

**Report on the Training Workshop on Assessment Methodologies, Data Gathering and
CEPA Planning for the ACB-JAIF Project**

12 - 22 October 2015

Mulu Marriott Resort and Spa, Gunung Mulu National Park, Miri, Sarawak, Malaysia

ACB-ESABII Workshop

- ACB-ESABII Workshop was held at the Gunung Mulu National Park in Miri, Sarawak, Malaysia from 12-22 October, 2015.
- ACB-ESABII Workshop was sponsored by Biodiversity Center of Japan (ESABII secretariat) and ACB (ASEAN Centre for Biodiversity), hosted by the Gunung Mulu National Park secretariat.

Training Workshop of Taxonomic Capacity Building

- Training Workshop of Taxonomic Capacity Building of the Plants in the Mountainous Zone was held from 16 - 22 October, 2015, during the ACB-ESABII Workshop. The program included lecture on Taxonomy of the Plants and field work.

The *Training-Workshop on Biodiversity Assessment Methodologies, Data Gathering and Communication, Education and Public Awareness for Park Management Staff* was held from 12-22 October at Mulu Marriott Resort and Spa, Gunung Mulu National Park in Miri, Sarawak, Malaysia. The training workshop was co-organized by ACB with the Ministry of Natural Resources and Environment, Malaysia (NRE) and Sarawak Forestry Corp., and with funding from JAIF, ESABII, and the Ministry of Environment-Japan (MOE-J). The training workshop gathered 25 protected area managers, forest rangers and staff of protected areas and ASEAN Heritage Parks, and other government environment agencies from eight ASEAN Member States.

The comprehensive workshop encompassed topics on biodiversity assessment methodologies, data gathering and analysis, taxonomy, and communications, education, and public awareness (CEPA). Presentations included the following:

1. ASEAN Heritage Park Programme - Dr. Filiberto A. Pollisco, Jr., ACB
2. Geographic Evolution of Biodiversity in Southeast Asia – Dr. Edwino Fernando, Professor, University of the Philippines Los Banos
3. Elevational Patterns of Vegetation in South East Asia: Example from Malaysia – Dr. Richard Chung, Forest Biodiversity Division, Forest Research Institute Malaysia

4. How to's Field Guidebook – Dr. Edwino Fernando, Professor, University of the Philippines Los Banos
5. Presentation of Gunung Mulu National Park and Do's and Don't's in the Park – Oswald Braken Tisen, SARAWAK FORESTRY
6. Ecotourism Program of Gunung Mulu NP – Alison Pritchard, Park Manager
7. Floristic Biodiversity Assessment: Methods – Dr. Sandra Lim Yap, Assistant Professor, Institute of Biology, University of the Philippines Diliman
8. Geographic Information System as a Tool for Biodiversity Analysis – Dr. Nathaniel Bantayan, Director, Makiling Center for Mountain Ecosystems, UPLB, Philippines
9. Monitoring Sites 1000 Project in Japan – Dr. Hidetsugu Miwa, Senior Technical Officer, ESABII-MoE Japan
10. Bornean tropical forest on bloom: General Flowering of Dipterocarps in Sarawak – Dr. Yayoi Takeuchi, National Institute for Environmental Studies (NIES), 16-2 Onogawa, Tsukuba City, Japan
11. Taxonomy of Dipterocarpaceae and Sapotaceae – Dr. Edwino Fernando, Professor, University of the Philippines Los Banos/Dr. Teguh Triono, The Indonesian Biodiversity Foundation (Yayasan KEHATI), Jakarta
12. Introduction of ESABII and its efforts for taxonomic capacity building – Dr. Hajime Hirosawa, Asst. Director, Biodiversity Center of Japan, MOE-Japan
13. Promoting ASEAN Heritage Parks through CEPA – Mr. Rolando Inciong, Head, Communication and Public Affairs
14. News and Feature Writing for ASEAN Heritage Parks – Ms. Karen Lapitan, Communication Consultant
15. Producing Audio-Visual Materials to Promote AHPs – Ms. Pamela Reblora, Development and Communication Associate, ACB
16. Using Social and Digital Media to Promote AHPs – Mr. Eisen Bernardo, ACB
17. Good CEPA Practices in Selected AHPs – Ms. Sahlee B. Barrer, Publication Consultant
18. Collection and Preparation of Herbarium and Specimens - Dr. Nobuyuki Tanaka, Department of Botany, National Museum of Nature and Science, Japan

Practical exercises on biodiversity assessment methodologies, data gathering, analysis and interpretation allowed the participants to practice what they had learned in the discussions. Two groups were asked to create a sampling design and construct 20x20, 5x5, and 1x1 meter plots inside Gunung Mulu National Park, where they tested for

species diversity, richness and dominance using the indices highlighted in the discussion. The hands on experience provided a practical demonstration of biodiversity assessment and analysis, and provided opportunities for further explanation of the biodiversity assessment methodologies.

These and discussions geological evolution of biodiversity in Southeast Asia, elevational patterns of vegetation, and taxonomy provided the backdrop for the development of the draft *Field Guide on the Lowland Forest Trees of the Dipterocarpaceae and Sapotaceae Families in Gunung Mulu, Sarawak, Malaysia*. Participants received instruction of what species to look out for, what photos to take, and what information will be needed to produce the species descriptions for the field guide. The groups were divided into five plant groups, specifically: trees, palms and pandans, herbs and shrubs, ferns, and vines. After two days of field work and research along the Deer Cave trail inside Gunung Mulu National Park, the information gathered were then presented at plenary and were submitted to ACB for crafting into the field guide. The results include the following:

- Trees – the group identified 25 species from 16 families including Datistaceae, Dilleniaceae, Dipterocarpaceae, Lauraceae, Rubiaceae, and Sapindaceae.
- Herbs and Shrubs – the group provided photos and initial descriptions of 13 species from 11 families.
- Ferns – photos and initial descriptions were provided for 14 species from 11 families.
- Vines – descriptions of characteristics of vines were provided, along with initial descriptions for 14 species from 9 families.
- Palms and pandans – photos of species were provided.

The CEPA workshop provided an opportunity for the AMS representatives to learn the significance of CEPA; elements of good CEPA materials; use of social and digital media in the promotion of AHPs; and learn good practices on CEPA from other AHPs. A short workshop was also conducted to determine what CEPA practices learned from Gunung Mulu National Park or from other participants can be recommended for replication in their own CEPA strategies in their respective AMS. CPA staff also conducted photo and video documentation of significant features of the national park.

Observations and Feedback

Gunung Mulu National Park was an ideal venue for the biodiversity assessment workshop as it provided all the field area and facilities needed for the training. The relative isolation of the park ensured that all the participants focused on the training, although the limited internet connectivity was a challenge. The significant features of the park also allowed the participants to thoroughly appreciate the biodiversity values of the park.

Most of the participants appreciated the long but comprehensive workshop. While some of the topics served as a refresher course, particularly for those with forestry backgrounds, additional components such as CEPA and the development of the field guide provided new opportunities for learning. The participants provided the following feedback at the conclusion of the workshop:

- Cambodia – thanked ACB, SARAWAK FORESTRY, and the Government of Japan for the opportunity to participate in the program. They learned a lot and hoped to implement what they have learned in Cambodia.
- Indonesia – thanked the organizers for the opportunity to gain new knowledge and experience in AHP and protected area management. They have met new friends, and learned new information that they can take back to their national park, and expressed to join new workshops from ACB.
- Malaysia – Kenneth of Sabah Parks of Mt. Kinabalu National Park thanked ACB for the opportunity to join the workshop. His experience is more of a refresher course since some of the things taught he already knew about, so this was a chance to implement and practice skills that have been previously learned. He also appreciated the CEPA workshop as their work also has impacts or is connected to CEPA. Working on the field guide was a new experience, which was much appreciated. Alim of Taman Negara National Park also expressed his appreciation for the program and looked forward to future activities with ACB. Julia Sang thanked ACB, the secretariat and the government of Japan for the well-organized training workshop. While her organization provides a supporting role to AHPs, she looked forward to future activities and more detailed workshops on taxonomy, and not just plants. She expressed her appreciation for the guides since they think that many people rely on guides to national parks. This output will be very useful to Gunung Mulu National Park and hoped that ACB will have more activities such as this. She thanked the other participants as well as she

enjoyed their company and camaraderie. Jok of Gunung Mulu National Park also expressed his appreciation for the workshop and hoped to soon have a guide book for mammals. He also enjoyed the CEPA aspect of the workshop because of its significance in informing stakeholders of the importance of the park. He also appreciated the drafting of the field guide and the assistance provided by the other participants. Ellen expressed her appreciation as well, since she learned many things she can apply in her own work, such as in research, development of field guides in biodiversity, and the use of CEPA in community awareness. She stated that overall it has been a very useful workshop.

- Myanmar – thanked ACB and the Japanese government for the opportunity to learn more about taxonomy, biodiversity assessment and CEPA.
- Philippines – congratulated the organizers for a successful workshop. The workshop also served as a refresher course and the lessons learned during the workshop can be implemented at the AHPs. As the focal agency for the ASEAN Heritage Parks in the Philippines, the Biodiversity Management Bureau will be in the position to echo the lessons learned from the workshop to other AHPs and protected areas in the country. She also appreciated the CEPA workshop and the development of the field guide as these are widely needed in the Philippines.
- Singapore – thanked ACB for the opportunity to join the long but comprehensive workshop and there were definitely aspects of the workshop that they can share with their colleagues. They expressed appreciation for the staff and guides of the park who were very knowledgeable and patient with the participants. They will certainly come back to explore more of the park, including the Pinnacles and the Gunung Mulu summit.
- Thailand – expressed his appreciation for learning more about biodiversity and the development of the field guide.
- Viet Nam – learned a from the workshop and invited everyone to visit Hoang Lien Sa Pa National Park.

Key Officials Met

1. Dr. Hajime Hirosawa, Asst. Director, Biodiversity Center of Japan, MOE-Japan
2. Dr. Hidetsugu Miwa, Senior Technical Officer, ESABII-MoE Japan
3. Dr. Nobuyuki Tanaka, Department of Botany, National Museum of Nature and Science, Japan
4. Mr. Wong Ting Chung, Chief Executive Officer, SARAWAK FORESTRY

5. Mr. Oswald Braken Tisen, Deputy General Manager, SARAWAK FORESTRY
6. Mr. Victor Luna Anak Amin, Manager, Protected Areas and Biodiversity, SARAWAK FORESTRY
7. Ms. Alison Pritchard, Park Manager, Borsarmulu Park Management
8. Mr. Jok Wan Ngau, Acting Park Warden, Gunung Mulu National Park, SARAWAK FORESTRY

Next Steps

The participants have already submitted photos and initial descriptions of the draft *Field Guide on the Lowland Forest Trees of the Dipterocarpaceae and Sapotaceae Families in Gunung Mulu, Sarawak, Malaysia*. Next steps include validating information in the submitted text; selection and identification of photos; and finalization of the field guide with experts and the ACB production team.



