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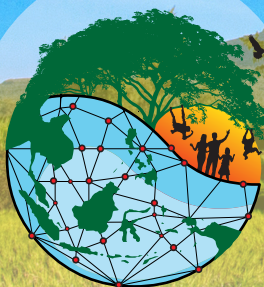
National Commission
of the Philippines

The 12th Southeast Asian
Biosphere Reserves Network (SeaBRnet) Meeting:

Strengthening Networks for Sustainable Management of Biosphere Reserves

including a special session of
the Asia-Pacific Biosphere Reserves Network

26-28 March 2019 | Legazpi City, Albay, Philippines



SEABRNET XII
Legazpi City, Albay, Philippines

26 - 28 March 2019





National Commission
of the Philippines

Report of the 12th Southeast Asian Biosphere Reserve Network (SeaBRnet) Meeting

Strengthening Networks for Sustainable Management of Biosphere Reserves

26–28 March 2019
Legazpi City, Albay Biosphere Reserve
The Philippines



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Acronyms

APBRN	:	Asia-Pacific Biosphere Reserve Network
BR	:	Biosphere Reserve
BRIDGES in AP	:	Biosphere Reserves Interconnected in Diverse Global Environments for Sustainability in Asia and the Pacific
EABRN	:	East Asian Biosphere Reserve Network
ICC	:	International Coordinating Council
JBRN	:	Japanese Biosphere Reserves Network
JFIT	:	Japanese Funds-in-Trust
LAP	:	Lima Action Plan
MAB	:	Man and the Biosphere
MNRE	:	Ministry of Natural Resources and Environment
PacMAB	:	Pacific Man and Biosphere Network
SACAM	:	South and Central Asia Man and Biosphere Network
SeaBRnet	:	Southeast Asian Biosphere Reserve Network
SDGs	:	Sustainable Development Goals
WNBR	:	World Network of Biosphere Reserves

Introduction

The UNESCO Man and the Biosphere (MAB) Programme combines the practical application of natural and social sciences, economics and education to improve human livelihoods and the equitable sharing of benefits, and safeguard natural and managed ecosystems. It promotes innovative approaches to economic development that are socially and culturally appropriate and environmentally sustainable.

As of 2020, the MAB Programme's World Network of Biosphere Reserves (WNBR) comprises 701 Biosphere Reserves in 124 countries, including 21 transboundary Biosphere Reserves spanning the territories of two or more countries. The MAB Programme and WNBR is an important and valuable partner as well as an instrument for field research through which to build and share knowledge on practice-based sustainable development.

Adopted by the MAB International Coordinating Council (ICC) at its 27th session, the MAB Programme Strategy 2015–2025 provides a comprehensive yet succinct set of goals, contributing to the global Sustainable Development Goals (SDGs). The overarching goal of the Strategy is to develop a world network of Biosphere Reserves that serve as models of sustainable development, by improving governance, collaboration and networking within the MAB Programme and WNBR. In this sense, Biosphere Reserves are positioned as places in which the 2030 Agenda and its Sustainable Development Goals (SDG) are pursued in practice.

The 4th World Congress of Biosphere Reserves, held in Lima, Peru, launched the Lima Action Plan (LAP) for Biosphere Reserves for 2016–2025. Complementing the MAB Programme Strategy, the plan outlines how the MAB Programme through the WNBR will make a targeted contribution to the achievement of the 2030 Agenda and the SDGs.

Locally, MAB National Committees and networks are encouraged to prepare their own strategies and national action plans, using the MAB Strategy and the Lima Action Plan as key points of reference. National plans and strategies should address national and regional realities and imperatives; as well as implement the LAP at the global level. In countries across Asia and the Pacific, the development of national strategies is ongoing.

Meeting objectives

The 12th Southeast Asian Biosphere Reserve Network (SeaBRnet) meeting and Asia-Pacific Biosphere Reserve Network (APBRN) special session gathered representatives from Southeast Asia and the Pacific to:

- Enhance participation and active networking within the MAB community in the region's Member States – including UNESCO National Commissions, MAB National Committees and relevant ministries, Biosphere Reserve managers and other public stakeholders, as well as universities, civil society organizations, private sector and other relevant stakeholders.
- Foster collaboration in research, implementation and monitoring, including exchanges between Biosphere Reserves.
- Communicate and disseminate other activities of the MAB programme to the network.
- Launch three guidance documents to promote Biosphere Reserves as an efficient tool for sustainable economic and social development.

Meeting summary

The 12th SeaBRnet meeting brought together MAB stakeholders in Southeast Asia, MAB National Committees and Biosphere Reserve managers. In order to strengthen the networking and exchange among subregional networks within Asia and the Pacific, they were joined by representatives of the South and Central Asia MAB Network (SACAM), the East Asian Biosphere Reserve Network (EABRN) and the Pacific Man and Biosphere Network (PacMAB).

Members of SeaBRnet and its sister networks exchanged experiences and discussed the interaction of UNESCO programmes, the implementation of the Lima Action Plan, and the strategic contributions of MAB and its networks in Asia and the Pacific towards the achievement of the SDGs. With a particular focus on the potential of Biosphere Reserves to contribute towards the SDGs, the overall objective of the meeting was to strengthen networks for sustainable management of Biosphere Reserves.

Three publications were launched during a dedicated session of the Asia-Pacific Biosphere Reserve Network (APBRN), drawn from studies coordinated by UNESCO Office, Jakarta with the support of Japan Funds-in-Trust (JFIT) in the context of the project 'Biosphere Reserves Interconnected in Diverse Global Environments for Sustainability in Asia and the Pacific (BRIDGES in AP).' The publications included a framework for Biosphere Reserve management informed by sustainability science, guidelines for applying eco-labelling in Biosphere Reserves, and a comparative study on legal aspects of Biosphere Reserve zonation. Each document has been developed through the mobilization of MAB expert networks in the region.

The meeting programme also included updates on MAB activities at the global level, including the MAB Youth Forum 2019 and MAB Young Scientists Awards 2019. The German National Commission for UNESCO shared a new guidance manual on management of Biosphere Reserves in Africa, developed in close cooperation with the MAB regional network for Africa (AfriMAB Bureau), Arab Network of Biosphere Reserves (ArabMAB) and UNESCO MAB Secretariat. A representative from the Japanese AEON Environmental Foundation outlined activities undertaken with the Japan Biosphere Reserve Network (JBRN) following a partnership agreement signed between the Foundation and JBRN. A one-day field visit to the Albay Biosphere Reserve was held.

The meeting sessions are summarized in further detail below.

Field Trip

Day 1 (26 March 2019)

Two parallel field visits were held for participants to observe the management of the Albay Biosphere Reserve (BR). The first field visit explored conservation, tourism development and education opportunities of mountain hiking trails, an underground river, and coastal and marine protected areas. The second trip visited the Albay Farmer's Bounty Village to observe the promotion of sustainable local economies within the reserve. The village is a 15-hectare experimental site dedicated to testing and promotion of local agriculture products, currently being developed by the Provincial Government of Albay.

Meeting minutes

Opening session



The 12th SeaBRnet meeting was officially opened by the Provincial Administrator on behalf of the Governor of Albay Province, Engr. Vida Corazon Prollamante, and Ms Lindsay A. Barrientos, representing the UNESCO National Commission of the Philippines.

Ms Prollamante welcomed all members of SeaBRnet and other networks, and thanked the organizing committee for preparing the meeting.

MAB country reports

MAB country reports were presented in the first session of the meeting. Represented by MAB National Committees and/or managers from participating Biosphere Reserves, country delegations outlined recent MAB-related activities and their plans for the future.

A brief summary of each country report is presented below.

The Philippines

Ms Lindsay Barrientos explained the role and objectives of the UNESCO National Commission of the Philippines.

- Facilitates maximum engagement with UNESCO and advance UNESCO's work and programmes in the country.
- Serves as the liaison body to link the work of the Philippine Government with UNESCO's work.
- Disseminates relevant information on UNESCO's programmes and projects.
- Promotes the nation's role in the betterment of human life and the environment.



- Links UNESCO's work, programmes and activities in education, sciences, culture and communication with relevant groups/organizations/agencies in the Philippines.
- Monitors UNESCO programmes in the country.
- Helps address concerns in UNESCO-inscribed sites in the Philippines. .

Currently, the Philippines has three Biosphere Reserves; Puerto Galera (inscribed 1977), Palawan (inscribed 1990) and Albay (inscribed 2016).

Puerto Galera BR is known for a variety of endemic species including tamaraw (*Bubalus minoronensis*) and an extremely rare species of hard coral known as 'Puerto gallerie' which can only be found at this site. It is also home to Iraya Mangyans, who are one of the indigenous peoples of Oriental Mindoro and known for their skills of nito weaving, a unique art form.

Palawan BR is known as the country's last ecological frontier. Comprising the entire province of the same name, the reserve is a cluster of islands composed of one long main island and multiple smaller groups of islands. It is located in the western fringes of the Philippine archipelago. Palawan currently has nine protected areas comprising at least 20 per cent of its total area, including two World Heritage sites.

Albay BR is located in southeastern Luzon in the Philippines. The inner lands are composed mainly of open grassland and forest ecosystems, while the coastline consists of mangrove forest, urban centers and agricultural land. It is home to three mountains including Mount Mayon, the Philippines' most active volcano, which reaches 2,462 metres above sea level.

The main threats and challenges faced by the three Philippine Biosphere Reserves include:

- Non-compliance with existing laws.
- Vulnerability to natural hazards.
- Influx of tourists and migrants.
- Illegal fishing.
- Lack of institutionalized biodiversity assessment tools and monitoring systems.
- Lack of community awareness of the importance of core and buffer zones in the reserves.

The largest achievement in 2018 was the launch of the Philippine Biosphere Reserve Network (PhilBRnet). During the launch, a commitment was signed between the three Biosphere Reserves in the Philippines and UNESCO National Commission to support PhilBRnet. This network will be the channel for communication and exchange of information between and among the reserves in the Philippines.

Thailand

Ms Narumon Laosuwan, Department of National Parks, Wildlife and Plant Conservation of Thailand, presented a summary of key achievements, challenges and opportunities facing Thailand's Biosphere Reserves. Achievements include mangrove rehabilitation and marine species conservation in Ranong BR. Mangrove rehabilitation was undertaken in collaboration with government and international agencies, private sector and volunteers. A total of 71.2 hectares were planted for further study and monitoring.

In 2018, the four established Biosphere Reserves in Thailand (Sakaerat, Mae Sa-Kog Ma, Huay Tak Teak and Ranong) conducted a range of activities with various stakeholders. These activities included raising awareness of the importance of local community engagement in Biosphere Reserves, branding, ecotourism workshops and environmental education programmes for youth and disabled people. Other activities included habitat protection, knowledge sharing and biodiversity monitoring. At the end of the presentation, a one-minute #ProudToShare video from Mae Sa-Kog Ma BR was shown.

Timor-Leste

Mr Joao Antalmo Ferreira, Timor-Leste Ministry of Agriculture, presented the first site to be considered for Biosphere Reserve nomination in Timor-Leste, Nino Konis Santana National Park. He outlined biodiversity values and other information for the proposed site. Nino Konis is a highly diverse habitat with a range of terrestrial and marine species. In addition, the park is well known for its traditional cultures and historical values. In order to protect and conserve the park's biodiversity, the Government of Timor-Leste has developed policy and legislation, enhanced human resource capacity and allocated a budget. Challenges include limited human resources in government authorities, increasing demands for development, increasing population, lack of an established management plan and zonation scheme, as well as illegal logging and fishing activities.

Viet Nam

Dr Duong Ming Lam, General Secretary of the Vietnam MAB National Committee, presented the implementation, challenges and initiatives of the LAP at nine Biosphere Reserves in Viet Nam.

Biosphere Reserves in Viet Nam are currently engaged with Blue Communities, a four-year research capacity-building programme for marine planning in East and Southeast Asia, funded by the United Kingdom Government's Global Challenges Research Fund. The programme has 12 interconnected research projects and 10 cross-cutting capacity-building activities. The programme is an academic-stakeholder collaboration with community co-creation and co-delivery to support the development, implementation and ongoing management of initiatives

that promote the sustainable use of marine resources by multiple users. The main objective of the programme is protecting fragile ecosystems and supporting people's livelihoods, food security, health and well-being in coastal communities.

The programme provides an established, collaborative infrastructure in which initiatives can be developed and tested with local stakeholders, with an aim to promote successful approaches with other coastal communities in the wider UNESCO Biosphere Reserve network and elsewhere. Initiatives address the following challenges:

- Promotion of sustainable harvesting,
- Preparation for climate change,
- Promotion of good health,
- Identification of opportunities for growth,
- Co-development and implementation of marine planning and management schemes.

The cross-cutting and research capacity-building activities include:

- Further co-development of the current 12 research projects to identify research capacity and training needs with local communities and researchers,
- Engagement in learning-by-doing joint projects to offer opportunities for learning and exchange for both UK and Southeast Asian researchers in case study sites. This includes facilitated analysis of lessons learned from research results and stakeholder engagement,
- Undertake iterative evidence synthesis and analysis with partners and local communities to inform learning and identify evidence gaps,
- Ongoing identification of additional relevant research/stakeholder partners (government, non-government organizations, community groups) and assessment of their skills, as appropriate, for each study site,
- Co-plan and implement a programme of bespoke training through workshops, mentoring, exchange visits, secondments, lectures and webinars, based on skills mapping and identified research capacity and training needs,
- Develop the use of case studies as 'training and ground team development', including the North Devon Biosphere Reserve in UK, and share the lessons learned from research and management experiences,
- Inclusion of stakeholder interaction as a key component of all UK research visits to partner countries to ensure research and its outputs are relevant and sensitive to national and local cultural issues,
- Scale-up research activities and stakeholder engagement to develop regional teams, in addition to national and local teams,

- Identification of future research priorities to develop and deliver further improvements in marine management and planning, including continuous evaluation of the impact of approaches developed and proposed in the current programme,
- Joint application for further funding to address current and future research priorities.

Cambodia

Mr Long Kheng, Cambodia Ministry of Environment, presented challenges and action plans for Tonle Sap, the country's sole Biosphere Reserve. He briefly introduced the features of Tonle Sap, including zones, unique hydrological phenomena, species diversity, population and socioeconomic settings, as well as threats and future concerns. In order to protect the area, the Government of Cambodia has developed key strategic actions to manage the protected area system, including:

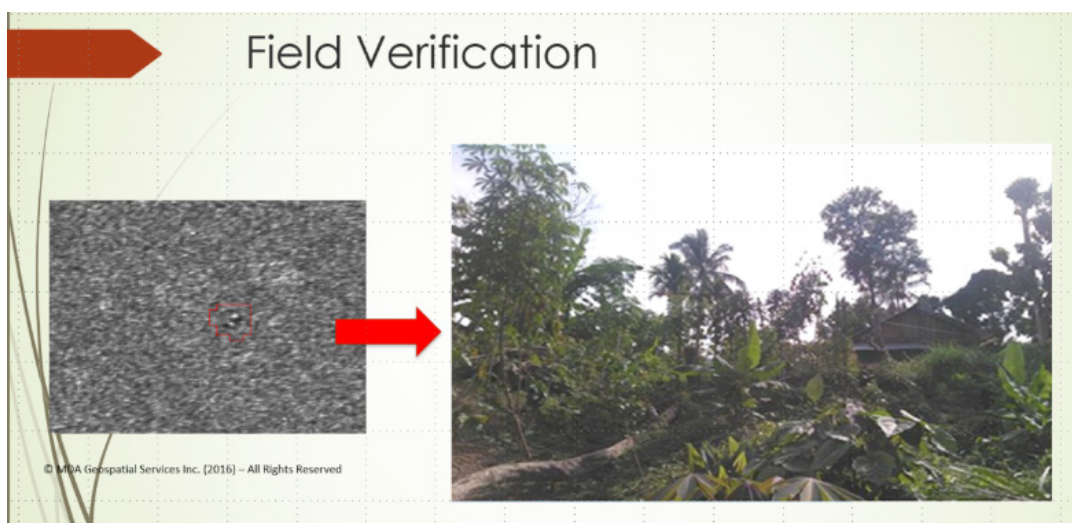
- Legal binding and recognition of biodiversity hotspots, fishery, forestry and protected area reforms. The Royal Government of Cambodia has included the transition zone of Tonle Sap BR as a new protected area,
- Good cooperation among relevant institutions at all levels and decentralization of management. Several functions of the Ministry of Environment have been delegated to local authorities including protected area management, core protected area coordination and management, environmental education and awareness-raising, and solid waste and pollution management,
- Improving and enhancing knowledge and skills of local communities for sustainable management of natural resources and livelihoods in the community protected areas and fisheries. Activities include raising awareness of local communities, training local farmers to grow more crops from their existing land to avoid encroachment, and the development of ecotourism,
- Research, monitoring and education programmes..

Indonesia

Mr Anang Achmadi, representing the Indonesian MAB National Committee, presented an overview of the management and development of Biosphere Reserves in Indonesia, as a 'road map' towards sustainable economic development. As of June 2019, Indonesia has 16 Biosphere Reserves and expect another three reserves to be approved during the next Session of the International Coordinating Council of Man and Biosphere Programme (ICC-MAB). The Indonesian MAB Committee is committed towards the nomination of new Biosphere Reserves in the near future.

The Committee is continuing networking efforts to ensure the effectiveness of the Indonesian Biosphere Reserve Forum and stakeholder participation by engaging with private sector, local governments and communities. It is also actively participating in international fora including SeaBRnet, Islamic Educational, Scientific and Cultural Organization (ISESCO), International Alliance of Protected Areas (IAPA) and hosted the 30th session of ICC-MAB meeting in Palembang, Indonesia, in July 2018. In 2019, the Committee is committed to develop and encourage logo branding of products from Biosphere Reserves in Indonesia.

During the session, Dr Dolly Priatna, Indonesia Institute of Sciences, also shared lessons learnt from private sector participation in the management of Giam Siak Kecil – Bukit Batu and Berbak Sembilang BR in Sumatra, Indonesia. Dr Priatna presented the activities of the private sector entity Asia Pulp and Paper (APP) to help preserve Indonesian rainforest using MDA’s Forest Alerts Service (FAS).¹ Employing MDA’s RADARSAT-2 satellite, FAS enables APP to monitor forest cover loss in core and buffer zones of conservation areas and meet their commitment to not clear conservation forest areas. Monitoring land cover changes in production areas is essential for efficient operational planning and minimizes illegal encroachment, further protecting high-value forests. FAS provides near real-time critical and timely information to APP, typically within two days of data collection. Every 24 days, the



system monitors approximately 3.8 million hectares, which includes APP’s pulpwood supply and the Giam Siak Kecil – Bukit Batu BR. The satellite penetrates clouds to detect subtle forest disturbances in areas as small as 0.5 hectares.

Another private sector mitigation activity is engagement with the community. APP operates the programme Collaborative Conservation Management (CCM), located at District Duri 1 in Riau which covers more than 3,000 hectares. Through the CCM, APP contributes to the protection of natural forest by conducting community development within the area.

¹ MacDonald, Dettwiler and Associates Ltd

Malaysia

Mr Andy Henry Dusim, Malaysia Ministry of Natural Resources and Environment, gave an introduction to the two Biosphere Reserves in Malaysia. He summarized the plan of activities for conservation and management of the two sites and presented achievements to date. Tasik Chini BR activities include lake and river water quality monitoring, river bank rehabilitation, conservation and preservation of forest, monitoring of land use issues, research and development, and the promotion of sustainable mining and awareness-raising programmes. Crocker Range BR activities include the establishment of site management committees, land use mapping, scientific research, implementation of communication, education and public awareness; and climate change mitigation programmes.

Myanmar

Mr Sein Tun, Park Warden for the Inlay Lake Wildlife Sanctuary, outlined general information and conservation activities of Inlay Lake BR. Inlay Lake was designated as a UNESCO Biosphere Reserve in June 2015. The lake was formed more than 1.5 million years ago and its unique geological history has created habitat conditions that led to a rich biodiversity with many native species. The wetland ecosystem of the freshwater lake is home to 267 species of birds, 43 species of freshwater fishes, otters and turtles. The lake is a nesting place of the globally endangered Sarus crane.

However, the lake faces serious threats including the impacts of climate change, rapid population increase and unsustainable practices which have led to rapid shrinkage of the water surface and decline in water quality. In order to conserve the lake, the authority has conducted several mitigations including creating a bird preservation area; fishing free zones and demarcation areas; and other communication, education and public awareness programmes.

Japan

Dr Yoshihiko Iida, Kanazawa University, presented an overview of Biosphere Reserves in Japan. There are currently nine, all managed by local governments in close cooperation with local communities. Some Biosphere Reserves are managed within a single municipality, while others are managed by multiple municipalities through a cooperative arrangement.

Recent publications on Japanese Biosphere Reserves include:

- Matsuda, H., Sato, T., and Yumoto, T. (eds) 2019. *UNESCO Ecopark: Nature Reserve as a Model of Sustainable Community*. Kyoto University Press, Kyoto, Japan (in Japanese.)

- Matsuda, H., Sato, T., Nakamura, S. (in press) Transdisciplinary Approaches for the Reactivation of Japanese Biosphere Reserves. Price, M., Reed, M. (eds) *Sustainability, Science, and Society: Learning from UNESCO Biosphere Reserves*. Earthscan (Routledge) Publishing.

Dr. Iida outlined major legislation with significance for Japan's Biosphere Reserves and the role and responsibilities of the Japanese MAB National Committee. The Japanese Biosphere Reserves Network (JBRN) has met annually since 2013 as a platform for exchanging knowledge and ideas between Biosphere Reserves and to raise the profile of the network.

JBRN has also strengthened educational collaboration with universities, elementary and high schools in Japan. Most educational activities are conducted in buffer zones and transition areas. A case study of university collaboration with Biosphere Reserves in Japan, Belarus and Russia was conducted in 2018 (Mammadova and Iida [eds.] 2018. *Biosphere Reserves for Future Generations: Educating Diverse Human Resources in Japan, Russia and Belarus*. Kanazawa University). International training courses and symposiums through BR networks were also conducted in 2018. Moving forward, JBRN is targeting training for young field professionals through other BR networks.

Comments and statements from APBRN participants

South and Central Asian MAB Network (SACAM)

SACAM was represented by delegates from Bhutan and the UNESCO Office in India.

Mr Tandin Namgay, senior forest officer, Department of Forest and Park Services, Bhutan Ministry of Agriculture and Forests, introduced the Bhutan MAB programme. Bhutan is a small landlocked nation located in the southern slopes of the eastern Himalayas. To the north lies Tibet, while to the west, south and east lie Indian territory. Known for its proactive conservation initiatives, Bhutan has designated more than a half of its territory as protected area – comprising five national parks, four wildlife sanctuaries, one nature reserve, one botanical park and nine corridors linking protected areas. The country's botanical park is to be nominated as a Biosphere Reserve. Mr Namgay discussed the next steps of the Bhutan MAB National Committee towards the nomination of the site including seeking formal approval and determination of zonation. This was discussed in further detail during the 9th SACAM meeting in April 2019.

Ms Neha Midha, UNESCO Office New Delhi, presented a general overview of Biosphere Reserves in the SACAM network, which includes 44 Biosphere Reserves in 13 countries and one transboundary site between Kazakhstan and Russia. The network operates principally for the management of Biosphere Reserves and similarly managed areas with a focus on regional thematic topics:

- Traditional ecological knowledge
- Biodiversity conservation
- Forest ecosystems
- Land degradation
- Rehabilitation in vulnerable ecological systems (wetlands, drylands and mountains)
- Waste management

Moving forward, the SACAM network aims to provide nomination assistance to countries which have no Biosphere Reserves, as well as incentives to promote reserve-related research, education and management.

Pacific MAB Network (PacMAB)

PacMAB was represented by Mr Bond Segal from Utwe BR, Federated States of Micronesia, Ms Koshiba Jerlda, Ngatpang State, Republic of Palau, and Ms Eugene Meleisea, Samoa Ministry of Natural Resources and Environment. Each delivered a short presentation as well as a one-minute video of their respective Biosphere Reserve and/or conservation area.

East Asian Biosphere Reserve Network (EABRN)

EABRN was represented by delegates from China, Mongolia and Uzbekistan. The MAB Committee of China showed a video illustrating MAB Committee activities as well as several videos from individual Biosphere Reserves in China. Uzbekistan was represented by Ms Shagiakhmetova Amirovna from the State Committee on Ecology and Environmental Protection.

Mongolia was represented by Ms Batchimeg, Uvs Lake Basin BR. She presented an overview of the six Mongolian Biosphere Reserves which cover approximately 5.9 million hectares and constitutes 3.7 per cent of the country's total land area. The Uvs Lake Basin BR is an inland sea, frequented by a range of seabirds even though the nearest ocean is 3,000 km away. The lake is almost circular and 70 km in diameter. The surrounding area consists of steppes, mountains, forests, wetland and deserts. It supports a variety of birds, both resident waterfowl and migrating birds. Mammals include snow leopard, mountain sheep (argali), marbled polecat and the Asiatic ibex. This Biosphere Reserve is transboundary and the management plan was developed jointly with Russia.

The Philippines Session

Day 3 (28 March 2019)

This session provided an opportunity for the Philippines – as host of the event – to present a selection of Biosphere Reserve-related research and development activities in the Philippines, and to discuss achievements, progress and challenges with network members.

State of Philippine biodiversity and conservation with special focus on rehabilitation of Boracay and Manila Bay

Teresita Blastique, Department of Environment and Natural Resources, presented the state of conservation in the Philippines. She described major biodiversity issues and conservation efforts for several protected areas in the country. The Philippines is one of the 17 mega-diverse countries in the world that host two-thirds of the Earth's biodiversity and 70–80 per cent of the world's endangered species. Challenges include land use conversion, forest fire, wildlife poaching and trade, unplanned development, climate change and waste.

Over the years, the country has developed best practices and gained valuable insights in protected area management that takes into consideration the drivers of biodiversity loss and the meagre resources available for protected area management. The Philippines has learned important lessons especially in participatory protected area management planning, the need to address socioeconomic issues, and develop sustainable financing mechanisms. The next stage of protected area management will revolve around two themes: integration of conservation into mainstream development planning, and broadening the governance base of protected areas.

She also presented lessons learnt from the rehabilitation programme in Boracay Island and Manila Bay..

Tourism in Bicol Region

Benjamin Santiago, Director of Department of Tourism, once again welcomed all participants to the Bicol Region. For many years, Albay has been synonymous with the Mayon volcano mountain but his department now encourages the region to offer other activities for leisure, relaxation and travel. The province was declared a Biosphere Reserve by UNESCO as it is the home of approximately 462 flora and fauna species, 137 of which are endemic. Albay is also home to at least 19 festivals that are celebrated all year round by different cities and municipalities. These festivals showcase local cultures.

Palawan Biosphere Reserve

Declared a Biosphere Reserve in 1990, the Palawan Biosphere Reserve covers 1,150,800 hectares and includes the entire province of Palawan Island, which is the westernmost province of the Philippines. The Palawan BR is also home to approximately 57 ethnolinguistic groups with three indigenous peoples: Tagbanua, Palaw'an and Bataks.

The major economic activities are agriculture and fisheries. Other important industries are tourism, on-shore and off-shore mining, minor forest products, and pearl farming. The province of Palawan is known as the Philippines's 'last ecological frontier'.

The Palawan BR is an archipelago composed of one main island and more than 1,700 islands. It is endowed with rich natural resources and highly diverse flora and fauna found in both land and sea. According to IUCN classification, it has 105 out of 475 threatened species in the Philippines. Of the 105 threatened species, 67 are endemic to the Philippines, while 42 of the 67 Philippine endemics are Palawan endemics. Its coastal and marine ecosystems include coral reef (379 species of corals), seagrass meadow (13 species), and mangrove (31 species, distributed in 44,500 hectares of mangrove forests, the largest remaining mangrove cover in the Philippines. It also harbours dugongs as well as marine turtles and whale sharks.

The characteristics of terrestrial and freshwater ecosystems are also diverse, consisting of old growth and second growth tropical rainforest, karstic limestone, forest over ultramafic rocks, casuarinas and beach forest. They serve as habitats to freshwater fish (total of 18 Philippines endemics), amphibians (26 Philippines endemics), reptiles (69 species), birds (279 species), migratory birds, terrestrial mammals (58 species, 16 are Palawan endemics).

Puerto Galera Biosphere Reserve

Puerto Galera BR is situated on Mindoro Island, about 120 km south of Manila. Its 23,200 hectares make up the northern tip of Mindoro Island and are bounded to the north by the Verde Island Passage, to the west by the Camarong River and to the east by the municipality of San Teodoro. Ecosystems represented are savannas and grasslands, dipterocarp forests, mossy forests, mangrove, coral reefs and coastal ecosystems as well as agroforestry systems. A wide variety of endemic species are present, including tamaraw (*Bubalus mindorensis*). The conservation of coral reefs has been recognized as one of the main tasks of the Biosphere Reserve as healthy coral reefs are important for conservation of biodiversity, maintenance of traditional lifestyles and culture, tourism revenues, education and research.

Traditional sources of income for the local community used to be fishing and subsistence agriculture. However, after the boom of tourism at the end of the 1970s, the service sector became more important with rapid population and economic growth. Today, the rapid and unregulated development of the tourist sector is the largest problem in Puerto Galera.

Albay Biosphere Reserve

The Albay BR is located in southeastern Luzon in the Philippines. The inner lands are composed mainly of open grassland and forest ecosystems, while the coastline consists of mangrove forest, urban centres and agricultural land. It is home to three mountains including Mount Mayon, Philippines' most active volcano, which reaches 2,462 metres above sea level.

The reserve contains 182 terrestrial plant species of which 46 are endemic. It also hosts four endemic mammal species, 12 endemic species of birds including the famous Luzon bleeding heart (*Gallicolumba luzonica*), 17 species of amphibians of which 13 are endemic, and 30 species of reptiles of which 22 are endemic.

In addition, Albay's marine and coastal ecosystems are home to 62 species of flora, which represent 62.5 per cent of all known species in the Philippines, as well as five of the world's seven marine turtle species. The diversity of seagrass, seaweed beds and mangrove forests in the reserve is intrinsically linked with the diversity of faunal species found across the marine and coastal ecosystems, particularly in marshlands or mangroves. The marine and coastal fauna encompass 272 species including 158 species of gastropods, 15 bivalve species, 12 crustacean species, 13 echinoderm species, 1 sea slug species, 26 coral species, 5 species of turtles and 42 fish species.

During the meeting, Albay representatives presented the draft management plan, developed with the involvement of local authorities and communities. The representatives of Albay BR and Wudalianchi BR in China also met to discuss the possible establishment of a formal partnership between the two sites.

Province of Apayao

The Province of Apayao is known as the home of the Philippine eagle. A landlocked province located in northwestern Luzon, the province hosts virgin rainforests and other high biodiversity values. It is an emerging ecotourism destination with caves, waterfalls, rock formations, bird sanctuaries and the 180-kilometre long Apayao-Abulog river. The province is currently preparing a nomination dossier for eventual nomination as a UNESCO Biosphere Reserve.

Knowledge sharing session

Management manual for UNESCO Biosphere Reserves in Africa

Mr Florian Schmitt, German Commission for UNESCO

In close cooperation with the MAB regional network for Africa (AfriMAB Bureau), Arab Network of Biosphere Reserves (ArabMAB) and UNESCO MAB Secretariat, the German Commission for UNESCO coordinated the development of a *Management Manual for UNESCO Biosphere Reserves in Africa*.

Developed with African experts and biosphere managers in response to a request by AfriMAB and ArabMAB representatives in 2011 (Rhon Communique), it is a comprehensive reference document providing practical guidance, with a focus on community engagement. It is expected that the examples and best practices for managing protected areas and BR sites in this manual can be replicated in other regions.

The manual is available online: https://www.unesco.de/sites/default/files/2018-01/Manual_br_field_.pdf

Private sector partnership agreement in Japan

Mr Haruki Nishikata, AEON Foundation

During the Japan Biosphere Reserve Network (JBRN) meeting in August 2017, a partnership agreement was signed between AEON Environmental Foundation and JBRN. Endorsing the principles of BR activities, which place importance not only on the protection and preservation of ecosystems but also on the co-existence of nature and human society, the AEON Foundation is committed to further development of Japan's BR sites. In particular, environmental education and other activities for disseminating the values of BRs are important to ensure their natural values remain for the next generation.

The following activities have been conducted by AEON Foundation in collaboration with BR sites in Japan:

- Biosphere Reserve fairs to increase the visibility of Biosphere Reserves and introduce local products from BR sites:
 - June 2018 Biosphere Reserve Fair at AEON Mall Takasaki.
 - November 2018 Convention on Biological Diversity 14 in Egypt.
 - January 2019 Biosphere Reserve Fair at AEON Mall Matsumoto.
 - February 2019 Biosphere Reserve Fair at AEON Mall Kofushowa.
- Environmental education for children from elementary schools and junior high schools at Minakami BR and Yakushima BR

Special Session of the Asia-Pacific Biosphere Reserve Network

Booklet launch

In response to a request by members of the APBRN, three booklets were produced by the UNESCO Office Jakarta to provide guidance on the implementation of the Biosphere Reserve concept and achievement of relevant Sustainable Development Goals. In accordance with the request, three topics were assigned top priority:

- Guidance on the management of Biosphere Reserves as sites for sustainability in action,
- Guidance on the development of eco-labelling programmes with particular reference to Biosphere Reserves as ecotourism destinations,
- Guidance on the legal status of Biosphere Reserves, in particular zonation.

Each publication was developed in full consultation with stakeholders and experts from Biosphere Reserves in the region and with the support of Japanese Funds-in-Trust through the BRIDGES in AP project. Draft editions of the booklets had been presented during the 11th SeaBRnet meeting in Chiang Mai, Thailand, in May 2018, and draft executive summaries shared with delegates attending the 30th MAB ICC in Palembang, Indonesia, in July 2018.

The publications complement the ongoing process towards the development of technical guidelines for Biosphere Reserves. Although they have been designed specifically for use in Asia and the Pacific, it is expected that other MAB and Biosphere Reserve communities across the world will find them useful.

More details for each publication can be found below and available online at: <https://jfit-for-science.asia/publications/>

A Standard Framework for Biosphere Reserve Management Informed by Sustainability Science

The framework comprises a series of eight complementary elements suggested as essential steps towards successful Biosphere Reserve management. Seven steps are concerned with site-level implementation within reserves, while the final step has a national-level focus.

The framework is the combined result of a comprehensive literature review, visits to five Biosphere Reserves in Asia and the Pacific, as well as guidance from an international experts group. It provides straightforward, concrete and strong recommendations. The eight steps are:



- **Participatory platform**
Biosphere Reserve to serve as a participatory platform for connecting and engaging stakeholders, including communities, business and youth.
- **Policy integration**
Biosphere Reserve management to share common vision(s) and to have support from all relevant stakeholders.
- **Partnership and networking**
Biosphere Reserve management to establish and/or strengthen partnership and networking among all stakeholders to support the implementation of activities.
- **Periodic review**
Biosphere Reserve management to utilize periodic reviews to maintain Biosphere Reserve quality and proper functions.
- **Strengthen administration**
Professional development is key to strengthening Biosphere Reserve administration.
- **Legal recognition**
Biosphere Reserves to have legal recognition that provides appropriate level of legitimacy.
- **Promoting existing framework**
Biosphere Reserve management to promote, adopt and/or apply existing plans, frameworks and/or indicators.
- **Strategic dissemination of the framework**
Biosphere Reserve management to integrate the standard framework in the nomination/designation process and/or the 10-year periodic reviews

A management checklist is available in the publication. It should be emphasized that the recommended standard framework for Biosphere Reserve management has been designed for maximum relevance to existing frameworks such as the MAB Strategy and Lima Action Plan. Therefore, this framework should be understood, promoted and synergized within the context of these existing frameworks.

Eco-labelling Guidelines for Biosphere Reserve Management

Implementing eco-labelling programmes can bring a range of benefits for producers, service providers, Biosphere Reserve managers and consumers.

The guideline outlines three tiers of labelling schemes to enable Biosphere Reserve managers to select the approach that would best meet their specific needs and capacity:



- **Tier-1 Destination labels**

Suitable for Biosphere Reserves that have limited resources but want to increase the site's visibility and raise awareness.

- **Tier-2 Quality labels**

Suitable for Biosphere Reserves that aim to promote local environmentally-friendly products and services specifically associated with the site.

- **Tier-3 Professional certification labels**

Primarily aimed at Biosphere Reserves that wish to promote local environmentally-friendly products and services that are verified by a third-party professional certification agency. This scheme has the ability to promote visibility well beyond the site's immediate geographical boundaries.

Biosphere Zonation in Asia and the Pacific: Legal Context and Perspectives

This publication examines the framework of international and regional laws, policies, guidelines and practices available to assist countries in Asia and the Pacific in achieving their Biosphere Reserve commitments. Key findings are divided into two main categories: recommendations for countries with existing dedicated Biosphere Reserve legislation and recommendations for countries without.

Biosphere Reserves were developed prior to present-day international agendas for sustainable development. However, Biosphere Reserves – under the current UNESCO policies and guidelines – can provide a locally-based comprehensive framework for sustainable development built around the three pillars of social, economic and environmental sustainability. Renewed national leadership could demonstrate the unique role that Biosphere Reserves can play in education, locally-based natural resource management and benefit sharing for sustainable development.

For this to be successful, it is important for countries in Asia and the Pacific to support the full implementation of legislation on Biosphere Reserves in countries where they are established. For countries with no dedicated legislation on Biosphere Reserves, it is important to assess the existing framework of national laws, regulations and policies with Biosphere Reserve-related elements to include – where possible - Biosphere Reserves as a core element of the legislation and to adopt specific legislation dedicated to Biosphere Reserves.



Man and the Biosphere Programme

MAB Youth Forum 2019

During the 30th session of ICC MAB in Palembang, Indonesia in July 2018, the Council expressed its will to strengthen engagement with youth and called for the organization of a new MAB Youth Forum in 2019 as an event closely linked to the preparation of the 15th Conference of the Parties of the Convention on Biological Diversity (CBD COP 15) to be held in China in 2020.

The 2019 MAB Youth Forum is organized by the UNESCO MAB Programme and UNESCO Beijing Office in close cooperation with Biosphere Reserves in China, where the forum took place during 15-19 September 2019.

For more information on the application procedures, please visit the official website: <https://www.unescomabyouth.org>

MAB Young Scientists Awards

Since 1989, MAB has been providing young researchers each year with awards of up to US\$5,000 to support research on ecosystems, natural resources and biodiversity. Through the MAB Young Scientists Awards, MAB is investing in a new generation of scientists worldwide to be the key people to address ecological and sustainability issues.

The MAB Young Scientists Awards targets young researchers carrying out interdisciplinary research in line with UNESCO's MAB Programme. Priority is given to projects carried out in Biosphere Reserves.

Applicants are strongly encouraged to take into account the priorities of the Lima Action Plan for UNESCO's MAB Programme and its World Network of Biosphere Reserves (LAP), and to identify in their applications how their research contributes to the research-related actions of the LAP and to the SDGs..

The objectives of the MAB Young Scientists Award Scheme are to:

- Encourage young scientists, in particular those from developing countries, to use MAB research, project sites and Biosphere Reserves in their research.
- Encourage young scientists who already use such sites to undertake comparative studies in other sites in or outside their own country.
- Promote and encourage the exchange of information and experience among a new generation of scientists.
- Strengthen communication of the LAP within young scientists and strengthen its visibility.

- Involve young scientists in the implementation of the LAP.
- Enhance awareness among young scientists of the role of research in the implementation of the SDGs – in particular when conducted in Biosphere Reserves

Key conclusions

The 12th SeaBRnet meeting was held in Legazpi City, Albay Biosphere Reserve, the Philippines from 24–29 March 2019, bringing together approximately 120 participants from the MAB community in Southeast Asia, along with delegates from the wider Asia-Pacific region – the South and Central Asia MAB Network (SACAM), the East Asian Biosphere Reserve Network (EABRN) and the Pacific Man and Biosphere (PacMAB).

The main objective of the meeting was to strengthen active networking within the MAB community across Asia and the Pacific, through direct exchange and collaboration among Biosphere Reserves across the region. Another objective was to optimize the contributions of Biosphere Reserves to the 2030 Agenda and the Sustainable Development Goals (SDGs).

The meeting and associated events were hosted by the Provincial Government of Albay and the Philippines National Commission, and supported by JFIT, UNESCO Jakarta Office and the MAB Secretariat. UNESCO colleagues from MAB Secretariat in Paris and New Delhi Office also took part in the event, supporting its implementation and contributing to the sessions and discussions.

Country delegations shared national and site updates and demonstrated how the activities of individual Biosphere Reserves are linked and feed into national planning and priorities. New initiatives in Biosphere Reserve monitoring and evaluation and innovative communication materials were also shared.

During a dedicated APBRN session, three publications on priority issues, as identified by members of the four subregional MAB networks in Asia and the Pacific, were launched. The publications include practical guidelines for management of the region's Biosphere Reserves; eco-labelling and certification schemes for Biosphere Reserves; and provide legal guidance for Biosphere Reserve zonation.

In a significant testimony to the strong commitment from the regional MAB community, the delegation of Indonesia expressed interest in hosting the 13th meeting of SeaBRnet in the newly-designated Biosphere Reserve (and UNESCO Global Geopark), Rinjani Lombok in West Nusa Tenggara Province, Indonesia, in 2020.

Annex

Annex 1 Agenda and links to meeting materials

Time	Agenda	
Day 0 – Monday, 25 March 2019		
Participants arrival in Legazpi City		
Day 1 – Tuesday, 26 March 2019		
08.00 – 17.00	<p>Field Trip</p> <p><i>Route 1:</i></p> <p>Corangon Shoal – Ligao City – Jovellar Underground River</p> <ul style="list-style-type: none"> - Corangon Shoal Release of sea turtles, visit to the Islet - Bambusetum Park, Ligao City - Jovellar Underground River <hr/> <p><i>Route 2:</i></p> <p>Mount Masaraga – Quituinan Hill – Sumlang Lake</p> <ul style="list-style-type: none"> - Mount Masaraga - Quituinan Hill Horseback riding and visit to Quituinan Tunnel - Sumlang Lake: Bamboo rafting/kayaking 	
18.00	<p><i>Dinner</i></p> <p>Albay Farmer’s Bounty Village</p>	
Day 2 – Wednesday, 27 March 2019		
08.00 – 09.00	<i>Registration</i>	
09.00 – 09.30	<p>Welcome Remarks & Opening Session</p> <p><i>Welcome Remarks:</i></p> <ul style="list-style-type: none"> - The Philippines National Commission for UNESCO - UNESCO Senior Programme Specialist, on behalf of Director of UNESCO Jakarta <hr/> <p><i>Opening:</i></p> <p>Welcome Message by Provincial Administrator on behalf of Governor of Albay Province</p>	<p>Master of Ceremonies: local host</p> <hr/> <p>Engr. Vida Corazon Prollamante</p>

Time	Agenda	
10.00 – 11.00	<i>Group Photo and Coffee break</i>	
11.00 – 11.15	Introduction on SeaBRnet Meeting	Mr. Hans D. Thulstrup, SeaBRnet Secretariat
11.15 – 12.00	Country reports (Approximately 10 min ppt each + 15 min Q&A) 1. The Philippines 2. Thailand 3. Timor-Leste	<i>Moderator:</i> Mr Y. Purwanto, MAB Indonesia Ms. Lindsay A. Barrientos Ms. Narumon Laosuwan Mr. Joao Antalmo Ferreira
12.00 – 13.30	<i>Lunch</i>	
13.30 – 15.30	Country reports (cont.) 4. Vietnam 5. Cambodia 6. Indonesia Private Sector Participation in the Management of Biosphere Reserves. A Lesson learnt from: Giam Siak Kecil-Bukit Batu & Berbak Sembilang Biosphere Reserves 7. Malaysia	<i>Moderator:</i> Ms. Lindsay A. Barrientos, UNESCO National Commission of the Philippines Mr. Duong Minh Lam Mr. Long Kheng Mr. Anang Achmadi Mr. Dolly Priatna Mr. Andy Dusim
15.30 – 16.00	<i>Coffee break</i>	
16.00 – 16.30	Country reports (cont.) 8. Myanmar 9. Japan	<i>Moderator:</i> Ms. Wimonmart Nuipakdee, Mae Sa-Kog Ma Biosphere Reserve Manager, Thailand Mr. Sein Tun Mr. Yoshihiko Iida
16.30 – 17.45	Delegates from subregional networks (EABRN, SACAM, PacMAB) 10. Bhutan (slides presentation)	<i>Moderator:</i> Ms. Wimonmart Nuipakdee, Mae Sa-Kog Ma Biosphere Reserve Manager, Thailand Mr. Tandin Namgay

Time	Agenda	
	11. Federated State of Micronesia (video) 12. Palau (slides presentation) 13. Samoa (slides presentation) 14. China (videos) 15. Mongolia (video and slides presentation)	Mr. Bond C. Segal Ms. Koshiba Jeralda Ms. Eugene Elsie Meleisea Ms. Ma Xuerong Ms. Tseveenravdan Batchimeg
17:45 – 18:00	Wrap-up and closure of day 1	Mr. Hans D. Thulstrup, SeaBRnet Secretariat
19:00	<i>Dinner hosted by The Mayor of Legazpi City</i>	
Day 3 – Thursday, 28 March 2019		
09.00 – 10.00	The Philippines Session State of Conservation of Philippine Biodiversity with special focus on the rehabilitation of Boracay and Manila Bay	<i>Master of Ceremonies: local host</i> Teresita T. Blastique, Chief of Community Management and Sustainable Financing Section Biodiversity Management Bureau Department of Environment and Natural Resources
10.00 – 10.15	Tourism in Bicol Region	Department of Tourism - Regional Office V, Director Benjamin Santiago
10.15 – 10.30	<i>Coffee break</i>	
10.30 – 12.15	The Philippines Session (continue) - Palawan BR - Puerto Galera BR - Albay BR - Province of Apayao	Mr. Mark Ace dela Cruz Ms. Joan Margarete A. Yap Ms. Karol Go Mr. Henry B. Caluducan
12.15 – 12.30	Discussion, Q&A	<i>Moderator:</i> Ms. Lindsay A. Barrientos, UNESCO National Commission of the Philippines
12.30 – 14.00	<i>Lunch</i>	

Time	Agenda	
14.00 – 14.30	Example of Management Manual for UNESCO Biosphere Reserves	Mr. Florian Schmitt, German Commission for UNESCO
14.30 – 15.00	Perspective from Private Sector	Mr. Haruki Nishikata, AEON Foundation
15.00 – 17.30	ABPRN Session	
15.00 – 15.15	Launching of Publications: <ul style="list-style-type: none"> • Sustainability Science Framework for BR Management • Eco-labeling Guidelines for BR Management • Comparative Law for BR Zonation 	Mr. Hans D. Thulstrup, SeaBRnet Secretariat
15.30 – 16.00	MAB Youth Forum 2019	Mr. Hans D. Thulstrup, SeaBRnet Secretariat
16.00 – 16.30	MAB Young Scientists Awards	Ms. Marie Prchalova, MAB Secretariat
16.30 – 17.00	General discussion and way forward	Mr. Hans D. Thulstrup, SeaBRnet Secretariat
17.00 – 17.30	<i>Coffee break</i>	
17.30 – 19.00	Free Time	
19:00	<i>Farewell Dinner hosted by the Governor of Albay Province and Cultural Performance</i>	
Day 4 – Friday 29 March 2019		
Departure of participants		

Annex 2 List of Participants

No.	Country	Name	Gender	Position	Organization
1	Bhutan	Tandin Namgay	M	Senior Forest Officer	Dept. of Forest and Park Services, Ministry of Agriculture and Forest Government of Bhutan
2	Cambodia	Long Kheng	M	Deputy Director	Department of Freshwater Wetlands Conservation, General Directorate of Administration for Nature Conservation and Protection, Ministry of Environment
3	China	Yan Xun	M	Deputy Director	Department of Natural Protected Areas Management, National Forestry and Grassland Administration
4	China	Chen Difei	M	Deputy Director	Natural Reserve Office, Department of Natural Protected Areas Management, National Forestry and Grassland Administration
5	China	Chen Dai	M	Officer	International Cooperation Center, National Forestry and Grassland Administration
6	China	Wang Zhengyu	M	Deputy Secretary-General	China MAB Committee
7	China	Ma Xuerong	F	Officer	China MAB Committee
8	China	Niu Mingguang	M	Deputy Director	Wudalianchi Administration Committee
9	China	Yan Guanmin	M	Director	Wudalianchi Environmental Protection Bureau
10	China	Zhang Jiabo	F	Interpreter	Wudalianchi Administration Committee
11	France	Marie Prchalova	F	Programme Specialist	UNESCO
12	Federated States of Micronesia	Bond C. Segal	M	Board Member	Utwe Biosphere Reserve Community
13	Germany	Florian Schmitt	M	Programme Specialist	German Commission for UNESCO
14	India	Neha Midha	F	National Professional Officer	UNESCO
15	Indonesia	Hans Thulstrup	M	Senior Programme Specialist	UNESCO
16	Indonesia	Adhe Wulandari	F	Project Assistant	UNESCO

No.	Country	Name	Gender	Position	Organization
17	Indonesia	Y. Purwanto	M	Executive Director	Indonesian MAB Committee
18	Indonesia	Dolly Priatna	M	Finance Director	Indonesia Institute of Sciences (LIPI)
19	Indonesia	Iin Fathya Anwar	F	Staff	Indonesia Institute of Sciences (LIPI)
20	Indonesia	Anang Setiawan Achmadi	M	Communication & Dissemination Director	Indonesian MAB Committee
21	Japan	Haruki Nishikata	M	Senior Manager	AEON Foundation
22	Japan	Akira Yamada	M	Manager	AEON Foundation
23	Japan	Yoshihiko Iida	M	Cooperative Researcher	Kanazawa University
24	Malaysia	Andy Henry Dusim	M	Assistant Secretary	Ministry of Water, Land and Natural Resources
25	Malaysia	Ludi Bin Apin	M	Principal Assistant Director	Sabah Parks, Sabah Malaysia
26	Mongolia	Enkhbold Sansarbayar	M	Director	Department of Ministry of environmental Tourism
27	Mongolia	Tseveenravdan Batchimeg	F	Specialist	Specialist of Uus Basin SPA
28	Myanmar	Sein Tun	M	Warden of Inlay Lake Wildlife Sanctuary	Nature and Wildlife Conservation Division, Forest Department, MoNREC
29	Palau	Koshiba Jeralda	F	Secretary of the Board	Ngarameduu BR
30	Philippines	Maria Bea Karisma Agarao	F	National Project Coordinator Officer	UNESCO
31	Samoa	Eugene Elsie Meleseia	F	Senior Ranger Officer	Division of Environment and Conservation, Ministry of Foreign Affairs and Trade
32	Thailand	Kanjanapun Khamhaeng	M	Superintendent, Tarutao National Park	Tarutao National Park
33	Thailand	Isoon Rinkome	M	Manager	Hauy Tak Teak Biosphere Reserve
34	Thailand	Wimonmart Nuipakdee	F	Manager	Mae-Sa Kog-Ma Biosphere Reserve
35	Thailand	Narumon Laosuwan	F	Forest Technical Officer	International Cooperation Sub-Division, Foreign Affairs Division - Department of National Parks, Wildlife and Plant Conservation

No.	Country	Name	Gender	Position	Organization
36	Thailand	Disaorn Aithiariyasunthon	F	Forestry Technical Officer	Ranong Biosphere Reserve
37	Thailand	Wijarn Meepol	M	Manager	Ranong Biosphere Reserve
38	Thailand	Surachit Waengsothorn	M	Manager	Sakaerat Biosphere Reserve
39	Timor-Leste	Joao Antalmo Ferreira	M	National Director	Natural Conservation of Ministry Agriculture
40	Uzbekistan	Shagiakhmetova G. Amirovna	F	Main Specialist	State Committee on Ecology and Environmental Protection
41	Vietnam	Duong Minh Lam	M	General Secretary	Vietnam MAB Committee
42	Philippines	Lindsay Barrientos	F	Deputy Executive Director	UNESCO National Commission of the Philippines
43	Philippines	Freddie Blanco	M	Program Officer for Science and Technology	UNESCO National Commission of the Philippines
44	Philippines	Josephine Escueta	F	Administrative Assistant	UNESCO National Commission of the Philippines
45	Philippines	Kaye Sapungen	F	Planning and Information Officer	UNESCO National Commission of the Philippines
46	Philippines	Rossen Aguirre	F	Municipal Environment & Natural Resources Officer	Bataan Natural Park
47	Philippines	Margarita Limcangco	F	Chief of Staff – Mayor's Office	Bataan Natural Park
48	Philippines	Joan Margarette A. Yap	F	Municipal Environment & Natural Resources Officer	Puerto Galera BR
49	Philippines	Carmela L. Datinguino	F	Chief of Staff – Mayor's Office	Puerto Galera BR
50	Philippines	Mark Anthony B. Arago	M	Engineer II – Municipal Engineering Office	Puerto Galera BR
51	Philippines	Mark Ace dela Cruz	M	Project Development Officer	Palawan BR
52	Philippines	Benjamin Adriano Jr.	M	Project Development Officer II	Palawan BR
53	Philippines	Dorcas Besa, EnP	F	Project Development Officer	Palawan BR
54	Philippines	Henry B. Caluducan, CE, EnP	M	PPDC	Local Government Unit of Apayao
55	Philippines	Marcelo B. Menor, EnP	M	PGO-ENRD	Local Government Unit of Apayao

No.	Country	Name	Gender	Position	Organization
56	Philippines	Engr. Jasmin S. Kirtug	F	Municipal Assessor Officer & Designate MENRO	Local Government Unit of Apayao
57	Philippines	Dorothy Joy Cayaba	F	Planning Officer	Local Government Unit of Apayao
58	Philippines	Teresita T. Blastique	F	Supervising EMS Chief PA, Community Mgt. & Sustainable Mgt. Section	Department of Environment and Natural Resources
59	Philippines	Arnulfo Mascariñas, PhD	M	President	Bicol University
60	Philippines	Prof. Jocelyn Serrano	F	Representative	Bicol University
61	Philippines	Prof. Carlos Cortez	M	Representative	Bicol University
62	Philippines	Prof. Kalayaan Triunfante	M	Representative	Bicol University
63	Philippines	Prof. Janet I. Triunfante	F	Representative	Bicol University
64	Philippines	Allan L. Leuterio	M	ARD for Technical Services	DENR V
65	Philippines	Marlene M. Francia	F	OIC, CDD	DENR V
66	Philippines	Stephanie Ivy Mapalad	F	Ecosystem Management Specialist I	DENR V
67	Philippines	Keith Harvey Dimaranan	M	Forest Management Specialist II	DENR V
68	Philippines	Yolda T. Abanta	M	PASu MMNP	DENR V
69	Philippines	Benjamin F. Santiago	M	Regional Director	DOT V
70	Philippines	Frezalva Vir Burce	M	TDA Manager	DOT V
71	Philippines	Josie M. Aguilar	F	OIC-PD/Division Chief	DTI Albay
72	Philippines	Engr. Gina Paz E. Sipin, PhD	F	OIC-Department Head	Provincial Government of Albay
73	Philippines	Ma. Teresa F. Atos	F	OIC-ENRO	Provincial Government of Albay
74	Philippines	Engr. Eduardo R. Matias Jr.	M	OIC-Division Head	Provincial Government of Albay
75	Philippines	Engr. Rosanna	F	Planning and Admin	Provincial Government of Albay
76	Philippines	Macario Pavia	M	Provincial Planning Officer	Provincial Government of Albay
77	Philippines	Mary Karol Fe R. Go	F	Planning Officer I	Provincial Government of Albay

No.	Country	Name	Gender	Position	Organization
78	Philippines	Marjorie Naje	F	Planning Assistant	Provincial Government of Albay
79	Philippines	Axl John Mirabueno	M	Staff	Provincial Government of Albay
80	Philippines	Dorothy F. Colle	F	Provincial Tourism Officer	Provincial Government of Albay
81	Philippines	Rowena L. Ondiz	F	Planning Officer IV	Provincial Government of Albay
82	Philippines	Carlo Fernandez	M	Information Officer I	Provincial Government of Albay
83	Philippines	Mariella Isabelle Melgar	F	Staff	Provincial Government of Albay
84	Philippines	Rommel Negrete Jr.	M	MDRRMO	Local Government Unit of Albay
85	Philippines	Rose Ann B. Mostaza	F	Tourism Office Staff	Local Government Unit of Albay
86	Philippines	Angela Marie Pacres	F	Tourism Officer	Local Government Unit of Albay
87	Philippines	Michelle May B. Mañago	F	Administrative Aide V	Local Government Unit of Albay
88	Philippines	Sweetzel Acerado	M	MPDO	Local Government Unit of Albay
89	Philippines	Lourdes Boreta	M	Tourism Officer	Local Government Unit of Albay
90	Philippines	Justin Luna	M	Tourism Staff	Local Government Unit of Albay
91	Philippines	Cristina Agapita Pacres	F	Tourism Officer	Local Government Unit of Albay
92	Philippines	Engr. Joseph Esplana	M	CENRO	Local Government Unit of Albay
93	Philippines	Leonardo M. Olivarez	M	Municipal Assessor	Local Government Unit of Albay
94	Philippines	Kevin Carlo R. Abila	M	Municipal Information Officer	Local Government Unit of Albay
95	Philippines	Ma. Gina R. Balingbing	F	Tourism Officer	Local Government Unit of Albay
96	Philippines	Loida Iglesia	M	Staff	Local Government Unit of Albay
97	Philippines	Lizandro C. Bilan	M	MPDC	Local Government Unit of Albay
98	Philippines	Emma R. Bordeos	F	MENRO	Local Government Unit of Albay
99	Philippines	German J. Gonzaga	M	MPDO	Local Government Unit of Albay
100	Philippines	Francis Joaquin Claveria	M	MENRO	Local Government Unit of Albay
101	Philippines	Jockey Serrano	M	Tourism Officer	Local Government Unit of Albay

No.	Country	Name	Gender	Position	Organization
102	Philippines	Catherine L. Sy	F	MENRO Designate	Local Government Unit of Albay
103	Philippines	Engr. Alfred Mirabueno	M	Environmental Management Specialist	Local Government Unit of Albay
104	Philippines	Kimberly Buendia	F	Tourism Staff	Local Government Unit of Albay
105	Philippines	Justino Li. Balingbing	M	MENRO	Local Government Unit of Albay
106	Philippines	Eriel De Jesus	M	Tourism Aide I	Local Government Unit of Albay
107	Philippines	Engr. Zernan Serrano	M	Environmental Management Specialist I	Local Government Unit of Albay
108	Philippines	John Albert Fabrero	M	Tourism Officer	Local Government Unit of Albay
109	Philippines	Jaime F. Moran	M	MENRO	Local Government Unit of Albay
110	Philippines	Bianito Bolaños Jr.	M	Congressional Staff	2D Albay
111	Philippines	Manny Imperial	M	President	TOPS Albay
112	Philippines	Mediatix Villanueva	M	Owner	Shelmed Cottage Industries
113	Philippines	Genesis Lumbeo	M	Staff	
114	Philippines	Rey Anthony Ostria	M	Correspondent	Philippine Daily Inquirer
115	Philippines	Daria Weinen	F	Volunteer	PTCAO
116	Philippines	Luzie Doering	F	Volunteer	
117	Philippines	Teresa Vargas	F	Trevally Travel & Tours Staff	ACTA - Legazpi

