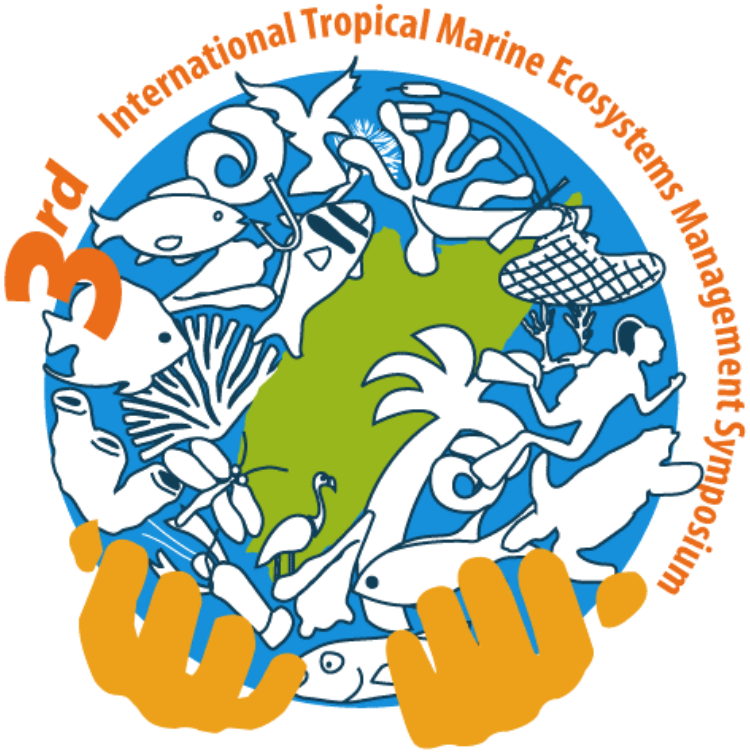
THIRD INTERNATIONAL TROPICAL MARINE ECOSYSTEMS MANAGEMENT SYMPOSIUM



ACTION STATEMENT

Final Version

Cozumel, Mexico
20 October 2006

Introduction

The 1995 Call to Action by the International Coral Reef Initiative is more urgent today than when it was first made.

ITMEMS3 was held in Cozumel, Mexico on October 16 to 20, 2006. It brought together over 300 people from 45 countries reflecting a broad range of experience of managers, scientists, private sector, non-governmental organizations, development and funding agencies to review progress since ITMEMS2 in 2003 and to share and discuss lessons learned in implementing the ICRI Framework for Action.

ITMEMS3 consisted of 49 workshops and two special sessions that considered priority issues or problems of management of tropical marine ecosystems that had been identified by managers from all coral reef regions of the world early in the Symposium planning process. The workshops were prepared and managed by organizing groups to address 13 themes:

- Building resilience into coral reef management
- Disaster management and restoration
- Enforcement and investigation
- Fisheries and aquaculture
- Human impacts
- Information and knowledge management
- Modelling and decision support
- Communication, education and awareness
- Integrated and participatory strategies
- Sustainable tourism
- Economic valuation and incentives in marine natural resources management
- Partnerships and strategic alliances
- Sustainable financing

A specific objective of the Symposium was to develop recognition and mutual understanding of the roles of local government, and the technical and scientific management community in management of coral reefs and related ecosystems. This was addressed through a Local Government Leaders Forum Chaired by the Mayor of Cozumel Hon Gustavo Ortega Joaquin with participants from Tanzania, Philippines, Cook Islands, Australia and Hawaii, USA. The Forum developed the *Cozumel Declaration,* which is provided in Attachment 1 of this Statement.

An additional special session focused on peer to peer networking between the full range of participants from managers to scientist to local community representatives, NGOs and government.

ITMEMS3 participants recognized that, amongst many threats, the emergence of climate change as an over-arching threat to tropical marine ecosystems increases the imperative for action and effective management. As such a separate statement on climate change in relation to tropical marine ecosystems was drafted and adopted by the symposium, and is provided in Attachment 2 of this statement.

The proceedings of ITMEMS3 contain the detailed reports and recommendations of each workshop. This statement has been developed from the reports of the workshops of ITMEMS3 to reflect recurring and emerging issues in more than 400 recommendations. It has been designed

to focus on overarching priorities for action in the next 5 – 10 years to address the four elements of the ICRI Call to Action, which are:

- Integrated Coastal Management
- Capacity Building for Management
- Research and Monitoring; and
- Performance Evaluation and Review

This Statement builds upon and reflects the principles and processes established in multilateral environment agreements and other relevant international programmes[1]. The detail and context of the issues and recommendations in this Statement should be read and interpreted in light of the individual theme and workshop reports, and the Action Statements of previous ITMEMS.

The principles and overarching actions identified in the 1995 Framework for Action continue to provide a valid strategic context for this Statement.

Principles

The ICRI recognizes the following principles:

- Achieving the ICRI's purpose requires the full participation and commitment of governments, local communities, donors, NGOs, the private sector, resource users and scientists; therefore true partnerships, cooperation and collaboration exemplify the ICRI activities
- The overriding priority is to support actions that will have tangible, positive and measurable effects on coral reefs and related ecosystems and on the well-being of the communities which depend upon them
- Human activities are the major cause of coral reef degradation; therefore, managing coral reefs means managing those human activities. Individuals whose decisions and actions affect coral reefs–from boardrooms to beaches–need to become aware of and committed to the conservation and sustainable use of coral reefs and related ecosystems
- The diversity of cultures, traditions and governance within nations and regions should be recognized and built upon in all the ICRI activities
- Integrated coastal management, with special emphasis on community participation and benefit, provides a framework for effective coral reef and related ecosystem management
- Developing national capacity to conserve and use sustainably coral reefs and related ecosystems requires a long-term (decadal) commitment. Improvement of coral reef management requires a permanent commitment and an adaptive approach
- Strategic research and monitoring programs should be an integral part of the ICRI because management of coral reefs and related ecosystems should be based on the most relevant scientific information
- Actions promoted under this framework should take account of, and fully use, the extensive body of international agreements and organizations that address issues related to coral reefs and related ecosystems. The ICRI will facilitate the leveraging and channeling of existing resources among all sectors for the benefit of coral reefs and related ecosystems

Actions

[1] *WSSD, the U.N. Commission on Sustainable Development, the Convention on Biological Diversity, the U.N. Framework Convention on Climate Change, the Global Conference on Sustainable Development of Small Island Developing States, the U.N. Convention on the Law of the Sea, Convention on International Trade in Endangered Species of Wild Flora and Fauna, Global Program of Action to Protect the Marine Environment from Land-Based Activities, the Ramsar Convention, World Heritage Convention, FAO Code of Conduct for Responsible Fisheries, Regional Seas Conventions and Action Plans, the Convention on Migratory Species.*

- All those committed to supporting the ICRI and this Framework for Action are called upon to take account of and to act on the following at the international, regional and national levels
- Support national and regional efforts to establish and coordinate strategies, priorities and programs to implement the ICRI Framework for Action
- Ensure that sustainable management of coral reefs and related ecosystems is considered at future relevant international meetings
- Develop and/or strengthen national, regional and international mechanisms for gathering and sharing information and expertise on the sustainable management of coral reefs and related ecosystems
- Promote improved access to financial and technological resources to enable institutions, regional centers and networks to assist and inform governments, industries and communities
- Addressing conservation and sustainable use of coral reefs and related ecosystems requires activities in the following areas:

    - Public awareness, education and training
    - Ratification of or accession to relevant international instruments
    - Stakeholder participation at all levels; training policymakers and private sector decision-makers in the development and implementation of coral reef management
    - Marine science and technology
    - Environmental law, particularly environmental impact assessment regulations; and
    - Micro-enterprise development and access to financing on a small to medium scale

Recommendations

INTEGRATED COASTAL MANAGEMENT (ICM)

Building resilience into coral reef management

Coral reefs are facing increasing stresses from causes including rising sea temperatures, over-exploitation, land based sources of marine pollution and severe events including storms and tsunamis. Climate change is now recognised as one of the most serious long term threats to the biodiversity and services provided by tropical marine ecosystems.

ITMEMS3 recommends that:

- Managers should promote action to limit climate change to ensure that further increases in sea temperature are limited to 2°C above pre-industrial levels and ocean carbonate ion concentrations do not fall below 200 μmol. kg^{-1}
- Management planning must incorporate recognition that mass coral bleaching, will have the potential for similar social and economic consequences as other environmental such as droughts, oil spills and other disasters, and will require similar responses
- Facilitate and finance actions to increase resilience of coral reef social-ecological systems, particularly through marine management area networks comprising adequate areas of coral reefs and associated habitats in non-extraction zones, protection of water quality and herbivore populations, and adaptive governance
- Facilitate and finance the development and implementation of coral bleaching response programs, including contingency funding

Disaster management and restoration

The world today is witnessing more frequent and more widespread calamities, due either from natural or anthropogenic causes that damage or destroy coastal ecosystems on unprecedented scales. Nations are often ill-prepared to assess and take measures to reduce subsequent damage because of the lack of baseline information. In order to be better prepared for proper disaster management and restoration.

ITMEMS3 recommends that:

- Contingency plans be developed according to the nature of coastal areas which will provide for proper coordination at the regional, national and local level before, during and after a disaster
- Land use planning in the coastal zone must consider the wide range of important economic values that coastal ecosystems provide, not least their important coast protection functions
- Integrated coastal management be promoted and implemented to build resistance and resilience into tropical marine ecosystems
- Economic incentives need to be developed in conjunction with supporting legislation in order to encourage the preservation and restoration of coastal ecosystems
- Maritime nations survey their coasts, particularly coral reefs and associated ecosystems, to establish baseline data to serve as benchmarks in the face of disasters and support management

- Maritime nations ensure that they have appropriate early warning systems in place, as well as communication and disaster preparedness strategies and techniques
- Many countries need to urgently amend the legislation covering damage compensation claims. Guidelines would usefully be produced highlighting the key steps and requirements in legislative change

There are a limited number of methods for restoring areas of coral reefs affected by disasters or human impacts. There are currently no techniques available to restore significant areas of corals; most current techniques are not cost effective. They have limited ecological scale but are applicable to the restoration of sites of high economic value.

ITMEMS3 recommends that:

- Decisions on whether or not to restore damage should consider the probability of survival of transplants, a low level of likelihood that the impact will be repeated in the long term, and ensuring that the resources devoted to restoration do not distract effort from more valuable alternative activities
- Assessment of appropriate compensation for damage from the responsible party should be based on the total economic value of benefits foregone as a result of reef damage as well as the costs of restoration

Enforcement and investigation

The ITMEMS2 Statement and recommendations on enforcement remain valid today but there has been little progress in implementing those recommendations.

ITMEMS3 recommends that:

- Resource management agencies involve enforcement expertise to ensure active and early consideration of enforcement issues during planning processes
- Resource management agencies provide awareness and education for the public on laws, regulations and consequences of violations including publicising the outcomes of prosecutions to promote deterrence and improve
- Donor organizations, NGOs and governments should not focus only on science and planning but support the development and maintenance of enforcement capacity to ensure that management strategies succeed
- Incorporate Ecological Risk Assessment (ERAs) to focus compliance and impact mitigation planning
- Nations should take actions against illegal activities by their citizens overseas.

Fisheries and aquaculture

Tropical nearshore and coral reef fisheries are generally not well managed.

ITMEMS3 recommends that:

- Support reform of fishery governance at multiple levels to harmonize policies to ensure consistency, sustainability and integration of fisheries management with other elements of tropical marine ecosystem management

- ICRI encourage and support sustainable fisheries management based on a whole ecosystem based approach
- ICRI support the design, implementation and performance monitoring of MPAs as one important tool in a suite of tools to protect important and vulnerable life history phases, habitats and ensure sustainability of fisheries
- Identification of fishery management objectives should consider the wide range of economic value provided by healthy fisheries (e.g. actual or potential dive recreation tourism revenues)
- Support the development and adoption of policies that encourage rights and local tenure based management to eliminate open access marine regimes in the ocean. This approach will encourage co-management and encourage sustainable fishing
- Encourage diversified skills for community-based income generating activities to increase community resilience

Human Impacts

Preliminary research findings suggest that marine protected areas have a lower disease prevalence than reefs that are fished and recover more rapidly after stress.

ITMEMS3 recommends that:

- Marine protected areas should be promoted and implemented as a management tool for containing coral disease

Dredging and port development and inappropriate reef restoration around coral reefs can create significant impacts. However, these are often essential activities, and the Permanent International Association of Navigation Congresses (PIANC), through Working Group 15, is developing guidelines that are relevant to tropical marine ecosystems.

ITMEMS3 recommends that:

- Interested parties review the PIANC draft Guideline on "Dredging and port construction around coral reefs" and provide comments for editorial consideration
- When finalised, the Guidelines be considered for endorsement by ICRI as a minimum requirement for marine construction activities around coral reefs
- The Guidelines be extended to include mangroves and seagrass as critical tropical marine ecosystems

Integrated and participatory strategies

The participation of stakeholders and cross-sectoral engagement is fundamental to the development of successful management strategies. In particular, it is vital to ensure that those bearing the costs of policies or projects are identified, as well as those benefiting. The integration of traditional management and knowledge systems with modern scientific and economic equivalents presents important challenges in the design and implementation of management.

ITMEMS3 recommends that:

- The inclusion of traditional management into a hybrid or integrated strategy should occur in partnership with local government, central government and traditional leaders

- Investing in peer-to-peer learning among communities is the most effective means to develop and support the capacities needed to adapt and adopt best practices globally

Sustainable tourism

Sustainable tourism has the potential to create long term economic, social, cultural and environmental benefits although there are many examples economic and environmental failures.

ITMEMS3 recommends that:

- Partnerships with the tourism industry be developed to generate mutual benefits for the environment, industry and local communities
- Integrated cost benefit analysis be conducted by credible experts to promote policy and development so that tourism creates long-term economic, social, cultural and environmental benefits
- Coordination frameworks, such as the Guidelines on Biodiversity and Tourism Development of the Convention on Biological Diversity (CBD), be implemented to ensure stakeholder participation in the creation of a local vision for sustainable development for its continued execution, implementation and monitoring of compliance
- A vehicle for multi-stakeholder participation from which a mutually beneficial partnership can develop with the cruise ship industry, including cruise industry commitment to define and adopt a voluntary code of practices and procedures to better manage shore-based excursions
- Create mechanisms to ensure transparency and accountability in creating appropriate legislation to implement and enforce policies of intra-government and inter-sectoral coordination, strengthening enforcement penalties and empowering local communities
- Prior to cruise destinations development, ensure existence of mandatory government criteria for adequate sustainable infrastructure and destination management tools that address cruise tourism impacts
- Engage the tourism industry and create incentives for the promotion and adoption of sustainable policies, products, and practices
- Community based tourism should be supported as a tool that can achieve both poverty alleviation and local marine conservation; support should include policy development, capacity building and financing
- Community based tourism projects should be developed using participatory and conflict assessment tools; and should be based on realistic goals and expectations, sound environmental and cultural impact assessments, and good project governance including transparent management of tourism generated benefits

Economic valuation of marine natural resources

Understanding of the full range of values in tropical marine ecosystems is important for the development of effective management strategies.

ITMEMS3 recommends:

- Integration of the full environmental and social costs into all resource decision-making with respect to coastal policies and projects using extended cost benefit analysis (e.g. in ICZM and EIAs) to capture the true impacts of different human activities
- Standardisation of economic valuation and reporting approaches to ensure better comparability between values measured in different locations
- Future international tropical marine environment conferences highlight the potentially powerful role of coral reef economics

Sustainable financing

Long-term financial planning and monitoring for revenue generation, funds management, and expenditure should be fundamental to all ICM activities. Revenue generation must not adversely affect conservation goals.

ITMEMS3 recommends:

- Lobby for governments to maintain a minimum budget towards the maintenance of MPAs, regardless of others sources of funding
- Strengthen financial accountability and transparency for MPA and coastal resource management, based upon effective accounting systems, reporting, and stakeholder communication
- Develop appropriate legislation to allow local decision-making, establishment of fee systems, and expenditure of funds generated by the MPA
- Coordinate PA site and system level planning to facilitate allocation of funds and cross-subsidization of management costs between MPAs
- Develop revenue sharing mechanisms with local communities, such as MPA user fees, conservation concessions, and alternative livelihoods

CAPACITY BUILDING

Building resilience into coral reef management

Managers can take action to reduce the impacts of climate change in tropical marine ecosystems.

ITMEMS 3 recommends that:

- Create incentives for development of partnerships for adaptation
- Increase investments in targeted messages to accelerate adaptation to climate change
- Invest in village-to-global education and communication for climate adaptation that will integrate traditional and scientific knowledge into implementation of adaptation strategies for coral reefs around the world

Enforcement and investigation

Enforcement must be viewed and supported as one of several strategies to promote improved compliance with regulations.

ITMEMS3 recommends that:

- Professional fora and networks be developed for investigators and enforcement personnel to promote regional and international exchange of expertise
- Where the legal framework allows, community-based initiatives be promoted and supported to strengthen compliance and foster community stewardship
- Formal local, national and international interagency mechanisms be developed to ensure coordinated response capacity for enforcement and investigation

Fisheries and aquaculture

Fishers are not adequately involved in policy making for fisheries and ocean conservation.

ITMEMS3 recommends that:

- A fisheries forum within ITMEMS should be included in future meetings that provides opportunity for fishers to share their experience and network

Human impacts

The issue of coral disease is not widely understood.

ITMEMS3 recommends:

- The identification of methods and opportunities to inform local leaders of the importance of water quality as an issue to be addressed in relation to ecosystem and human health
- Production of a documentary on coral diseases for broad-based popular consumption, linking the issues of water quality, agriculture and other anthropogenic impacts to coral health and disease

Information and knowledge management

ITMEMS3 recommends:

- Resources should be made available for capacity building in data collection, analyses, management and effective communication
- Provide countries with data management support, tools and training
- Establish a network among local communities, NGOs, governments and scientists for the exchange of tools and lessons learned

Communication, education and awareness

Knowledge does not necessarily change behaviour, but communication, education and awareness programmes can be developed to foster change. While there have been significant advances in improving global awareness, these have not resulted in behaviour changes at a pace and scale that stems the decline of tropical marine ecosystems.

ITMEMS recommends:

- A second International Year of the Reef (IYOR) be held in 2008, building on the history and lessons of the 1997 IYOR

- IYOR 2008 is a call to action to strengthen commitment at all levels to reverse coral reef decline and sustain the benefits of coral reef ecosystems
- The IYOR should help establish partnerships and initiatives that result in longer-term improvements in management capacity and community engagement at all levels
- Development of communication, education and awareness strategies to engage local communities and increase social, economic and political benefits as part of local solutions for global problems
- IYOR should build synergies with major events already planned for 2008, by seeking active linkages and partnerships with those events, and work with local partners to broaden the impact of their initiatives to reach new constituencies for conservation
- Special efforts must be made to collaborate with the private sector to engage in and continue best business practices, and support awareness among their customers, as part of their partnership with IYOR
- The urgent start of coordination, fundraising and promotion for IYOR as sufficient planning and resources will be critical for its success

Communication is vital in establishing viable ecologically sustainable tourism

ITMEMS3 recommends:

- Promotion of communication as a mechanism for creating a sense of ownership and increasing empowerment for all stakeholders
- Create a user- friendly, multi-lingual information platform to make resources available for managers and other stakeholders, including but not limited to MPA management plans, community-based initiatives, educational materials, technical expert lists, employment announcements, funding opportunities, links to organizations, press releases, scientific publications, etc.

Integrated and participatory strategies

Communities have a vital role to play in the stewardship, sustainable use and management of marine natural resources. It is essential that tropical ecosystem managers recognize and build on community knowledge to use resources sustainably.

ITMEMS recommends that:

- Support be given to facilitate interaction of community representatives with other stakeholders, especially local government
- Community representatives be invited as full participants to national, regional and international meeting
- Funding be provided for facilitating the establishment of CBOs and building their capacity to support their initiatives
- Support be given to facilitate community level exchanges and sharing of best practices
- Sustainable livelihoods be promoted for community empowerment linked to conservation management

Partnerships and Strategic Alliances

Recognizing that partnerships are powerful tools that can promote capacity building, leverage financial support, strengthen cultural participation, and facilitate complementary experiences, and actions around common management goals.

ITMEMS3 recommends:

- At the onset of every partnership for tropical marine ecosystems, partners should define common goals and objectives, agreed roles and responsibilities, equitability, and should provide transparency and accountability in a process for managing and strengthening that partnership
- Partnerships for tropical marine ecosystems should harness formal and indigenous knowledge and empower community and stakeholder participation in management processes while applying and reinforcing cultural heritage
- Include comprehensive background information (e.g. socio-economic and ecological data for tropical marine ecosystems) to support the partnerships
- Develop appropriate communication tools (use of a common language for tropical marine ecosystems) to facilitate information sharing/exchange within the partnership(s) and to the outside world

Economic valuation

Economic valuation is increasingly recognized as being powerful in influencing decision-makers, promoting sustainable resource management and leveraging management funds. However, awareness is lacking at all levels with respect to how economic values can be applied, and their potential power.

ITMEMS3 recommends that:

- Training and support in the basics of economic valuation and how environmental values can be applied (e.g. case studies, cost benefit analysis and design of economic incentives) is required for ecosystem managers and decision-makers with appropriate guidance materials

Sustainable financing

Tools, mechanisms and systems for revenue generation, management of funds and expenditure, need to be institutionalized within MPA authorities at the site and system level.

ITMEMS3 recommends:

- Increase financial and economic expertise within MPA staffing
- Apply best practices for tools and mechanisms that promote MPA sustainable financing including the establishment and operations of trust funds, business planning, accounting systems, financial modelling, diversification of income sources, system level planning, and reporting

RESEARCH AND MONITORING

Building resilience into coral reef management

Partnerships between scientists and managers are essential to address the challenges posed by climate change.

ITMEMS 3 recommends that:

- Facilitate and finance assessments of risk and vulnerability of coral reefs to climate change

Disaster management and restoration

ITMEMS3 recommends:

- Baseline monitoring of coastal areas prone to natural disasters to develop and maintain vulnerability mapping
- Undertaking more scientific research on cost-effective methods applicable to large scale restoration of marine tropical ecosystems
- Study the role of marine tropical ecosystems in coastal protection in different regions of the world
- Review available data and information on damage valuation claims worldwide to understand the potential for seeking compensation

Enforcement and investigation

ITMEMS3 recommends that:

- Guidance be provided to resource managers regarding the entire investigation and enforcement process
- Enhance the direct application of research and monitoring into assisting enforcement and investigation

Human impacts

Laboratories with capacity to handle advanced water analysis and ecotoxicology assessments are important for research and monitoring of coral disease. An inventory of such laboratories exists for the Caribbean (The Association of Marine Laboratories of the Caribbean; AMLC).

ITMEMS3 recommends:

- Preparation of additional inventories of laboratories that can handle advanced water quality analysis and ecotoxicology studies for other regions, modelled after the AMLC
- Development of regional scale recommendations for water quality standards, and improvement of monitoring of coral disease levels and their inclusion in existing monitoring programs

Awareness of marine invasive species and the threats that they pose is generally low, but their impacts can be severe.

ITMEMS3 recommends:

- The continued development of methods for early detection of marine invasive species
- Research into methods of eradication of marine invasive species
- Research into the ways in which climate change may affect or compound the threat of marine invasive species

Information and knowledge management

The formats and procedures for data collection, analysis, storage and accessibility of data collected in monitoring and surveys can have a significant impact on data applications and availability.

Establishing ecosystem and socioeconomic baselines and trend assessments are essential for ICM and risk reduction

ITMEMS3 recommends:

- Implementation and integration of ecological and socioeconomic monitoring in tropical marine ecosystems management and more effective communication of the results
- In planning for research and monitoring, consider not only the financial requirements for data collection, but also for storage analysis and dissemination costs. Provide countries with data management support, tools and training
- Improve data archiving and metadata accessibility, with full acknowledgement of partners and sources
- Invest in peer-to-peer learning networks to accelerate the implementation and increase the effectiveness of marine resources management
- Encourage all countries and regions to assemble status and trend assessments for raising awareness, including the IYOR in 2008

Modelling and decision support

Participatory modelling provides the means of integrating socio-economic and biophysical models.

ITMEMS3 recommends that:

- Participatory modelling should be used to enhance the legitimacy of models and their use by decision makers

Integrated and participatory strategies

The integration of traditional management strategies and knowledge with modern science and conservation practice is important for the achievement of ecological sustainability and the maintenance of local livelihoods and culture.

ITMEMS3 recommends:

- Recognition that social science is fundamental for understanding traditional management systems and appropriate forms of management intervention
- Both scientific and local knowledge systems, and mechanisms for detecting and reacting to changes in socio-ecological systems, should be harnessed in the development of hybrid management systems
- Traditional systems should be respected as partners in management and research, and the sharing of scientific knowledge with communities should be done in a respectful manner
- Recognition that traditional knowledge can be strengthened and enhanced by science, and empower communities in management

Economic valuation of marine natural resources

ITMEMS3 recommends:

- A global assessment of the availability of coastal economic value data and information to identify gaps and focus research
- The establishment of centralized and freely available economic valuation database to improve the scope of benefit transfer studies, so that values from one study can be used to evaluate the values for other similar resource or impact situations
- An analysis of global best practice in legal frameworks and associated damage compensation approaches to underpin effective marine ecosystems damage compensation claims
- Investigation into how economic incentive mechanisms can be better applied, in particular the scope for "payments for ecosystem services" (e.g. off-site fishery benefits and coast protection services) and payments for indirect damages (e.g. sedimentation and greenhouse gas emissions)

Sustainable Financing

There is a recognized absence of financial and economic data, which is critical for MPA planning and management, hence the need for more research.

ITMEMS3 recommends:

- Investigate establishing payments for ecosystem services such as fisheries replenishment from no-take zones, and coastal protection by natural resources (mangroves and coral reefs)
- Determine costs of management for MPAs and ICM as a foundation for financial planning and develop benchmarks for the evaluation of cost-effectiveness
- Monitor improvements in financial performance (revenues and costs) using financial modelling

PERFORMANCE, EVALUATION AND REVIEW

Sustainable Finance

There is a wealth of experience in financial procedures and mechanisms that should be shared among MPA practitioners.

ITMEMS3 recommends:

- Review, collect and disseminate case studies on revenue generation mechanisms
- Evaluate cost burdens to ICM practitioners from donor reporting requirements

ITMEMS 3 COZUMEL DECLARATION

LOCAL GOVERNMENT LEADERS' STATEMENT

Local Governments hold the key to the future of coral reefs and other tropical marine ecosystems. Greenhouse gas emissions, land based sources of marine pollution, unsustainable coastal development, overfishing and destructive fishing are local problems that impact at the global level. Healthy coral reefs are a beautiful indicator of healthy coastal and marine ecosystems and an increasingly valuable natural resource. The economic, social and cultural futures of people of tropical coasts and islands are linked to the health of coral reefs.

Local Government is on the front line of the issues that directly affect the future of coral reefs and associated ecosystems. Many local governments face huge and constantly changing challenges in providing for sustainability – meeting the needs of the present without compromising the needs of the future.

We are grateful for the opportunity provided for us to engage with the expertise of the coral reef management and scientific community through participation in the program of the Third International Tropical Marine Ecosystems Management Symposium.

We have identified 6 major issues that should be addressed to develop the partnership between the global coral reef management community and local government

EMPOWERMENT

We call upon the management and scientific community to support the empowerment and resourcing of local governments to manage tropical marine ecosystems.

NETWORKS

We call upon the management community to work with local government and community networks to develop informed partnerships to address the management of tropical marine ecosystems.

CAPACITY BUILDING

We call upon the management community to work with local government to develop practical technical capacity at the local level to address marine ecosystem issues.

KNOWLEDGE AND COMMUNICATION

We call upon researchers to communicate current research information in a manner that addresses the needs of local government

POLITICAL WILL

We call upon the management community to work with local government to build the political will to meet the challenges of managing tropical marine ecosystems.

RECOGNITION OF ACHIEVEMENT

We encourage the management community to publicly recognize the achievements of local government in sustainable management of marine resources.

Gustavo Ortega Joaquin	Mayor, Island of Cozumel, Mexico
Mahmoud Juma Issa	Mayor. Zanzibar Municipal Council, Tanzania
Ann Bunnell	Deputy Mayor, Townsvile, Queensland, Australia
Lucilo Bayron	Vice Mayor, Puerto Princesa City, Philippines
Teariki Matenga	Mayor, Tukitumea, Rarotonga, Cook Islands
Hermani Braganza	Mayor, City of Alaminos, Pangasinan, Philippines
Jeremy Harris	Former Mayor, Honolulu, Hawaii, USA