

Report on the Regional Meeting for India and Nepal IUCN/ SSC Asian Rhino Specialist Group (AsRSG)



March 5-7, 2007
Kaziranga National Park, Assam, India



ASRSG

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NATIONAL
PARK

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AREAS
ASIAN RHINO & ELEPHANT
ACTION STRATEGY



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Amrithraj Christy Williams, Nico Van Strien and Bibhab Kumar Talukdar

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Introduction

Both India and Nepal have demonstrated success with rhinoceros conservation programs and contributed towards global biodiversity conservation. For example, recent rhino conservation successes were published in one of India's leading daily newspapers: 'Kaziranga National Park has once again established itself as the century's greatest conservation success story with an increase of over 300 in the population of the great Indian one-horned rhinoceros (*Rhinoceros unicornis*) in between 1999-2006 in a span of 7 years recorded 1,855 rhinoceros in the park.' Likewise, there was a rhino translocation initiative transferring animals from Kaziranga to Manas National Park. Similarly, Nepal successfully translocated 87 rhinos from Chitwan National Park to Bardia National Park and Suklaphanta Wildlife Reserve. In spite of all these success stories, in range countries, there are still gaps in experience sharing and information exchange between the managers, scientists and decision makers in rhino range countries. This meeting provided an opportunity to share management and conservation experiences and facilitated preparing a strategy for the conservation of rhinoceros in range countries.

The Asian Rhino Specialist Group (AsRSG) organized a 3-day workshop in Kaziranga National Park, Assam, India, 5-7 March 2007.

The aim of the meeting was to:

- share ideas and discuss the present status of Asiatic one- horned rhinoceros as well as transboundary rhino conservation strategies,
- share experiences on the Rhinoceros Translocation Programme in Nepal and India,
- share information on the successful rhino conservation programme in Kaziranga National Park , Assam, India, and
- prioritize issues to prepare a regional Rhino Action Plan for South Asia.

The meeting was jointly organized by the AsRSG for South Asia, WWF Asian Rhino Elephant Action Strategy (AREAS), WWF Nepal, and IUCN Nepal and was hosted by Assam Forest Department at Kaziranga National Park. Workshop participants included nearly 47 rhino experts, park managers and enthusiasts from different organizations, mainly from India and Nepal.

The AsRSG is very grateful for the generous support provided by the Indian Government and its Officials, in particular for the assistance provided by Mr. Sonadhar Doley, Principal Chief Conservator of Forests, Mr. M.C. Malakar, Chief Wildlife Warden from the Assam Forest Department and Mr. S. N. Buragohain, the Director of Kaziranga National Park. Special acknowledgements are due to Dr. Bibhab Kumar Talukdar for his invaluable support for logistics, transportation and communication. We also thank Dr. Nico van Strien, AsRSG Co- Chair for Southeast Asia for his support, especially after the tragic loss of the Co-Chair Dr Tirtha Man Maskey, whom we remember for his selfless devotion and pioneering work in conservation. His spirit lives on in the work that we all do.

Financial support for the meeting was provided by the WWF AREAS and by WWF Nepal. Dr. Christy Williams, the AREAS coordinator has always been a passionate supporter of garnering more support for rhino conservation in the region. This investment will surely reap the results that all of us are working towards.

This report contains the documents and data sheets produced by the working groups and the papers and supporting documents presented during the working sessions of the AsRSG workshop for South Asia.

Background

The IUCN Species Survival Commission (SSC), created in 1949, is a worldwide science-based network of volunteer experts who work towards achieving its vision, "A world that values and conserve present level of biodiversity". The strength and relevance of the SSC comes from this network thousands of volunteers who donate their time and expertise to produce the scientific and practical foundation on which the effective delivery of conservation is built, both within the IUCN and elsewhere.

An Asian Rhino Specialist Group for South Asia has been developed at the WWF Nepal Program Office, with the support of WWF Asian Rhino and Elephant Strategy (AREAS) Program. Logistic support is provided by WWF Nepal.

After correspondence with all the selected members and their acceptance for renew and new members, the AsRSG has finalized our members list as follows:

Status	India	Nepal	Sri- Lanka	Pakistan	Bhutan	Total
Renew Members	5	3				8
New Members	10	6		**	**	16
Discontinue Members	12		1			14
Members from Int'l Organizations Related to Nepal/India Activities		2				2

* **Unavailable**

Meeting Objectives:

- Encourage networking among AsRSG members in South Asia;
- Share experiences from the rhino translocation programs in Nepal and India;
- Highlight the success of the rhino conservation programme at Kaziranga National Park; and
- Present the Rhino Action Plan of Nepal discuss effective strategies for transboundary Rhino conservation between Nepal and India.
- Assess the conservation status of the greater one-horned rhino



**KAZIRANGA
NATIONAL PARK**

ASRSG

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ASIAN RHINO SPECIALIST GROUP (AsRSG) Workshop AGENDA
Kaziranga National Park, Assam, India
(5-7 March 2007)

WORKSHOP OBJECTIVES:

- To encourage networking among AsRSG members in South Asia;
- To share experiences from the Rhino translocation programmes in Nepal and India;
- To highlight the success of the rhino conservation programme at Kaziranga National Park; and
- To present the Rhino Action Plan of Nepal and discuss effective strategies for transboundary rhino conservation between Nepal and India.

TIME	PROGRAMME	LEAD
DAY 1. Monday 5 March, INAUGURATION SESSION		
4:30 – 5:00 PM	Registration of the Participants Distribution of T-Shirts/ Folders/ Name cards	Ms. Bhawana & Ms. Corona
5:00 – 5:15 PM	Welcome to guest and dignitaries to the dais and felicitation by Assam Forest Department and AsRSG:- Handover of souvenirs to Forest Commissioner, Assam	Director or DFO Kaziranga National Park Dr. Nico van Strien
5:15 – 5:25 PM	Objective of the workshop	Dr. Bibhab Talukdar
5:25 – 5:40 PM	Detailed Introduction on AsRSG	Dr. Nico van Strien
5:40 – 6:00 PM	Significance of AsRSG meeting at Kaziranga	Mr. Mohan C. Malakar, Chief Conservator of Forests, Assam
6:00 – 6:15 PM	Speech By PCCF of Assam	Mr. Sonadhar Doley
6:15– 6:25 PM	Lighting of lamps and by Forest Commissioner followed by his inaugural speech	Mr. B.B. Hagjer
6:25– 6:35 PM	Remarks from Mr. Karna Shakya, WWF Nepal Advisor	Mr. Karna Shakya
6:35 – 6:45 PM	Remarks from IUCN Nepal Country Representative	Mr. Prabhu Budhathoki
6:45– 6:50 PM	Vote of Thanks to guests and participants	Dr. Amirtharaj Christy Williams
6:50 – 7:15 PM	Cultural Show	
7:15 PM	Invitation to Dinner	
DAY 2. Tuesday 6 March, STATUS, TRANSLOCATION AND RESEARCH		
6:00 -7:00 AM	Field Visit (Elephant Ride)	
9:00 – 9:15 AM	Introduce agenda for the day and facilitator	Dr. Nico van Strien
	Status of Rhino	
9:15 – 9:40 AM	Status of rhino and horn stockpiles in Kaziranga National Park	Mr. Utpal Bora
9:40 – 9:50 AM	Discussion	
9:50 – 10:10 AM	Status of rhino and horn stockpiles in Jaldapara and Gorumara National Parks	Dr. P T Bhutia
10:10 –10:20 AM	Discussion	
10:20 –10:40 AM	Status of rhino and horn stockpiles in Manas National Park	Mr. Abhijit Rabha
10:40 –10:50 AM	Discussion	
10:50 –11:10 AM	TEA/COFFEE BREAK	
11:10 –11:30 AM	Status of rhino and horn stockpiles in Pabitora National Park	Mr. Surojit Dutta
11:30 –11:40 AM	Discussion	
11:40 –12:00 PM	Status of rhino and horn stockpiles in Orang National Park	Mr. Sukumar Momin
12:00 –12:10 PM	Discussion	
12:10 –12:30 PM	Status of rhinos and horn stockpiles in Nepal	Mr. Shiva Raj Bhatta

Time	Programme	Lead
12:30 –12:40 PM	Discussion	
12:40 – 1:00 PM	Remarks from Chair	
1:00 – 2:00 PM	LUNCH	
	TRANSLOCATION OF RHINOS	
2:00 –2:05 PM	Introduction to second session and chair,	Mr. Bishan Singh Bonal
2:05 – 2:35 PM	Indian Rhino Vision 2020	Mr. Tariq Aziz
2:35 – 2.50 PM	Rhino Census methodology	Mr. Bhupen N. Talukdar
2:50 -- 3.00 PM	Rehabilitation of rhinos in Assam	Dr. Anjan Talukdar and Dr. Bhaskar Choudhury
3:00 – 3:20 PM	Discussion	
3:20 – 3:30 PM	TEA/ COFFEE BREAK	
	RESEARCH	
3:30 – 3:45 PM	Status and Distribution of Translocated rhinos in TAL – Nepal	Mr. Kanchan Thapa
3:45 – 4:00 PM	Discussion	
4:00 – 4:15 PM	Changing Rhino Habitats in Assam and Geo-spatial Analysis	Mr. Pranjit Sharma and Dr. Bibhab Talukdar
4:15 – 4:30 PM	Discussion	
4:30 – 4:45 PM	Local Communities in Rhino Conservation	Mr. Basu Dhungana and Mr. Lava Bista
4.45 – 5.00PM	Discussion	
5.00 – 5.15PM	Remarks from Chair	
DAY 3. Wednesday 7 March, AsRSG PLANNING		
7.00 – 8.30 AM	Field Trip (Jeep Safari)	
9:00 – 9:05 AM	Introduction to the agenda and chair	Mr. Mohan C. Malakar
9:05 – 9.20 AM	Wildlife Trade in India "Status of Rhino Poaching in Assam and trade on rhino horn"	Dr. Bibhab Talukdar and Mr. Mrigen Baura
9:20 – 9:35 AM	Wildlife Trade Nepal " Rhino Poaching, trade and implication on National Conservation Strategy of Nepal"	Mr. Prasanna Yonzon
9:35 - 9:50 AM	Threats of Poaching in Chitwan National Park	Mr. Prabhakar Ghimire
9:55 - 10:25 AM	Presentation of Rhino Action Plan in Nepal	Mr. Puran B. Shrestha
10:25- 10:40 AM	Discussions	
10:40 - 10:50 AM	Briefing about the Working Group	Dr. Christy Williams
10:50 - 12:30 PM	Working Group- <ul style="list-style-type: none"> • Western Terai – Dudhwa, Katarniaghat, Bardia and Suklaphata • Central Terai – North Bengal, Chitwan, Jaldapara and Gorumara • North East India- Manas, Orang, Pabitora, Kaziranga National Park, Laokhowa-Bura Chapori and Dibru-saikhowa • Red List of Indian Rhino 	
12:30 - 1:00 PM	Presentation of Action Plan	
1:00 – 2:00 PM	LUNCH	
	CLOSING SESSION	
2:00 – 4:00 PM	Future Direction of AsRSG - Information Exchange Encourage Networking, Future Programmes SSC Red List issues	Dr. Nico van Strien
4:00 – 4:15PM	Concluding Remarks	Mr. Mohan C. Malakar
4:15 – 4:25 PM	Vote of Thanks	Dr. Ghana Gurung WWFNepal
4:25 – 4:35 PM	Distribution of Tokens of Appreciation	Mr. Prabhu Budhathoki and Dr. Ghana Gurung
4:35 PM	END OF THE AsRSG WORKSHOP	

Inaugural Session

The inaugural session of the Asian rhino workshop was moderated by Dr. Bibhab Kumar Talukdar, Secretary General of Aaranyak and a member of AsRSG. The workshop began with a welcome address by Mr. Sonadhar Doley, Principal Chief Conservator of Forests (PCCF) of Assam. Mr. Doley welcomed the international participants, representatives from Government Organizations, NGOs, individual experts and media persons. Mr. Doley emphasized that rhinos are endangered species and a decline in their status and distribution range means a threat of local extinction unless conservation efforts are stepped up immediately. Highlighting the objectives of the meeting, Dr. Bibhab Kumar Talukdar also emphasized that this was an important opportunity to share knowledge and get aware with rhino conservation efforts in Asia.

Dr. Nico van Strien, AsRSG Co-Chair for Southeast Asia, gave a detailed introduction to the AsRSG. He noted that the success story of rhino conservation in Kaziranga should be replicated in Nepal, where a crisis for the survival of the pachyderm looms large. Dr. van Strien emphasized that we can improve the situation with rigorous efforts from all quarters. He concluded his remarks by expressing hope that the workshop would come up with concrete recommendations to set a course ahead for the conservation of Asiatic rhinos.

Mr. Mohan C. Malakar, Chief Wildlife Warden of Assam Forest Department talked about the importance of having the workshop at Kaziranga National Park, Assam. He raised concerns and opportunities for continued existence and conservation of one-horned rhinos in South Asia. In his closing remarks, he noted that the Forest department of Assam was proud to be a part of the workshop to exchange ideas and provide valuable inputs to materialize the vision of the successful conservation of the Asian one-horned rhinoceros.

Mr. S.N. Buragohain, the Director of Kaziranga National Park, remarked that he was privileged to have hosted the AsRSG workshop in Kaziranga National Park. He emphasized that the park, in addition to improving the habitats, has adopted vigorous actions and that the Assam Forest department has been making significant contribution towards conservation and protection of rhinos in parts of Assam.

Lastly, Mr. Karna Shakya, Advisor to WWF Nepal and Mr. Prabhu Budhathoki Country representative of IUCN Nepal, added that this workshop targets to build partnership among the organizations working in rhino conservation and thanked everyone present there.

The inaugural session came to an end with the release of AsRSG workshop poster which was followed by a cultural show.

Technical Session

Minutes of Meeting Asian Rhino Specialist Group (AsRSG) and Working Group Result, Kaziranga National Park, Assam India (5-7 March 2007)

I. (9.15-10.50 AM) DAY 2.

A - STATUS OF RHINO AND HORN STOCKPILES IN KAZIRANGA NATIONAL PARK

Mr. Utpal Bora

Kaziranga National Park (KNP), with an area of 429.93 km², is known worldwide for its success in the conservation of greater one-horned rhino. It harbors the world's largest population of one-horned rhino: 1855 animals in 2006. Utpal Bora briefly explained that the first rhino census in KNP was initiated in 1996 and since then there has been a steady increase in its population. Table 1 shows the successive rhino population in 2006.

Table 1: Successive Rhino Population in 2006.

Year	Male	Female	Young	Un sex	Total
1966	67	83	44	172	366
1972	203	188	148	119	658
1978	331	332	243	43	939
1984	283	296	201	166	946
1991	338	357	190	184	1069
1993	387	379	176	222	1164
1999	556	586	257	153	1552
2006	545	693	409	208	1855

Mr. Bora further stated the success behind the increase in population in KNP was the commendable motivation and dedication of staff officers along with the teamwork and help from the local people who have good awareness of the wildlife and wilderness. Increasing infrastructure such as roads, wireless vehicle network, and an increased level of intelligence have been an added advantage. To continue current high standards, it is necessary to utilize modern scientific management, including checking the straying of rhino which is one of the biggest problems. A united, cost-effective approach, including increasing facilities for staff officers, will further enhance and strengthen the conservation and population of rhinos in Kaziranga.

B - STATUS OF RHINO AND HORN STOCKPILES IN JALDAPARA AND GORUMARA NATIONAL PARKS

Dr. P. T Bhutia

Dr. P.T Bhutia commenced his presentation with a brief introduction on Jaldapara Wildlife Sanctuary and Gorumara National Park and said that West Bengal is not significant compared to Kaziranga and Chitwan National Parks. He informed that the greater one-horned rhino was distributed in Sundarbans, Malda districts and over areas of the Gangetic Plains about 160 years ago. Javan rhinos once inhabited Bengal's dense forests, but have become extinct. The only surviving species of Asiatic rhino in [WB??] western Bengal is *Rhinoceros unicornis* which are presently confined only in two ranges in protected areas of state (Gorumara and Jaldapara) located in the flood plains of northern west Bengal, Duars. The rhino populations in Jaldapara Wildlife Sanctuary and Gorumara National Park are shown in Tables 2 and 3.

Table 2: Rhino Population Structure in Jaldapara WLS

Year	Adult			Calves	Total
	Male	Female	Unsexed		
2002	33	30	4	17	84
2004	37	31	5	23	96
2005	39	36	7	26	108

Table 3. Rhino Population Structure in Gorumara NP

Year	Adult			Calves	Total
	Male	Female	Unsexed		
2002	6	11	-	5	22
2004	9	11	-	5	25
2005	13	9	2	3	27

The major drawbacks for rhino conservation in both these parks were large interfaces between the forest and villages, lack of awareness among people living in the forest, insufficient trained and patrolling staff. The threat of poaching also exists. Another limiting factor for conservation of rhinos in Gorumara is a limited amount of suitable grassland habitat. The presence of a large, exposed, forest village border has also compounded the problem. A lack of research, monitoring and a database system for the purpose of accessing their impacts in the sanctuary is being felt. The cattle in the local villages are generally in poor health as well, so spreading of cattle-borne diseases to wild animals, and competition for fodder between the wild and the domestic cattle are the major problems in West Bengal. This results in soil desecration, destruction of organic matter, which compounds the problem.

Mr. Bhutia noted that the Action plan for conservation of rhino in Jaldapara and Gorumara is being revised for the next 10 years. Some of the strategies highlighted in the presentation were Zonation and Zone plans where protected areas have been divided into three management zones:

- 1) Wilderness zone which is intended for the conservation of biodiversity
- 2) Habitat improvement zone where managerial intervention, including habitat implementation, is carried out for improving rhino habitat
- 3) Eco-tourism zone, which partially overlaps other zones and wilderness tourism is developed.
- 4) Control of poaching of rhino and other species and illicit selling of timber by establishing anti poaching towers, camps at strategic locations manned by protection staff, and maintaining a fleet of patrolling elephants and staff over the sanctuary. A strong law enforcement mechanism is needed to apprehend poachers/smugglers, etc.
- 5) Strengthening wireless network and extending the Park area.
- 6) Ecotourism in the protected areas included promoting conservation awareness among tourists, dispersing tourism pressure on the protected areas, and regulating and reorienting tourism to make it more educative and compatible with the goal of conservation and involving local people in tourism activities. Ecotourism as a tool for conservation has bright prospects - the challenge lies in implementing it in its truest sense.

By taking up all these measures the area will be developed with more inputs and infrastructure and holds great promise as habitat for the rhinos.

**C. STATUS OF RHINO AND HORN STOCKPILES
IN MANAS NATIONAL PARK**

Mr. Abhijit Rabha

Rhino conservation has been found to be more challenging in Manas National Park especially after the socio-political unrest during the 1990s. However, public and political support for Manas National Park has been exceptional at the most local level of villages and the political level. Abhijit Rabha further added how the officers and the front liners fought without any infrastructural assistance and produced amazing results in determining the success and effectiveness of conservation and environmental management. These efforts led to the deaths of about 15 poachers and illegal tree fellers from 2001-2003. In 2002, a study on the population of elephants determined that the Park held 678 individuals

Manas National Park was opened for overseas tourists and the management plan for Manas property was written down. Surveys determined that Asiatic buffaloes in the WHS number about 210 individuals. The influential Bodoland Liberation Tiger (BLT) force surrendered in early 2000, resulting in peace and political stability in the area. The officials, together with proactive group of All Bodo Students Union (ABSU), ex-BLT members, have contributed towards formation of the ecotourism society. Former poachers joined in, became active conservation volunteers, and were provided physical training. Mainao, a rescued female rhino, was shifted to Manas from Kaziranga National Park by the Wildlife Trust of India under the Wildlife Rescue and Rehabilitation Program. The animal was released into the wild by the deputy chief of Bodoland Territorial Council, thus demonstrating the Council's political will and support. Since then, two more rhinos and six elephants have been moved to Manas for reintegration with the wild population. There has been a boost in ecotourism at Dwimari and Kokilabari. Strategies aimed at building awareness are in place to engage local communities (via training of school teachers and publication of educational materials), and a project securing alternative livelihoods and health (as part of Pigmy Hog Conservation Project - supported by the Darwin Initiative) and livestock healthcare (training of mobile healthcare workers) has been developed.

Abhijit Rabha also highlighted the importance of standardizing procedural mechanisms for better monitoring, status reporting, GIS analyses, and interpretation of results. This requires deployment of properly skilled and motivated frontline staff and a strict data quality control at observer and recording levels and support from Assam Forest Department. This could be achieved by effective and formalized training programs for field personnel and trainers (a first workshop like this is being held as part of a collaborative project with Assam Department with funding from the Darwin Initiative). Mr. Rabha also emphasized the importance of effective grassland management and investigating the impact of their change from cattle grazing, annual burning, illegal extraction and natural events like flood. He said, "Realizing effective monitoring and management is key to securing the future of the Assam rhino requires the concerted effort of all involved - from field security and monitoring, data collection and analyses, reporting to decision making."

II. (11.10 AM-1.00 PM)

**D - STATUS OF RHINO AND HORN STOCKPILES
IN PABITORA WILDLIFE SANCTUARY**

Mr. Surojit Dutta

The Pabitora Wildlife Sanctuary (38.81 km²) is located in a flat terrain in the flood plains of river Brahmaputra, a basin-like structure in the midst of Mayang, Kamarpur and Monohar hillocks finely-dotted with water bodies, grassland and tree forest. The area is part of Brahmaputra River floodplain; as such, water remains year-round in different lakes and swamps which makes Pabitora ideal rhino terrain. Pabitora is 60% grassland, 18% wetland, 20% woodland and 2% other kinds of habitat. Pabitora Wildlife Sanctuary (PWLS) has been successful in rhino conservation. Table 4 summarizes the area's rhino census results:

Table 4. Rhino Census in Pabitora Wildlife Sanctuary

Year	Adult	Sub Adult	Calf	Total
1987	36	13	5	54
1993	32	5	11	56
1995	42	17	9	68
1999	43	12	19	74
2004	47	11	21	79
2006	48	12	21	81

PWLS has witnessed a steady increase in its rhino population. One of the major problems that the Sanctuary management faces is poaching, and, as the area of Pabitora is very small, the straying of rhinos from the sanctuary also leads to rhino poaching outside the rhino protected area. Others problems include degradation of habitat, immense biotic pressure, annual floods, overhead high tension power, human- animal conflict, siltation and scarcity of water during dry seasons, invasion of Ipomoea spp into grasslands grazing by livestock from fringe areas to protected areas.

However, major steps such as intensive patrolling inside the protected area and awareness programs have also been organized. Additionally, interaction sessions with Eco-Development Committees are being carried out and intelligence network is being made effective. Fringe area cattle also are vaccinated and the Park's area is being extended to ensure rhino security. Tourism has also increased from the past years.

**E - STATUS OF RHINO AND HORN STOCKPILES
IN ORANG NATIONAL PARK**

Mr. Sukumar Momin

Rhino conservation in Orang National Park began its momentum in 1972, with an official estimate of rhinos in the area. Covering 78.80 km², Orang National Park was declared as wildlife sanctuary in 1985 and in 1999 was upgraded into a National Park. The various habitats found in Orang are swap grasslands, moist deciduous forests, wet alluvial grassland and Khoir Sissoo forest. Orang also is home to many other species including the royal Bengal tiger, Asiatic elephant, hog deer, wild boar, 15 species of reptiles, and other animals. Table 5 details the rhino population trends since 1972:

Table 5. Rhino Population Trends in Orang National Park

Year	Adult			Sub Adult			Calves	Total
	Male	Female	Unsexed	Male	Female	Unsexed		
1972	10	13	3	3	2	-	4	35
1985	23	23	-	7	2	-	10	65
1991	28	41	5	-	1	14	8	97
1999	17	17	1	3	2	-	6	46
2006	28	27	-	-	-	4	9	68

Problems and threats include damage to habitat composition, severe poaching, lack of community participation, insufficient fund flow, weed invasion in grasslands, poor habitat connectivity, and declining grasslands (while woodlands have increased).

Nevertheless, Orang could support 100 to 150 rhinos. If NGOs and local people support conservation, the possibility of increasing the rhino population in the park can be enhanced, particularly if good awareness and education initiatives, coupled with ecotourism, is in place.

**F - STATUS OF RHINOS AND HORN STOCKPILES
IN NEPAL**
Mr. Shiva Raj Bhatta

Shiva Bhatta commenced his presentation by saying that three Terai protected areas (Chitwan National Park, Bardia National Park and Suklaphanta Wildlife Reserve contain rhino. The government's efforts to conserve rhinoceros through the establishment of Chitwan National Park, implementation of a buffer zone program and translocation of rhinos to other protected areas has improved the rhino's prospects in Nepal. The population in Chitwan has increased significantly. The current status and distribution of rhino are shown in Table 6:

Table 6. Rhino populations in Nepal

Name Of PA	Rhino Population									Total	Count/ estimate
	Adult			Sub Adult			Calves				
	Male	Female	Unsex	Male	Female	Unsex	Male	Female	Unsex		
Chitwan NP	113	129	20	9	25	8	11	19	38	372	2005
Bardia NP	9	11		4	3				3	30	2007
Suklaphanta WR	3			2					2	7	2007
Grand Total	125	140	20	15	28	8	11	19	43	409	

In Nepal, the main reason for the rapid reduction in the rhino population are the disappearance of most of alluvial plain grasslands, combined with massive poaching. Major steps taken so far include arresting illegal traders - more than 100 people are in custody with a provision of up to 15 years in jail and a fine of NRs100,000.00, or both.

Mr. Bhatta has stressed that in addition to increasing the efficiency of park staff in rhino conservation, training needs to be provided on a regular basis to enhance staff skills and capabilities. Horn stockpiles are collected and stored in Chitwan National Park.

With the increase in political commitments, the action plan, which is based on regular monitoring of rhino population and their habitats and generating resources for plan implementation, the future of rhino looks promising in Nepal.

III. (2.00 3.00 PM)
G - INDIAN RHINO VISION 2020
Mr. Tariq Aziz

Tariq Aziz said 2000 rhinos survive in about 970 km² of habitat in three Indian Protected Areas (Pabitora, Orang and Kaziranga). Threats faced in Assam include poaching and illegal trade, habitat destruction, conflict with people, and fragmented populations. Improvement in the conservation status of the rhinos in India means improving protection of the existing rhino populations and recreating lost rhino populations via translocations.

Successful translocations need:

- Buy-in from the government
- Technical expertise on rhino translocations
- Sufficient resources

Indian Rhino Vision 2020's first phase has a 3-year duration, with the aim to conduct

- Assessment of security in target protected areas
- Assessment of rhino habitat and rhino population status and potential
- Development of improved security infrastructure and operations in Manas and Orang
- Training of Assam Forest Department staff in translocation of rhinos
- Translocation of 20-30 rhinos into Manas National Park in Feb-March 2007
- Monitoring of translocated rhinos in Manas.

Phase one stresses protection work. Some new roads are now operational, and many more plans are in place. The Southern Boundary Road, as yet unbuilt, is very critical for protection of Manas. Local communities are involved in various activities, and more than 130 young men from villages around Manas have been engaged for its protection. Mr. Aziz mentioned that the village communities actively participated in the Manas Centenary Celebrations (January 2006), where many poachers surrendered their arms.

The commitment of the Government of India has created greater interest and attracted attention. There is marked improvement in patrolling; issues relating to staff welfare and shortage of personnel are yet to be addressed

H RHINO CENSUS METHODOLOGY

Mr. Bhupen N. Talukdar

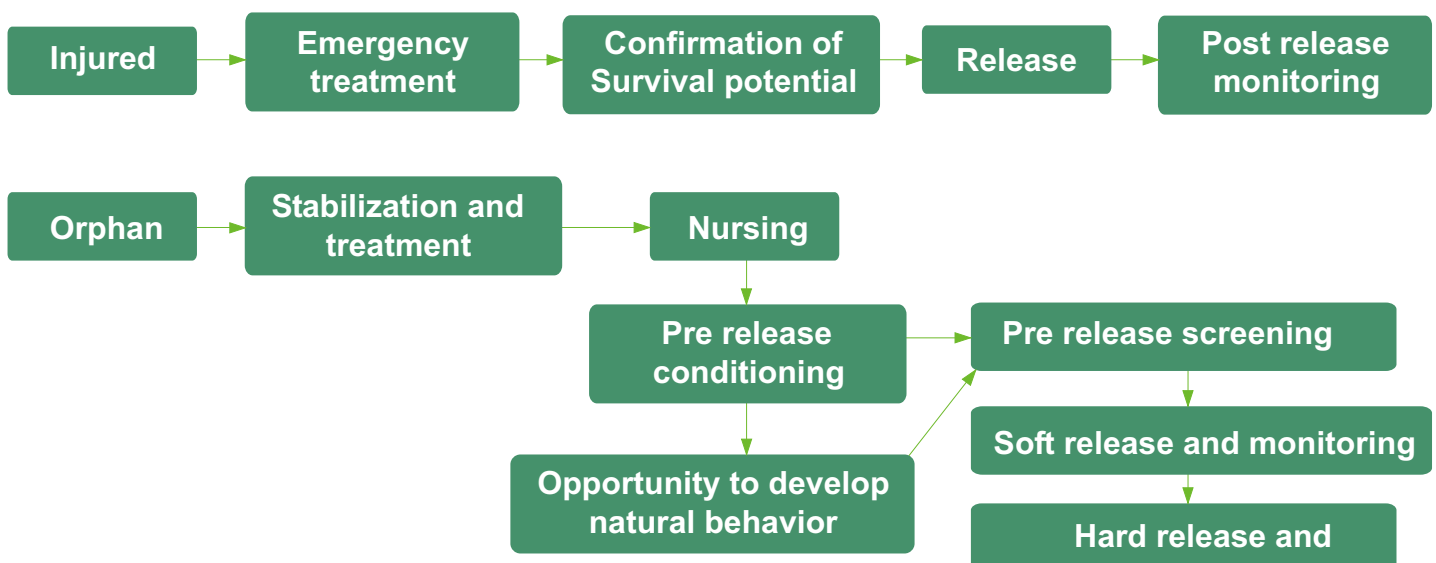
Mr. Bhupen N. Talukdar delivered a presentation on Ecological Change of Rhino Habitat in Orang within 15 years. He mentioned that from 1890 to 1900, Orang was heavily settled, but villagers left the area because of chronic black-water fever. Mr. Talukdar discussed the composition of the vegetation cover in Orang National Park and population estimates of rhino in the park from various censuses carried out by the Assam Forest Department. He pointed out the change in grassland composition in the park and impact of Mimosa a weed that retards the growth of grassland in the park. Mr. Talukdar also stressed the need to check illegal cattle grazing in the park and in that matter massive awareness in the fringe villages is necessary. Periodic monitoring of vegetation in Orang National Park is essential to initiate corrective measures to ensure long-term conservation of rhino and habitat in the park.

I REHABILITATION OF RHINOS IN ASSAM

Dr. Anjan Talukdar and Dr. Bhaskar Choudhury

Dr. A. Talukdar and Dr. Bhaskar Choudhury discussed treatment and temporary care of injured, sick, orphan animals and release of fit individuals back to appropriate habitat (International Wildlife Rehabilitation Council).

Chronology of Rhino rehabilitation:



IV. (3.30 - 5.00 PM)**J - STATUS AND DISTRIBUTION OF TRANSLOCATED RHINOS****Mr. Kanchan Thapa**

Mr. Kanchan Thapa reported that altogether 87 rhinos have been translocated successfully from Chitwan National Park since 1986: 84 have been moved to Bardia National Park and four rhinos were moved to Shuklaphata Wildlife Reserve. The paper presented the preliminary results of the monitoring program for these translocated rhinos. Data were collected from direct observations, signs, and interviews with reserve staff and local communities. Monitoring results showed that the translocated rhino population has increased in Suklaphanta Wildlife Reserve to six. Unfortunately, there was a sharp decline in population of rhinos in Bardia National Park.

There are two distinct sub-populations of translocated rhinos in Bardia National Park: one in Babai River Floodplain where 70 rhinos were released, and the other in Karnali River floodplain where 13 rhino were released. There has been sharp decline in the Babai rhino population as result of conflict situation and lack of protection. The Karnali floodplain rhino population has increased to 35 since 1986. Further translocation is needed in Suklaphanta Wildlife Reserve to safeguard the current population of rhinos. There is strong need for a transboundary effort to conserve rhinos and to ensure their protection in western part of Terai Arc Landscape.

**K CHANGING RHINO HABITATS
IN ASSAM AND GEO SPATIAL ANALYSIS****Mr. Pranjit Sarma and
Dr. Bibhab Talukdar**

Mr. Pranjit Sarma highlighted the current vegetation pattern of rhino bearing areas of Assam. The presentation covered five rhino sites in Assam: Kaziranga National Park, Orang National Park, Manas National Park, Pabitora Wildlife Sanctuary and Laokhowa Wildlife Sanctuary. Mr. Sarma showed satellite imageries of 1980s, 1990s and 2000s for all the five rhino sites in Assam and pointed out the landmass loss in case of Kaziranga due to shift of river Brahmaputra towards the south. He highlighted the human pressure on Pabitora Wildlife Sanctuary and changes in suitable rhino habitat in the sanctuary that has led to rhino straying out of the sanctuary, especially in winter (the dry season). He further mentioned that the rapid increase in human population around Pabitora Sanctuary (from about 9,571 in 1971 to about 23724 in 2001) has further curtailed the scope of expansion of the Pabitora Wildlife Sanctuary. This increase in the human population around Pabitora is responsible for increased cattle populations, which are sent into the prime rhino habitat areas within the sanctuary for grazing. Mr. Sarma showed an area adjacent to Pabitora, Borbeela (with an area of 24.7 km²) that is suitable habitat for rhino. This new area may eventually be included in Pabitora Wildlife Sanctuary to ensure long term conservation of rhino.

L LOCAL COMMUNITIES IN RHINO CONSERVATION**Mr. Basu Dhungana and
Mr. Lava Bista**

Mr. Basu Dhungana and Mr. Krishna Prashad Bhurtel discussed the role of local communities in rhino conservation in Nepal's Chitwan National Park, mentioning the role of the Buffer Zone Management Committee formed in Chitwan National Park. This includes allocation of resources for conservation-related activities. Mr. Dhungana and Burtel highlighted the initiation of electric fencing, observation tower, community library, education and awareness. The Management Committee also initiated livelihood enhancement activities for the fringe communities, including mushroom cultivation, handicraft, weaving, fisheries, etc. The presentation addressed various problems the Chitwan National Park faces, including wildlife poaching, invasive species (e.g., Eupatorium and Michania), poisoning of water bodies and human encroachment.

IV. (9.05 10.25 AM) Day 3

M - STATUS OF RHINO POACHING IN ASSAM AND TRADE ON RHINO HORN

Mr. Mrigen Baura and Dr. Bibhab Talukdar

The Assam Forest Department has been making major contribution towards conservation and protection of rhinos in Assam. Mr. Mrigen Baura and Dr. Bibhab Talukdar emphasized that though rhino bearing areas like Kaziranga, Orang, and Pabitora witness continuous growth in the rhino population the other areas like Laokhwa Wildlife Sanctuary and Manas National Park face the threat of poachers and wild life traders. Orang National Park has witnessed severe poaching threats during 1994-2000. However, the officials and NGOs taking this matter seriously have sponsored equipments to strengthen anti-poaching patrols and this has certainly played a significant role in decreasing the poaching of rhinos to a great extent. Similarly, in Pabitora the maximum number of rhinos were poached in the sanctuary in 1988.

The poachers in Pabitora often use electrocution. Kaziranga National Park, although an outstanding example of conservation of Asiatic rhinos, has also witnessed threat of poaching. From 1987-2005, a total 358 rhinos were poached while 1137 died due to natural causes. Laokhwa Wildlife Sanctuary had 70 rhinos and Manas had about 80. But during the period of ethnic unrest, most of the rhinos were poached; currently there are no rhinos available. But considering the habitat types, rhinos could still be placed there, according to Dr. Talukdar. Considering increase in poaching activities, legal orientation strategies to mitigate wildlife crime, strengthening antipoaching capabilities by arranging adequate staff and funds providing trainings are required to control poaching in Assam.

N - RHINO POACHING TRADE AND IMPLICATION ON NATIONAL CONSERVATION STRATEGY OF NEPAL

Mr. Prasanna Yonzon

The number of rhinos in Nepal is decreasing due to increased poaching in 2005. Of Nepal's 372 rhinos, 49 died in the past year.

Route of rhino horn transport

Rhino horn smugglers of rhino horn take advantage of international border and lack of proper coordination between the enforcement agencies of the two countries, and use the townships in the border areas for carrying out smuggling activities.

Saktikhor, Siddhi, Korak, Dahakhane, passage to Dhading and Kalanki, Balkhu, Balaju and Boudha are the main areas in Kathmandu where rhino horn trading are the highest. The poachers and wildlife traders are mainly people from mountain communities, Indian Bawarras and Behalayas and Tibetians, who have linkages to Tibet. Poaching of rhinos takes place primarily because of the tremendous demand for its horn in the international market. Due to the increase in poaching of rhino horn, there is a need to institutionalize Anti Poaching Units, severe penalties, seizures and arrests.

It is also necessary to undertake awareness campaigns to help develop some positive attitudes among local community surveillance in protecting rhinos, including awards to communities involved in protecting this endangered species. Livelihood support to poachers' families could also be provided. Cooperation and support from local people and different enforcement agencies play an important role in conserving rhinos. It is also important to amend policies to include grassroots efforts in rhino conservation. Most importantly, urban traders and poachers need to be monitored on a regular basis.

O - CONSERVATION RHINO IN THE EYE OF JOURNALIST**Mr. Prabhakar Ghimire and
Mr. Subodh Gautam**

Due to the Maoist insurgency, conservation in Nepal suffered heavy loss. Maximum numbers of rhinos were killed by the poachers manipulating the political situation in Nepal during these insurgencies. Now that the political situation is stable in Nepal, poaching still remains a threat, explained Mr. Prabhakar Ghimire. In 5 months, about 12 rhinos were killed by the poachers and three died from natural causes.

Mr. Prabhakar also informed that the poachers and traders often receive the political protection. Some wardens are also seen misusing their powers, and lack of proper investigation, commitment from the Government bodies and negligence of conservation staff are some of the reasons why the rhinos end up in the hands of wildlife traders and poachers. However, if provisions are made for punishing those officials misusing their powers, including severe penalties and punishments for those involved in trading rhino horns, with proper investigation, the poaching rate could certainly be less than at present. Mr. Prabhakar further added that the cooperation of local people living in the buffer zone and adjacent to protected areas will also be the key to achieving success in combating poaching.

One of the major roles played by media in the field of conservation is creating awareness to the people by giving conservation related news and programs that discourage poaching. Two senior conservation officer were suspended as a result of strong media reports. Despite that, there are various problems faced by the media, including obtaining proper information because the knowledgeable sources prefer to stay away from the journalists, difficulty of access to the concerned officials, lack of specialized knowledge among journalists, lack of coordination between local reporters and people, and that conservation issues are not the main concern among the people and the local level media is not influential enough. If we prevail over these limitations, then the poaching threats in Chitwan will indeed drop off.

P RHINO ACTION PLAN IN NEPAL**Mr. Puran B. Shrestha**

The main goal for the rhino action plan is to preserve the Rhinoceros unicornis and strengthen the recovery of rhino population in Nepal. It aims to build and maintain the population of rhino in Nepal through translocation, to develop the local guardianship, to continue scientific studies and monitoring, to develop human resources in wildlife management and most importantly to stop the illegal trade of rhino horn and products.

The main objectives are:

- Study biology and habitat and establish a database with a monitoring system by conducting essential research on rhino.
- Habitat expansion through rehabilitation, restoration of identified priority rhino habitats by maintaining forest corridor, and developing tourism plans for protected areas.
- Create viable population by translocating more rhinos and monitoring translocated rhinos.
- Improve rhino human relation through buffer zone development and conservation by implementing awareness programs, community development programs, trainings, and a community relief fund.
- Strengthen anti-poaching capabilities by establishing and equipping anti-poaching units, and supporting national legislation as well as CITIES..
- Build up institutional capacities by providing specific trainings, and strengthening infrastructure, including building orphanage centers in each protected area. Improve storage for rhino horn stock piles.
- Strengthen national transboundary, regional and international collaboration through organized periodic meetings which aim to develop an information-sharing mechanism.
- Continuous transfer of rhino for ex situ conservation from wild populations by preparing rhino transfer criteria, and a translocation schedule.

Five years Action Plan Program for the Asian one-horned rhino for Nepal.

The total Budget to implement a 5-year action plan is estimated at US\$2.90 million. Of this, US\$1.47 million has been set aside for Chitwan National Park, US\$833,000 for Bardia National Park and US\$507,000 for Suklaphata Wildlife Reserve.. The major portion of the total budget is allocated for anti-poaching operations.

1) Chitwan National Park

Activities	Budget in US \$
Population estimate/ Research and Monitoring/ Database	255,000
Habitat Management	75,000
Anti Poaching	130,000
Conservation Education	524,000
Rhino orphanage/ Medicine/ Stockpile storage	40,000
Hattisar Management	115,000
Tourism code of conduct	100,000
Relief Funds	25,000
Trainings/workshop/seminars	100,000
Other unseen costs	100,000
Sub Total	1504,000

2) Bardia National Park

Activities	Budget in US \$
Population estimate/ Research and Monitoring/ Database	195,000
Habitat Management	105,000
Anti Poaching	248,000
Conservation Education	25,000
Rhino orphanage/ Medicine/ Stockpile storage	80,000
Hattisar Management	25,000
Tourism code of conduct	25,000
Relief Funds	50,000
Trainings/workshop/seminars	30,000
Other unseen costs	50,000
Sub Total	833,000

3) Suklaphata Wildlife Reserve

Activities	Budget in US \$
Population estimate/ Research and Monitoring/ Database	100,000
Habitat Management	75,000
Anti Poaching	232,000
Conservation Education	15,000
Rhino orphanage/ Medicine/ Stockpile storage	35,000
Hattisar Management	25,000
Tourism code of conduct	25,000
Sub Total	507,000

WORKING GROUP AND CONCLUSIONS

A. WESTERN TERAI

Population of 200 rhinos maintained as a metapopulation in four protected areas in the Western Terai Landscape.

Existing situation

- Four patches (protected areas) and matrix (forest outside of protected areas, agricultural land and settlement)
- Patches are not big enough to maintain viable population of large mammals
- Human disturbance is a major challenge for conservation
- If not managed, the population may become extinct because of its small number (lack of dispersal and Inbreeding)

Current population

Population	Rhinoceros (Reintroduced)
Bardia Population	30-40
Sukla population	6
Dudhwa population	21
Katarnia Population	4

- Individual protected areas alone can not hold viable population
- Ever-increasing human population and their needs make conservation work more difficult
- Managed as a metapopulation

Potentiality

- Remnant forest outside the protected areas of the Western Terai still connects these protected areas.
- Movement of rhinoceros from one park to another and occasional records of elephant and tiger in these forests indicates potential for managing these mammals in a metapopulation approach.
- Genetic Variability of Western Terai large mammals is high* .
- High genetic variability in rhinoceros in the Chitwan population (Dinerstein 1991).

**No DNA study results yet to substantiate genetic variability.*

Priority Activities

- Security: Ten guard post by 2008 in Bardia and Suklaphata, US\$ 1,00,000 (equipment and other logistics)
- Strengthen communication network: US\$ 25,000
- Strengthen population through supplementary translocation: 20 rhinos from Chitwan National Park in 2009: US\$10,000 US
- Ten rhinos to be moved to the Western Terai in Nepal from Kaziranga National Park by 2010/2011: US\$ 250,000
- Establish individual identification-based monitoring of rhinos for active management to keep population breeding optimally . US\$50,000 for first year and US\$10,000 every subsequent year

Supplementary activities:

- Capacity building and training (US \$50,000 per year)
- Expedite Transboundary Cooperation (US \$5,000 per year)
- Strengthen Awareness and Education Program (US \$ 40,000 per year)
- Support to Park Management: Hattisar Management (US \$25,000 per year)
- Habitat Management: Grassland management/weed control (200 ha: US\$ 10,000 per year)

Assumption: Provided Government of Nepal approves the proposal.

B. NORTH EAST INDIA

KAZIRANGA

Known	Need to know	Being Done	Need to Do	When	Who	Costs
Population						
Available	Food habit	Census every 6 years	Census every 3 years on the same day by forenoon	2009 and onwards	Government	
Target Population						
2500 by yr 2020	Monitoring	Management	Extension and Management	Immediate and Recurring	Government	
Poaching						
0.3% annually during 2000-2006	Eliciting information, Traffic and trade	Anti-poaching	Legal cell, Intelligence network, and protection	Immediate and Recurring	Govt. Enforcement Agencies	
Protection						
New recruitment and increase of staff strength, free ration and more field allowance, Creation of new range in North Bank	Intelligence Network and Poacher's profile	Anti-poaching duty	Increase in staff strength and logistic support	Immediate and Recurring	Government	

Known	Need to know	Being Done	Need to Do	When	Who	Costs
Equipment						
Arms, Wireless, Vehicles, country boats, uniforms, boat line clearance	----	----	Requires more and maintenance	Immediate and Recurring	Govt/Donors/ NGOs	
Habitat Management						
Wetland: De-siltation, Anicut (Bundh), removal of water hyacinth, Grassland: Eradication of weeds (Mimosa, Epitorium, Michania), Reclamation of grassland	----	De-weeding	Dynamics of river plain ecosystem	Immediate and Recurring	Government	
Community Work						
Eco-development. Ecotourism	Impact of eco-development	Eco Development	Development of EDC	Immediate and Recurring	Government	
Rescued Population						
Stray of animal and casualties/injuries during calamities	Monitoring and Evaluation	Rescue and Driving back		Recurring	Government	
National Highway						
Proposal of Widening of NH	Monitoring of impact on animal migration	Impact of animal migration	Status Quo/ diversion/ flyover	----	Government	
Corridor						
Addition 2, 3, 5	----	----	Finalization	Immediate	Government	
Miscellaneous						
Mining	Impact	Monitoring	Regulation of mining	Immediate	Government	

PABITORA

Known	Need to know	Being Done	Need to Do	When	Who	Costs
Population						
81 as on 2006	Food habit, stray activity,	Census every 6 years	Census every 3 years on the same day by forenoon	2009 and onwards	Government	
Target Population						
120 by 2020	Monitoring	Management	Inclusion of Extended area and addition of new area like Borbeela	Immediate	Government	
Poaching						
2.5% annually during 2000-2006	Eliciting information, Traffic and trade	Anti-poaching	Legal cell, Intelligence network, and protection	Immediate and Recurring	Govt. Enforcement Agencies	
Protection						
New recruitment and increase of strength, free ration and more field Allowance, new camps	Intelligence Network and Poacher's profile	Anti-poaching duty	Increase in staff strength and logistic support	Immediate and Recurring	Government	
Equipment						
Arms, Wireless, Vehicles, country boats, uniforms, boat line clearance	----	----	Requires more and maintenance	Immediate and Recurring	Govt/Donors/ NGOs	
Habitat Management						
Wetland: De-siltation, Anicut (Bundh), removal of water hyacinth, Grassland: Eradication of weeds (Mimosa, Epitorium, Michania), Reclamation of grassland	----	De-weeding	Monitoring	Immediate and Recurring	Government	
Community Work						
Eco-development. Ecotourism	Impact of eco-development	Eco Development	Development of EDC	Immediate and Recurring	Government	
Rescued Population						
Stray of animal and casualties/injuries during calamities	Monitoring and Evaluation	Rescue and Driving back	----	Recurring	Government	
Miscellaneous						
Opening of industry	Impact	Monitoring	Regulation	Immediate	Government	
Livestock Grazing	Impact	Physical Chasing and impounding	Conversion of scrub cattle	Immediate	Govt/NGOs	

ORANG NATIONAL PARK

Known	Need to know	Being Done	Need to Do	When	Who	Costs
Population						
68 as on 2006	Food habit, stray activity,	Census every 6 years	Census every 3 years on the same day by forenoon	2009 and onwards	Government	
Target Population						
120 by yr 2020	Monitoring	Management	Extension and Management	Immediate and Recurring	Government	
Poaching						
1.5% annually during 2000-2006	Eliciting information, Traffic and trade	Anti-poaching	Legal cell, Intelligence network, and protection	Immediate and Recurring	Govt. Enforcement Agencies	
Protection						
New recruitment and increase of strength, free ration and more field Allowance, new camps	Intelligence Network and Poacher's profile	Anti-poaching duty	Increase in staff strength and logistic support	Immediate and Recurring	Government	
Equipment						
Arms, Wireless, Vehicles, country boats, uniforms, boat line clearance	----	----	Requires more and maintenance	Immediate and Recurring	Govt/Donors/ NGOs	
Habitat Management						
Wetland: De-siltation, Anicut (Bundh), removal of water hyacinth, Grassland: Eradication of weeds (Mimosa, Epitorium, Michania), Reclamation of grassland	----	De-weeding	Dynamics of river plain ecosystem	Immediate and Recurring	Government	
Community Work						
Eco-development. Ecotourism	Impact of eco-development	Eco Development	Development of EDC	Immediate and Recurring	Government	
Rescued Population						
Stray of animal and casualties/injuries during calamities	Monitoring and Evaluation	Rescue and Driving back	----	Recurring	Government	
Miscellaneous						
Livestock Grazing	Impact	Physical Chasing and impounding	Conversion of scrub cattle	Immediate	Govt/NGOs	

MANAS NATIONAL PARK

Known	Need to know	Being Done	Need to Do	When	Who	Costs
Population						
3	Status	Census every 6 years	Census every 3 years on the same day by forenoon	2009 and onwards	Government	
Target Population						
50 by yr 2020	Feasibility	Management	Translocation and re-introduction	Immediate and Recurring	Government	
Poaching						
—	Eliciting information, Traffic and trade	Anti-poaching	Legal cell, Intelligence network, and protection	Immediate and Recurring	Govt. Enforcement Agencies	
Protection						
New recruitment and increase of strength, free ration and more field Allowance, new camps	Intelligence Network and Poacher's profile	Anti-poaching duty	Increase in staff strength and logistic support	Immediate and Recurring	Government	
Equipment						
Arms, Wireless, Vehicles, country boats, uniforms, boat line clearance	----	----	Requires more and maintenance	Immediate and Recurring	Govt/Donors/ NGOs	
Habitat Management						
Wetland: De-siltation, Anicut (Bundh), removal of water hyacinth, Grassland: Eradication of weeds (Mimosa, Epitorium, Michania), Reclamation of grassland	----	De-weeding	----	Immediate and Recurring	Government	
Community Work						
Eco-development. Ecotourism	Impact of eco-development	Eco Development	Development of EDC	Immediate and Recurring	Government	
Rescued Population						
Stray of animal and casualties/injuries during calamities	Monitoring and Evaluation	Rescue and Driving back	Setting up of rescue and rehabilitation centre	Immediate and Recurring	Government	
Miscellaneous						
Livestock Grazing	Impact	Physical Chasing and impounding	Conversion of scrub cattle	Immediate	Govt/NGOs	

LAOKHOWA

Known	Need to know	Being Done	Need to Do	When	Who	Costs
Population						
Nil	Feasibility	Census every 6 years	Census every 3 years on the same day by forenoon	2009 and onwards	Government	
Target Population						
50 by yr 2020	Habitat status	Management	Re-introduction and Intensive management	Immediate and Recurring	Government	
Poaching						
—	Eliciting information, Traffic and trade	Anti-poaching	Legal cell, Intelligence network, and protection	Immediate and Recurring	Govt. Enforcement Agencies	
Protection						
New recruitment and increase of strength, free ration and more field Allowance, new camps	Intelligence Network and Poacher's profile	Anti-poaching duty	Increase in staff strength and logistic support	Immediate and Recurring	Government	
Equipment						
Arms, Wireless, Vehicles, country boats, uniforms, boat line clearance	----	----	Requires more and maintenance	Immediate and Recurring	Govt/Donors/ NGOs	
Habitat Management						
Wetland: De-siltation, Anicut (Bundh), removal of water hyacinth, Grassland: Eradication of weeds (Mimosa, Epitorium, Michania), Reclamation of grassland	----	De-weeding	----	Immediate and Recurring	Government	
Community Work						
Eco-development. Ecotourism	Impact of eco-development	Eco Development	Development of EDC and intensive eco-tourism	Immediate and Recurring	Government	
Rescued Population						
Stray of animal and casualties/injuries during calamities	Monitoring and Evaluation	Rescue and Driving back	Setting up of rescue and rehabilitation centre	Recurring	Government	
Miscellaneous						
Livestock Grazing	Impact	Physical Chasing and impounding	Conversion of scrub cattle	Immediate	Govt/NGOs	

C. CENTRAL TERAI

Vision for Central Terai

A populations of 800 Indian One horned Rhinos by 2017.

Actions in Priority:

1. To protect existing populations with strong law enforcement and anti-poaching operations.
2. To improve the quality of existing habitat
3. To extend and maintain habitat, particularly in Gorumara and Chitwan
4. To study population and habitat dynamics
5. To opt for translocation among the three populations to improve gene pool based on scientific studies.

Cross-cutting theme:

1. To create extensive conservation awareness program
2. To conduct trans-boundary exchange, meetings and workshop from community at sites to managers and national levels.
3. To engage local communities and their institutions actively in park management

The basis of Vision and priority activities:

Protected areas	Jaldapara	Gorumara	Chitwan	Parsa
Area km ²	216	80	932 + 350	499+30
Existing Habitat	100	8	70	10
Rhino	108	27	372	0 but movement recorded
Habitat extension	50	40	70	20
Human population	57,000	30,000	225,000	40,000
Rhino Population growth	150	50	590	10
Total	200		600	
Growth about 5.0%	Increase in growth due to habitat improvement, extension & gene flow			

D. RED LIST STATUS OF GREATER ONE-HORNED ASIAN RHINO

A small group met to discuss the IUCN Red List status of the Greater one-horned rhino. Based on the below information, it was agreed that the species should be considered “Vulnerable” based on criteria B1+B2b(ii). A Red List authority will be developed for review of this initial recommendation by the Asian Rhino Specialist Group Chairman.

Name of PA	Size of PA (km ²)	Buffer zone in km ²	# Rhino	Area of occupancy (km ²)
Nepal				
Chitwan	932	750	372	70
Sukulaphanta	355		6	20
Dudwa-Bardia Complex (India/Nepal)				
Dudwa	800		21	10
Karteniaghat	450		2	10
Bardia	968	350	35	50
India				
Jaldapara	216		108	100
Gorumara	80		27	8
Pabitora	39		81	16
Orang	79		68	79
Manas	500		3	1
Kaziranga	860		1855	350
Pakistan				
Lal Sohanra NP	?		2	
Total	5279	1100	2577	714

Participants:

Forty-seven people, representing Government of Nepal Ministries and Departments, Indian Government and officials, NGOs/ INGOs, donors, and media participated in the workshop. The complete list of participants and their organizations are presented in Annex 1.

ANNEX 1

LIST OF PARTICIPANTS REGIONAL WORKSHOP ASIAN RHINO SPECIALIST GROUP (ASRSG) MARCH 5-7, 2007 KAZIRANGA NATIONAL PARK, ASSAM, INDIA

SN	Participants	Organization	Contact	Ph. No.
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21	Mr. Karna Shakya	Advisor, WWF Nepal		
22	Mr. Krishna.P. Bhurtel	Chitwan National Park, Nepal		98550 15407
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24	Mr. Loknath Baruwah	Kaziranga National Park , Assam		94352 35132
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Photographs



The opening ceremony



Discussions held during the workshop among conservationists, park managers and forestry officers



Participants of the workshop