



28 January 2010

The Director
Division for Ocean Affairs
and the Law of the Sea
Office of Legal Affairs
United Nations
New York, NY 10017

Reference: LOS/ICP/2010

Dear Director,

I am writing in response to a letter of 11 December 2009 from the Under-Secretary General for Legal Affairs of Director of the Division for Ocean Affairs and the Law of the Sea of the Office of Legal Affairs of the United Nations inviting IUCN the International Union for Conservation of Nature to provide information with respect of “Capacity-building in ocean affairs and the law of the sea, including marine science” in response to paragraphs 196 and 202 of General Assembly resolution 64/71.

In response to this invitation, IUCN would like to mention some relevant activities detailed below.

With respect to vulnerable species, IUCN publishes the IUCN Red List of Threatened Species™ which is the world’s most comprehensive, authoritative and objective resource on the global conservation status of plant and animal species, including their global risk for extinction. It is available on-line at www.iucnredlist.org. With reference specifically to marine biodiversity, IUCN published in 2008 a “Red List Status of the World’s Marine Species” in which it was noted that the number of marine species that had been assessed lagged far behind those of the terrestrial world. To fill this knowledge gap, IUCN with partners including Conservation International and Old Dominion University is undertaking a Global Marine Species Assessment to assess over 20,000 marine species by 2012. The results so far confirm that marine biodiversity is under threat. For example, approximately 17% of sharks and their relatives are threatened, an additional 13% are considered near threatened, and 47% are data deficient.

With respect of conserving biological diversity in the deep and open oceans, IUCN is participating in the Global Ocean Biodiversity Initiative (GOBI), an international partnership advancing the scientific basis for such biodiversity. GOBI aims to help countries as well as regional and global organizations to use existing and new data, tools and methodologies to identify ecologically or biologically significant areas (EBSAs) with an initial focus on ocean areas beyond national jurisdiction. The work is based on the seven scientific criteria and the guidance for designing representative networks of protected areas adopted at the Ninth Conference of the Parties (COP9) to the Convention on Biological Diversity in May 2008. GOBI is supported by the German Federal Agency for Nature Conservation (BfN) as part of the German presidency of the Convention on Biological Diversity COP and facilitated by IUCN.

The first report of this initiative “Defining ecologically or biologically significant areas in the open oceans and deep seas: Analysis, tools, resources and illustrations” was presented at the CBD Scientific Expert Workshop in October 2009 in Ottawa, Canada. It provides a general overview of scientific tools, technologies and data sources as well as a number of illustrations on how these techniques can be applied to individual EBSA criteria
<https://www.cbd.int/doc/meetings/mar/ewbcsima-01/other/ewbcsima-01-multiorgs-en.pdf>.

Specific capacity building activities to be undertaken by GOBI during the coming year include a series of regional workshops that will address issues relating to the identification of significant areas, including access to existing data and selection of appropriate tools and methodologies. One of these workshops will take place in the Pacific region, where insights from indigenous knowledge can add new dimensions for how significant areas can be identified. Additionally, GOBI has created a dedicated web portal and web-GIS tools for sharing of experiences and case studies (<http://GOBI.org>). This web portal also includes a compilation of information about relevant topics, including scientific reports, internet-based sources of data and tools. A possible training or consultation with users of these tools will be explored in conjunction with the COP10 meeting in Japan.

This initiative began in early 2009 in collaboration among IUCN, UNEP World Conservation Monitoring Centre, Marine Conservation Biology Institute (MCBI), the Census of Marine Life, the Ocean Biogeographic Information System and the Marine Geospatial Ecology Lab of Duke University. A growing number of partners are now participating to varying degrees, including scientists from academia, government institutions and non-governmental organisations. The initiative continues to seek additional collaborators to help bring the best science and data to bear on the identification of ecologically or biologically significant areas in the remote ocean.

Also in relation to deep-ocean and high seas areas, IUCN has been involved in the UNDP implemented and GEF funded Pacific Islands Oceanic Fisheries Management Project, IUCN has researched the impacts of pelagic longline fishing on seamounts in the Pacific region. Information was collected through a literature review and a questionnaire survey of longline fishermen operating in the region. Results suggested that long line fishing around seamounts may have a negative impact on turtles, and some shark species. However, threats to the target species of yellowfin and bigeye tuna are much greater from purse seine vessels fishing away from the seamounts. This is because of the large numbers of juveniles that are caught by purse seiners fishing around floating objects (Fish Aggregation Devices or FADs).

Regarding marine alien invasive species, IUCN has conducted an analysis to identify obstacles in addressing marine invasive alien species, including a lack of understanding of the severity of the threat posed, insufficient information on status and trends, insufficient technical capacity to address the issue as well as limited public awareness. A series of projects to address different aspects of the problem, including means of reducing the risk of species introductions and management was then developed and implemented between 2004 and 2009 to cover certain priority issues, including through baseline assessments of marine invasive alien species in isolated islands environments; reducing species introduction risks associated with aquaculture; enabling Marine Protected Area managers to address the increased risks of species introduction associated with common activities in and around marine protected areas; and improving knowledge and awareness of invasive alien species among the general public¹.

As part of its work with respect of marine invasive species, IUCN has prepared a manual in collaboration with the GEF-UNDP-IMO GloBallast Partnerships Programme to respond to requests from countries for assistance in strengthening and developing national regulatory frameworks related to marine Invasive Alien Species with a focus on the transfer of potentially harmful aquatic organisms and pathogens in ships' ballast water and sediments. The manual is directed at national level practitioners as a hands-on guide to the development of national ballast water management strategies. It is intended as a source of basic information and as step-by-step guidance in the development of national ballast water management strategies. Several other guides are being prepared through the GloBallast Partnerships Programme and include Guidelines for National Ballast Water Status Assessments, Guidelines for Economic Assessments of the Impacts of Marine Invasive Alien Species, and Guidelines for Legal Reform. All will be available from the GloBallast Partnerships website.²

Regarding marine protected areas, IUCN through the World Commission on Protected Areas – Marine has established a High Seas MPA Task Force to provide a platform for those interested in advancing the scientific and legal basis for protected areas beyond national jurisdiction, and to help support the establishment of pilot sites to gain pragmatic experience. WCPA Marine in general works with partners and scientists around the world to identify sites to serve as a basis for networks of marine protected areas. Working with Google Earth, IUCN has established a public wiki database to provide information on marine protected areas and to assist others as they establish additional areas.³

IUCN is also now directly involved in research of deep sea ecosystems. With partners, including the United Nations Development Programme, the Global Environment Facility, Zoological Society of London, the EAF-Nansen project, the Institute of Marine Research, Agulhas and Somali Current Large Marine Ecosystems Project; the Marine Ecology Laboratory, University of

¹ IUCN: Marine Invasive Alien Species: Recent Progress in Addressing a Growing Threat to Ocean Biodiversity and Ecosystems, available at http://www.iucn.org/about/work/programmes/marine/marine_our_work/marine_invasives/invasives_publications.cfm?4476/marineinvasivesprogressreport

² See <http://globallast.imo.org>, Tamelander J., Riddering L., Haag F., Matheickal J., 2010. Guidelines for Development of National Ballast Water Management Strategies. GEF-UNDP-IMO GloBallast, London, UK and IUCN, Gland, Switzerland. GloBallast Monographs No. 18.

³ www.protectplanetoocean.org

Reunion and the African Coelacanth Ecosystem Programme, we organized a six-week research expedition to gather data and species from six seamounts in areas beyond national jurisdiction in the southwest Indian Ocean. The work will directly feed into conservation and management recommendations for the area and inform future management of deep-sea ecosystems in the high seas globally⁴.

IUCN developed a project entitled “Management of Climate Change Impacts on Coral Reefs and Coastal Ecosystems in Tsunami-affected Areas of the Andaman Sea and South Asia” and supported through a grant from the Finnish Ministry for Foreign Affairs of Finland to take a holistic approach to addressing tsunami impacts in the context of preexisting processes and trends. The project worked towards three objectives, to improve the management of coastal ecosystems including coral reefs, mangroves and other key environments; to develop alternative livelihood projects for families in coastal areas who could no longer support themselves because of damage to the coastal environment; and to improve the education and awareness of the impacts of human activities on coastal ecosystems and thus strengthen the capacity of local resource users and managers to mitigate those impacts. The project was initiated following the devastating tsunami and three heavily affected countries were chosen as primary targets, including Indonesia (Aceh), the Maldives and Sri Lanka. Other regional activities included countries around the Bay of Bengal. The project was successfully implemented through a partnership with over thirty organizations and directly involving over 100 individuals in activity development, implementation as well as capacity building. The close association with the International Coral Reef Action Network (ICRAN) and a regional EU-funded project on Marine and Coastal Protected Areas provided additional financial support that greatly increased project reach and impact. Several thousand individuals benefited through livelihood diversification, socioeconomic monitoring, ecological research, management advice, education and awareness and other training. The project has produced over thirty significant technical outputs.

The project contributed significantly to an increased knowledge of ecosystem impacts of the tsunami and related processes, as well as how environmental stresses interact. Results included new findings on several important subjects such as small-scale fisheries and coral reef resilience science, including reef fish spawning aggregations. A contribution was made to the development and field testing of a protocol for assessing coral reef resilience to climate change. Works on livelihoods was implemented under the Coral Reefs and Livelihoods Initiative (CORALI), formed through the joint planning and implementation of activities with an EU-funded project implemented by ICRAN, United Nations Environment Programme (UNEP), South Asia Cooperative Environment Programme (SACEP) and Integrated Marine Management (IMM) Ltd. Among the most notable achievements was the development and implementation of a Sustainable Livelihoods Enhancement and Diversification (SLED) approach. Activities at local level directly involved and benefited 500 individuals at six sites around the region through 29 different livelihoods projects, ranging from training for acquisition of new and relevant skills, to value addition of existing livelihoods and products and introduction of new livelihoods. The activities also influenced the communities in which they were implemented, reaching thousands

⁴ Further information is available at the project website at www.iucn.org/marine/seamounts, the cruise blog at <http://seamounts2009.blogspot.com/> and a diary on BBC Earth News at http://news.bbc.co.uk/earth/hi/earth_news/newsid_8363000/8363108.stm.

of coastal dwellers. Some of the projects are already being replicated and scaled up through initiatives by national and local governments and civil society organizations. The success of the activities is owed in part to the thorough methodological development, building on detailed review as well as extensive consultation with and involvement of communities. This also enabled the development of guidance on socioeconomic monitoring, produced in several languages of the region in order to facilitate the use of monitoring to support livelihoods development. A South Asia Marine and Coastal Protected Areas management toolkit was developed with the direct engagement of over fifty international and regional experts, and training on using the toolkit was organized. An educational toolkit entitled “Children’s Perception of the Environment” was produced for teachers, educational projects, environmental clubs and managers. To facilitate uptake the toolkit is being translated into Bahasa Indonesia, Bengali, Dhivehi, Hindi, Malayalam, Sinhala and Tamil. The project also has enabled the initial development of a framework for social adaptation to climate change, expected to become a key resource to support building resilience to climate change among coastal populations and industries.⁵

Further work with respect of corals has included beginning a Protect Planet Ocean Review of MPAs in the Wider Caribbean in partnership with The Nature Conservancy and other organizations to provide an in-depth regional analysis including assessing country and regional commitments to ocean protection, and identify gaps; refining data on existing MPAs and their effectiveness and provide higher resolution identification of success factors, highlighting management successes in case studies; identifying challenges that are impeding the region from meeting commitments; and providing science-based recommendations that can be implemented on the ground to achieve CBD targets.

A resilience survey of Bonaire National Marine Park (BNMP) was conducted by IUCN, BNMP and other partners in June 2009. This included a review of relevant literature, training of a field team of ten and detailed data collection at 21 sites. A final report is being compiled. IUCN is also engaged in the development of two other projects in the Caribbean that specifically address alien invasive species.

In collaboration with others, IUCN has worked in Man and the Biosphere Reserves in the Gulf of Mannar, India as well as Malindi-Watamu and Kiunga, Kenya. Activities include coral reef monitoring, reef and seagrass mapping and monitoring, reef resilience assessment and training, coral bleaching assessments, targeted research focusing on the symbiotic relationship between coral and zooxanthellae as well as reef restoration, as well as socioeconomic monitoring and livelihoods support.

IUCN is collaborating with UNEP on development of applications for incorporating tropical coastal ecosystem resilience and climate change vulnerability assessments into marine spatial planning for use by planners and decision-makers; advice on regional agreements on deep-sea fisheries and associated compliance; and synthesis and dissemination of a UNEP LME report. IUCN participated in a meeting on “Integrating ecological resilience into spatial conservation

⁵ See Tamelander J. 2009. CORDIO Asia Final Report - Management of Climate Change Impacts on Coral Reefs and Coastal Ecosystems in Tsunami-affected Areas of the Andaman Sea and South Asia. Project completion report. IUCN Global Marine Programme 2009. IUCN, Gland, Switzerland available at http://www.iucn.org/about/work/programmes/marine/marine_resources/marine_publications/?4373/cordioasiareport

planning on coral reefs” was held in Marsa Alam, Egypt in November 2009. In collaboration with others, IUCN organized a coral reef training workshop for East Africa in Sodwana, South Africa, in November 2009. The workshop was attended by scientists, resource managers, law enforcement officers and litigators from Kenya, Tanzania, Mozambique and South Africa

In 2010 IUCN is initiating a mangrove initiative focusing on five countries in the Pacific: Fiji, Solomon Islands, Vanuatu, Tonga, and Samoa, in collaboration with SPREP and other partners and with support from the German government.

In 2010 IUCN will launch a project funded by Kuwait Environment Public Authority (EPA), aiming to assess the status of Kuwait’s coral reefs and develop a long-term monitoring program. The project will use a participatory approach for development of area specific visions for marine ecosystem management and development. Other upcoming capacity building activities in the Middle East include a Regional Training Workshop on Identification and Assessment of Shark Species in Mukalla, Yemen, December 2010, and a Regional Training Workshop on Management of Marine Protected Areas in Jeddah, Saudi Arabia in July 2010, both conducted jointly with Regional Organization for the Conservation of the Red Sea and Gulf of Aden (PERSGA), and a training workshop on impact of climate change on marine ecosystem organized jointly with the Islamic Organization for Education, Science and Culture (ISESCO) in Aqaba, Jordan (time TBD).

Thank you for the opportunity to provide this information. I apologize that we were not able to meet the deadline in your letter for submission of information, but hope that the information will nonetheless prove useful at this date.

Sincerely yours,
Harlan Cohen
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