

INDIA

Manas Wildlife Sanctuary



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II.1 Introduction

Year of Inscription 1985

Organisation Responsible for the Report

- Forest Department & Manas Tiger Project
Barpeta Road 781 315
State of Assam
India

II.2 Statement of Significance

Inscription Criteria N ii, iii, iv

Statement of Significance

- Proposed as follows:
“Manas is an outstanding example of a rare combination of Sub-Himalayan Bhabar Terai formation with riverine succession leading up to Sub-Himalayan mountain forest. Biodiversity is expressed through as many as 21 species which are present in the park are listed in the IUCN Red Data Book and habitat mosaic.”

Status of Site Boundaries

- Borders and buffer zone of the property are considered adequate.

II.3 Statement of Authenticity/Integrity

Status of Authenticity/Integrity

- The WH value is considered to have been maintained.
- The hydro-electric dam over the river Manas at the Indo-Bhutan border has been cancelled by the Royal Government of Bhutan.
- In 1992, a IUCN mission noted with concern the encroachment by Bodo militants in MNP, leading to its inscription on the WH in Danger List. The authorities now stress that the “ethnic upsurge was neutralised in 1993 with the formation of the Bodoland Autonomous Council”, and that all encroachment was removed in September 2002.

II.4 Management

Administrative and Management Arrangements

- Manas was first declared a protected area in 1917. In 1973 it became the Core Zone of Manas Tiger Project; a WH site in 1985; and a Biosphere Reserve in 1989.
- The present status of the area as a WH site provides the highest degree of protection under the Wildlife Protection Act of 1972. 11 further laws are listed.
- The management plan for Manas WH site for the period 2003-13 has been submitted for State government approval.

Present State of Conservation

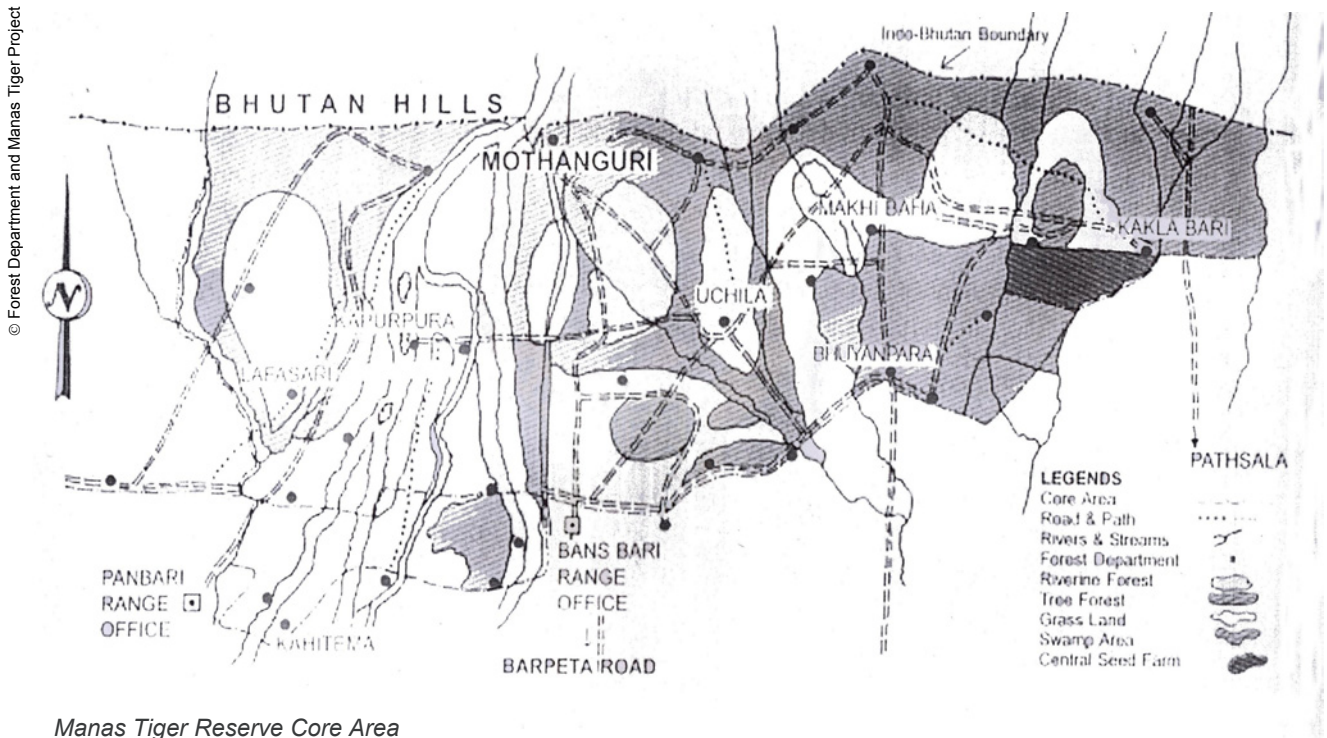
- In 1990, the addition of the neighbouring Reserve Forests of Kahitama, Panbari and Koklabari increased the area of the WH site from 391 to 500 sq. km.
- In 2001, Manas National Park was declared as the core zone of the ‘Buxa-Manas Elephant Reserve’ covering a total area of 2,837 km².
- Captive breeding of Pygmy Hog has been initiated.
- A report on the state of conservation was submitted to the National Government in 2001.

Staffing and Training Needs

- 469 staff are employed. 294 are forest guards and foresters (grades I&II).
- Staffing level is considered adequate.
- Training needs were identified in areas such as micro-planning, first aid, and population viability analysis.

Financial Situation

- The MNP receives funds from the Central Government (tiger project, biosphere reserve, eco-development scheme), and State Government (rhino conservation). No figures supplied.
- Funding is considered inadequate. Proposals to attract assistance from NGOs (WCS, SI) and tourism operators are being developed. It is also suggested that the “site manager must be given some financial autonomy in the context of better management”.
- UNESCO has provided equipment in the form of three vehicles, motor boats and monetary aid. The Wildlife Trust of India has supplied 300 field kits.



Manas Tiger Reserve Core Area

- * International Assistance from WHF as follows: (i) 1997, US\$90,000 Emergency Assistance; (ii) 1998, US\$90,000 Emergency Assistance.

Access to IT

- 2 PCs with internet access. No GIS capacity.

Visitor Management

- Visitor statistics show 3,219 domestic tourists and a complete absence of foreign tourists in 2002.
- There is a jeep Safari trail, foot paths, boating facilities, as well as camping sites for tents.
- There is an identified need for solar-operated bathing cubicles, “tiger-proof” netted areas, interpretation zones, and more elephants for tourist rides.
- A future visitor plan will address the need to restrict the number and type of vehicles inside MNP, advance book elephant rides, and involve local people in tourism.

“The proposed monitoring system sets out to estimate loss of timber and natural resources in cubic meters, of species per hectare, complemented by an Environmental Impact Assessment (EIA). .”

II.5 Factors Affecting the Property

Threats and Risks

- Growing “land hunger” amongst fringe villages,
- Organized smuggling of wildlife articles,
- Illegal felling, grazing and fishing.

Counteractive Plans

- “As such there is no emergency plan. Nevertheless the management plan prepared takes care of the anticipated risks and emergencies that may arise in future.”
- Levels of poaching have been declining, but there remains an urgent need to involve local people in eco-development activities.
- There is also a need to promote transfrontier protected area management with the government of Bhutan.

II.6 Monitoring

Monitoring Arrangements

- The proposed monitoring system sets out to estimate loss of timber and natural resources in cubic meters, or species per hectare, complemented by an Environmental Impact Assessment (EIA).
- Monitoring partner institutions include the University of Guwahati, Assam Remote Sensing Application Centre, NGOs, and the Wildlife Institute

(Dehradun).

Monitoring Indicators

- The following key indicators have been proposed: (i) animal population dynamics; (ii) ecosystem dynamics; (iii) tourist inflow.

II.7 Conclusions and Recommended Actions

Conclusions and Proposed Actions

- Priority must be given to “tricky trans-border international affairs” involving anti-State insurgents in the neighbouring Kingdom of Bhutan.
- Training is proposed for data collection techniques.
- Support from WHF is required for all-round training to combat poaching (including improved arms), environmental education, and “trans-frontier co-operation from field to national level”.

* State of Conservation Reports

1986 Committee CONF.003/INF.4 At its 9th Session, the Committee asked to be kept informed of the possible construction of a dam on the Manas River. The proposal was rejected and the threat to the reserve averted.

1989 Committee CONF.004.5 IUCN presented a verbal report to the Bureau that the WH property had been invaded in February 1989 by several hundreds of local Bodo tribe people who had caused great damage to the park and loss of life. The Indian authorities responded by sending police to halt further destruction, but the problem of illegal encroachment had not been resolved. IUCN reported that at least six Indian rhinoceros, four tigers, as well as some elephants, had been killed; a large number of trees felled; and the habitat of the golden langur, hispid hare and pygmy hog put at risk. IUCN conveyed a resolution of the Species Survival Commission urging restoration of the Sanctuary to the Prime Minister of India and the Chief Minister of Assam.

The Bureau requested the Secretariat to contact the Indian authorities to express its concern over the situation.

1990 Committee WHC-CONF.004.4 The Secretariat transmitted the concerns of the Bureau regarding the integrity of the WH property to the Indian authorities in August 1990.

1992 Bureau CONF.003.3 The Bureau recalled that the Indian authorities had not responded to the Committee's recommendation that the property be nominated for inclusion on the List of World Heritage in Danger. The Secretariat and IUCN invited Mr. Deb Roy, Additional Inspector General of Forests (Wildlife), to present a paper on the status of conservation of Manas Wildlife Sanctuary during the IVth World Park's Congress held in Venezuela in February 1992. Mr. Roy pointed out that the Indian Government had regained control of most parts of Manas; had started an investment programme to reconstruct infrastructure damaged by militants; and was of the view that the ecological integrity of the site had not been seriously threatened. WWF-India had also launched a programme for the development of local people living in the vicinity of the Sanctuary.

1992 Committee CONF.002/5 The Secretariat informed the Bureau that the damage caused by the invasion of the Sanctuary by the Bodo tribe was estimated to be about 50 million Indian rupees (about US\$ 1.6 million). Concerned by information reported by IUCN that the area was still not free from encroachments by militants, and that illegal cultivation was spreading within the Sanctuary, the Committee decided to include the Manas Wildlife Sanctuary on the List of WH in Danger in accordance with Article 11, paragraph 41, of the Convention.

1993 Bureau CONF.001/3 During a meeting in May 1993 with the Ministry of Environment & Forests in New Delhi, a member of the WH Centre was informed that the Ministry was doing all within its powers to obtain a report on the state of conservation of Manas Wildlife Sanctuary from the State authorities in Assam. The representative of the Additional Director for Wildlife reported a considerable improvement in the relationship between the State authorities and representatives of the Bodo tribe, and increasing success in the negotiations to find a peaceful solution to the conflict in Assam.

1993 Committee CONF.002/5 The Committee reiterated its request to the Indian authorities for a full assessment of the damage to the Manas WH property and remedial measures currently being undertaken.

1994 Bureau CONF.001/3b Since the last Committee meeting, three news features and a report from the Assam Forest Dept. confirmed that the situation in Assam had continued to deteriorate. Almost one third (22) of the park's remaining rhinos had been poached in 1993; the Bodo rebellion was still hampering management efforts; and only one part of the area was considered safe. As a result, the Assam Forest Dept. was training a group of elite commandos with modern weaponry. WWF-India and the Forest Department were also planning various activities with the local communities around the park.

1994 Committee CONF.003/6 The Centre notified the Committee that it was aware of actions undertaken by two NGOs, WWF-India & the Swaminathan Foundation, which had commissioned a report on the Manas Wildlife Sanctuary.

The Committee endorsed the possibility of international assistance to the park if it was officially requested by the Government of India.

1995 Bureau CONF.201/4 The Bureau noted that co-operation between the Governments of India and Bhutan on the management of Manas had been taking place on a bi-lateral basis. To enhance co-operation between India and Bhutan in the conservation of the Manas ecosystem, the Government of Bhutan was invited to ratify the Convention as soon as possible.

1995 Committee CONF.203/5 The Committee took note of a letter received from the Indian Government concerning a forthcoming mission to Manas. The letter indicated that the Indian authorities planned to involve local level NGOs in monitoring the state of conservation of the site, and noted that co-operation between the management authorities of the Manas Wildlife Sanctuary of India and Manas National Park in Bhutan would be encouraged.

1996 Bureau CONF.202/2 IUCN informed the Bureau that a full report by a member of the Rhino Specialist Group would be made available to the Committee. The Bureau recommended to retain the property on the List of WH in Danger.

1996 Committee CONF.201/7A The Committee was informed that alternative arrangements were planned by the Government of India in the context of the Natural Heritage Training Strategy to review the state of conservation for Manas and other WH sites in India.

The Committee encouraged the State Party to consider hosting and providing support for a regional WH site managers training workshop in 1997.

1997 Bureau CONF.204/2A The Bureau was informed that the Director of Manas had presented a state of conservation report on the property during the World Natural Heritage Site Managers' Meeting for South Asia hosted by the Indian Ministry for Environment and Forests (MOEF) in January 1997. The report observed that (a) the work of the Bodo Autonomous Council to demarcate an area within the State of Assam had gathered momentum since 1993; (b) militant activity had diminished; and (c) an estimated 8,000 tourists had visited Manas in 1996. Ranger and guard units remain damaged, however, and the MOEF, together with the State Forest Dept. of Assam and the Directorate of the Manas Wildlife Sanctuary, was elaborating a 2-year rehabilitation plan for Manas.

1997 Committee CONF.208/8A The Committee was informed that MOEF and the State Government of Assam had elaborated a 2-3 year rehabilitation plan, at a total cost of US\$ 2,135,000, of which US\$ 235,000 was requested as emergency assistance from the WH Fund. The Bureau approved an initial grant of US\$ 75,000 for the purchase of 3 vehicles, 2 boats and 55 wireless communication sets, and recommended that the Committee consider approving additional amounts subject to satisfactory use of the funds and written documentation on counterpart Indian funds disbursed.

The Committee was satisfied with the use of the first instalment approved by the Bureau and approved a second instalment of US\$ 90,000 as emergency assistance to cover the costs of 2 wooden fibre boats, 400 patrolling gear sets, and the construction of buildings to serve as ranger stations.

1998 Committee CONF.203/7 The Committee was informed that the construction of ranger posts and staff housing had been delayed due to heavy rains, but park authorities had taken precautions to locate the buildings in areas which would not be vulnerable to raids by militants. The Indian authorities further suggested that the Committee revive its invitation to Bhutan to ratify the Convention in order to facilitate the nomination of Bhutan's Royal Manas National Park as a trans-border WH site to strengthen surveillance operations for the Manas ecosystem.

The Committee noted that during 1997-98 the MOEF had provided US\$ 400,000 to strengthen the conservation of Manas, with an additional US\$ 100,000 planned for 1998.

1999 Bureau CONF.204/4 The Bureau was informed that UNESCO-New Delhi had undertaken a site visit to Manas in March 1999. The visit confirmed that all equipment delivered was in use, and the site management was eager to support activities to benefit local villages. Following the site visit, MOEF submitted to the Centre a revised budget for the use of the US\$ 70,000, comprising of 16 activities intended to cater to the needs of local villagers such as veterinary and health camps, and the repair of existing irrigation facilities. WWF-Bhutan also informed the Centre in April 1999 of its willingness to assist the Royal Government of Bhutan on its potential ratification of the WH Convention. The Centre transmitted all relevant information to WWF-Bhutan and extended its co-operation with other international conservation organizations also resident in Bhutan.

1999 Committee CONF.209/13 IUCN informed the Committee of its review of the state of conservation report on Manas provided by the State Party in June 1999. IUCN noted several positive developments including an Assam Forest Protection Force to act as a rapid reaction force for surveillance operations. The Committee invited the State Party to co-operate with the Centre and IUCN to prepare a progress report on the implementation of the rehabilitation plan since mid-1997 for submission to the Committee in 2000.

2000 Bureau CONF.202/4 The Bureau was informed that the implementation of the second phase of the rehabilitation plan would be completed in 2001. IUCN notified the Bureau of an IUCN/SSC Asian Rhino Specialist Group meeting held in February 1999. At the meeting, the Director of Project Tiger in Manas had estimated that the number of rhinos inside the site may be no more than 10.

2000 Committee CONF.204/9 The Deputy Inspector General for Wildlife of India agreed to present a case study on Manas at the Centre/IUCN workshop held in Amman, Jordan, in October 2000 on the "Role of World Heritage in Danger Listing in Promoting International Co-operation for the Conservation of World Natural Heritage".

2001 Bureau CONF.205/4 IUCN received reports indicating continued insurgency and in-fighting within the United Liberation Front of Assam, and an alleged movement of insurgents into the Sanctuary from the Bhutan side of the transborder ecosystem in December 2000. The construction of a road through the Bhutan side of the Manas ecosystem had also significantly increased traffic and access to the core areas of the WH property in India. IUCN noted, however, that efforts by the Forest Dept. and village communities had established 25 groups of young volunteers or "Manas Bandhu" ("Friends of Manas") to conduct awareness campaigns around the Sanctuary.

The Bureau further requested the Director-General of UNESCO to invite His Majesty the King of Bhutan to ratify the WH Convention.

2001 Committee CONF.208/9 Due to continued security risks, the UNESCO/IUCN/UNF-UNFIP project "Enhancing our heritage: monitoring and managing for success in World Natural Heritage Sites" decided to substitute Manas with Keoladeo National Park as one of the 3 pilot sites for the project in South Asia.

2002 Committee CONF.202/18 A field visit to Manas Wildlife Sanctuary was organized during an IUCN mission to Assam in February 2002. The principal findings were that: (a) there continued to be considerable levels of organized poaching, illegal logging and encroachment; (b) of the 3 protection Ranges established, only the Bansbari Range (the central area) was reasonably functional, as insurgency precluded the resumption of protection activities in the Eastern and Western Ranges; (c) lack of reliable data made management difficult, but a draft Management Plan was nearing completion; (d) the operating budget, infrastructure, equipment, staff experience and training in routine aspects of protected area management were insufficient; (e) limited infrastructure and basic public services in the surrounding villages reduced sustainable economic development options; and (f) poverty and population pressures placed alternative community-based projects beyond the capacity and resources of the present staff. Researchers and the Director of the property suggested that the number of Asian One-horned rhinoceros could be as low as ten individuals.

The mission also held informal discussions with the Royal Manas National Park (Bhutan) who indicated that the climate was unfavourable for a transboundary WH proposal. The scale of poaching and insurgency on both sides of the international border was of serious concern

and the Royal Forest Dept. of Bhutan had closed a local school, relocated families from the Park base, and was planning to replace the Park staff with an army unit. The mission further reported that all of the US\$165,000 allocated by the Committee as emergency assistance had been used on approved projects and equipment procurement. A trust account had however been established by the Assam Forest Dept. with the potential to cover ongoing management costs at both Manas (and Kaziranga) WH sites.

The Committee invited the Centre and IUCN to review with the State Party a list of potential projects prepared by the site Director, and examine the trust fund established by the State Government of Assam as a possible mechanism for attracting resources from international and national donors.