

CONSERVATION OF WILDLIFE ANIMAL IN INDONESIA

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1. Introduction.

Indonesia is an archipelago country that consists of about 13,000 islands, located between longitudes 95° and 141° East and in the equatorial latitudes. The prevailing climate is moist and tropical with consistently high temperature throughout the year except where influenced by altitude. There are two seasons, dry season and rainy season. Recently, in Indonesia large areas of forest have been exploited and managed for the sake of the country developments. It is necessary to conserve natural resources including wildlife urgently. The purpose of this paper is to introduce and discuss about the conservation of wildlife animal in Indonesia.

2. The Fauna.

Zoogeographically, Indonesia is divided into three zones (see Fig. 1). The first one is generally called Indo-Malaysian zone, which are rich in primate species, deer, jungle cats, civets, rodents, etc. The orangutan is only found in Sumatra and Borneo, tigers and rhinos are found in Sumatra and Java. The second is Indo-Australian zone, where Indo-Malayan forms are mixed with Australo-Papuan ones. The island of Sulawesi is famous for such its indigenous fauna as anoa (a dwarf buffalo), babirusa, four species of macaques, celebes pygmy squirrels and many other endemic rodents. Komodo island is famous for its komodo. The third is Australo-Papuan zone, which are famous for their unusual bird life such as cassowaries, cockatoos, parrots, parakeets and especially the birds of paradise in all their amazing variety. There are also many endemic of placental mammals and other species (Wendy Veevers-Carter, 1978).

3. Activities of Physical Development.

As a developing country, Indonesia has tried to manage and exploit natural resources for many years for the sake of the country development. The main purpose is to increase standard of living and welfare of the people. Development in many sectors (agriculture, industries, etc.) has been done.

In agricultural development, extensification program has to be done. New paddy fields, dry fields and home gardens have been provided, such new agricultural facilities as dams and irrigation channels have been built. Many estates have been established, for example rubber and coconut oil estates. Since 1970, out of Java forests have been exploited and managed by forest concession holders mechanically and extensively (during 1970-1974 only about 3,447,000 hectares of forest areas were exploited and until 1984, 44,939,000 hectares had already been exploited. Such other physical developments as factories, transportation facilities, houses, transmigration areas, educational facilities and so on have also been built.

The positive result of the physical developments has been reached, but on the other hand some negative impacts also have appeared, for example the decrease of wildlife animal's habitat, both its quantity and quality, and one of further consequences is the extinction of wildlife animal and plant. Up to now, many efforts and activities concerning nature conservation have been done, and one of them is the conservation of wildlife animal.

4. The Conservation of Wildlife Animal in Indonesia.

The increase of activities of physical development and human population have given bad impacts to wildlife animal's life. Many species of the wildlife animal now threaten to be extinct. To protect the species from extinction, some of what the Indonesian government has done are protection of the endangered species by laws, and improvement their habitats.

There are 521 species of wildlife animal are now protected by laws. These species include, class of mammals, birds, reptiles and fishes. Many conservation areas have been established. Up to now there are 303 place of the conservation areas which cover approximately 12,067,793 hectares. About 4.46 million hectares (37%) of the conservation areas, are managed by

National Park Management System. Many species of wildlife animal, especially endangered species, are protected in the areas. They can live naturally in undisturbed habitats. Until now, 19 National Parks have already been established (three of them are not yet announced officially), which are distributed in all over Indonesia (see Fig. 1).

5. Discussion.

Both development and conservation have to be carried out together, the important thing is how to minimize the negative impacts of the development. Therefore, we have to understand the nature laws, the characters of wildlife animal and plant as an individual species, populations, communities, and their environments. Establishing conservation areas must be an appropriate step to aim at the purpose. National park management system will be one of good systems to manage the conservation areas, because in the management system, beside protection of natural and scenic areas, also for scientific, educational, and recreational activities which are very important for human life.

Conservation of wildlife animal also to be meant to protect animal's genetic resources. As it is shown in Fig. 1, in the first zone, 12 national parks have already been established. In Java, population density is very high, who have given heavy pressure to the natural resources. In Sumatra forest areas have been converted into estates, transmigration areas and so on, while in Kalimantan been exploited extensively. All the activities will probably extinct species of wildlife animal. Therefore, establishments of national parks are very urgent, and also in the second zone. In the third zone, national park has not yet been established. In this zone the population density is very low, so that the need for establishing national park has seemed less urgent than the two other zone.

Protection of endangered species of wildlife animal by laws, is one of ways to protect the species from extinction, but usually the persons are in charge of guarding conservation areas are few, so that it is difficult to guard the species in their very large habitats from illegal hunters. Therefore, the laws will not be effective. In this case, conservation education to public society is needed, so that they will keep the laws, and even take a part in conserving the species.

References.

1. Anonymous, 1985. The explanation of Forestry Development, 80 pp. Department of Forestry, Jakarta, Indonesia.
2. Veevers W-Carter, 1978. Nature Conservation in Indonesia, 85 pp. PT Intermedia, Jakarta, Indonesia.



Fig 1 : Zoogeographically Zonation, and the Distribution of National Parks in Indonesia.

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| --- Zoogeographical Zones | | | ● National Parks |
| I. Indo-Malaysian Zone | II. Indo-Australian Zone | III. Australo-Papuan Zone | |
| 1. Gunung Leuser | 5. Kepulauan Seribu | 9. Meru Betiri | 13. Kutai |
| 2. Kerinci Seblat | 6. Gunung G. Pangrango | 10. Bali Barat | 14. Lore Lindu |
| 3. Barisan Selatan | 7. Bromo Tengger | 11. Komodo | 15. Dumoga |
| 4. Ujung Kulon | 8. Baluran | 12. Tanjung Puting | 16. Kasa, Pombo, Wae Nua, Wae Mul |