



**IUCN – The World Conservation Union
Member’s report on activities to ICRI**

Presented by IUCN

Reporting period: May-December 2007

1. General Information

Representation to ICRI (Country / Organization):	Organization
Focal Point 1:	Carl Gustaf Lundin
Focal point 2:	Jerker Tamelander
Last meeting attended:	Tokyo
How do you circulate ICRI information within your country and/or organization?	Regular email updates and progress reports, GMP newsletter
Budget allocated for coral reef related activities (please mention for year/period):	

2. Member contribution to the ICRI GM

A. Questions to inform the break-out discussion groups

Session 1: Economic Valuation of coral reef ecosystems

- a. Do you have examples of economic valuation of coral reefs being applied in practice? (e.g., in consideration of coastal land use, coastal/marine spatial planning, for determining compensation, etc.);

Valuation of coral reefs has been carried out in a number of areas around the world, as well as on a national or global level. However, practical application of such information appears limited. Similarly, the use of other environmental economic tools and approaches in the marine realm lags behind some terrestrial ecosystems. This includes payment for ecosystem services (PES) - very little work appears to have been done in the marine realm, one exception being Banc d’Arguin National Park, an MPA in Mauritania which receives 1 million €per year on the base of EU fishing agreements as a remuneration of its role in fisheries sustainability. There are examples of PES-like work on a more moderate scale in some MPAs, including e.g. Hon Mun in Vietnam, where IUCN was the lead technical agency.

IUCN is seeking to address this through its Global Environmental Economics Programme and activities implemented by thematic programmes, including the Global Marine Programme. A workshop on Economic Valuation of Large Marine Ecosystems was organized at the International Waters Conference in Cape Town, July 29-30, 2007. The report of the workshop is available on www.iucn.org/marine. A further training focusing on PES will be conducted in association with the Global Forum on Oceans, Coasts and Islands in Hanoi, April 7-11, 2008.

- b. Do you have established methods for assessing these values? If so, please provide further information.

See e.g. online sources
<http://earthmind.net/marine/>
<http://ecosystemvaluation.org/>
<http://topshare.wur.nl/naturevaluation/71350>

IUCN Global Environmental Economics Programme (Lucy Emerton, lucy.emerton@iucn.org)
www.iucn.org/economics

Session 2: Designing the ICRI Regional Workshop on Sustainable Tourism (to be held in July 2008 directly following ICRS-11)

- a. With respect to coral reefs, what does sustainable tourism mean to you?

Tourism that does not compromise the ecological functionality of coral reefs and associated ecosystems and that is economically viable, with benefits accruing to local communities and stakeholders in a fair and equitable way.

- b. What are the key challenges you face to achieving sustainable tourism?

B. Summary of IYOR 2008 Activities

- Briefly tell us about your activities for IYOR 2008. Information provided will contribute to the discussion during the IYOR 2008 Session on Friday, January 25, 2008.

Activities and products related to coral reefs and associated ecosystems will be IYOR branded. This includes e.g. educational and awareness products produced by IUCN, CORDIO and partners under the CORALI initiative in South Asia. Specific IYOR events are planned by several IUCN and CORDIO partners, including e.g. SDMRI and CARESS in India

C. Emerging Issues

- Please identify any emerging issues relevant to coral reef ecosystems that you believe ICRI should consider.

Shoreline erosion – even minor sea level rise may have major impacts on shoreline stability, especially where coupled with ecosystem degradation. This will potentially have severe implications for coral reefs, mangroves and seagrass beds, and there are numerous examples of catastrophic as well as incremental but increasing shoreline change from around the world. However, mitigation strategies are frequently not in place. Further, in some cases responses are based on insufficient information, e.g. where detailed vulnerability mapping has not been carried out or where data on shoreline change is lacking. In some cases response plans are insufficient or even inappropriate, including some NAPAs, which provide essential guidance on how least developed countries meet the climate change challenge.

An ICRI resolution or statement could draw attention to the issue as well as provide broad guidance on approaches and issues of importance in mitigating shoreline erosion. This would complement past resolutions, recommendations and statements on e.g. coral reefs and climate change and acidification. IUCN could lead drafting of such a document.

D. ICRI and Other Meetings

Are your ICRI Focal Points considering attending any of the following meetings in 2008?

- 2008 Ocean Sciences Meeting, Florida, 2-7 March
- CBD COP 9, Bonn, 19-30 May
- UNICPOLOS 9, New York, June 2008

- ❑ ICRS 11, Fort Lauderdale, 7-11 July
- ❑ IUCN World Conservation Congress, Barcelona, 5-16 October
- ❑ Ramsar COP 9, South Korea, 29 October - 4 November
- ❑ Other (please specify):

The above meetings will be attended by IUCN although most not by the ICRI focal point.

ICRI resolutions and recommendations

(1) Coral Reefs and Climate Change

Projects implemented by IUCN Global Marine Programme, IUCN's Working Group on Climate Change and Coral Reefs (CCCR), CORDIO and partners include:

1. Development of monitoring methods for measuring coral reef resilience to climate change in the field, and field testing:
 - a. Workshop of the World Bank Coral Reef Targeted Research Bleaching Working Group. Zanzibar, Tanzania. April 2007.
 - b. Edwin W. Pauley Summer Program in Marine Biology. Hawaii, USA. June 2007.
 - c. Field testing of methodology for resilience assessments of coral reefs to climate change. Red Sea, Saudi Arabia. September, 2007
 - d. Climate vulnerability assessment of coral reefs of the Kiunga Marine Reserve. Kiunga, Kenya. December, 2007.
 - e. Climate vulnerability assessment of coral reefs of the Mafia Island Marine Park. Mafia Island, Tanzania. November, 2007
 - f. Coral reef resilience assessment regional training course for reef scientist around the Bay of Bengal, in the Maldives in January 2008
2. Testing coral reef resilience and resistance. Transplantation experiments on the Kenyan coast (Kanamai and Nyali). Transplantation of coral fragments (*Porites lutea* and *Porites cylindrica*) from bleaching-resistant to bleaching-susceptible reefs and continued monitoring of fragments during bleaching cycles.
3. Improving bleaching early warning. Bleaching updates for the Western Indian Ocean have been developed and disseminated via the IUCN-CCCR website.
4. Measuring herbivory. A draft manual for monitoring herbivory in terms of functional groups useful for assessing coral reef resilience to climate change has been developed in partnership with TNC. The final version of the manual will be available early 2008.
5. Research projects. Regional interview survey of fish spawning aggregations in the Bay of Bengal and resilience field assessment. Preliminary results presented in upcoming CORDIO report.

(2) ICRI Recommendation on Acidification and Coral Reefs

(3) ICRI Resolution on ITMEMS

Used in support of project proposal to MacArthur Foundation on resilience related activities (see above).

Other project/progress updates:

CORDIO

Coastal Ocean Research and Development in the Indian Ocean (CORDIO) will launch a new status report in the first quarter 2008. The report is entitled “Ten years after bleaching – facing the consequences of climate change in the Indian Ocean CORDIO Status Report 2007. (Editors: David Obura, Jerker Tamelander, & Olof Linden. CORDIO (Coastal Oceans Research and Development, Indian Ocean)/Sida-SAREC. Mombasa. <http://www.cordio.org>). See CORDIO report to the meeting.

Livelihoods Enhancement

The Coral Reef and Livelihoods Initiative (CORALI) in South Asia, a collaborative initiative between IUCN – The World Conservation Union, Coastal Ocean Research and Development in the Indian Ocean (CORDIO), United Nations Environment Programme (UNEP) South Asia Cooperative Environment Programme (SACEP), International Coral Reef Action Network (ICRAN) and IMM Ltd., as well as national and local organizations in South Asia and the Andaman Sea, has been designed to address the challenge of “how to better support livelihood development as key part of a more holistic approach to coral reef conservation”. It comprises three elements: a) the development of a regional skills and knowledge network; b) the development of an improved approach to socio-economic monitoring; and c) the further development of a participatory approach to SLED in coral reef dependent communities.

A group of community level coastal livelihoods practitioners from Bangladesh, India, Maldives, Pakistan and Sri Lanka met for 3 regional workshops during 2007 to explore sustainable livelihoods for coastal communities and work towards developing a regionally appropriate SocMon methodology for South Asia. The group trialed a simplified tool aimed at gathering basic community level data related to changes in the reef environment and reef-related livelihoods that could be presented back and shared with communities. In tandem with this process the group, in collaboration with IUCN, is working towards developing a regional socioeconomic monitoring manual. This process is being coordinated at the field level by the Indian NGO, Centre for Action Research on Environment, Science and Society (CARESS). While funding for the SocMon Manual has been secured additional resources are being sought to support field teams to trial the methods, and revise and update the manual as needed, and develop a network of practitioners.

Education and awareness

A range of education and awareness initiatives are also being implemented by IUCN, CORDIO and other CORALI partners. This includes the production of educational materials for developing environmental awareness in school children in South Asia and the Andaman Sea. An Investigative Toolkit for Teachers, building on similar materials prepared by IUCN and CORDIO in Sri Lanka and Thailand, will be produced in English and 5 key languages of the region: Tamil, Divehi, Sinhala, Malayalam and Bahasa Indonesia.

MPA Toolkit for South Asia

Managing Marine Protected areas – a Toolkit for South Asia is being produced in partnership with UNEP, ICRAN, SACEP and regional partners. The publication based on the Western Indian Ocean MPA Toolkit published by IUCN in 2004. The South Asia MPA Toolkit will be launched in the second quarter of 2008.

Invasive species

A baseline survey of marine alien invasive species in was carried out by IUCN covering coral reefs and lagoonal habitats of the Amirante group of islands and Aldabra, Seychelles. In total 35 sites were surveyed. The surveys were conducted in close collaboration with Government of the Seychelles, Department of Environment and SCMRT-MPA, Seychelles Island Foundation, Aldabra Research Station, Island Conservation Society and D’arros island. Results are expected by August 2008.

Science and policy support

IUCN organized a seminar on Building East-West Collaboration for Strengthening Marine Science in Africa as a side Meeting at the 5th WIOMSA Scientific Symposium in Durban, South Africa, following up on the meeting “Development cooperation for marine research in East and West Africa – Lessons learned and future directions”, organized by IUCN and partners in Stockholm, May, 2007.

The Western Indian Ocean Consortium (WIO-C) was launched at the Nairobi and Abidjan Conventions joint Conference of Parties in 5th - 8th November, 2007 in Cape Town South Africa. IUCN and CORDIO are founding members of WIO-C, along with WCS, WIOMSA, UNEP, EAWLS and WWF.

IUCN launched a project on "Building capacity and strengthening policies for coastal communities to manage their marine resources in East Africa". A national coastal community workshop for Kenya was held 17-19th December 2007 bringing together representatives from 15-20 coastal community groups to share information and lessons learnt on marine and coastal resource dependence and livelihood and their relationship to resource management, conservation and sustainable use. A similar workshop will be organized in Tanzania early 2008. One of the main outputs from the workshops will be short policy advisories, authored by communities, and covering pertinent issues, challenges and needs. These will be used to support and influence national resource management and development policy and will also provide material for community exchange visits. Case studies will look at livelihoods enhancement with a particular focus on aquaculture, but also addressing related capacity building, community empowerment, as well as development and management policy. The project will also produce a guideline on market and microfinance access for target communities. Activities are implemented in partnership with CORDIO.

Tanzania

A high level meeting on combating dynamite fishing in Tanzania was organized on Friday 7th Dec 2007 by the Tanzania Fisheries Department and supported by, among others, the British High Commission, WWF and IUCN. The meeting was attended by three ministers, Regional Commissioners and senior officers from the Police and the Navy from the coastal regions of both mainland and Zanzibar, as well as representatives from the tourism sector. The meeting resolution promised a zero-tolerance policy towards dynamite possession and use, and heavy penalties for anyone defying it. Dynamite fishing is again rampant in some parts of the country and threatens coral reef health and fish stocks as well as the tourism industry.

IUCN participated in high resolution coral reef and seagrass habitat mapping in Tanga, Tanzania in October 2007. Led by IRD the activities contributed to a research programme focusing on coelacanths and the potential establishment of an MPA in Tanga under a process involving the African Coelacanth Ecosystem Programme (ACEP), the Tanzania Marine Parks and Reserves Unit (MPRU) and the Marine and Coastal Environmental Management Programme (MACEMP). IUCN was the lead technical agency of a decade long participatory resource management project in Tanga.