OVERVIEW OF INDIAN RHINO ACTION PLAN

S.C. DEY, DEPUTY CHAIRMAN, ASIAN RHINO SPECIALIST GROUP

BACKGROUND

Out of three species of rhino that roamed over the Indo-Gangetic alluvium, two species, namely Javan rhinoceros (*Rhinoceros sondaicus*) became extinct in the later part of the previous century and the Sumatran rhino (*Dicerorhinus sumatrensis*) became extinct in the early part of the current century. The only species of rhinoceros that is existing in India today is the Great One-horned Rhinoceros (*Rhinoceros unicornis*) restricted to broadly five natural population in Assam, two natural population in West Bengal, one introduced population and one migratory population in Uttar Pradesh. The causes of decline of the rhino population in the past were primarily the following:

- (a) Destruction and fragmentation of rhino habitat primarily for extension of agriculture and tea gardens.
- (b) Poaching of rhino for horns and other parts attributed to have magical medicinal values.
- (c) Hunting of rhino for sports during the Mughal period and early days of British rule in India, and later during the regimes of the Maharajas.

It will be interesting to note that in Assam, Col. Pollock, a Military Engineer engaged in laying of roads in Brahmaputra valley, almost shot a rhino or a wild buffalo for breakfast every day. A sportsman in Bengal Dooars, possibly an English planter, fired about 100 shots at a number of rhinoceros in a day, killing five and seriously wounding more than twenty five. Maharaja Nripendra Narayan of Coochbehar shot 208 rhinoceros between 1871 to 1907.

LEGAL STEPS TAKEN FOR PROTECTION OF RHINOCEROS IN THE PAST

The first attempt to conserve the Rhino in Assam came through Assam Forest Regulation 1891 and subsequently through the Assam Rhinoceros Prevention Act 1915, upgraded in 1954 as Assam Rhinoceros Act 1954. In 1908 a reserve was created in the Brahmaputra basin for protection of rhino which was subsequently declared as a game sanctuary in 1915 and renamed as Kaziranga wildlife sanctuary in 1950. This was upgraded in the year 1974 to a National Park. Other sanctuaries were also notified in the meantime.

In Bengal, the initial control for rhino conservation came through Indian Forest Act 1927 followed by the Bengal Rhinoceros Preservation Act 1932. Jaldapara Game Sanctuary was created in 1941 which was subsequently renamed as Jaldapara Wildlife Sanctuary in 1976 and extended further in 1990. Gorumara Wildlife Sanctuary was created in 1949. This was subsequently extended and upgraded to a National Park in 1994.

The Wildlife (Protection) Act 1972 which is applicable all over India, except Jammu and Kashmir, currently provides protection to rhino and its habitat. In this Act, Rhinoceros has been placed under schedule I (Part-1) which provides complete protection to the species in India.

RISE AND FALL OF CONSERVATION STATUS OF RHINO

Even though there is no precise documentation regarding the population of rhino that existed in India at the turn of the century, its population was believed to be around 100 in the beginning of the current century being roughly 50 to 60 in Assam and 40 to 50 in Bengal. The population in West Bengal rose to about 90 around the mid 60s and the same in Assam to about 1,500 in 1991. Maximum poaching of rhino took place in West Bengal during the period 1968 to 1972, when 32 rhinoceros were poached. In 1986 the rhino population in West Bengal came down to 22. Maximum poaching of rhino in Assam took place in the year 1992 when about 70 rhinos were killed by poachers.

Since then there has been gradual rise in rhino population in West Bengal which is reported to be around 60 in 1998 and the Indian population of rhino currently stand to about 1600 including introduced population in Dudwa (UP) and the migratory population at Katerniaghat (UP).

MANAGEMENTAL INTERVENTION FOR INCREASING RHINO HOMERANGE IN THE WILD AND IMPROVED GENE FLOW.

Uttar Pradesh housed a significant rhino population during the Mughal period from where the rhinos were exterminated through persecution over years. An attempt to reintroduce some rhino population in Dudwa was done in the year 1984 by bringing five rhinos from Assam, of which two died. Subsequently in 1987, four rhinos were brought from Nepal and kept in a very wide enclosure in the forest habitat of Dudwa. The population at Dudwa started breeding slowly registering an increase which is now 16 in number.

The migratory population of rhino at Katerniaghat is also being looked after and their security ensured. Two male rhinos have also been brought from Assam to West Bengal for improving the genetic strain, one each to Jaldapara and Gorumara, and they are now being acclimatized in wide enclosures.

MORTALITY, POACHING AND ANTI-POACHING

The conservation of rhino in India is a story of a relentless fight by the field functionaries with the vagaries of nature, biotic interference, poaching and illegal trade. In the year 1988, in Kaziranga alone, one hundred and twenty nine rhinos died including natural and un-natural causes. On an average 80 to 100 rhinos die in Kaziranga a year including poaching and natural death. One hundred to one hundred twenty rhinos are also born in a year. The number of persons arrested a year for rhino poaching varies from 50 to 70 and the number of poachers killed a year generally varies from six to eight, being the highest of 12 in 1994. The arms recovered from poachers are eight to ten a year being the maximum of twenty in the year 1993. Poaching though continues, but has been reduced to less than thirty a year currently.

SUPPORT TO RHINO CONSERVATION

Currently the conservation of rhino in India is supported under the following budget heads:

- (a) Non-Plan.
- (b) State-Plan.
- (c) Integrated Forestry Development Project.
- (d) Centrally Sponsored Scheme.

The main support from Centrally Sponsored Schemes currently comes from the Scheme of Development of National Park and Sanctuary and eco-development project. Support to some areas also comes from Project Elephant and Project Tiger. Though it is very difficult to segregate the expenditure figures for the conservation of rhino alone, but for conservation of major rhino bearing areas India spends currently about one million US\$ annually from non-plan and about five hundred thousand US\$ annually from plan budget.

MAIN ACTIVITIES TO CONSERVE THE RHINO

The main activities undertaken through National funds include:

- Protection of the habitat and species by regular patrolling.
- 2. Improvement of habitat by canopy manipulation and inter-planting.
- 3. Maintaining camps for anti-poaching operations.
- 4. Better communication through road and wireless network.

- 5. Creation, of high lands and water holes, where required.
- 6. Extension of protected area to cover additional rhino habitat and spill over population.
- 7. Reducing man animal conflict by electric fencing.
- 8. Public awareness and educational programmes.
- 9. Training of staff and other enforcement agencies.
- 10. Eco-development programme.

All the activities, though undertaken, fall short of requirements in meeting the challenges facing the long term rhino conservation due to limitation of resources.

GLOBAL EFFORT FOR PLANNING OF RHINO CONSERVATION

In the meeting of United Nations Environment Programme in the year 1992 and 1993 at Nairobi, the demand made by India for rhino conservation for three years was 8.33 million US\$ of which external funding demanded was 5.3 million US\$. This demand was subsequently revised in the meeting of Asian Rhino Specialist Group held at Jaldapara in December, 1993 and Sandakan, Sabah, Malaysia during November-December, 1995. The revised demand was worked out at 16.7 million US\$ for the years 1996 to 2000. Out of this, projects with immediate priority (AI) was worked out to be 8.4 million US\$, projects with high priority(A2) as 3.5 million US\$ and general priority projects (A3) as 4.8 million US\$. The work listed in terms of priority were as follows:-

- I. Communication network, both road and wireless communication.
- 2. Capacity building, including training and infrastructural support.
- 3. Habitat improvement and habitat extension.
- 4. Education and public awareness programme.
- 5. Research on species and habitat including continuous monitoring.
- 6. Compensation, intelligence gathering and rewards.
- 7. Translocation and rehabilitation of rhinos.
- 8. Establishment of Veterinary care and immunization programme.
- 9. Relocation of enclave villagers.
- 10. Eco-tourism.

It may be mentioned here that even though the Asian Rhino Action Plan was first prepared in the year 1989 by the Asian Rhino Specialist Group and subsequently improved and revised in the meeting of United Nations Environment Programme, in 1993 by the range states and the specialist group in presence of donor agencies and consumer states, the drawing of external financial support was left to the countries. If one looks into the flow of fund, it could be seen that in India, the external aid for insitu rhino conservation is insignificant, which was almost nil till the year 1993 with only some support coming in the year 1994-95 through integrated forestry development project and subsequently during 1997 and 1998 through the World Heritage Scheme of UNESCO and Tiger and the Rhino Conservation fund of US Fish and Wildlife Services. While the support from international bodies for in-situ rhino conservation in India has been negligible, there is some tendency to focus more priority on ex-situ rhino conservation in some of the South East Asian Countries where the fund flow has been more.

A stage has come now to decide whether more attention for rhino Conservation should be given to countries which have clearly demonstrated the ability to improve the status of rhino from a perilous stage through their own efforts and programmes, or more attention should be given to countries where no such promise has been shown so far and consequently no guarantee for long-term conservation of the rhino in the wild. While the Asian Rhino Specialist Group must address the scientific and

technical aspect of rhino conservation, but their credibility will perhaps depend on how much they can mobilize the global bodies, including developed countries, to provide support to the field-based programmes for the conservation of this prehistoric species, which has undergone the least morphological changes in the evolutionary history of the species over geologic time scale. I am sure my friends and colleagues from Nepal will also share the same concern.

