



The ASEAN Regional Centre for Biodiversity Conservation

► By **REXIE JANE PARREÑO**

Introduction

Southeast Asia is one of the wealthiest parts of the world when it comes to biodiversity. Biodiversity as defined is the living part of our environment, the total richness of living forms and life processes of our planet. It includes the full range of ecosystems, their component species and the genetic varieties of those species. Biodiversity includes not only natural life forms but also those that have been selected and shaped by human domestication, breeding and even genetic engineering. As such, biodiversity includes all agriculture, fisheries, forestry, horticulture, wildlife management, nature conservation and human resources (MacKinnon, 2000).

Three of the world's mega-diverse countries are found in South-

east Asia, namely Indonesia, Malaysia and the Philippines. Indonesia is among the top five mega-diverse countries in the world and contains more than 15 percent of all vertebrate species. The area also hosts the richest and diverse marine life in the world. While very rich in biological and genetic resources, the region is the most severely threatened in the planet in terms of biodiversity. It has four major biodiversity "hot spots" and 36 out of the world's 221 endemic bird areas. Many of its endemic species are currently facing a high degree of endangerment.

How Southeast Asia utilizes and manages its natural resources affects the condition of its biodiversity. The region is one of the most populated in the world, with over 470 million people who consistently obtain food, clothing, shelter, medicine, recreation and livelihood from the environment.

Moreover, poor access to information, partially functional protected area systems, misuse of land and weak enforcement of environmental policies and laws have also contributed to biodiversity degradation.

Thus, the establishment of the ASEAN Regional Centre for Biodiversity Conservation (ARCBC).

Overview of ARCBC

ARCBC was designed to strengthen biodiversity conservation in the ASEAN by developing a network of focal agencies called National Biodiversity Reference Units (NBRUs), one established in an institution in each member country. Participating countries are Brunei Darussalam, Cambodia, Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam.

The Centre was created by virtue of the Financing Agreement signed

in July 1997 between the Commission of the European Communities (EC) and the Government of the Philippines, which signed on behalf of the ASEAN.

The project started in February 23, 1999 and will be implemented over a five-year period. The EC provides funding support for networking, applied research, database and information management, training and technical assistance while the ASEAN provides office space, facilities and support personnel.

Total project funds amount to 10.3M Euro, 82.5% of which is provided by the EU and the balance by the ASEAN (mostly the Government of the Philippines).

Construction and staffing of the Los Baños-based Centre was completed in August 1997 and became operational in October 1998.

Project Goals and Objectives

The project’s over-all goal is to intensify biodiversity conservation through improved cooperation in a comprehensive regional context, by assisting in setting up a network of institutional links among ASEAN countries and between ASEAN and EU partner organizations.

Specifically, ARCBC intends to:

1. Promote the formation of a regional network of institutional intra-ASEAN and ASEAN/EU links in biodiversity conservation and management policies and strategies;
2. Identify the needs and assist in the training of human resources required to bring about significant improvement in the management of biodiversity conservation and the implementation of conservation strategies in ASEAN member-countries;
3. Identify and help overcome critical information gaps which impede the management of ASEAN’s biodiversity;
4. Analyze, document and disseminate information on regional biodiversity conservation;

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5. Establish and maintain an appropriate database referral system which links national and international institutions and agencies holding information relevant to biodiversity conservation;
6. Support relevant institutions in the analysis of existing biodiversity legislation and the formulation of proposals for coordinating regional policies and initiatives on biodiversity conservation, in line

with international treaties and agreements;

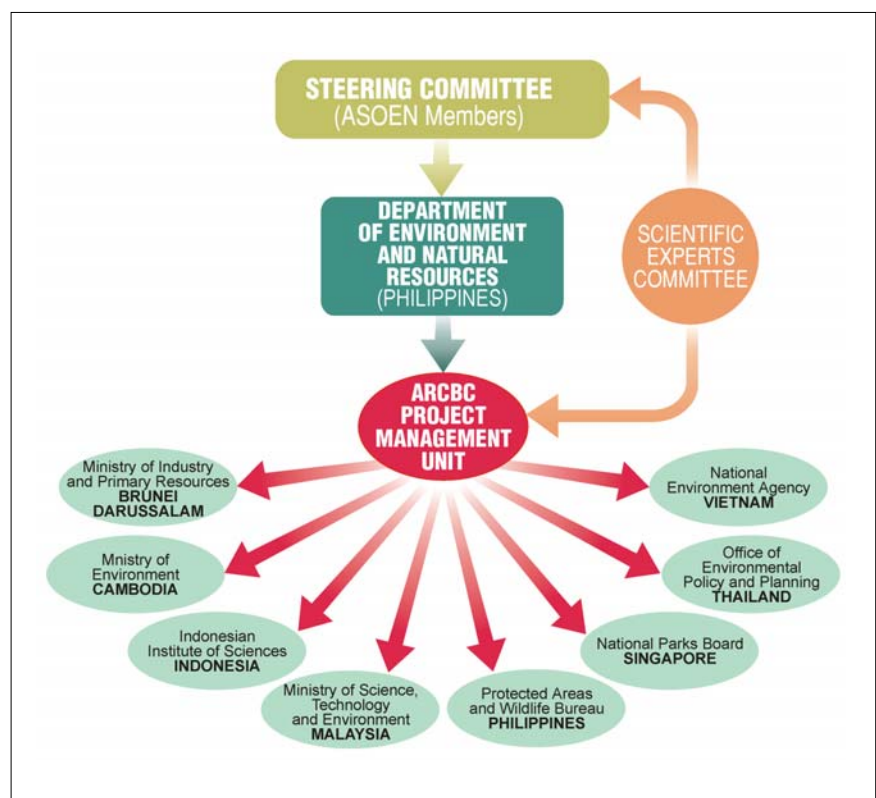
7. Organize workshops, conferences and seminars on regional biodiversity conservation issues; and
8. Assist in upgrading curricula on biodiversity conservation used in ASEAN universities and training institutions.

Institutional Arrangement

The Project’s *Steering Committee* (SC) is composed of ASEAN Senior Officials on the Environment. The SC is responsible for the over-all coordination of ARCBC and approves the project workplans and reports.

The Department of Environment and Natural Resources (DENR)-Philippines, as the Executing Agency, acts on behalf of the ASEAN and is responsible to the Steering Committee.

The *Project Management Unit* (PMU), under the leadership of the ASEAN and EU Co-Directors, handles the technical, administrative and financial aspects of the project. Together with the Project Directors, the DENR personnel and the Technical Assistance Team make up the PMU.



The *Scientific Experts Committee*, a panel of scientific experts representing each member country, advises the PMU on all research-related proposals and activities to be included in the workplans and research program. The committee also assists in the preparation of the Project research prospectus.

The *National Biodiversity Reference Unit (NBRU)* interfaces the ARCBC with the national authorities and institutions, provides local instruments for in-country follow-up of project activities and constitutes a first reference for the screening of research proposals for formal endorsement to ARCBC. A country coordinator heads each National Biodiversity Reference Unit (NBRU).

NBRUs of Member Countries

Brunei Darussalam

Forestry Department-Ministry of Industry and Primary Resources

Cambodia

Department of Nature Conservation and Protected Areas-Ministry of Environment

Indonesia

Research and Development Centre for Biology-Indonesian Institute of Sciences

Malaysia

Conservation and Environmental Management Division-Ministry of Science, Technology and Environment

Philippines

Protected Areas and Wildlife Bureau-Department of Environment and Natural Resources

Singapore

National Parks Board, Ministry of National Development and Environment

Thailand

Office of Environmental Policy and Planning-Ministry of Science, Technology and Environment

Vietnam

National Environment Agency-Ministry of Science, Technology and Environment

Project Components

ARCBC carries out its functions through four main programs of activity: networking, biodiversity research, training and data management. Each component has the following functions:

Networking and Institution Building

1. Establish a regional network of NBRUs to link scientific knowledge and promote information exchange and synergies on biodiversity;
2. Develop and implement an exchange program for professors and researchers among ASEAN institutions and invite European leading experts (Biodiversity Visiting Chairs) to facilitate the transfer of knowledge and experience;
3. Design and conduct seminars, conferences and thematic workshops on biodiversity conservation issues;
4. Assist relevant institutions in analyzing existing biodiversity legislation and in formulating proposals for coordinating regional policies and initiatives; and
5. Support national authorities in developing an ASEAN agenda for policy analyses to promote common strategies for transborder biodiversity conservation.

Training and Extension

1. Conduct Training Needs Assessment (TNA) of institutions and human resources involved in biodiversity conservation;
2. Develop training packages and methods for individuals and stakeholders;
3. Establish cooperative linkages with competent ASEAN training institutions;
4. Sponsor training for ASEAN operators, managers, administrators and policy makers involved in biodiversity conservation and protected areas management;
5. Provide advice for upgrading and harmonizing training courses; and

6. Grant assistance to national authorities for improving biodiversity curricula in academic and training institutions.

Research and Development

1. Develop guidelines for the definition and identification of ASEAN research priorities;
2. Assist NBRUs in the review of project proposals of regional relevance and prepare research prospectus for dissemination to EU and ASEAN institutions; and
3. Organize conferences to finalize the regional research agenda, identify research institutions, provide funds for applied biodiversity research and monitor research activities.

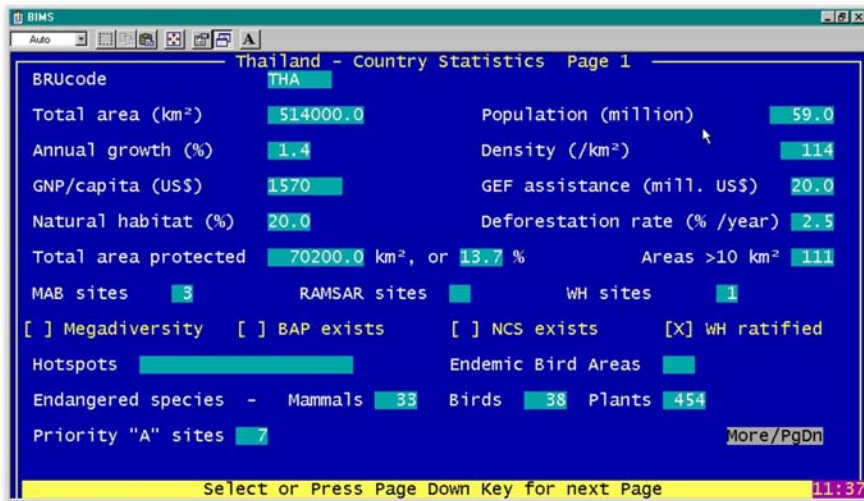
Database and Information Management Systems

1. Create and maintain electronic repositories of biodiversity data for ASEAN and EU scientific institutions and establish links to other international databases; and
2. Provide technical assistance to NBRUs and other relevant institutions in establishing guidelines for information sharing and data handling services.

Accomplishments to Date

As of May 2001, ARCBC has formed both the Steering Committee (SC) and Scientific Experts Committee (SEC), and established NBRUs in seven participating countries. Three consultative meetings have been held between ARCBC and the NBRUS, while three meetings were conducted for both the SC and the SEC. ARCBC continuously strengthens its relationship with the NBRUs and assists them in carrying out their functions through constant coordination, collaboration and regional visits by the PMU.

The networking component has developed a system of collaboration among training and research institutions from both the ASEAN and EU. Through networking,



The Biodiversity Information Monitoring System (BIMS), a software developed by ARCBC, can be used to monitor the status of biodiversity in a particular area. Information that can be found through this software includes thematic maps, species distribution, and conservation status.

ARCBC has also established ties with international environmental organizations such as the World Wide Fund for Nature (WWF) and Birdlife International, both of which have signed Memoranda of Agreement with ARCBC. These agreements aim to promote an active exchange of information between ARCBC and the said organizations.

Four regional thematic workshops were conducted last year:

1. ASEAN Framework Agreement on Access to Biological and Genetic Resources (Singapore, February 2000)
2. Biosafety Negotiation on Genetically Modified Organisms (Malaysia, April 2000)
3. Standardization of Biodiversity Reporting and Information-Sharing (Indonesia, June 2000)
4. Guidelines on the Selection and Establishment of ASEAN Heritage Parks (Vietnam, September 2000)

The Centre has also built a network of experts through the Biodiversity Staff Exchange Programme. Currently, 199 ASEAN and 12 EU experts have expressed interest in participating in the program.

In terms of the training component, Training Needs Assessments (TNAs) for institutions and human resources involved in biodiversity

conservation have been completed in Vietnam, Thailand and Indonesia in coordination with respective NBRUs. The ASEAN-wide TNA was completed in May this year.

Three draft training modules on biodiversity conservation have been developed. A number of training and extension materials are currently being developed, namely:

1. Protected Area Managers' Handbook and Training Manual
2. Protected Area Rangers Handbook and Training Manual
3. ASEAN Birds Identification Training Pack
4. ASEAN Mammals Identification Training Pack
5. Review of Marine Protected Area System of ASEAN Countries
6. ARCBC Sourcebook: Biodiversity Guidelines for Development in Coastal and Rural Areas
7. Biodiversity Database Users Training Manual
8. Manual on Participatory 3D Modeling for Natural Resource Management (second edition to be published in Vietnamese, Bahasa and Thai).

Several education officials and faculty reviewed existing curricula on biodiversity during a workshop conducted in October last year. The activity aimed at upgrading the quality of instruction of biodiversity training

courses at all levels in the Philippines.

ARCBC has also developed a Research Grant Programme wherein 36 biodiversity research projects were selected for funding under the applied research budget. These projects were approved by the SEC and then endorsed by the SC to the EC for final approval. Proponents of these projects are leading scientists and biodiversity research institutions in member countries. The grant amounts to 2.5 million euro.

Management of biodiversity data is one of the major activities of ARCBC. The Biodiversity Information Management Systems (BIMS), a database Software DOS version, has been installed in the NBRUs of Indonesia, the Philippines and Vietnam. ARCBC is currently pilot-testing its web and windows versions and has acquired basic information technology equipment and specially developed software and regional datasets.

ARCBC has also incorporated a new component in the organization, namely Information Dissemination, through various media including the Internet, the publication of a quarterly newsmagazine (*ASEAN Biodiversity*) and other biodiversity reference materials. The activity is based at the ARCBC Annex in Quezon City. It also assists the Philippine NBRU, the Protected Areas and Wildlife Bureau, in developing its biodiversity database.

The ARCBC website was launched on June 11 in line with the celebration of World Environment Day (June 5) and DENR Day (June 10).

ARCBC in the Future

In the future, ARCBC hopes to gain autonomy with adequate sources of funding at the end of the five-year funding support by the EC. Through its relevance and good service value, it hopes to continue assisting the ASEAN region. ●

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