our new Strategic Plan development, and operations planning.

Participants at the Strategic Planning workshop held in May 2011 include the newly inaugurated Councillors (seated in front row wearing garlands), Country Network Coordinators, Committee Chairs and Technical Advisers. (Photo: The LMMA Network)

In May 2011, a series of meetings were held in Fiji to inaugurate the LMMA Network Council and continue the Strategic Planning Process. The new Strategic Plan puts in place key changes for the Network including our mission, 'customers' (i.e. direct target beneficiaries of our work), and strategic results aimed for. The mission has evolved from being a forum for practitioners to becoming a leader in community-driven marine management. While the ultimate beneficiaries of our work are coastal communities, the direct recipients of LMMA Network regional support are, firstly, existing Country Networks, and secondarily, sites that can learn from the Network's experience, all in order to improve marine resource management and conservation. Our new strategic results areas are Network Financing, Learning, Advocacy and Country Network Institutional Strengthening. More details on these will be provided on our website and in next year's report.

After the Strategic Planning workshop, as part of LMMA Network cross-site learning, participants paid a visit to a Fiji LMMA site in Votua, where they engaged in a kava ceremony to meet the community leaders and learn about the various projects in the villages, and then toured the community's wastewater treatment facility, marine protected area, and the women's handicrafts program. The following week, half the group continued with technical meetings while the new councillors went on a 3-day site visit to Verata, one of the original LMMA sites in the Network, to engage in more in-depth sharing and learning with the communities and participate in activities, such as mangrove planting and making presentations to schools.

Operational planning will take place during the latter half of 2011 to reorganize our management and operations structure so that it better aligns with the LMMA Network's evolution, decentralization and new strategic plan, as well as the realities of overloaded LMMA personnel and growing Country Networks.

As mentioned previously, the LMMA Network's 10th Anniversary celebrations and learning will continue throughout 2011; updates will be posted on our website and final report next year.

II. Progress on Objectives

Following we give a brief overview of our progress on each of our five objectives.

Objective 1: Learning about the LMMA approach

After the two-year review of our learning process, the Network wrapped up and compiled these findings and developed a new learning workplan for the next five years. The review results generated important lessons learned on monitoring design, data collection, management and storage, and analysis. There were some hard lessons on attempting rigorous systematic analyses across multiple countries, sites and cultures. Applying the Network's "Learning Framework" over a range of sites with different levels of investment, capacity, and skills – together with the LMMA Network intention for monitoring to address both local priorities and broader learning interests – confounded systematic storage and analysis of data and often led to issues of data reliability, problems with sampling design and implementation, and other concerns related to data quality. Nonetheless, we also had positive examples where activities, approaches and/or individuals worked particularly well, lessons which will also inform our work ahead.

Our new learning direction is aimed to better target and support monitoring work and improve how we gather and share lessons learned (both formal and informal) from member sites across the Network. We have issued a brief "Learning Statement" based on our experiences in this area, and aim to develop a "Lessons Learned" document on what we have learned over ten years of LMMA monitoring using the Network's Learning Framework. These will be posted on our website when finalized.

To share our learning on monitoring, presentations were made at various international venues, including, most notably, the Community Ecosystem Assisted Fisheries Management (CEAFM) meeting in Noumea, New Caledonia in December 2010. The workshop brought together 70 key stakeholders from national government conservation and fisheries departments, regional and national NGOs and other relevant organizations to try to find common ground between the various fisheries and conservation approaches in the Pacific, including those on monitoring.

More than a dozen LMMA folks (staff, partners and/or CN members), including representatives of national fisheries agencies, attended. LMMA Network Learning Committee members made the following presentations: Hugh Govan on "Status and potential of LMMAs" and Caroline Vieux (CRISP) and James Comely (IAS/USP) on "Monitoring information for CEAFM decision-making: reflections on LMMA's learning". Presentations were well received; participants apparently appreciated the uncommon candor in discussing results and challenges faced by the Network in developing and implementing its 'Learning Framework' monitoring protocol. The monitoring presentation was hailed as one of the most honest and useful presentations ever witnessed in this context by the lead facilitator and organizers, and was recommended as a model for learning by participants. It appears that many are facing similar challenges or disappointing results and were happy to see others draw attention to and openly discuss the issues. While monitoring was mentioned in various presentations, none other addressed either results or data quality.

In November 2010 we convened a Learning Committee meeting to devise a workplan for Network learning activities built upon the results of the Learning Review and other lessons learned from our experiences in recent years. The new workplan has since (May 2011) been

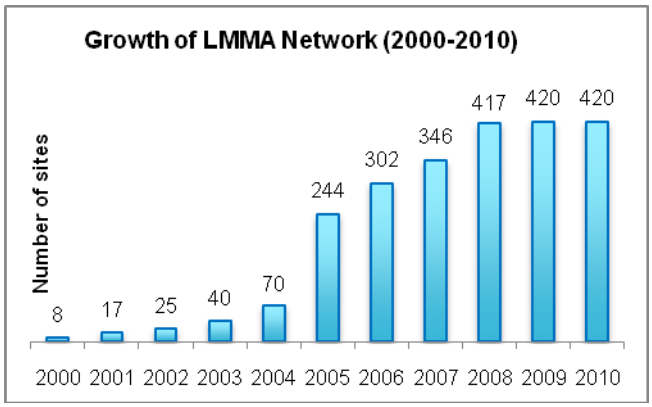
re-organized to fit into the new Strategic Plan (i.e. targeting Country Networks as the primary audience and secondly to share with other sites and networks who could learn from LMMA experiences, and, within this context, to develop quality credible information and lessons for advocacy) and essentially encompasses:

- Supporting Country Networks to help their member sites better track their basic LMMA management status and progress
- Revision of Network database to better track management status and progress of sites across the Network
- Providing more targeted support to LMMA Country Networks on marine management needs and issues faced by their members
- Measuring management effectiveness of LMMA tools and strategies with focus on clearly defined objectives using a much smaller set of indicators.
- Placing greater emphasis on evaluating and documenting 'lessons learned' from all LMMA Network-supported activities, such as cross-site and other exchanges and trainings, both to improve the activities and to better track results.

Objective 2: Protect biodiversity at specific sites

The number of member sites has grown dramatically since setting our original target of protecting biodiversity at 10 sites across the Indo-Pacific region in 2000. While we continue to improve the ways we measure actual biodiversity conservation achieved, we gauge site-level impact by tracking indicators of improved management, such as the number and size of actively managed LMMAs, types of tools/protected areas being applied, new management policies, the application of new skills from recent trainings, and more.

The graph at right shows the number and growth of LMMA member sites since the Network's founding[2]. These 420 LMMA sites include over 600 participating villages and cover nearly 13,000 square kilometers with 475 management tools in use covering over 1400 square kilometers. On-the-ground achievements on this objective from individual Country Networks are reported in **Section III: Country Updates**.



Objective 3: Promoting the LMMA Approach

The Network continues to promote the CBAM (community-based adaptive management) principles and tools of the LMMA approach through our regular channels of networking, cross-site visits, and presentations at various regional and international conferences and workshops. The following is a brief roundup of LMMA Network member activities to promote the LMMA approach in 2010. (Key in-country activities by Country Networks are briefly covered in a later section.)

[2] Note that these numbers represent 'official' LMMA Network sites (sites that have formally requested and received membership in the LMMA Network), but do not include the many community-based projects throughout the region utilizing LMMA approaches or gaining some assistance from the Network but not officially members of the Network. Due to the extensive growth of participating sites over the years, and as part of our new strategic planning process, we are revaluating how we 'count' membership; more updates will be given as we finalize decisions. If necessary, revised numbers for 2010 will appear in next year's reporting.

To follow on from the November 2009 CRISP-sponsored CBAM training in Tahiti, LMMA Network technical advisers Mike Guilbeaux and Hugh Govan assisted in the development of a proposal to create a similar network in French Polynesia to support local communities and individuals working on nearshore marine management issues. The proposal highlights the LMMA Network as an example, as well as other relevant MPA support networks that have emerged in the Pacific, notably NOAA's Pacific Islands Managed and Protected Areas Community (PIMPAC) and Hawaii's Community Stewardship Network, among others.

In March 2010, Network Manager Wendy Tan participated in the First Peoples Worldwide Asia Roundtable in Chiangmai, Thailand. She presented on the LMMA Network and the benefits (as well as challenges) that a network can provide to diverse and dispersed communities that nevertheless share common interests and challenges in resource management and conservation.

In April/May 2010, LMMA Network technical adviser Hugh Govan visited Colombia in response to an invitation by Fundación MarViva following his presentation made at the IMPAC2/IMCC conference in May 2009. Although MarViva originally desired an exchange between LMMA Network communities and those in the Colombian Pacific region of Chocó, it was decided to hold a preliminary visit as the first step to explore further options. MarViva covered travel costs in order for the Comunidades negras (Afro-Colombian communities) and the central government and other institutions in Chocó to learn about the Network's experiences in local marine resource management in the hope of catalyzing moves towards co-management in Colombia. Visiting their project site on the Pacific Coast and a nearby potential project site, Hugh made Spanish language presentations on the LMMA experience and showed the communities short clips from the LMMA Lessons Learned video. He also made presentations at a multi-stakeholder forum and university seminar in the capital of Bogota, and was interviewed by the media. Follow up ideas include information or key stakeholder exchanges on fisheries monitoring, awareness tools (such as music or ‘economic games’), and guidelines for ‘work principles’ between communities and organizations/institutions.

In June 2010, Wendy Tan participated as a panellist in a roundtable discussion hosted by the East-West Center at the University of Hawaii, part of an Asia future leaders exchange program. The student participants were selected by U.S. Embassies and Fulbright offices in their respective countries as representative of the top students in local universities. A key focus of the fellowship is to investigate resiliency and adaptability in ecosystems and human communities so that program participants can explore solutions to their resource issues back home. Wendy discussed the LMMA Network’s approach of building regional links, sharing learning and ‘bringing community voices’ to policy arenas as a viable solution to help address the environmental challenges faced in marine conservation.

Also in June, LMMA Network members from FLMMA joined partner Fiji and PNG SeaWeb staff in attending a SeaWeb Social Marketing Workshop in Honolulu. The three-day workshop was to introduce the concept and techniques of social marketing, present case studies, and brainstorm potential campaigns. Attendees shared examples and experiences from their sites and discussed similar issues and possible solutions. Participants left the workshop with an understanding of the principles of social marketing and its use in a Pacific island context, as well as ideas for draft campaign strategies for their sites and plans for moving forward.

In November 2010, three Fiji LMMA sites hosted Packard Foundation Board members and Senior Staff on their first site visit to the Pacific, accompanied by Bernd Cordes and Pamela Seeto of Packard's Western Pacific Program.

Partners, as well as other interested individuals and organizations, have expressed the value of LMMA Network insights, materials, encouragement, guidance and, in some cases, hands-on assistance. The benefit of the Network's many interactions, at various scales and venues, is the spreading of ideas and technical information regarding LMMAs and the CBAM approach across – and indeed, beyond – the Pacific region.

Website
In 2010 we redesigned our website, www.lmmanetwork.org, to ensure it provides useful and relevant resources – including guidebooks, posters, videos, online tools and links to more information – as well as news, stories and videos from our sites and other community-based marine conservation initiatives around the region. The new site's content management system is also much improved, allowing for easier updating and posting of the latest news. Please let us know what you think, as we are continually working to improve it and keep it relevant to our audiences needs. Send us an email at info@lmmanetwork.org. We value your feedback!

Objective 4: Build capacity for learning and implementation of CBAM

We continue our efforts in building capacity in CBAM; several CBAM orientations/capacity building workshops were held in Micronesia, Australia, Colombia, Timor Leste through ILMMA's work with the Coral Triangle Initiative, and more. We are also reviewing and may revise our CBAM training materials and delivery to ensure that it is up-to-date, relevant and in practical ways, meeting our members' needs.

Results from our CBAM training and outreach work are encouraging. For example, in Micronesia, the Marshall Islands adopted the Network's publication "*Locally-Managed Marine Areas: A guide to supporting Community-Based Adaptive Management*" in the National Framework for Conservation Area Planning as the basic toolkit. The guide is seen as an appropriate tool for community-based planning, problem analysis and decision-making, since the guidebook was developed for this purpose specifically for Pacific Island communities.

To help communities better manage specific marine resources, technical advisor Hugh Govan has been working on an effort between the Secretariat of the Pacific Community (SPC) and the LMMA Network to develop species information fact sheets to provide information on the characteristics of key target species and best management approaches. After gathering input to define priority species from the community perspective, the factsheets are currently in design by a consultant to SPC. Fact sheets will be available via the LMMA Network website later in 2011.

Objective 5: Develop the policy environment at local, regional, country, and international levels to support widespread adoption of LMMAs

The LMMA Network has worked in various levels of the policy arena over the year.

Regionally:
The CEAFM December 2010 workshop mentioned earlier resulted in a draft statement that was to be presented at the Heads of Fisheries meeting of SPC in February-March 2011 for their approval and potential subsequent submission to the governing body of SPC. LMMA Network and partner participants drafted some key points, including:

- Agreement that "The preferred mainstream conservation approach is not limited to a 'lock it up' (in reserves) philosophy and fisheries management is now embraced as an integral part of community conservation efforts."
- Adopting a one size fits all approach to CEAFM should be avoided. A diversity of approaches under a shared vision (incorporating both fisheries and conservation aspects) and common principles are appropriate, but actual approaches will need to vary.
- A tiered approach to monitoring: a major re-think is necessary. Not every site requires the same monitoring; all need some form of data/information to inform management plans and subsequent adaptation while others will be monitored/sampled to address particular issues.
- SPC identify and meet community needs in CEAFM-related education and awareness materials, and make use of NGO and environment departments to increase the reach and reduce the cost of getting material to communities and collate and distribute CEAFM-related information from regional partners and other sources.
- Climate change is best considered as another impact on inshore living resources which will require adaptation strategies under a CEAFM approach. SPC to promote and support CEAFM as strategy to address climate change impacts through building resilience in communities.

In February 2011, Hugh Govan attended the Council of Regional Organizations of the Pacific (CROP) Marine Sector Working Group (MSWG) in Fiji. It was important to have an LMMA representative present as the topic was the MSWG development of the "Pacific Oceanscape" proposal. As the MSWG is tasked to: "Determine areas of complementarity and overlap and any potential gaps in coverage of existing and proposed regional activities/initiatives in the marine sector"; and "Recommend to CROP implementation procedures for enhancing coordination and cooperation, and for ensuring that priority areas are adequately addressed," the Network's interest was to share its experience with the aim to inform future regional work. It is also hoped that such linkages will result in the LMMA Network and approach being taken more into account in regional activities and possible future funding allocations[3].

At national levels, the LMMA CNs have engaged actively in national level discussion and given input to national fisheries management, particularly in Fiji, where FLMMA has a seat at the National Fisheries Council, looking at regulatory measures and government support and resources to community conservation and resource management. Philippines and the Solomon CNs similarly have provided input to their national fisheries regulatory policy.

Country Networks are increasingly seen as important national government partners. In Solomon Islands, despite recent elections and ensuing political leadership changes, the hosting of SILMMA and its important national role has been reaffirmed by the Ministry of Fisheries and Marine Resources. In PNG, PNGCLMA is a member of the national climate change adaptation working group out of the national Office of Climate Change and Development, while in Fiji, FLMMA has been tapped to represent Fiji in a number of important bodies, including Convention on International Trade of Endangered Species (CITES), Program of Work for Protected Areas of the Convention on Biodiversity (POWPA), Integrated Coastal Management (ICM), and I Taukei Affairs (Fijian Affairs) on village by-laws regulations.

[3] Note that NGOs and non-CROP members do not participate in decisions that have CROP resource allocation implications.

The LMMA Network has also successfully increased the 'voice for communities' to government in Fiji, and also in Pohnpei, where the community MPA Executive Committee has been invited to join the legally-mandated Pohnpei Resource Management Committee (PRMC) which oversees resource management and conservation in Pohnpei and is comprised of directors and leaders of resource management agencies and chaired by Pohnpei State Lt. Governor.

CNs are also making policy progress at the provincial level. For example, in Indonesia, ILMMA is currently working with the Department of Environment and laying the groundwork to begin working with the Department of Fisheries in Jayapura, Biak and the Kei islands.

At local levels of government, the CNs have provided impetus and support for local government actions. In the Philippines, the local government's strict enforcement in some communities are believed to have contributed to more fish, less fishing time and increased income; in others, support from PhiLMMA has resulted in stricter enforcement and higher revenues from resource management efforts, with some of these funds made available for PhiLMMA activities in the communities. In Indonesia, ILMMA is conducting outreach via local radio program public announcements to encourage communities to respect village MPAs or *sasi* areas (traditional fishing grounds management areas) and LMMAs.

III. Country Updates

In this section, we give brief updates on country key achievements and highlights from 2010. For more information, visit the **Where We Work** section on our website www.lmmanetwork.org.

FIJI

Participants at FLMMA's 2010 Annual General Meeting. (Photo: Ron Vave)

The Fiji LMMA Network (FLMMA) progressed steadily in 2010, fostering greater collaboration between partner organizations and LMMA communities, holding various CBAM and monitoring workshops, conducting intensive research and presenting research results to key stakeholders, sharing lessons informally and formally, reaching out to surrounding non-LMMA communities, working to create an enabling environment through making a network submission to the government's Fisheries Act Review, strengthening communities' traditional leadership and management capacity, facilitating sites' income generation projects, and greater utilization of the media to spread our work.

The year also saw several requests for membership in recognition of the effectiveness and impact of a large collaborative organization such as FLMMA, as well as existing LMMA sites pursuing funding independently of their partner organizations. Also this year, FLMMA submitted some funding proposals to potential new donors.

Highlights in 2010 included FLMMA's celebration and collaboration with partners during the *International Year of Biodiversity* and *Plant One Million Trees*, as well as experiencing increasing support from government with regard to enabling legislation and regulatory mechanisms and providing resources to help support community-based management.

Key achievements in 2010

Increased government support and integration

The FLMMA office is physically located at the Ministry of Fisheries, enabling easier integration of its core work and operations into the government office, which provides assistance such as funding, legislative support, infrastructure and human resources. FLMMA actively participated in the consultation review process of 3 pieces of Fisheries legislation, in particular the in-shore section. In the review process, FLMMA was given permission by 8 provinces through respective provincial offices to represent the communities with whom they work. The government relied on FLMMA to contribute the lessons and experiences compiled over years of community-based work, especially pertaining to regulation of community-based protected areas. FLMMA representatives have been mandated to deliver community voices in national government forums such as the National Fisheries Council as part of the in-shore fisheries review component, as well as representation on the following councils: CITES-Convention on International Trade of Endangered Species, POWPA-Program of Work for Protected Areas, ICM-Integrated Coastal Management and the I Taukei Affairs[4] Village Bylaw regulations.

Institutional Effectiveness

FLMMA developed its first draft Strategic Plan for 2010-2014 in 2009 through an inclusive participatory approach with its members to address issues and obstacles to progressing community-based work at all management levels. As the process included presenting the draft SP to member communities and respective partners over 2010, the SP review was held piggy back with 8 provincial lessons learning meetings organized by FLMMA towards the end of the year. These provincial meetings, which had specific goals for the respective provinces, were also utilized to generate discussions about the SP leading up to the FLMMA annual general annual meeting (AGM), when the FLMMA SP was endorsed to be the guide in performing the network's core functions.

Pictures from the Provincial Lessons Learning Meetings in Fiji 2010. (Photos: Ron Vave)

Key lessons learned in 2010

1. FLMMA persevered with community monitoring, despite questions of lacking scientific rigor, and developed a process to recognize and acknowledge anecdotal evidence to be verified by scientific means. The process includes 3 levels of detail: Level 1 = perception, Level 2 = community collected data, and Level 3 = detailed study by partners. The monitoring protocol seeks to determine site-based success by triangulating the results from each level. As the process was just implemented in early 2011, the results remain to be seen, but could be adapted by similar community-based initiatives if fruitful.

2. In recent interaction with communities, FLMMA realised that various stakeholders and individuals within the community had become less meaningfully engaged. This was due to a combination of factors such as unstable village leadership as well as lack of FLMMA

[4] Formerly called "Fijian Affairs"; changed to "I Taukei Affairs" by government decree in July 2010.

management support. To address this issue, IAS in collaboration with the I Taukei Affairs Board (IAB), developed a Leadership and Management (L&M) project which has so far been implemented in seven provinces, with plans to be completed in the fourteen provinces of Fiji by end of 2012. This L&M project should strengthen community leadership and in turn have a far-reaching effect on the welfare and well-being of the people, as well as improve the ability for management programs such as FLMMA to fulfill its goals and objectives.

Key highlights in 2010

1. The Fisheries Department is currently rewriting its legislation and FLMMA members have been invited to all draft reviews. The consultants assisting them both have a long association with FLMMA and the legislation will have strong support for community protected areas. FLMMA brings in community representatives to all meetings; rather than representing the three traditionally-based confederacies they now represent the four administrative divisions of government.

2. FLMMA members are often invited to present at both national and regional conferences. In 2010 FLMMA was invited to Pacific Festival Day at the 25th International Coral Reef Initiative (ICRI) in Apia, Samoa to share how it uses community local knowledge to help improve resource management effectiveness. As a result, ICRI members have seen an example of the viability of local knowledge and will hopefully consider this in their initiatives.

3. The joint FLMMA and Rare Pride *Campaign for Sustainable Fisheries Management/Fiji - Cakaudrove and Macuata Provinces* aimed to reduce poaching and uncontrolled openings of protected areas. It also built capacity and enhanced communications skills of communities and promoted the benefits of long-term marine protected areas. The work resulted in increased management efforts of communities in two provinces in Vanua Levu (Macuata and Cakaudrove). A passenger bus operating in the area was painted in environmental themes as were bill boards erected at strategic points along the highway in the two provinces. The Qoliqoli Committees in approximately 15 districts were given uniforms by the RARE program which enhanced their effort and commitment in managing their fishing grounds. Training was done in financial management and leadership in the two provinces to address key barriers to tabu management. A baseline assessment of attitudes and poaching events was performed, which will be re-assessed at a later date. FLMMA Coordinator Margaret Tabunakawai achieved a Masters degree in Social Marketing from a US University based on her participation in the RARE program and her work on this campaign.

Key challenges for 2011

Poaching is a recurring issue at many FLMMA sites. Amicable resolutions are not enough to diminish its occurrence. This growing issue has caused some communities to lose interest, since they are failing to reap the benefits of their sacrifice, which is being taken advantage of by poachers. The new Inshore Fisheries legislation will have clearer regulations for tabu areas, greatly increased fines for violators and more support for fish wardens, which will hopefully improve the situation. Once enacted, FLMMA will begin an awareness campaign on the new law and discuss how better enforcement can be done. The growth of FLMMA and its continued efforts to decentralize implementation activities to provincial levels highlights the need to strengthen leadership and management roles of traditional leaders at LMMA sites at both district and village levels. Capacity building for LMMA sites to be able to conduct trainings themselves requires development of FLMMA training materials to assist community facilitators as well as setting up of community resource centres.

INDONESIA

During the mere two days of open harvest in Ohoiren Village, communities collected more than 8,000 sea cucumbers within the agreed size limit. (Photo: Cliff Marlessy)

Key achievements in 2010

Conservation: Enhancing new sites in Papua
In 2010, ILMMA added three new sites: Karabai Village on the island of Mbromsi, Pasi Village on the island of Pasi in Padaido, Biak and Meukisi Village in Tanah Merah Bay, Jayapura.

ILMMA facilitated various activities in Karabai and Pasi, including:

1. Introducing the LMMA approach.
2. Training workshop on participatory mapping, attended by 13 people from six villages from Pasi and Mbrosi Islands. The training was facilitated by community mappers from the Meos Mangguandi Island.
3. Mapping community traditional fishing grounds of four villages from Mbromsi Island and two villages from Pasi Island, and clarifying the fishing ground boundaries with the nearby islands.
4. Mapping live coral cover at Karabai and Pasi villages.
5. Drawing 8 village maps: 2 traditional fishing grounds maps, 2 coral cover maps, 2 marine habitat distribution maps, and 2 marine protected area maps.
6. Training in and writing Village Natural Resources Regulation, currently in draft stage consisting of 10 chapters and 46 verses. Draft will be endorsed by the village and district government before it is officially used by the communities on Pasi and Mborsi Islands.
7. Training on Socio-economic data collection. Data collected included information on demographics, social conditions, economics, education, environmental awareness, and governance.

The Meukisi Village has been familiar with the LMMA concept since 2005 when ILMMA introduced the environmental education program at the SD YPK Meukisi (elementary school). Local teachers developed curriculum incorporating environmental topics, which was later endorsed by the district government. Parents and youth saw changes in attitude in their children and siblings, who became more aware and sensitive of environmental issues. Based on this success with the environmental education program, the community requested ILMMA to introduce conservation activities to their village.

Other factors encouraged the Meukisi community to adopt an LMMA approach. The village government and youth saw positive results in neighboring villages after those communities implemented an LMMA, including an increase of important species and protection of their marine boundaries from illegal fishing by applying Village Natural Resources Regulations. They also realized that pressure on natural resources in their village is greater with increased fishing intensity by fishermen from the city to their village, therefore adopted an LMMA approach in order to protect their natural resources.

Environmental education for primary schools

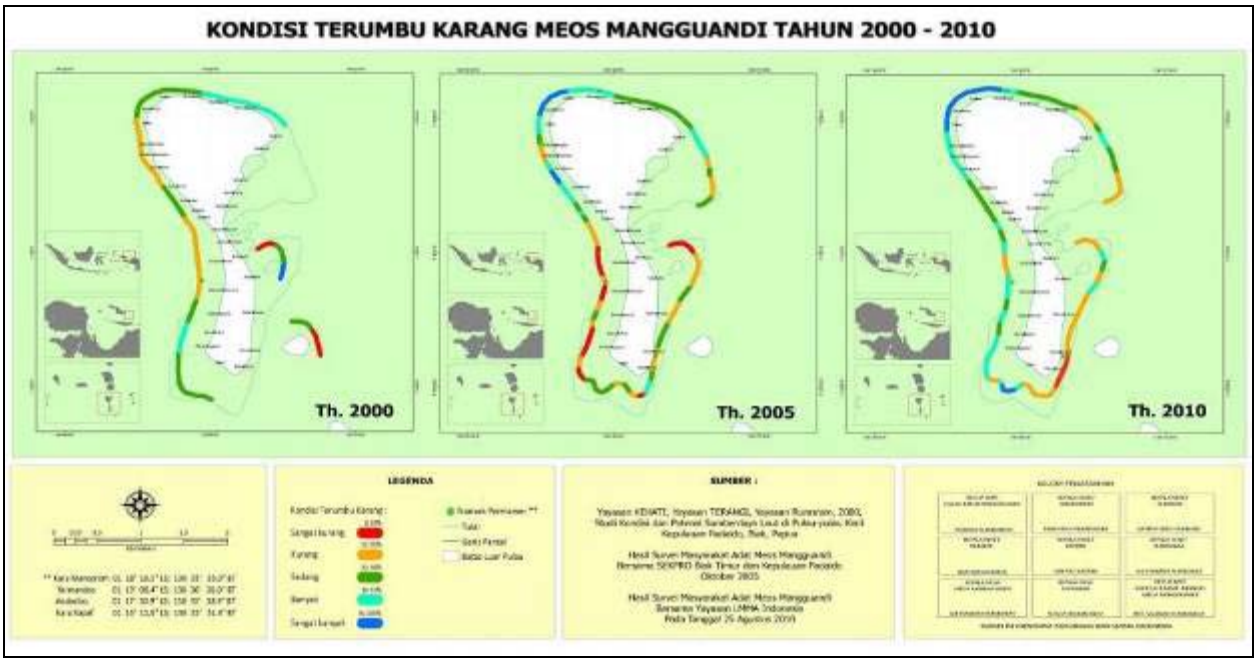
The environmental education learning module (pictured at right), developed by teachers and introduced in 2006 for class-five students in six elementary schools in Tanah Merah Bay, has been approved by the Department of Education and Teaching in Jayapura District. The module was developed with a focus on the local marine resources where students live. In 2010, the environmental education subject was officially included as material for all schools throughout Tanah Merah Bay. The module will be posted on the www.lmmanetwork.org website once translated.

Campus to Village (*Kampus ke Kampung*)

Not only have ILMMA education sites been successful at incorporating environmental education with locally relevant materials into schools, but also in having the villages serve as a learning site for university students. In 2010, ILMMA facilitated 25 students from local universities in Jayapura (University of Cenderawasih, University of YAPIS, STIPER) to conduct fieldwork and research at ILMMA sites in Jayapura, and one PhD candidate from Murdoch University to study at Kei and Padaido islands. This interest from academia stimulates confidence and pride in the community in that the local wisdom of generations can be tailored to support university-level scientific study. The students also help to document this local knowledge so that it will not disappear and will stay alive in the community.

Significant improvement in Live Coral Cover

Of the 11 ILMMA sites with live coral cover maps, four have serial data covering the past 10 years, another four have five years serial data, and three sites have gathered baseline data. Monitoring results in October 2010 from the eight sites with serial data showed a significant increase in live coral cover. The graphic on the next page shows the areas of increased live coral cover on Meos Mangguandi Island from 2000 to 2010. Green to blue colored bars represent increasingly higher coverage, while yellow and red lower.



Overall, there was a positive trend in coral cover from 2000-2010, although some areas declined in 2005 (indicated by the red areas) due to earthquakes that struck the island during that time. Locally, it is felt that the significant improvement in coral cover by 2010 is due to Meos Mangguandi's Natural Resources Management Regulation being applied and broadcast widely by various groups. For example, youth and *adat* (customary) groups intensively visit neighboring villages as part of a public awareness campaign to disseminate or "socialize" the rules, and youth, church leaders and village government groups intensively carry out their own awareness campaigns on conservation and the village's Natural Resources Management Regulation through radio.

Key lessons learned in 2010

Legalizing fishing regulations helps decrease number of violations, but is not enough
The implementation of Village Natural Resources Regulations and their recognition and legalization by village and district governments has helped communities protect their traditional fishing grounds and penalize fishers using illegal methods or poaching from outside the village.

Meos Mangguandi Island has recorded only six violations in 2010 after village regulations were legalized, which represents a decline in violations over the past five years. The majority of cases were of poaching in the *sasi* (protected) area by fishers from neighboring villages. Conversely, in Auki, violations increased in the last three years. There were 113 violations recorded in 2010, the number still high despite village regulations, many involving the use of bombs; more than a third of the violators were from outside the island of Auki. Economic need and the desire for huge catches within a short time are still the main drivers for fishermen to use bombs. Another is jealousy; groups not receiving any aid/funds from government or donors lash out by using bombs, justifying their actions as due to not getting support, despite the damage they cause to marine resources. The lesson is to reach out to these communities to help them become stewards of their environment rather than expecting to receive outside assistance and funds.

Sanctions for illegal fishing activities need to be strong enough to be dissuasive
So far, violators from Meos Auki only receive social sanctions, such as their names being announced during Sunday worship, or a visit by community leaders to the violators' family. For violators from outside the community, the village issues a letter of reprimand. Mild sanctions like these are not effective in deterring violators. To address this, ILMMA helped the village form a community patrolling team to routinely monitor the village's LMMA boundaries and send away trespassers.

Poaching also occurred in the waters of Tablasupa, Tablanusu and Demoikisi at Tanah Merah Bay, Jayapura. The culprits again were outside fishermen from neighboring villages. To help overcome these incidents, ILMMA helped these three villages develop and formulate their Village Natural Resources Regulation so that they have power to apprehend violators. With the regulation in place in May 2010, the youth group and conservation team from Demoikisi Village captured and confiscated a fishing boat illegally in their waters. The Demoikisi Adat Council warned the fishermen against trespassing and fishing in Tanah Merah Bay. In October 2010, Tablasupa fishermen caught another trespassing fishing boat, which was confiscated and the fishers fined by the Tablasupa Adat Council.

Key highlights in 2010

Set up Community Learning Center at three focal areas
ILMMA provides basic training for communities in its program sites to ensure that they gain adequate knowledge to be self-reliant in conserving their natural resources. The skills gained have proven to be so useful that communities in ILMMA's three focal areas have become experts in certain fields and three Community Learning Centers have been established.

1. The Meos Mangguandi Learning Center in Biak, Papua specializes in participatory mapping and developing local marine resource regulations. The Padaido community has realized that mapping is an important tool for their community as it is used to establish their legal rights to protect their traditional fishing ground and marine resources. It also enables them to counter big fishing companies, mostly armed with a local government permit to operate in their territory. The map-making initiative has also encouraged effective governance and accountability because it requires approval of the village and sub-district governments. Once approved, the community has to announce it through the local media, particularly the Indonesian Radio Broadcasting Company (RRI), to inform the broader public of the boundaries and their protective rights over their traditional fishing grounds. This community has helped other villages in eastern Indonesia map their fishing grounds, and have now developed their village as a Learning Center where others can come to learn about this process from them.

2. The Tanah Merah Bay Learning Center specializes in Environmental Education. The student learning modules developed by teachers from six primary schools and focusing on local marine resources in the Tanah Merah Bay Area have been approved by the Department of Education and Teaching of Jayapura District. This is the first time ever that village teachers in Papua developed and wrote their own school materials. The community's expertise has led them to develop the Center for Environmental Education Learning at Basic Education level.

3. The Tanimbar Kei Learning Center in Southeast Maluku specializes in traditional management and alternative income development. The community on this island is well known as being very strong in their adherence to tradition in natural resource management. As the only Hindu community in Eastern Indonesia, their tradition has taught them to respect and conserve their land and marine resources. Most of these traditions have been adopted as part

of their Natural Resources Management and Tourism Regulations. The village conservation group is very dedicated to conservation efforts, which are fully supported by the community and customary leaders. Combining traditional management (known as *sasi*) with an adaptive approach has resulted in a significant increase in the number of trochus, as well as economic development through seaweed farming. In Ohoiren Village in Southeast Maluku, the community has also seen an increase in the abundance of sea cucumbers and trochus through *sasi*.

All the three centers are designed to accelerate the transfer of knowledge and boost the learning process from community to community, and *by* the community.

Public Service Ads and Interactive Radio
One of the most effective media for disseminating conservation activities is radio. RRI is a state radio broadcast with the widest outreach to remote islands in Biak. RRI in Papua has a special event called "environment dialogue". Meos Mangguandi and Auki communities use public service advertisements as part of socialization and awareness campaigns on the importance of protecting marine resources. In addition, RRI invited the Meos Mangguandi community, as the only location in Biak Numfor applying *sasisen*, to share their experiences and success in managing natural resources using this method. Simon Morin and Junus Rumkorem represented the community and informed the public about community efforts on the island of Meos Mangguandi to apply the value of local wisdom to protect natural resources.

Key challenges for 2011

Develop ILMMA Strategic Plan and Communication Strategy for 2011-2014
These activities will involve 11 sites in the conservation program and 15 from the environmental education program.

Develop Eco-enterprise
This is a new initiative for ILMMA, proposed by communities in order to create alternative sources of income to allow them to reduce dependence on marine resources and successfully manage their LMMA. ILMMA has developed a training program that includes:

- Identification of the proposed business to be developed
- Assess the feasibility
- If business is deemed feasible, develop operational planning for its preparation and implementation.

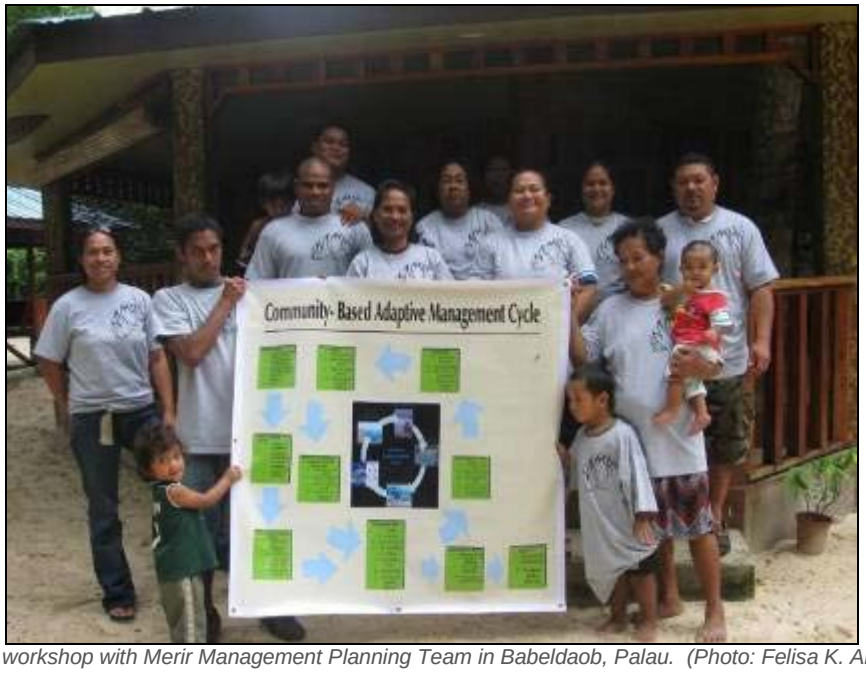
Host three Cross Learning Visits
ILMMA's Community Learning Centers will host the following international learning exchanges:

- In September/October 2011, Palau LMMA communities will visit Tanimbar Kei and Aru Islands, Southeast Moluccas
- In October/November 2011, Manatuto and Hera communities from Timor Leste will visit Tanimbar Kei, Southeast Moluccas
- In 2012, Kimbe Bay, Papua New Guinea communities will visit Jayapura, Papua

"LMMA helps us, teachers, to implement school based management and school based curriculum as a creative and joyful learning. Our students learn about coral reefs and kinds of fish that living surround it".
Mien Wally, Principal of Wibong Primary School, Tablasupa, 8 May 2010

MICRONESIA

Palau



CBAM workshop with Merir Management Planning Team in Babeldaob, Palau. (Photo: Felisa K. Andrew)

Key achievements in 2010

Assisting communities with applying the CBAM approach: completed draft management planning for Merir Island, Sonsorol State

Ten members of the Merir Management Action Planning team were trained in the basic management planning process using PIMPAC guidelines and CBAM principles, facilitated by former Palau/Micronesia LMMA Coordinator, Wayne Andrew with support from the regional LMMA Network, the Palau Conservation Society (PCS), and the Micronesia Conservation Trust.

After the initiation of the Merir (also known as Melieli) management planning project in early 2010, the action planning team was put together with both traditional and state leaders and including representatives from the three other islands of Sonsorol State – Pulo-Anna, Fanna, and Sonsorol. The team held several meetings with the Merir community and leadership to guide the development of the management vision and mission; map resources; identify and prioritize natural resource targets; identify problems, root causes, and potential solutions; identify stakeholders and their roles; and develop goals, objectives and actions for management.

The team then went through CBAM training supported by the Network to build their knowledge and ability to facilitate, carry out and evaluate the management planning process. This support gave an opportunity for the group to:

1. Understand the process in relation to the work they accomplished;
2. Clarify and understand the gaps and next stages of the management plan;
4. Understand the scope of work that the CBAM cycle entails; and
5. Develop individual skills in management.

They also identified further needs and have begun scouting individuals to be directly involved in the implementation of the plan. After the trainings, the traditional and state leaders officially bestowed their blessings to uphold the development and completion of this plan.

Key lesson learned in 2010

Lessons learned while drafting Merir Island Draft Management Plan

1. The PIMPAC Management planning process is straightforward and simple for the team to develop a realistic and do-able plan; it is very community friendly, allows for community participation and ensures strong ownerships of the plan if completed.
2. Strong and united community leadership and support/approval of the plan is essential for the plan's success.
3. Community member support is also important. Merir Community members were very supportive in the plan development process. They volunteered much of their time to participate in all meetings and contributed to the identification of indicators, threats/problems, root causes of each problem, and appropriate actions needed to help eliminate or reduce impacts.
4. Good leadership skills of the action planning team leader and members is necessary to gain strong support from state leaders, partners, community groups and other community members.
5. A community driven and owned plan and will be simple and easy for the community to understand and implement.

Key highlights in 2010

Amendment to the Helen Reef Legislation Act to include Hatohobei Island resources

The results of the 2010 Socio-Economic survey conducted by PIMPAC in collaboration with the Palau country network were reviewed by the Helen Reef Management board, staff, and the Hatohobei State Leadership for adaptation into existing management plans for the Helen Reef Project. Based on the Hatohobei communities' concerns, the project was expanded to include Hatohobei Island resources (both marine and terrestrial) that are in need of management and enforcement, and changed in name from "Helen Reef Resource Management" to "Hatohobei Resource Management."

Extending management efforts to Hatohobei Island addresses community members' concerns for the protection of the islands viable resources, and permits the enforcement team to expand its monitoring and surveillance to cover the entire water and land areas of both Helen Reef and Hatohobei. In addition, it will help to make the Helen Reef Ranger Station exchange more reliable and cost effective in terms of travel back to Koror on the mainland, and reduce the cost of food by buying locally in Hatohobei (which is also healthier compared to the previous practice of buying canned goods from the main stores in Koror).

The community also suggested more community benefits such as increasing the allowable harvest amount, including wide program participation, and restructuring the closed area to allow for better access, ability to harvest, and reliable enforcement capability. Changes in the design and tools of the management plan include:

- 5 turtles per year/for community functions
- 72 quarts of fish per state trip per person visiting the island

- Change in location and design of closed area
- Pertains to all the species regulated by the National Government, which are:
  - Napoleon Wrasse
  - Bumphead Wrasse
  - Hawksbill Turtles
  - Birds
  - Green Turtles (Seasonal & Size)

Participation in an Emerging Pacific Leadership Dialogue (www.epld2.com)
In March 2010, William Andrew, Palau Country Network Coordinator, was selected from over a hundred applicants to participate in an Emerging Pacific Leadership Dialogue group to discuss issues related to economy, environment & conservation and leadership in the Pacific region. More than 200 participants from all over the Pacific convened in various locations throughout the region. William's tour group was in Fiji looking at a range of topics focusing on:

1. Business and Economy, including the three largest income earners driving the Fiji economy – sugar, tourism and bottled water.
2. Managing the relationships between issues and initiatives relating to economic development, social (including indigenous), infrastructure, Native Land, environment and sustainable development.

Highlights and learning from William's experience include:

1. Identifying the different leadership types in the government and private sectors in Fiji.
2. Conservation projects in Fiji have worked very closely with grade schools on environmental awareness materials development and education.
3. One conservation project in particular is funded mostly from foreign grants, with a bit of support from private corporations, but it appears that there is very little government support in terms of direct financial sustainability for this particular project.
4. Alternative income generating activities are doing very well in providing communities good sources of alternate income to improve their living and needs.

Key challenges for 2011

Challenges to LMMA work in Palau include:

- Financial sustainability of site management efforts
- Continuing the development of site management plans for those sites in Palau currently without a management plan or in development; the challenges to this include lack of funds for state governments, lack of personnel or skilled personnel, and lack of priority interest from sites, among other difficulties.
- Lack of partnership agreement and support from state and local partners including local government agencies; Belau LMA will work on developing or strengthening these partnerships between national government, state government, and local agencies and partners.

Pohnpei

Pohnpei's 7th Annual MPA cross-site exchange participants. (Photo: CSP)

Key achievements in 2010

Pohnpei's approach to CBAM

When first introduced to the Community-Based Adaptive Management (CBAM) process, marine resource managers and community partners that comprise the Pohnpei MPA Network were excited by the name simply because it clearly stated "community". However, the term was unclear to the MPA Network until a workshop/training took place in 2009 on the approaches and tools that CBAM provides to guide resource management. Communities were comfortable with CBAM because they found it flexible and compatible with other methods; for instance, The Nature Conservancy's (TNC) Conservation Area Planning (CAP) can easily fit within the CBAM process. Given this experience, The Conservation Society of Pohnpei (CSP) and its local partners teamed up with TNC and the Secretariat of the Pacific Community (SPC) and developed a model that would pilot CBAM process in the communities. The result: a process called "*Lirohrohki Pohnpei Sarawi"* or *"to be loyal to our sacred Pohnpei".*

Formal recognition of Pohnpei's community MPA Executive Committee

The Pohnpei MPA Executive Committee came to exist as a result of a cross-site learning exchange between Pohnpei LMMA representatives and Fiji LMMA members in Votua Village in Fiji. The Pohnpei community members brought back the idea to create a task force with representatives from each of the MPA communities in order to bring the community voice to Pohnpei's MPA and marine resource conservation and management efforts. This task force became the MPA Executive Committee comprised of village leaders from seven MPA communities. In 2010, the MPA Executive Committee was invited to join the legally-mandated Pohnpei Resource Management Committee (PRMC) overseeing resource management and conservation in Pohnpei, comprised of directors and leaders of resource management agencies and chaired by Pohnpei State Lt. Governor. It is a big step for the MPA Executive Committee to be in PRMC to share the community perspective on resource management and conservation.

Key lessons learned in 2010

Combining awareness-raising with management planning
Developing a management plan could take a week or more than a year depending on the skills and capacity of both the facilitators and the communities. When identifying conservation targets, communities often lack the connections between species and ecosystems (for instance, people value fish but not so much the seagrass and mangroves, which play key roles in their life cycles) that will lead to more comprehensive threat abatement. As a result, we CSP is combining education and awareness alongside management planning to help community members understand more about their conservation targets and develop sound solutions to the deal with the threats.

Involve communities and other stakeholders when advocating for policy change
After a long-awaited response from lawmakers regarding our Pohnpei LMMA's recommendations to introduce fish size limits for fish sold in the markets, we learned that it would be faster and more attractive to consult with community members, fishermen and other stakeholders before submitting recommendations. While scientific data may be valid and potentially influential to shaping new regulations, it is good to understand that science is only one of the considerations for policymakers; stakeholder input and constituent buy-in are other important factors.

Key highlights in 2010

MPA Network continues to grow through cross-site visit
The 7th annual MPA cross-site visit marks another great accomplishment for Pohnpei marine resource management. Participants included the paramount leaders of Pohnpei state government, which includes the Governor, Lt. Governor, members of Pohnpei State Legislature and head of the state marine resources. Hosted by a non-MPA community, the event helped steer the community members' enthusiasm for community-based marine resource management without government support. The presence of both state and traditional leadership elevated the community's spirit. The hosting community's proposed MPA has been processing through legislation for more than three years, and was declared and legislated less than a month after the cross-site visit, adding Nanwap MPA as another site to the Pohnpei LMMA Network.

Introduction of Pakin Island to MPA Network
Pakin Atoll was identified as an Area of Biological Significance and a high priority action area for the Pohnpei Strategic Action Plan. A Rapid Ecological Assessment was conducted in 2006 that landed Pakin Atoll on Pohnpei's top five list of high fishery population and rich coral reef biodiversity. The people of Pakin Atoll have been practicing marine resource management and conservation for more than ten years. Finally in 2010, the Pakin community submitted their request to set aside three of their richest marine areas to be part of Pohnpei's MPA Network. Pakin community members participated in the 7th annual MPA cross-site visit and later elected a member to the MPA Executive Committee.

Key challenges for 2011

New regulation compliance and enforcement
New regulations - including fish size limits, mesh size rules, and banning spear fishing using SCUBA - have been passed. The MPA Executive Committee will need to help mobilize communities to comply with new regulations and assist in their enforcement.

Transitioning of Division of Fish and Wildlife Protection
The Marine Conservation Unit (Pohnpei's deputized enforcement arm) has been moved from the Department of Land and Natural Resources, forming a new Division of Fish and Wildlife Protection under the Department of Justice. Community Conservation Officers will need to develop a new strategy to keep the joint-enforcement partnership with the government.

PAPUA NEW GUINEA

Community Leader Stanis Giru from Patanga LMMA, drawing the map of his LMMA site during PNG Management Plan Manual review workshop organised by PNGCLMA in November 2010. (Photo: Maxine Anjiga-Arua)

Key achievements in 2010

Strengthened partnership with PNG Government
Papua New Guinea Center for Locally Managed Areas (PNGCLMA) is collaborating more effectively with the PNG Government through the Department of Environment and Conservation (DEC) and National Fisheries Authority (NFA). As a result of these partnerships and the recognition of PNGCLMA by the PNG marine conservation community as an important national conservation organization, the organization was nominated to coordinate learning and capacity building activities in PNG. PNGCLMA has agreed to lead and coordinate this national learning and capacity building network with support from a collaborative working group.

Updated PNGCLMA membership system
PNGCLMA has finalized a process to work with its member communities and will begin transitioning current LMMA site members to the new PNGCLMA system. The existing LMMA network membership criteria remain but current members must also formally register with PNGCLMA to fulfill PNG legal requirements under which PNGCLMA was registered to coordinate LMMA activities in PNG.

Key lessons learned in 2010

Be realistic about capacity during transition times
The transition from an informal to a formal organization was challenging, and moving to a new office took much more time and energy than expected. We were not able to produce timely reports for donors and key stakeholders due to lack of human resources, with only one or two people doing everything. Better transition planning with a realistic expectation of staff constraints would have helped us during this time. The process of setting up the financial systems also took more time than expected; from this, we have learnt to delegate, share responsibilities and obtain expert support and appropriate systems (such as technical accounting software) to improve our ability to manage and report on our finances.

Invest time in clarifying organization mission and work in times of change
During our transition to an independent and legally recognized organization, there was some confusion both internally and externally about PNGCLMA's future role in the conservation sector and our new organizational structure and programmatic focus. To address stakeholders' misconceptions about what we are and what we do, we carried out a lot of awareness-raising through the media and community and national meetings. Now most stakeholders in PNG have a better understanding that our primary focus will continue to be at the community level but that we will also contribute to achieving national goals. PNGCLMA works in partnership with both national and regional NGOs and relevant PNG government and/or private sector agencies to empower local communities to improve their marine conservation efforts through the provision of guidance, targeted capacity building and facilitation of sharing lessons learned.

Key highlights in 2010

1. In October 2010 PNGCLMA organised a national level workshop to reflect on the challenges and successes experienced by the PNG marine conservation community to date and to chart a new way forward to improve the impact of our collective conservation efforts. The PNG Government hosted the workshop and PNCLMA coordinated the various partner organizations who shared resources and collaborated to make the workshop happen. Clear and tangible recommendations came out of the workshop and will be implemented via a newly formed national learning network, in coordination with all key stakeholders, including the national government.

2. Through the national government's Office of Climate Change and Development (OCCD), PNGCLMA is a member of the national climate change adaptation program working group.

Key challenges for 2011

1. PNGCLMA's first challenge is to have national level stakeholders recognize and support the fact that all communities in PNG are different and what works in one community may not work in another. For example, some communities follow a chieftain system, some a church system, while others follow the government system. It is not the same in every community; they get organised based on what works for them. This is part of the challenge in a country that is so diverse, with more than 800 different languages and many cultures. Therefore PNGCLMA will be working in cooperation with different communities at their own pace and using different processes and approaches that make sense to a particular community.

2. The second challenge is (and has been) working with communities that have been doing site-based LMMA work with other organisations where the idea of self-reliance and sustainability was not discussed - where the community did not actively contribute to management efforts and the partner may have taken the lead in doing all the work (e.g., research/ monitoring). In these situations, it is a challenge for PNGCLMA to introduce the idea of working *together* towards more sustainable management of marine resources (as opposed to PNGCLMA doing the work for them). The PNGCLMA membership criteria attempts to address these 'community ownership' issues and includes: evidence of community organisation, at least one management area established (or in the process of being established), and payment of the K50 (about USD$19) membership fee per community (legal requirement). Discussions with communities regarding membership cover the topic of community expectations from PNGCLMA as well as contributions - what the community is willing to contribute as part of a partnership (e.g. in-kind contributions, such as working for the project and not expecting PNGCLMA to pay for labour).

PHILIPPINES

The colorful reefs of Barangay Lio, Romblon, Philippines. (Photo: SIKAT)

Key achievements in 2010

Maribojoc Bay, Bohol: Punta Cruz and Bingag MPAs

Various achievements have been seen in Bohol in 2010. In Maribojoc Bay, regular sea-borne operations in Punta Cruz and Bingag Marine Sanctuaries resulted in apprehensions of illegal fishers, especially the "Badjao" peoples who intruded in the no-take zones using cyanide. The local government unit (LGU) in coordination with Maribojoc Bay Executive Management Office and the local monitoring team conducted participatory monitoring in both MPAs. Both MPA management councils are continuously implementing user fees for ecotourism and other related activities such as review of management plans and policies, and patrolling and apprehension in the LMMA site. The latest MPA ratings by the Bohol Environment Management Office for Punta Cruz MPA is Level 1 because they failed to comply some of the requirements for higher rating such as proper maintenance of their Guard House, buoys, among others, while Bingag rated Level 5 (the highest rating) because they were able to pass all the criteria such as imposition of user fees, availability of funds from their income-generating projects (IGP), regular seaborne patrol operation, monitoring and enforcement of management policies.

Various coral formations in Punta Cruz Marine Sanctuary, Punta Cruz, Maribojoc, Bohol.
These photos were taken during the Participatory Monitoring held on December 18, 2010. (PROCESS Bohol)

Sultan Naga Dimaporo, Lanao del Norte
The establishment of MPAs in the Municipality of Sultan Naga Dimaporo, Lanao del Norte, reduced the number of fishers that venture to offshore fisheries from 70% to 30% due to increased availability of fish inshore. This has also minimized the threats to their lives from piracy, or loss of fishing boats or lives due to big waves and bad weather. Time spent fishing decreased from 8 to 4 hours per fishing trip and catches increased to more than 4 kilos from 1 or 2 kilos or even sometimes no catch at all. Some species increased since the MPAs were established, and even species thought as extinct in the area were sighted again by fishers. In addition, the MPAs became a mechanism for Moslems and Christians to work together in the protection, rehabilitation and management of coastal and marine resources in Illana Bay, fostering respect for each other's distinct culture and processes, especially in resolving conflict.

Mondragon, Northern Samar
The three-year protection and management effort through the Demarcated Fishery Management Area (DFMA) coupled with strict fishery law enforcement in this municipality resulted in increased fish catch from 3 to 5 kilos per day in 2008 to 10 to 20 kilos per day in 2010, particularly during the peak months of March to October in 2010.

Hinatuan, Surigao del Sur
In Mahaba Island, Hinatuan, the organized women fishers established a Women Managed Area (WMA) in their mangrove habitat to protect and manage the harvesting of shellfish, a source of income for women and food for poor fishing families. WMA is a management tool aimed at the protection and management of coastal and marine habitats and resources particularly utilized by women fishers. These areas and/or resources have typically been neglected as far as resource management planning, thereby marginalizing women; the work being done by the Mahaba women's' group is a step toward addressing this. To regulate shell gathering and protect stocks, an open and closed season for "*liboo*", a species of shellfish, was piloted: 2 months closed and 2 months open season was agreed upon by women gleaners in Mahaba Island.

In addition, fish catch in Hinatuan Bay has increased to from 3 to 8 kilos per day since 1998 when the fish sanctuaries were established.

Key lessons learned in 2010

Create good partnerships that benefit partners' needs as well as own
Helping local government units (LGUs) increase their revenue from resource management activities through means such as fisherfolk registration (collection of fees and licenses), penalties from apprehension activities, and user fees from fish sanctuaries has lead to increased LGU investment in coastal resource management. Funds generated have been used to support LMMA activities; strategic engagement of the LGU in resource management should be generated and maintained to ensure sustainability of management efforts by the communities. In addition, we should link with schools, religious groups and other sectors in the community to work for environmental protection and rehabilitation. For example, by sharing our work with various schools, most of the elementary students in the coastal communities are now involved in mangrove planting and coastal clean-up. In Sultan Naga Dimaporo, elementary students and teachers, together with the barangay LGU officials and people organizations, are working together for the establishment of a mangrove nursery in the to expand the existing mangrove area.

Have easily visible evidence of tools in use to alert and remind people of regulations
Visibility of resource management tools initiated by fishers improved enforcement of rules and regulations. For example, in Hinatuan, replacement and repair of guard houses, marker buoys and signage encouraged the Fishery Law Enforcement Team members to conduct regular patrolling and apprehension activities.

Key highlights in 2010

- PhiLMMA co-sponsored a national consultation workshop on ***Women in Fisheries and Climate Change*** in March 2010, attended by women fisher leaders from the Philippines and Thailand. Issues and action points to address climate change effects and impacts to women and coastal communities were identified.

- PhiLMMA co-sponsored a ***National Conference on Fisherfolk Settlement*** in February 2010, attended by fisher representatives from 11 provinces. The conference presented the trend of increasing displacement of small-scale fishers in coastal areas and the different strategies to secure tenurial rights. The result of the national conference was presented in the international workshop themed "*Recasting the Net: Defining a gender agenda for sustaining life and livelihoods in Fisheries*" sponsored by the International Collective in Support of Fishworkers, in Chennai, India, July 2010.

- Romblon LMMA sites received an award of ***Best Innovative Project***, Environment Category from the Philippines National Economic & Development Authority (NEDA), in October 2010 at the RP-Japan KR2 Exhibit and IFAD Knowledge and Learning market, the aim of which was to share learnings, best practices and project impacts among beneficiaries. The SIKAT project "Community-based Coastal Resource Management in the Municipality of Romblon" was chosen to present its notable accomplishments, which include: facilitating the shift of municipal government focus from marble mining to habitat conservation; strong community engagement in coastal resource management; forging multi-sectoral partnerships; increased support from the LGU; small commercial fishers active participation in resource management through patrolling in their designated fishing ground; increased revenue of the LGU from fishing as reflected in their budget allocation for coastal resource management (CRM) activities. Since the establishment of the 9 fish and marine sanctuaries in Romblon in 2004, there has been a recorded increased of fish catch from 2 to 5 kilos per fishing trip and an 85% decrease in illegal fishing activities inside the sanctuaries. This was due to the active patrolling efforts of the municipal fishers. Species that have not been seen by fishers for a long time – such as anchovies, yellowfin tuna, yellow fusilier, gray drummer – are again being sighted, especially during their season. Due to this success , barangay councils have allotted ₱163,600.00 (about $6520 USD) budget for CRM activities.

- Two community leaders, Ms. Salvacion Ruiz of Candelaria, Zambales and Mr. Charles Ramal of Romblon, Romblon, assumed the position as **Regional Fisherfolk Director** of the Bureau of Fisheries and Aquatic Resources for 1 month in their respective regions. This position is given to men and women fishers with exemplary accomplishments in coastal resource management and advocacy of fishers' rights in their respective areas.

Key challenges for 2011

- Sustained participation of member sites in PhiLMMA activities with minimal or no support from partner NGOs/LGUs could be a problem given the decreasing resources of Philippine NGOs; some members might have difficulty continuing participation in network activities and

in sustaining their initiatives as well. In light of this trend of dwindling funding, new approaches and mechanisms need to be devised to build and sustain partnerships with local government and other service providers so that resources are generated to continue communities' efforts in resource protection and management.

- We need to look beyond our efforts focused on working with allied groups and begin reaching out to the illegal fishers in our respective communities. We need to raise environmental awareness through education, information and campaign approaches, and help fishers find alternative fishing practices or other solutions so they can stop using illegal and destructive means.

SOLOMON ISLANDS

SILMMA 2010 Annual General Meeting, Sunset Lodge, Savo. (Photo: Patrick Mesia)

Key achievements in 2010

Seaweed expansion

The export of dried seaweed (*Kappaphycus Alvarezii*) had reached its highest record in the Solomon Islands in the last quarter of 2010. A lot of factors contributed to the increase in production, one of which is the huge financial support from the European Union (EU) to run trainings and purchase farming materials. Seaweed farming is also a priority of the Ministry of Fisheries Aquaculture program, which has four aquaculture officers involved in production.

Many communities working with Solomon Islands LMMA Network (SILMMA) have undertaken seaweed farming as an alternative livelihood activity. Communities in Marau that have been working with the Foundation for the Peoples of the South Pacific (FSPI) to manage their reef resources have successfully farmed the marine algae and are now selling dried seaweed to the Lee Kwok Kueng Company in Honiara. In the third quarter of 2010 they produced nearly 2000 kilos per month and fetched a monthly income of SBD$8779.50 (roughly $1,136 USD). Similar

aquaculture livelihood activities are happening in the University of Queensland (UQ) and WWF sites in Marovo lagoon; production in the 3rd quarter of 2010 was around 632 kilograms per month, providing a monthly income of SBD$2844 (about $368 USD) for the few seaweed farmers in the lagoon.

Many requests to the Aquaculture Department in 2010 for initiating seaweed farming projects came from MPA sites in communities that are working with some SILMMA partner NGOs.

SILMMA Strategic Plan printing and distribution
SILMMA's 5-year strategic plan was developed after several consultation meetings in 2009 and printed in November 2010, just in time for the annual general meeting held at the Sunset lodge in Savo, Central Islands Province, where it was endorsed by the members present. The plan was then distributed to various stakeholders, including Ministries and Provincial officers, who after reading it should know a bit more about the SILMMA network and its roles.

Key lessons learned in 2010

Community Monitoring Protocol: Use tools only as needed and appropriate to site
In May 2010, a workshop was conducted to develop a community monitoring protocol. The workshop was held in Gizo with financial support from CTSP and technical assistance provided by key partner organizations TNC, Worldfish, WWF, UQ, Tetepare Descendant Association (TDA) and Roviana Vonavona Conservation (RVC). This was an example of how the network can tap the technical expertise available within partner organizations to conduct key activities that require technical expertise.

It has been the perception of some Solomon Islands communities that biological data collection and intense monitoring is "a must" in MPA establishment, hence baseline surveys and repetitive monitoring have been included as part of the MPA plan. However, due to the expense involved and the question of the reliability of community collected data, the newly developed monitoring protocol will not be enforced on any community, neither will it be used as a membership criteria to join the county network, but rather will be an optional choice for communities. Those that are genuinely interested in doing monitoring as an evaluation mechanism for their management plan can use the guide. Others that do not want to engage in heavy monitoring activities can still share lessons from their management regimes through the use of the simple reporting template that is provided in the SILMMA strategic plan.

Invest in good networking and communication with provincial resource management offices
The work that TNC is doing in Choiseul with the Lauru Land Conference and the province has shown positive results in terms of support for resource management by provincial and community leaders. The same can be said about the FSPI work in the Central Islands province and the formation of the Gela, Russell Islands and Savo Natural Resources Management (GERUSA) Network. The common factor in these examples was the involvement of the provincial leaders. An important lesson learnt by SILMMA and its partner organizations is the need for proper dialogue with relevant offices in the provinces, updating the authorities with progress reports or informing them of intended activities of SILMMA or any partner organization in the province.

Key highlights in 2010

Presentation at the Provincial Fisheries Conference
SILMMA coordinator Patrick Mesia[5] gave a presentation during the 2010 annual fisheries conference meetings held at the Ministry of Fisheries headquarters in Honiara in March. A total of 9 Provincial Fisheries officers from all 9 provinces in the country were present during the talk. The presentation highlighted the kind of activities that the network is involved with and the potential areas that good linkages and working relationships can be established with provincial fisheries offices. Copies of the first issue of the SILMMA newsletter was given to the fisheries officers, SILMMA facts sheets and some FSPI posters (pidgin version) were also given to the officers to help them in their awareness campaigns in the provinces.

A page dedicated to SILMMA in the Solomon Sea Sustainables website
In 2010 WorldFish developed a website with CRISP funding primarily to improve the marketing of sustainably-cultured products from small scale mariculture enterprises. The website is also being used to house UQ collated data and serves as a repository of information on CBRM and marine livelihood opportunities. The site has a page dedicated to SILMMA (http://www.solomonseasustainables.com/ManageResources.aspx). To find out more about aquaculture products from the Solomon Islands, visit www.solomonseasustainables.com.

Key challenges for 2011

- Timely funding from the regional network affected SILMMA in the implementation of activities, as funds were not received until the end of October 2010 due to foreign exchange transfer procedural changes in the Network's host organization country. It is anticipated that funding will be received more promptly in future, and as long as SILMMA budgets are submitted on time to the regional network for approval. SILMMA partner organizations are also much more aware that they must fund activities through their project budgets and in negotiation with donors, as regional LMMA Network funds are used for expenses that are more difficult to fundraise for, such as core network and administration needs and information dissemination.

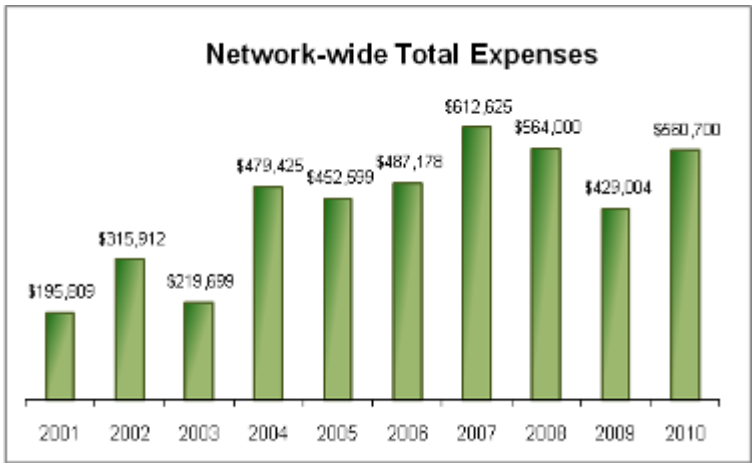
- The idea of trying to get all partners to feel that they are part of the network is still a bit challenging. Part of that challenge is to ensure that partners are very clear on the capacity and role of SILMMA, which is to act only as an information-sharing forum and as a clearing house for requests and partner coordination. As the strategic plan becomes more widely disseminated and understood, reinforced through provincial visits by the coordinator, this should become clearer to partners. In the longer term, support and effective information sharing between partners will only happen if everyone feels ownership of the network and partners are clear that they must fund SILMMA activities from their own project budgets and thus build these into their proposals to donors.

[5] Patrick left his position in late 2010; the new SILMMA Coordinator is Peter Kenilorea, also with Ministry of Fisheries and Marine Affairs.

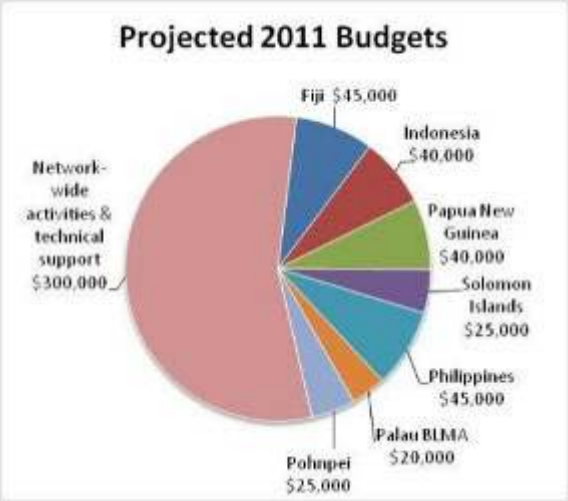
VI. Financials

The 2010 work of the overall LMMA Network was generously supported by the David and Lucile Packard Foundation, the John D. and Catherine T. MacArthur Foundation, the Marisla Foundation and the Coral Reef Initiative for the Pacific (CRISP). Country-level networks and individual sites and projects are also funded through other sources. Network funds are focused on Network-wide activities that benefit country networks and members, and to support country network core needs.

The graph at right shows operational funds expended annually by the overall Network since its inception (though the Network was launched in 2000, it did not have an operating budget until 2001; all figures expressed in US dollars.). Expenses include administration, salaries (country network coordinators, field staff, technical advisers and consultants), travel, country network annual meetings, training and cross-site activities, conferences and workshops, equipment, resource materials, publications, field supplies, telecommunications, and, where applicable, taxes. The 2010 budget is somewhat higher than the previous year due to the strategic planning underway (we hired a consultant as a strategic planning adviser and convened two regional meetings – one for governance and the other for learning). These costs were somewhat offset by a reduction in field activity and training expenses for a couple of country networks that were focused on internal structure and organizational matters.



The pie chart below shows a breakdown of estimated LMMA Network funding for 2011 (final amounts subject to change). Total country budgets may be higher than shown; indicated here is only the amount supplied by the overall Network directly. Country budgets shown only reflect LMMA Network contribution, not including in-kind or other external contributions and technical support. Individual CNs and partners seek additional funding to support in-country network activities and coordinators. The pie chart also includes a slice for Network-wide activities such as meetings, capacity building activities, systematic learning, management, coordination, technical support and communications. Major activities planned for the regional Network for 2011 include continuation of strategic planning, operational planning, the first annual cycle with the new Council in place, revised learning activities, website launch and 10th anniversary activities.



Acknowledgements

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The David and Lucile Packard Foundation

The John D. and Catherine T. MacArthur Foundation

Coral Reef Initiative for the Pacific (CRISP)

Whitley Fund for Nature

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The Locally-Managed Marine Area (LMMA) Network 2010 Annual Report
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