

CENTRAL JAVA, INDONESIA

"The Oasis of Java"

he Karimunjawa archipelago is a chain of small islands situated northwest off Java Island, the most crowded island in Indonesia. Because of the isolated location, not many people recognise this area. This wonderful archipelago has pristine natural resources and a remarkable diversity of ecosystems. Based on local myth, this archipelago was discovered by Sunan Nyamplungan, the nephew of Sunan Kudus, the Great Moslem Missionary of Java. As he traveled across Java Island to spread the religion, he found the Island that was so far away from the main island. It was then named "Karimunjawa", which means to be obscure in Java.

The Karimunjawa archipelago is one of district territories (Kecamatan) under Jepara Regency, Province of Central Java Indonesia. It lies from 5°49' - 5°57' South Latitude and 110 $^{\circ}$ 04 -110 $^{\circ}$ 40 East Longitude. Comprising 22 islands in the

Java Sea, the Karimunjawa district is divided into three villages, namely Karimunjawa, Kemujan and Parang.

Karimunjawa was among the first areas recognised as being important for conservation and marine biodiversity protection. It was formally declared a Strict Natural Reserve in 1986 and has since been declared one of the priority areas for the conservation of marine biodiversity in Southeast Asia (World Bank, 1992). Then in 1999, the Ministry of Forestry established Karimunjawa archipelago as the Karimunjawa Marine National Park covering 110, 625 ha. In 2001, an area of 110,117.30 ha was declared as Marine Protection Area (MPA).

Physical Features

Karimunjawa Marine National Park is one of the six marine national parks in Indonesia.

Profiles

The Park consists of both the terrestrial and the marine components. The sea covers 110.117,30 ha, while the lowland tropical forest covers 1.285,50 ha and the mangrove forest, almost 300 ha.

Based on the geological map of Central Java Province (1976), the geological formation in the archipelago is mostly dominated by quartz sand stone, gravel, mud, and clay. The topography of Karimunjawa Marine National Park is a wave low land, with elevation ranging from 0-506 meters above sea level; Gajah hill is the Park's highest point. Temperatures range from 30-31°C.

The Animal Life

Karimunjawa has five types of ecosystems: coral reef, sea grass and seaweed, mangrove forest, coastal forest and low land tropical rain forest. These islands are rich with many unique and diverse flora and fauna.

The Karimunjawa islands are blessed with warm and clear waters that provide optimum conditions for the abundant coral reefs. At least 51 genera of corals have been identified (one of these is the rare red coral - Tubipora musica), as well as 242 species of reef fish, seven species of the giant clams and other various marine organisms such as mollusks, sponges, soft corals, and sea worms. Sixteen species are protected under the Conservation of the Natural Resources and the Ecosystem Laws; the species include the Green turtle (Chelonia mydas), Hawksbill turtle (Eretmochelys imbricata), Giant clam



(Tridacna maxima), Sand Clam (Hipopus hipopus), Boring clam (Tridacna crocea), Skinny Clam (Tridacna squamosa), China Southern Clam (Tridacna derasa), and the ancient rare mollusk Nautilus (Nautilus pompilus), the symbol of Karimunjawa Marine National Park.

The common mammal fauna found in the land area include the Cervus timoreensis, Macaca fascicularis karimundjawae, Manis javanica, and tropical Edor Snake (Calloselasma rhodostoma). Bird species include the Ducula rosaceae, Picnonotus govier var karimudjawae and Psitacula alexandri var karimundjawae. Some migratory birds are also found in this area, such as Actitis hypolaceus and Numenius phaecaous. The latest expedition report of the Indonesian Science Institute reveals that there are two endemic butterfly species, and these are the Euploea crameri karimodjawensis (Danaidae) and the Idea leuconoee karimodjawensis (Danaidae).

The Plant Life

There are also 10 genera of sea grass mostly dominated by Enhallus and Thallasia. Moreover the seaweed species are grouped into three divisions: Chlorophyta (Coulerpa and Halimeda) Phaeophyta (Padina, Sargassum and Turbinaria) and Rhodophyta (Euchema, Glacillaria, Gelidinium, Hypne and Acanthopora).

A total of 300 ha of mangrove forest covers the national park, and is the habitat for 13 genera and 32 species of mangrove. A number of endemic species exists within the low land tropical rain forest including Dewadaru (Fagraea elliptica), Setigi (Pemphis acidula) and Kalimasada (Cordia subcordata). The local people use these trees as sources of raw material for souvenir handicrafts. Recently, the population of these three tree species has deteriorated because of the increased extraction. Strict protection is needed to control further degradation.

The lowland tropical rain forest is the natural habitat of the rare sea eagle, the white-bellied Haliaetus leucogaster. Generally, the total forest area of the Karimunjawa Marine National Park is in



good condition, despite incidents of illegal extractions by local people living around the area. This is mostly done to fulfill household needs such as firewood and housing material.

Many researchers have been attracted to the marine biodiversity and pristine forest as well as the uniqueness of the Karimunjawa archipelago. When the Dutch colonised Indonesia, many Dutch botanists such as Teysmann (1854), Koorders (1886), Schlechter (1910) and Dammerman (1926) came to the Karimunjawa archipelago and tried to inventory the flora and fauna. But not enough information has been generated to complete the list of flora and fauna. The Park management, however, is moving toward efforts to build a strong and accessible database system.

The Local Community and Proposed **Eco-cultural Activities**

The population of Karimunjawa District is 8,842 (Karimunjawa National Park Statistics, 2002), most of whom are fishermen. Karimunjawa community consists of many ethnic groups such as Javanese, Maduranese, Bugis, Mandar, Bajak, Luwu. They live in harmony and have created a new behaviour and tradition.

A unique territory, Karimunjawa has great potential resources that have yet to be explored and attract people to discover its richness. The potential resources of Karimunjawa archipelago are conservation, ecotourism (both marine and land) and fisheries. The pristine conditions, the diversity of the archipelago, the many beautiful sites and the various activities that can be done, are major factors for developing tourism in the area. Among these are:

- Beautiful underwater scene (coral reef and marine biota) and white sandy beaches and clear blue waters conducive for diving, snorkeling, swimming, sailing, fishing, and sun bathing;
- Challenging treks through Bendera Hill, Gajah Hill, Legon Lele and Legon Goprak;
- Religious journeys to Sunan Nyamplungan Cemetery, where the ancestors of the Karimunjawa community are buried; and the
- Unique customs and traditions of the Karimunjawa community.

Protected Area Management

The Karimunjawa National Park Office manages the National Park and its main task is to manage the ecosystem and conduct conservation efforts based on recent regulations and laws.

Based on the functions, Karimunjawa National Park was divided into four zones:

- 1. Sanctuary Zone (1,299 ha) a no take zone consisting of Burung and Geleang Islands. Research and education is permitted.
- 2. Wilderness Zone (7,801 ha) -Research is permitted and tourist

Profiles

- activity is limited. It consists of Krakal Besar, Krakal Kecil, Menyawakan, Cemara Besar, Cemara Kecil, Bengkoang and part of Karimunjawa and Kemujan islands.
- 3. Utilization Zone (4,431 ha) consists of Menjangan Besar, Menjangan Kecil, Kembang, Kembar, Karang Katang, Karang Kapal, Parang, Karimunjawa and Kemujan.
- 4. Buffer Zone (98,093.5 ha) comprises Karimunjawa, Kemujan, Parang, Nyamuk. These islands are inhabited.

Due to the dynamic process of management, recent degradation and the degree of destruction, the current zones are no longer effective for management. The Karimunjawa National Park is now proposing a new zone management through a project that began in 2002 and still ongoing.

How to get there

The archipelago is 45 nautical miles away from Jepara Regency and 60 Nautical miles from Semarang, the capital city of Central Java Province. Recently Karimunjawa Island, the main island of the archipelago, can be reached by plane and ferry. A regular ferry named KMP. MURIA serves the Jepara to Karimunjawa route twice a week, starting from Kartini

Port in Jepara and reaching the Karimunjawa Port after sailing for about 6 hours. A plane flight is managed only by the Kura-Kura Resort; the plane takes off from Ahmad Yani Airport in Semarang and lands on Dewadaru Airport in Kemujan Island. Inter-island travelling is served by local fishermen's boats, which can be hired anytime

Best Time to Visit

The most comfortable time to visit the National Park is from March to July and September to November because of the calm water and wind conditions. There are two resorts in the Karimunjawa archipelago - one in Menyawakan Island and the other in Tengah Island. Tourists can visit the white tip shark natural pond built to conserve the threatened species, which tourists can also play with and feed. Special unique souvenirs are provided such as walking sticks, rosaries, rings, command sticks and Keris – a Javanese traditional stick weapon made from Dewadaru wood - and also some fisheries food products.

For further information about Karimunjawa Marine National Park, please

Karimunjawa Marine National Park Office Jl. M. Supeno 1 No. 2, 3rd Floor Semarang City Central Java Indonesia Tel/Fax. 62-24-8349709

e-mail: btnkj@dephut.cbn.net.id puspa.phpa@deohut.cbn.net.id

Park Manager: Ir.Puspa Dewi Liman, M.Sc

Karimunjawa Section Office

Jl. Dananjoyo Kapuran Karimunjawa District Jepara Central Java Indonesia Tel/Fax. 62-297-312282

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Reference

World Bank Technical Paper Number 193, Asia Technical Department Series 1992. Conserving Biological Diversity: A Strategy for Protected Areas in The Asia Pacific Region.