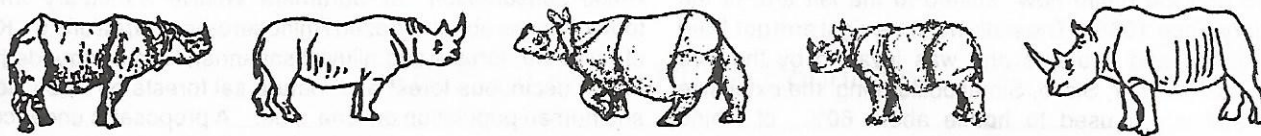


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# OVERVIEW OF RHINOCEROS

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The five species of Rhinoceros which still exist on the globe have been subjected to serious threat as a result of poaching, illegal trade and destruction of habitat. The world population of Rhinoceros, which was about 70,000 twenty years ago, has dropped down to a figure of 11,000 currently. The real loss has been in the Black Rhinoceros population of Africa which has fallen down from a figure of 65,000 of about 20 years ago, to an estimated 2,500 as assessed in 1992. The breakup of the present population of Rhino of the World is given in Table-I.

2. The only population of Rhino which is apparently safe today is the White Rhino in South Africa with approximately 5,300 individuals. In the same country, the total African population of White Rhino being about 5,800.

Asia has 3 species of Rhino falling under 2 Genera and 5 sub-species, but individually their population in each country is quite low. The largest population is that of great one horned Rhino (*Rhinoceros unicornis*) which numbers about 1500 in India and a population of approximately 400 in Nepal. Truly "critical" is the status of the Javan Rhino (*Rhinoceros sondaicus*) whose number is not likely to be more than eighty, the main population being in Indonesia consisting of about 50 Rhinos.

3. The Indian population of wild Rhino is now distributed over 2 major states (1) Assam, containing about 1400 Rhinos broadly over 5 areas and (2) West Bengal, containing about 50 Rhinos in 2 areas, and a reintroduced population of about 10 rhinos in the terai belt in the state of Uttar Pradesh. The breakup of existing Rhino population in India is given in Table-II.

4. While poaching and illegal trade is the primary cause of decline of Rhino population in Africa, the problem in Asia has been that of habitat loss under the ever increasing pressure from rising human population. Very recently with the severe drop in the black Rhino population of Africa, the attention of international poachers has turned towards India and quite a number of Rhinos have been poached in the country in the last two years.

5. It is necessary to mention here that whereas China has recently banned the trade of fresh Rhino horn and Korea has also expressed that they would also ban the trade of Rhino horn soon, fresh demands are being made from some countries of Africa to open the legal trade of Rhino horn, allegedly to reduce pressure of poaching and utilising the

revenue earned through such trade for conservation programme of Rhino in their countries. Surprisingly the lead is coming from Zimbabwe where the black Rhino population had dropped from 1750 in 1987 to 425 in 1992. South Africa is also strongly demanding the same. The Asian group of countries has opposed the demand.

6. The killing of Rhino and trade with Rhino horn have been banned in India for nearly 50 years and in other countries of Asia for a considerable period. It is for this reason that some stability in Rhino population could be achieved in the Asian continent, Nepal and India showing a remarkable rise of their population, the figure increasing in India from about 50 Rhino about 60 years ago to about 1600 in 1991. In Nepal, the figure has increased from about 60 in 1960 to about 400 in 1992.

7. Through adoption of proper policy followed by appropriate legislation and carefully drawn action plan, India could revive its Rhino population from a figure of meagre 50 nos. of about 60 years ago to a population of 1600 in 1991. Despite this, the mounting pressure of ever increasing human population on Rhino habitat and the world wide demand on Rhino horn, the Indian Rhino has again been subjected to a fresh threat and there has been some decline of Rhino population in India between the year 1991 to current time.

8. Asian Rhinos live nearest to the consumer centres. In addition, the horn of Asiatic Rhinos are valued much more highly compared to African Rhinos and are therefore subjected to more pressure than its African counterpart. Although a formulated action plan in the back drop of rigid law, followed by its reasonable enforcement could help in rebuilding of this population, international poachers and smugglers are turning towards India and our orthodox system of protection is currently proving inadequate. International financiers and smugglers are exploiting the poverty of local people to help them in killing of Rhinos, luring them with cash money.

9. Jaldapara population of Rhino increased from a figure of perhaps one dozen in nineteen twenties to a figure of nearly 80 (including Patlakhawa complex) in the end of 1960s, but severe poaching in 70s reduced the population to nearly 2 dozen around 1980 virtually leading the species to the point of extinction. The present population is thirty plus and is seriously threatened.

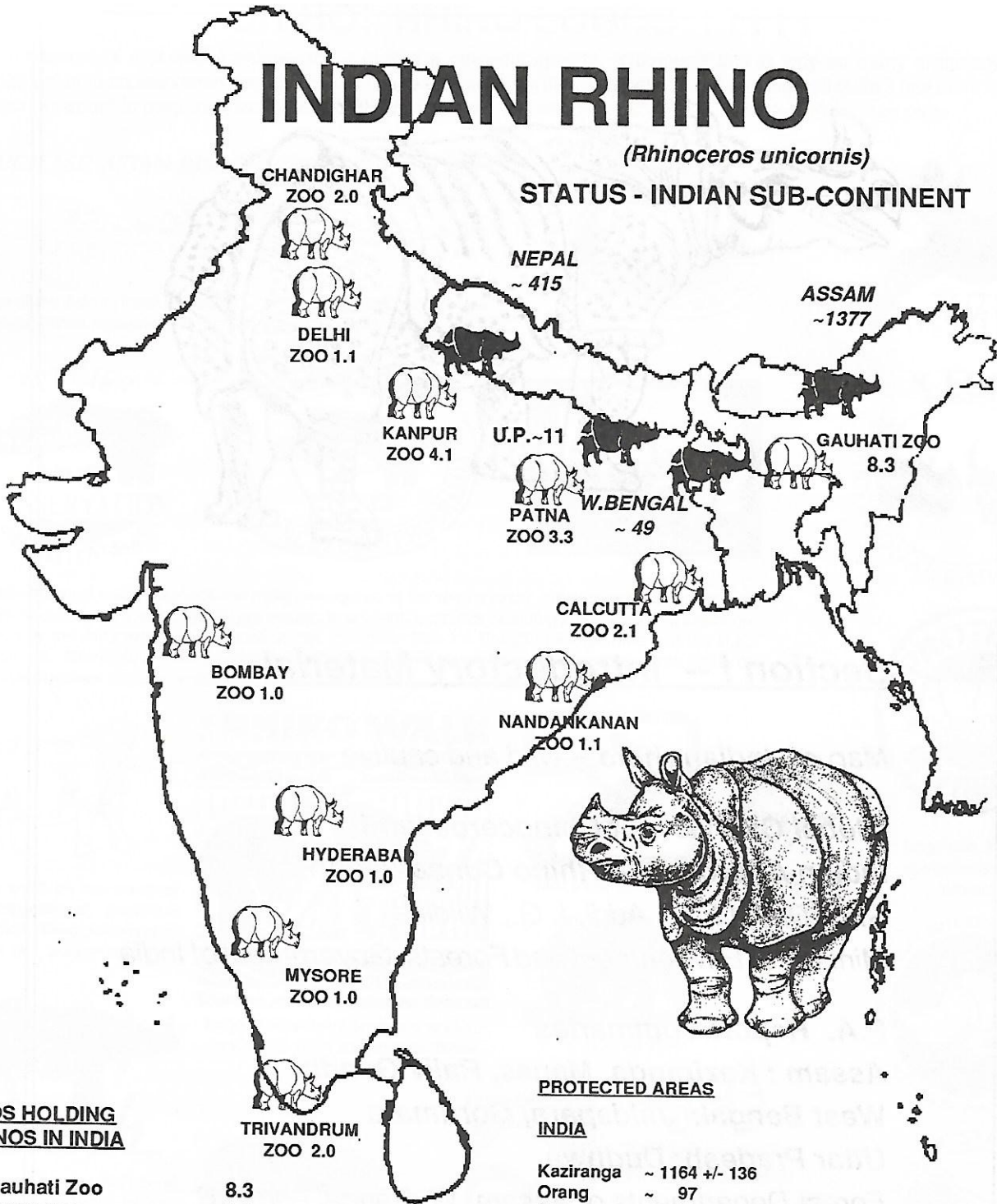
10. Other than poaching, another cause which is making rebuilding of rhino population in Jaldapara difficult is that the



# INDIAN RHINO

(*Rhinoceros unicornis*)

## STATUS - INDIAN SUB-CONTINENT



### ZOOS HOLDING RHINOS IN INDIA

|                    |       |
|--------------------|-------|
| 1. Gauhati Zoo     | 8.3   |
| 2. Patna Zoo       | 3.3   |
| 3. Kanpur Zoo      | 4.1   |
| 4. Calcutta Zoo    | 2.1   |
| 5. Delhi Zoo       | 1.1   |
| 6. Nandankanan Zoo | 1.1   |
| 7. Chandigarh Zoo  | 2.0   |
| 8. Hyderabad Zoo   | 1.0   |
| 9. Mysore Zoo      | 1.0   |
| 10. Bombay Zoo     | 1.0   |
| 11. Trivandrum Zoo | 2.0   |
| Total male/female  | 26.10 |

Total Rhinos in Indian zoos 36  
Total Rhinos in World's zoos 115

### PROTECTED AREAS

#### INDIA

|             |                |
|-------------|----------------|
| Kaziranga   | ~ 1164 +/- 136 |
| Orang       | ~ 97           |
| Manas       | ~ 60           |
| Pobitora    | ~ 56           |
| Jaldapara   | ~ 34           |
| Gorumara    | ~ 15           |
| Dudhwa      | ~ 11           |
| Laokhowa    | ~ nil          |
| Others .... | ~ 10           |

#### NEPAL

|          |        |
|----------|--------|
| Chitawan | ~ 400  |
| Bardia   | ~ 15   |
| Total    | ~ 1850 |

habitat in the western arm of the sanctuary became unfit for Rhino to stay due to the change of the course of river Torsa after 1968 flood. The main current of the river which was flowing through the right arm of the sanctuary earlier got blocked and the entire flow shifted to the left arm of the sanctuary since 1968. The wallows in the right arm got filled up by sands and boulders and was invaded by the tree succession of Khair, Sisso, Simal obliterating the extensive grass land which used to house about 60% of Rhino population of Jaldapara prior to 1968. Today hardly 5 to 8 Rhino exists in the right arm of the sanctuary.

11. The shape of the sanctuary is also a major bottleneck towards the development of Rhinos because the sanctuary is like a trouser, with the legs extending downwards being very narrow and with a high density of human population in the neighbourhood. The right arm in particular is more vulnerable having no buffer forest beyond the sanctuary boundary and directly abutting thick human habitation with the width varying between 1-3 Km only.

12. It is, therefore, necessary to adopt a specific strategy for quick building up of the Rhino population of Jaldapara which should include translocation of animals from Assam for increase of population and induction of genetic variety and also through effective captive breeding programme followed by its rehabilitation in the wild. With nearly saturated population of

Rhino in the wild in some areas of Assam this should not pose a problem.

13. I would also like the workshop to address the issue of Rhino conservation in Gorumara Wildlife Sanctuary which today houses about a dozen Rhinoceros in an area of 8.61 Km<sup>2</sup> of riverine forests and alluvial savannah land surrounded by Moist deciduous forest and mature sal forests on three sides and human population on one side. A proposal is under consideration to extend the boundary of the sanctuary towards North, East and South to include an additional area of nearly 50 km<sup>2</sup> to the existing sanctuary and raise the status of the core area to that of a National Park.

14. I hope the workshop will address the special problem of Rhino conservation in Gorumara and Jaldapara taking care of their shape, size and location, the change in the succession of vegetation, biotic pressure operating over these two sanctuaries and the ways and means of involving the local communities in the cause of conservation.

I expect the workshop will give a blue print on future management strategy for drawing an effective action programme which will help in realistic implementation of the Rhino conservation plan of Jaldapara for which a broad project has been posed to UNEP for international funding support.

Table I : Rhino Population of India

| <u>State</u>  | <u>Area</u>   | <u>Population</u> |      |  |
|---------------|---------------|-------------------|------|--|
| Assam         | Kaziranga     | 1164              |      |  |
|               | Manas         | 60                |      |  |
|               | Orang         | 97                |      |  |
|               | Pabitora      | 39                |      |  |
|               |               |                   | 1360 |  |
|               | Laohowa       | 0                 |      |  |
|               | Other pockets | 40 (?)            |      |  |
| West Bengal   | Jaldapara     | 34                | 49   |  |
|               | Goramara      | 15                |      |  |
|               |               |                   |      |  |
| Uttar Pradesh | Dudhwa        | 11                | 11   |  |
|               | Total         | 1460              |      |  |



TABLE - II World Rhino Population

| I. ASIA        |                    |             |                |
|----------------|--------------------|-------------|----------------|
| Country        | Great Indian Rhino | Javan Rhino | Sumatran Rhino |
| India          | 1500               | X           | X              |
| Nepal          | 400                | X           | X              |
| Indonesia      | X                  | 50          | 300 - 600      |
| Malaysia       | X                  | X           | 150 - 200      |
| Vietnam        | X                  | 20          | X              |
| Myanmar        | X                  | X           | ?              |
| Thailand       | X                  | X           | ?              |
| Laos           | X                  | ?           | ?              |
| Total          | 1900               | 70+         | 450+           |
| II AFRICA.     |                    |             |                |
| Country        | White Rhino        | Black Rhino |                |
| Angola -       | ?                  | 50          |                |
| Botswana -     | 27                 | 5           |                |
| Cameron -      | -                  | 35          |                |
| C.A.R. -       | ?                  | ?           |                |
| Ethiopia -     | -                  | ?           |                |
| Kenya -        | 74                 | 414         |                |
| Malawi -       | -                  | ?           |                |
| Mozambique -   | ?                  | 50          |                |
| Namibia -      | 91                 | 489         |                |
| Rwanda -       | -                  | 15          |                |
| Somalia -      | -                  | ?           |                |
| South Africa - | 5297               | 819         |                |
| Sudan -        | 5                  | ?           |                |
| Swaziland -    | 46                 | 6           |                |
| Tanzania -     | -                  | 127         |                |
| Uganda -       | ?                  | ?           |                |
| Zaire -        | 31                 | -           |                |
| Zambia         | ?                  | 40          |                |
| Zimbabwe       | 249                | 425         |                |
| Totals         | 5820               | 2475        |                |