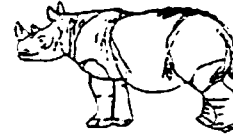
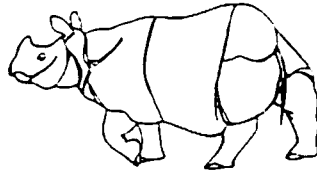
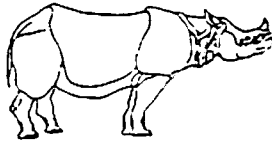


# ***IUCN SSC ASIAN RHINO SPECIALIST GROUP***



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## **REPORT OF THE IUCN/SSC ASIAN RHINO SPECIALIST GROUP**

**TO THE**

**UNEP CONFERENCE AMONG**

**RHINOCEROS**

**RANGE STATES, CONSUMER STATES, AND DONORS**

**28 June 1993  
Nairobi, Kenya**

**Mohd Khan bin Momin Khan & Thomas J. Foose, Ph.D.**



**IUCN**  
The World Conservation Union

**REPORT OF THE IUCN/SSC ASIAN RHINO SPECIALIST GROUP  
TO THE UNEP CONFERENCE AMONG  
RHINOCEROS  
RANGE STATES, CONSUMER STATES, AND DONORS**

The purpose of this report is to initiate a strategic analysis of the current status, biological objectives, and projected costs for rhino conservation in Asia over the next 3-5 years.. As such, the report is an extension of the attempts by the IUCN SSC Asian Rhino Specialist Group to facilitate development of rhino conservation strategies and action plans at global, regional, and national levels.

Asian rhinos are among the most threatened species in the world. Worldwide, only 12,000 rhino of all 5 species combined survive on the planet. Half of this number are African southern white rhino. Of the 3 species of Asian rhino, only 3,000 survive and two-thirds of these are one species, *Rhinoceros unicornis* (the Indian/Nepali or Asian Greater One-Horned Rhino). The other two species, *Dicerorhinus sumatrensis* (the Sumatran or Asian Two-Horned Rhino) and *Rhinoceros sondaicus* (the Javan or Asian Lesser One-Horned Rhino) are critically threatened: fewer than 1,000 Sumatran rhino survive; fewer than 100 Javan. Decline over the last 10 years has perhaps been more spectacular for the African black rhino, but fewer of any of the Asian rhino species survive than of either of the African species.

This report concentrates on the remaining major range states for rhino in Asia: India, Nepal, Indonesia, and Malaysia. Information for this overview has been derived largely from the Rhino Conservation Strategies and Action Plans prepared by India, Indonesia, and Malaysia and from the report submitted by Nepal to the December 1992 Preparatory UNEP Rhino Meeting. Unfortunately, it has not been possible to obtain full information yet from Nepal.

However, this report is intended as an initial draft of a process that will hopefully enable more strategic planning and support for Asian rhino conservation. It represents a skeleton on which flesh can be added, especially during the course of the UNEP Rhino Conference.

Many persons have contributed to the information contained in this report, including S.C. Dey, S. Deb Roy, Jasmi bin Abdul, Mohd-Tajuddin Abdullah, Zainal Zahari Zainuddin, Patrick Mahedi Andau, Laurentius Ambu, John Sale, Widodo Ramono, Haerudin Sajudin, Marcellus Adi, Sukianto Lusli, Nico Van Strien, Philip Wells.

**Mohd Khan bin Momim Khan  
Thomas J. Foose, Ph.D.  
20 June 1993**

## IUCN/SSC ASIAN RHINO ACTION PLAN SUMMARY

1. Preserve and manage the great one-horned, Javan and Sumatran rhinos as species and as components of their ecosystems.
2. Therefore, maintain viable populations *in situ* of all Evolutionary Significant Units (ESUs) of the three species against the pressure of habitat destruction and poacher activity.
3. To achieve this goal, develop populations of 2,000-3,000 individuals of each species. Ensure that for each species their populations are distributed across at least five separate sanctuaries, each of which would be capable of accommodating a minimum of 100 rhinos, preferably more. It is highly desirable to have two or more sanctuaries that can accommodate at least 400-500 rhinos each, though this might no longer be feasible for two of the species.
4. For Javan and Sumatran rhino in particular, Goal 3 will entail substantially expanding the existing population and establishing additional sanctuaries. For all three species, a total population larger than the minimum (i.e. 2,000), and additional sanctuaries capable of accommodating reasonably viable populations (> 100), are highly desirable.
5. "Doomed" rhino (i.e. individuals which are outside populations of reasonable viability and which cannot be protected with available or acceptable levels of resources) should be used for captive propagation, "gene pools", or be translocated to other natural sanctuaries where they may be part of viable and protectable populations.
6. Develop captive populations of at least 150 rhinos for each of the three species to reinforce the populations in the wild.
7. Encourage and assist efforts to reduce further the trade in rhino horn. Specifically:
  - There needs to be more enforcement of laws against internal trade in rhino horn and products, particularly in Singapore, Thailand, China, Hong Kong, and Taiwan. Use of substitutes for rhino horn needs to be promoted.
  - Efforts to prevent the illegal international commerce in rhino horn. Export of horn from India and Sumatra needs particular attention;
  - The internal trade of horn in Laos needs to be prohibited.
8. Implement public awareness and education campaigns in the vicinity of *in situ* rhino populations, to draw the attention of local communities to the importance and rarity of the rhinos, and thereby to mobilise public opinion in support of their conservation.
9. Continue wildlife management training programmes with a particular emphasis on developing an indigenous capacity to monitor and manage wild rhino populations, to capture, translocate, and reintroduce rhinos, and to maintain and breed them in captivity.
10. Continue protected area management training programmes, with an emphasis on survey techniques, anti-poaching measures, and village extension work. Devise methods whereby villagers can derive economic benefits from the protected areas.
11. As the situation permits, investigate the status of the Javan rhino in Indochina, and the Sumatran rhino in northern Burma, with a view to assessing what, if any, conservation activities should be undertaken.

**OVERVIEW OF COMPONENTS & COSTS\* FOR CONSERVATION STRATEGIES & ACTION PLANS  
FOR ASIAN RHINOS IN MAJOR RANGE STATES**

ACTION COMPONENT	INDONESIA		MALAYSIA		INDIA		NEPAL **		TOTAL	
	Capital	Operation	Captl	Oprtn	Captl	Oprtn	Captl	Oprtn	Captl	Oprtn
<i>In Situ</i> Protctn./Mgmt.										
Rhino Units		3,132		1,082		3,000		1,000		13,000
Facilities	216		730		1,166					
Equipment	590		415		233					
Staff/Institution	98				267					
Surveys/Monitoring	348	352	260	372	167					275
Community Extension	184	366			1,600					
Habitat Improvement					1,500					
Sanctuaries			395	15	133	100				700
<i>Ex Situ</i> Programs										
Translocation	297	50	300	446	125	100				990
Captive Breeding	1,210	205	534	333	58	60				837
Genome Banks	10		10		40					90
Strategy: PHVAs/GIS	20		70		40				85	
Techncl/Fiscal Cordntn.										
Range State	472		50	153	43					160
Regional/Global										
Trade Actions		30		30	50					
<b>TOTAL COST</b>	<b>3,445</b>	<b>4,135</b>	<b>4,464</b>	<b>2,431</b>	<b>5,422</b>	<b>3,260</b>	<b>255</b>	<b>1,000</b>	<b>13,586</b>	<b>10,826</b>
<b>RANGE STATE SUPPORT</b>			1,725	1,294		3,260				
<b>TOTAL EXTERNAL FUNDS</b>	<b>3,445</b>	<b>4,135</b>	<b>2,739</b>	<b>1,136</b>	<b>5,422</b>		<b>255</b>		<b>11,861</b>	<b>5,272</b>
GEF Grant	900		900							200
Cofinances (Via UNEP)										
Cofinances (Other)										
<b>TOTAL RESOURCES</b>										

\* Cost in thousands of US \$; recurrent costs represent total for the next 3 years; per annum recurrent cost is 1/3 of amount indicated.

\*\* Incomplete information available.

T.J. Foose & Mohd Khan  
25 June 1993

**ASIAN RHINO CONSERVATION**

**MAJOR RANGE STATES**

***TOTAL COSTS OVER NEXT 3 YEARS***

	<u>CAPITAL</u>	<u>OPERATIONS</u>	<u>TOTAL</u>
<b>INDIA</b>	5,422,000	3,260,000	8,682,000
<b>NEPAL *</b>	255,000+	1,000,000	1,255,000
<b>INDONESIA</b>	3,445,000	4,104,800	7,549,300
<b>MALAYSIA</b>	4,464,000	2,431,000	6,905,000
	_____	_____	_____
<b>TOTAL</b>	<b>13,586,000</b>	<b>10,826,000</b>	<b>24,422,000</b>

\* Information incomplete

# ASIAN RHINO CONSERVATION

## MAJOR RANGE STATES

### *EXTERNAL FUNDS NEEDED OVER NEXT 3 YEARS*

	<u>CAPITAL</u>	<u>OPERATIONS</u>	<u>TOTAL</u>
INDIA	5,422,000	-	5,422,000
NEPAL *	255,000	-	255,000
INDONESIA	3,445,000	4,135,000	7,580,000
MALAYSIA	2,739,000	1,136,000	3,875,000
	_____	_____	_____
<i>TOTAL</i>	<i>11,861,000</i>	<i>5,271,000</i>	<i>17,132,000</i>

\* Information incomplete

## OVERVIEW OF CURRENT AND TARGET POPULATIONS AND PROTECTED AREAS FOR ASIAN RHINOS

COUNTRY	<i>Rhinoceros unicornis</i> Indian/Nepali Rhino				<i>Rhinoceros sondaicus</i> Javan Rhino				<i>Dicerorhinus sumatrensis</i> Sumatran Rhino			
	Crnt Pop	Trgt Pop	Crnt Nmbr & Km <sup>2</sup> Areas	Trgt Nmbr & Km <sup>2</sup> Areas	Crnt Pop	Trgt Pop	Crnt Nmbr & Km <sup>2</sup> Areas	Trgt Nmbr & Km <sup>2</sup> Areas	Crnt Pop	Trgt Pop	Crnt Nmbr & Km <sup>2</sup> Areas	Trgt Nmbr & Km <sup>2</sup> Areas
Indonesia					~ 50	2,000	1/300	10/5,000	~ 600	2,000	3/21,000	5/30,000
Malaysia												
Peninsula					0	100	0	2/500	~ 100	400	4/8,000	4/10,000
Sabah									~ 60	200	2/2,000	4/4,000
Sarawak									< 25	100	1/600	1/1,000
Vietnam					< 50							
Thailand										200		2/2,000
Myanmar										200		2/2,000
Laos										200		2/2,000
India	~ 1,600	2,000+	8/2,000	10/2,500								
Nepal	~ 400	500+	2/1,000	2+/1,000								
Pakistan												
ASIA TOTAL	~ 2,000	2,500+	10/3,000	12/3,500	< 100	2,100			~ 800	3,300	10/37,000	20/50,000

# ASIAN RHINO CONSERVATION

## MAJOR RANGE STATES

### *RHINO POPULATIONS*

	<u>Rhinoceros unicornis</u>	<u>Rhinoceros sondaicus</u>	<u>Dicerorhinus sumatrensis</u>	<u>TOTAL</u>
INDIA	~ 1,600			~ 1,600
NEPAL *	~ 400			~ 400
INDONESIA		50	420-785	470-835
MALAYSIA			135-218	135-218
<i>TOTAL</i>	~ 2,000	50	555-1003	2,555-3,003



# ASIAN RHINO CONSERVATION

## MAJOR RANGE STATES

### TARGET RHINO POPULATIONS

	<u>Rhinoceros</u> <u>unicornis</u>	<u>Rhinoceros</u> <u>sondaicus</u>	<u>Dicerorhinos</u> <u>sumatrensis</u>	<u>TOTAL</u>
INDIA	2,000+			2,000+
NEPAL *	500+			500+
INDONESIA		2,000	2,000	4,000
MALAYSIA		100	700	800
<b>TOTAL</b>	<b>2,500+</b>	<b>2,100</b>	<b>2,700</b>	<b>7,300</b>

**PRIORITY POPULATIONS AND PROTECTED AREAS  
ASIAN RHINO**

<u>Species</u>	<u>Country</u>	<u>Protected Areas</u>
<i>Rhinoceros unicornis</i> Indian/Nepali Rhino	India	Kaziranga Manas Orang Pobitora Jaldapara Dudhwa
	Nepal	Chitawan Bardia
<i>Rhinoceros sondaicus</i> Javan Rhino	Indonesia	Ujung Kulon Way Kambas
	Vietnam	Nam Bei Cat Tien
<i>Dicerorhinus sumatrensis</i> Sumatran Rhino	Indonesia	Kerinci Seblat Gunung Leuser Barisan Selatan
	Malaysia	(Peninsula) Taman Negara Endau Rompin Selama Belum
		(Sabah) Tabin Danum
		(Sarawak) Limbang
	Myanmar	Tamanthi

# Asian Rhino Specialist Group

## Grupo Especialista en Rinocerontes Asiáticos

## Groupe de spécialistes du rhinocéros asiatique

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*ADDENDUM*

**REPORT OF  
ASIAN RHINO RANGE STATE  
WORKING GROUP  
AT THE UNEP RHINOCEROS CONFERENCE**

## DRAFT RECOMMENDATION FROM THE ASIA RANGE STATES

1. Asia has the highest diversities of rhino species (three species in two genera, and five sub species), but the lowest number of individuals. Asia is also the home of the two most endangered species of rhinos. The Asian Range States have noted that these points have not been realized fully and recognized by this conference.
2. The world issue on conservation of Asian rhinos cannot be separated from the issue of conservation of tropical rain forest and its biodiversity. In the Range States the rhino is used as a flagship species to promote the conservation of the world's richest ecosystems.
3. Trade of rhino horn has been banned in all range states for a considerable period, but illegal trade is continuing. The Range States have taken measures to control the illegal trade and have urged the consumer states to ban the use of rhino products. Asian rhinos are living nearest to the consumer centres, and Asia rhino horn are much higher valued and consequently fetch much higher prices than African horn. Dehorning is not possible in most populations, and many rhino populations cannot be commercially utilized for tourism. Lifting of the ban of rhino horn trade, will give a form of legitimacy to all trade and will encourage poachers and traders and will harm the Asian rhinos.
4. It is recommended that UNEP, through the Facility, should produce a directory of potential donors for rhino and elephant conservation, including details on procedures and criteria.
5. It is recommended that funds for the executive office of the Asian Rhino Specialist Group is included in the budget for the 'Facility' proposed to be established.
6. UNEP, through the Facility, should not only concentrate on involving Governments and NGO's in rhino conservation, but should actively seek financial support from corporations that have an 'interest' in rhinos are operating in range states.

## PRIORITIZATION OF ASIAN RANGE STATES RHINO CONSERVATION PROJECTS

Prioritization was done using criteria of:

- geographic distribution
- range country priorities
- current population size
- potential carrying capacity of the area
- rhino taxon involved
- size of budget
- initiating character of project

Initially each project was scored for the criteria above and the sum of the scores was used as a crude measure of priority. Subsequently the list was reviewed by the range state meeting and modified where the meeting felt that the initial scoring was not truly representing the importance of the project.

Projects were classed in three categories:

A1 - Projects of immediate priority. Such projects are vital for the immediate survival for the species or population and/or are necessary for the initiating of further conservation efforts. (13 projects)

A2 - Projects of high priority, but not immediately needed for the survival of the species or population. (12 projects)

A3 - Priority projects, that could be temporized or phased if funding is not immediately available. (14 projects)

## ASIAN RHINO CONSERVATION PRIORITIES

Country		Project Title	Costs
<b>A1 - Projects with immediate priority</b>			
India		Habitat improvement Kaziranga	840,000
India		Ecodevelopment programme	2,000,000
India		Transp. & Comm. equipment	2,300,000
Indonesia	Sumatra	Gunung Leuser AP unit	1,391,000
Indonesia		Rhino desk officer	472,000
Indonesia	Java	Ujung Kulon rhino unit	922,500
Malaysia	Peninsula	Rhino & habitat survey	225,000
Malaysia		Rhino Conserv. coordinator	115,000
Malaysia	Borneo	Rhino & habitat survey	260,000
Myanmar		Transportation and commun.	155,000
Myanmar		Buildings & roads Tamantii	50,000
Nepal		Environmental monitoring	257,600
Thailand		Rhino survey & training	24,620
<b>A2 - High priority projects</b>			
India		Sanctuaries	166,000
India		Monitoring & evaluation	100,000
Indonesia	Sumatra	Kerinci Seblat AP unit	1,870,000
Indonesia	Sumatra	Javan rhino transloc. study	347,000
Malaysia	Borneo	Captive breeding	206,000
Malaysia	Borneo	Deputy rhino cons. coord.	88,000
Malaysia		International advisory	57,000
Malaysia		PVHA/GIS workshop	70,000
Myanmar		Rhino biology studies	56,000
Myanmar		Staff equipment	32,000
Myanmar		Boundary demarcation Tamantii	5,000
Myanmar		Planning & anti-poaching	18,000
Nepal		Anti-poaching unit	189,600
<b>A3 - Priority project</b>			
India		Captive breeding, transloc.	500,000
India		Equipment & training	400,000
India		Staff facilities	2,000,000
Indonesia	Sumatra	In-situ int. manag. prog.	1,237,000
Indonesia	Sumatra	Barisan Selatan AP unit	1,121,800
Indonesia	Sumatra	Sumatran rhino zoo propagation	187,000
Malaysia	Peninsula	Captive breeding	973,000
Malaysia	Borneo	Rhino translocation	322,000
Malaysia	Borneo	Extension Pulong Tau NP	379,000
Malaysia		Infrastructure AP Malaysia	966,000
Malaysia	Peninsula	Rhino translocation	184,000
Myanmar		Public awareness	42,000
Myanmar		Institutional development	10,000
Myanmar		Staff welfare	30,000