

TRANSBOUNDARY BIODIVERSITY CONSERVATION AREAS IN SOUTHEAST ASIA:

Lessons learnt from Betung Kerihun National Park, Kalimantan, Indonesia

■ By Herry D. Susilo

Introduction

Betung Kerihun National Park (BKNP) is located in the Kapuas Hulu District (Kabupaten Kapuas Hulu). The name Betung Kerihun is a combination of two mountains - Mt. Betung located in the western part of the park and Mt. Kerihun, in the eastern part.

The park is the largest conservation area in West Kalimantan province, covering a total area of 800,000 hectares (roughly 25% of the Kapuas Hulu District surface) of tropical rainforest at varying altitudes of 150 to 2,000 meters above sea level. From the west to the east, BKNP is rectangle and lies between $112^{\circ}15' - 114^{\circ}10'$ longitude and $0^{\circ}40' - 1^{\circ}35'$ N latitude. It shares its border with Sarawak to the north; East Kalimantan province to the east; Banua Martinus and Putussibau to the South, and Nanga Badau to the West.

The Park has a highly diverse flora, represented among others by the different species of the Dipterocarpaceae family. Of the 267 species known for this family from Borneo, at least 121 species occur in the park. In total, at least 695 woody plant species, comprising 156 genera and 63 families, are known to occur in the Park; and 50 of these species are endemic to Borneo.

The diverse forest ecosystems of BKNP provide significant natural habitats for the rich fauna species, in which some 652 have already been identified. These include 54 mammal species (including eight primate, 17 bat, and 17 rodent species); 112 species of herpetofauna (consisting

of 59 amphibian, 25 reptilia, 24 squamata, and four testudinata species); 300 bird species, and 186 freshwater species.

The primates include the orangutan (*Pongo pygmaeus*), found mainly in the west part of the park, which is contiguous with the Lanjak Entimau Wildlife Sanctuary (LEWS) in Malaysia. The transboundary aspect of the two Reserves, which is particularly important for the conservation of the orangutan and other migratory species, also contributes to security and

on the agreement, the Government of Indonesia submitted in November 1993, a proposal entitled "The Development of Bentuang Karimun Nature Reserve as National Park" to the International Tropical Timber Organization (ITTO), which was eventually approved.

During its 6th meeting on 08–11 December 1993, the Cooperation Committee on Forestry between the Governments of Indonesia and Malaysia agreed to pursue the "Joint Cooperation in Developing



The Kapuas River in West Kalimantan, Indonesia.

confidence between the two nations, and enhances the tourism potential in the region.

Towards the Transboundary Biodiversity Conservation Area

In the 5th meeting of "The Cooperation Committee on Forestry" between the Governments of Indonesia and Malaysia, held from 01–04 December 1992, both Governments agreed on the establishment of a "trans-frontier reserve." Following up

Transfrontier Reserve" particularly Bentuang Karimun Nature Reserve (BKNR) in Kalimantan Barat, Indonesia, and LEWS in Sarawak, Malaysia.

Then on 12 August 1994, the Government of Indonesia and the ITTO signed an agreement to implement Project No. 26/93 Rev. 1(F): "Development of Bentuang Karimun as a National Park" Phase 1. The objective of this project is: "to develop a model of natural forest

Dave Lumenta

management through the national park system that not only will serve conservation of species and ecosystems but will also accommodate other purposes such as socio-economic development with the involvement of the local and regional communities. Such a model could be extended to regional cooperation between the neighbouring countries of Indonesia and Malaysia".

Specifically, the trans-boundary cooperation aimed to:

- Establish cooperation in conservation activities between Indonesia and Malaysia through the development of a transboundary joint management reserve, and
- Develop joint project proposal for further cooperation of the Governments of Indonesia and Malaysia (Sarawak).

At the same time, ITTO also agreed to finance Project No. 106/90 Rev. 1 (F): "Development of the Lanjak Entimau Wildlife Sanctuary (LEWS) as a Totally Protected Area (Phase 1). The general objective of this Project is: "to develop the LEWS as a Totally Protected Area **for nature conservation** and as a site for biological research". This will be contiguous with a larger wildlife sanctuary in Indonesia and will be carried out **in cooperation** with the Government of Indonesia.

Both projects reflect the transboundary aspects of biodiversity conservation as well as joint protected area management with the Government of Sarawak/Malaysia and Indonesia and in the context of project (Phase I) implementation. Cooperation was basically on two levels:

- Joint preparation, organising and implementation of the ITTO Borneo Biodiversity Expedition (IBBE); and
- Mutual visits and workshops.

On 07 October 1994, a "Launching Ceremony of Lanjak Entimau-Bentuang Karimun Biodiversity Conservation Area" was held in Kuching, Malaysia.

Candidate Trans-border Natural World Heritage Site

Following the Berastagi World Heritage Forest Policy Dialogue of 1998, the Directorate General of Forest Protection and Nature Conservation, Ministry of Forestry-Indonesia and UNESCO (World Heritage Center and Jakarta Office) in partnership with the ASEAN Secretariat and IUCN's WCPA Southeast Asian Regional Forum organised the Technical Workshop on the Preparation of Cluster and Transborder Natural World Heritage Nominations in the ASEAN Region, on 19 -21 April 2001 at Lido Lake, Bogor, Indonesia. This Technical Workshop recommended that Betung Kerihun National Park (West Kalimantan, Indonesia), Lanjak Entimau Wildlife Sanctuary and Batang Ai National Park (Sarawak, Malaysia) be given high priority as a pilot case for trans-border Natural World Heritage nomination of the central Borneo Montane Forests.

Other possible trans-border Natural World Heritage Sites include the:

- Peninsular Malaysian Lowland forests (Thailand and Malaysia): Halabala and Belum
- Northern Borneo Moist Forests (Malaysia and Brunei): Labi Forests Reserve and Gunung Mulu National Park.

As a follow up to the technical workshop, a joint meeting for the preparation of Transborder Natural World Heritage Nomination of Central Borneo Montane Forests was held in Kuching, Sarawak – Malaysia in March 2002. Indonesia and Malaysia have both agreed to set up a single proposal for nominating Betung Kerihun National Park, Lanjak Entimau Wildlife Sanctuary and Batang Ai National Park as Transborder Natural World Heritage Site. Both parties understand that the objective of the agreement could be achieved if both Governments support this nomination.

Back to back with the joint meeting, the Second Task Force meeting of Trans-boundary Conservation was

held on 23 March 2002. The meeting discussed the progress achieved since the first meeting and the joint actions that would be carried out. The meeting emphasised that research studies-related activities would still dominate the management activities of both conservation areas. The major activities include: (for BKNP) collaborative research programme on medicinal plants between World Wildlife Fund (WWF) and the Indonesian Institute of Science and Tanjung Pura University; joint study on orangutan with Kyoto University, Japan; the International Conference in Ecotourism Development in Betung Kerihun National Park; and (for LEWS) the establishment of three gene banks in LEWS that include non-timber species; exploration of the uses of plants for traditional medicine, and ornamental plants.

Lessons Learnt

Implementation of the projects

In the context of project implementation, the cooperation was basically on: (1) joint preparation, organisation and implementation of the ITTO Borneo Biodiversity Expedition (IBBE), and (2) mutual visits and workshops.

The implementation of the two ITTO-funded projects provided some significant initiatives and inputs to the implementation of the Trans-boundary Biodiversity Conservation Areas (TBCA).

The IBBE 97 effectively conducted and collected a lot of valuable data on forest types, botany, medicinal plants, primates, fish, birds, reptiles, amphibians and socio-economic aspects on forest communities. The expedition further enhanced the findings on the commonalities of the two conservation areas that must be managed as one TBCA. A joint expedition (research/study) is very important not only to know the biodiversity (species richness of flora and fauna; types of ecosystem) of the neighbouring protected areas to be conserved but also to know and

understand the socio-economic conditions of the local communities concerned. The data and information collected by the joint expeditions or research will be used for designing the cooperation activities for both conservation and sustainable development purposes.

However, the results of IBBE 97 have not been used optimally in preparing the Management Plan of BKNP, especially for the joint activities for the TBCA that have to be carried out by the park management unit.

Political Situation and Changes

TBCA cooperation started under the centralised regime of the previous government and has experienced substantial political changes. Although the declaration and administration of protected areas including National Parks is still a central government matter, the new government policy of decentralization and empowerment of local command has brought along drastic changes for the project, regarding both opportunities and constraints experienced during its implementation.

It has also suffered from leadership changes in the Ministry of Forestry. During its implementation, it has experienced changes of Ministers and of Directors General of Forest Protection and Nature Conservation.

Security concerns and boundary issues in West Kalimantan have delayed field implementation, particularly the implementation of the joint Biodiversity Survey (IBBE, 1997).

While both the Governments of Indonesia and Malaysia appear to have a clear picture of the scope of cooperation in biodiversity conservation and also in eco-tourism development and non-timber forest products (NTFP) trade, the issues on trans-boundary cooperation in the suppression of illegal logging, particularly along the northern boundary of the BKNP with Sarawak (outside LEWS) were not addressed in project activities. Illegal logging is a very sensitive issue for both govern-

ments, and it seems, at certain levels, to be bringing a negative impact on TBCA cooperation.

Different Management Categories and Sizes of the Conservation Areas

The Zoning System in Betung Kerihun National Park allows activities inside the park especially eco-tourism (inside Use Zone/Intensive Use Zone). In LEWS, the zoning approach for total protection and conservation allows very limited activities only in buffer and wilderness zone. The cooperation faces difficulties in designing certain joint activities, especially in efforts for empowering the local communities through the sustainable utilization of the park area (e.g. eco-tourism). At a certain level, the different sizes of the protected areas have also caused difficulty, especially in protecting the areas, for example, along the northern boundary of the BKNP with Sarawak that is outside LEWS.

Authority and Security Aspects of the Border

During the first meeting of the "Task Force for the Collaborative Management of the Trans-boundary Biodiversity Conservation Area (TBCA) of Lanjak Entimau Wildlife Sanctuary (LEWS) and Betung Kerihun National Park (BKNP)" on 07 August 2001 in Jakarta, it was agreed that three immediate cooperation activities will be implemented, i.e joint patrol, staff exchange and exchange of visits of the local communities.

The Task Force, however, in its second meeting realized that the implementation of the joint patrol would face problems in regard to the legal/authority and security aspect of the border.

Continuity of Funding for TBCA

The initiatives for TBCA cooperation such as the one between Betung Kerihun National Park, Indonesia and Lanjak Entimau Wildlife Sanctuary, Sarawak-Malaysia, have been driven

mainly by the ITTO through its financial support for the two initial projects, especially the ITTO Borneo Biodiversity Expedition (IBBE) 1997.

Presently, the trans-boundary activities are largely dependent on external funding. Although the Project's Phase I has been followed by the second phase, which is also supported by the ITTO, there is no concrete plan yet on how to sustain these efforts when external funding ends.

The efforts to nominate Betung Kerihun National Park and Lanjak Entimau Wildlife Sanctuary for inscription as a Trans-border Natural World Heritage Site could become an alternative in finding fund resources and in drawing attention of international communities to this TBCA, a relatively undisturbed montane forests/ecosystems in the heartland of Borneo.

In the regional level (ASEAN), the ASEAN Regional Centre for Biodiversity Conservation or ARCBC can play an important role in this case.

Conclusion

The importance of trans-boundary biodiversity conservation has become increasingly recognised in South-east Asian countries. Several initiatives have been started in several countries, but still need a lot of efforts towards closer cooperation at site level, and synchronisation of management and action plans for the TBCA.

Guidelines to be developed should consider the following:

- Initial joint activities, especially joint expedition/research
- Political support and commitment
- Legal/political aspect: particularly related to the policies and authority on border.
- Management categories and size of the protected areas (TBCA).
- Continuity of funding: alternatives of fund resources. ■

Herry D. Susilo is the Head, Sub Directorate of Conservation Areas, PHKA, Department of Forestry – Indonesia.