

# **Executive Summary:**

## **Discussions at the Mulu Forum**

The *Asia-Pacific Forum on Karst Ecosystems and World Heritage* (the Mulu Forum) was organised to discuss karst ecosystems in Asia and the Pacific in a World Heritage context and to agree on recommendations for action. The meeting involved some seventy global and regional experts on karst and biodiversity, as well as representatives from a number of the karst areas that are already inscribed as World Heritage Areas in Southeast and East Asia.

The discussions were guided by a number of background papers prepared by the World Commission on Protected Areas (WCPA) Working Group on Cave and Karst Protection, and included a review of tropical karst sites listed as World Heritage Areas to date and an assessment of the extent to which their management has given due consideration to biodiversity conservation. Participants discussed the issues through small workshop sessions and larger open forums over the three days. This allowed both focused analyses of particular topics and issues within smaller expert groups, and then larger discussions and debates to refine the information and outputs produced by the Forum. The result was a consensus on recommendations as follows:

1. priorities involving preparatory work and assistance to be finalised by the end of 2002, and
2. actions that can be, or are currently being, moved ahead by State Parties before the end of 2003.

These can be summarised as follows:

### **Priorities to be Developed within the Next Year**

#### *China*

- ❑ The existing karst World Heritage Areas of Huanglong, Jiuzhaigou and Wulingyuan should be re-assessed for potential designation under the biodiversity criterion.
- ❑ Consideration should be given to a more effective buffer zone at Zhoukoudian World Heritage Areas.
- ❑ Provide assistance with pre-nomination reviews of the Guizhou and Guilin karst.

#### *Lao PDR*

- ❑ Assistance should be provided to relevant Government agencies to raise awareness about the natural heritage aspects of the Convention.
- ❑ Discussion should take place to address a possible cross-border or cluster World Heritage nomination of Hin Nam No National Park and Phong Nha/Ke Bang in northern Vietnam.
- ❑ Investigation of the karst and biodiversity values of the Khammouane karst area.
- ❑ Re-assessment of Luang Prabang as a mixed natural/cultural site.

### *Myanmar*

- ❑ There is an urgent need to open policy dialogue with the Myanmar Government on Protected Area management and World Heritage areas.
- ❑ A scientific reconnaissance and rapid assessment of Myanmar's karst World Heritage areas could follow this.

### *Oceania*

- ❑ A natural and cultural resources study of likely Pacific Islands and a review and capacity building exercise for relevant government agencies should take place.
- ❑ Re-assessment and management review of Henderson Island and East Rennell for additional criteria.

### *Philippines*

- ❑ Extensive data development and review process required, including desk studies and field visits.

### *Thailand*

- ❑ A capacity building program for Thailand to enable it to review its karst areas and National Parks system.

### *Papua New Guinea*

- ❑ Pre-nomination reviews of the Huon Peninsula, the Kikori-Darai plateau, the Nakani-Whiteman Ranges, the Trobriand Islands, the Muller Plateau and the Hindenburg Wall should take place.

## **Action that can Proceed through State Parties over the Next Five Years**

### *Australia*

- ❑ Consideration for World Heritage nomination of the Nullarbor Region, Cape Range, Limestone Ranges and the Ruined City.
- ❑ Tasmanian Wilderness World Heritage Area and Mole Creek NP boundaries should be expanded to include some large, important sectors of the Mole Creek karst, and possibly the Hastings Cave Reserve and Mt Cripps also.
- ❑ Pre-nomination review of Chillagoe-Palmer River, Eastern Highlands Impounded Karst and Syngenetic Karsts.
- ❑ Investigation of the karst World Heritage values of Shark Bay and Great Barrier Reef World Heritage Areas.

### *Indonesia*

- ❑ The Government should consider an extension to Lorenz NP to include the Baliem River system.
- ❑ Government should review the World Heritage values of Gunung Sewu (Java) and the Maros Karst (Sulawesi) and identify appropriate protection and international recognition.
- ❑ Field surveys to rectify data deficiencies in Tana Toraja (Sulawesi) and Sunkulirang in Kalimantan.

### *Japan*

- ❑ An assessment of the Akiyoshi-Dai karst area for possible World Heritage nomination.

### *Korea*

- ❑ A review should be undertaken of at least the Dae-i-ri area, the Dong River area, and San-gye-ri areas to ascertain whether a World Heritage Area nomination should be prepared.

### *New Zealand*

- ❑ The Government should consider the nomination of Kahurangi (Mt Owen).

### *Malaysia*

- ❑ Expansion of the boundary of Gunung Mulu World Heritage Area to include Gunung Buda.
- ❑ Consideration of Niah Great Cave for nomination on cultural and biodiversity grounds.
- ❑ Assessment reviews of Pulau Dayang Bunting, Gomantong Cave, and Medai.

### *Vietnam*

- ❑ The Mulu Forum noted the re-nomination of Phong Nha/Ke Bang and the road construction through this area, a karst biodiversity study of Cuc Phong National Park, and the activities taking place at Halong Bay.
- ❑ Cao Bang may contain freshwater stromatolites, and if so, warrants a rapid reconnaissance survey for World Heritage values.

### *East Timor*

- ❑ A rapid reconnaissance survey of East Timor's karst should be carried out when the Government requests this to happen.

## **Management Issues for Karst World Heritage Areas**

The Forum also discussed management issues for karst World Heritage Areas, and with added information from the Guidelines for Cave and Karst protection (IUCN/WCPA 1997), produced a list of the key issues in karst management. These were divided into five key areas:

- ❑ hydrology and World Heritage Area boundaries
- ❑ impacts from developments outside of the protected area
- ❑ internal management issues
- ❑ finance
- ❑ education, training and awareness.

## **Other Issues**

The Forum reaffirmed that a regional network for cave and karst managers and experts should be established to share expertise and experience within the region. The WCPA Cave and Karst Working Group, ASEAN Regional Biodiversity Centre (ARBC), and the

Asia-Pacific Focal Point for World Heritage Managers, Australia, were identified as the core co-ordinating bodies for this network and it appears that some further steps still need to be taken to formalise this arrangement.

A brief discussion also took place on the *Draft Atlas of Karst and Karst Conservation Vol. 1: Asian-Pacific Region* (May 2001) edited by Elery Hamilton-Smith and Peter Ackroyd, IUCN WCPA Working Group on Cave and Karst Protection. This volume is only the first of what is hoped to ultimately provide a global coverage. Negotiations are currently in progress re the drafting of some other volumes, and for publication by one of leading Geomorphological Journals as a series of supplementary volumes. Professor Hamilton-Smith asked for comments and supplementary information from participants to complete and update the document.