

COUNTRY REPORT — INDONESIA

Rhino Management in Indonesia

Dr. RUBINI ATMAWIDJAJA

Director General
Directorate of Forest Protection
and Nature Conservation
Indonesia

1. INTRODUCTION

1. Background

In Indonesia rhinos are only distributed in Java and Sumatra. Javan Rhino (*Rhinoceros sondaicus*) was recorded almost throughout Java in the 18th century. Sumatran Rhino (*Dicerorhinus sumatrensis*) was known widely distributed from Aceh in the north to Lampung in the south of Sumatra previously. The existence of a belief that certain parts of the animal particularly its horn for drug, caused tremendous demands and soaring prices on them. During that period it is said that the population of Javan Rhino was quite high and at times even a nuisance in some areas. This was followed by period of extensive hunting. The decrease of their habitats and such hunting have reduced the population of Javan Rhino to about 53 in the Ujung Kulon National Park. Similar situation too, affecting its population in such a way as to make its distribution discontinuous. Both species are already legally protected, but poaching still continues and presents a threat to their continued survival.

1.2 Problems

There are several points which could be discussed concerning the fate of the two rhino species in Indonesia :

- 1.2.1 Javan and Sumatran Rhinos face quite a serious threat particularly from poaching. People still believe that rhino horn has certain magical medicinal values. The news of their poaching in Ujung Kulon and Sumatra can still be heard, now and then.
- 1.2.2 The outbreak of a mysterious disease in 1981 killed 5 individuals of the Javan Rhino. The exact cause of their death is not known. It could be anthrax. On the other hand it is suspected that a change in the habitat

might have played a role.

1.2.3 The reduction of its habitat is suspected to be one of the main causes for the decrease of the population. The decrease in amount and distribution of certain edible plants in Ujung Kulon is also suspected to be a cause of the death. The ongoing logging and the conversion of forest to other uses reduce the habitat of the Sumatran Rhino, and thereby alter the ecosystem of the rhino.

2.0 THE SITUATION OF RHINO POPULATION IN INDONESIA

2.1 Javan Rhino (*Rhinoceros sondaicus*)

2.1.1 Classification

The animal is single horned, solitary or lives in small groups of two (male and female) or three (male, female and young). It is very sensitive, that is why an undisturbed forest that can supply the necessities of life is obligatory. Javan rhino's diet includes an overabundance of leaves.

2.1.2 Habitat

Javan rhino is found only in the Ujung Kulon National Park where it occupies restricted areas especially lowland and swamps up to 1,000 m above sea level. It prefers shade and bush and avoids open areas. It likes to wallow. It seems that there have been very significant changes in the composition of forest trees in its habitat in Ujung Kulon, especially in its preferred food plants.

2.1.3 Population

The number of the Javan Rhino seems to fluctuate. The 1981 census figure is quite encouraging, though in 1982 there was an outbreak of an unknown disease which killed 5 animals.

The figures of their population size based on the data collected by Hoogerwerf (1970) and by the Ujung Kulon National Park Officers (1983) are as follows :

| | | |
|------|---------|-------------|
| 1937 | 25 | Individuals |
| 1955 | 30 — 35 | individuals |
| 1967 | 21 — 28 | individuals |
| 1975 | 45 — 54 | individuals |
| 1981 | 58 | individuals |
| 1982 | 52 — 53 | individuals |

The main threats to the population are poaching and diseases but the current management practice and the antipoaching measures taken so far show significant improvement on the rhino population.

2.1.4 Problems

Several problems closely related to the survival of the Javan Rhino Population in Ujung Kulon still remain. These are :

- Habitat : The uneven distribution of the preferred plants of the rhino. It is suggested that in some restricted areas measures should be taken to increase the productivity of the habitat.
- Facility : The lack of facilities for more efficient management is still the major constraint.
- Guarding : Counter measures toward poaching and other disturbances should be intensified throughout the park.
- Expertise : Specialists on rhino are needed to study all aspects of the rhino ecology and to monitor the fluctuation in number more accurately.

2.2 Sumatran Rhino (*Dicerorhinus sumatrensis*)

2.2.1 Classification

This is the smallest living species of rhino. Its skin is hairy like that of a buffalo, that is why the animal is also called woolly rhino. It has two horns, lives solitarily or occurs in small groups of two i.e. female and young. Active in the night (nocturnal).

2.2.2 Habitat

The species is found almost all over Sumatra but particularly in Aceh, Riau (along Siak River), West Sumatra, South Sumatra and Lampung. Unconfirmed information indicates that the species may also be found in East Kalimantan. In the Gunung Leuser National Park its habitats are only restricted to the primary forests between 1000 — 1900 m above sea level.

2.2.3 Population

Marcus Borner (1979) informed that there were about 40 animals in the Gunung Leuser National Park. The animals only live in the relatively moist areas. There are about 20 animals in the Kerinci Seblat National Park area in Jambi : in the Gunung Tuju forest and some are found along the Seblat River in Bengkulu. Several small groups were also found in Langkat area (North Sumatra Province), Trogamba area (between North Sumatra and Riau Province) and Berbak Game Reserve in Jambi.

2.2.4 Problems

The decrease in the rhino population is due to poaching carried out in order to collect the horn for medicinal purpose, as well as a

reduction of its habitats which are being converted to other land uses. Poachers catch and kill the animals using special traps with spears which can stab the animal in the back.

3.0 MANAGEMENT

3.1 Legal Protection Measures

Both species of Sumatran and Javan rhino are already protected under the Ordinance on the Wildlife Protection 1931 Np. 134 and No. 266, which *inter alia* state that "it is prohibited for hunting, capturing, killing and possessing any live or dead specimen or its parts and derivatives."¹⁰

The appointed leading agency for enforcing the act is the Department of Forestry c.q. Directorate General of Forest Protection and Nature Conservation.

3.2 Cooperation for Rhino Conservation

In view of the drastic decline of the rhino populations, the Indonesian Government c.q. Directorate General of Forest Protection and Nature Conservation took a number of measures in order to protect them and even to enhance their populations. The most recent measure taken is the setting up of the Sumatran Rhino breeding programme. The Howlett and Port Lympne Zoo in England is well known for its experience in breeding wild animals in captivity. The first stage will include the capture and breeding of 4 pairs of Sumatran rhino. Two pairs will be kept in England and the other 2 pairs in Indonesia. The ongoing capture operation so far has succeeded in capturing five animals in Torgamba area in the Riau Province. The Capture is carried out in a destroyed and doomed rhino habitat which is no longer possible to rehabilitate. The forest area is being converted to oil palm plantations. So far 5 rhinos have been captured, with one death. A pair of rhino has been sent to the Howlett and Port Lympne Zoo in England, while one young male rhino was sent to the Ragunan Zoo in Jakarta.

4.0 CONCLUSION

- 4.1 Sumatran Rhino (*Dicerorhinus sumatrensis*) and Javan Rhino (*Rhinoceros sondaicus*) have quite low populations in Indonesia. It is estimated between 450 - 700 Sumatran rhinos and 53 Javan rhinos are present today. By the recent *ex situ* breeding cooperation their future looks more promising.
- 4.2 The Sumatran rhino conservation cooperation has already established a breeding programme between Directorate General of Forest Protection

and Nature Conservation and Howlett and Port Lympne Zoo, United Kingdom and an exchange of rhinos between Indonesia and Malaysia is planned in the near future.

- 4.3 The National Park status for Ujung Kulon, Gunung Leuser, Kerinci Seblat and Barisan Selatan Reserves gives more guarantees to ensure the survival of both Javan and Sumatran rhinos.
- 4.4 A priority for research on the ecology and biology of both Javan and Sumatran rhinos should be initiated.
- 4.5 There is a need to improve the skills of the field staff to better cope with the ongoing problems, particularly in preventing poaching and in guarding the habitats of rhino in cooperation with local government and police.