



CHAPTER – I INTRODUCTION

Brief about Kaziranga National Park

1.1 India is a natural home to an amazing variety of fauna and flora. There are about 75,000 species of animals; of which, 340 species are mammals, 1,200 birds, 420 reptiles, 140 amphibians and some other species of vertebrates. Of these, about 190 species of mammals and more than 800 species and subspecies of birds are so far reported from Assam.

1.2 National Parks and Wildlife Sanctuaries are extremely important for conservation of biodiversity, and for ensuring the survival of floral and faunal components, not only for the present but also for future. For effective conservation and protection of wildlife in the country, forests are segregated into three distinct areas, namely (i) Wildlife Sanctuaries (**hereinafter referred as WS**), (ii) National Parks (**hereinafter referred as NP**) and (iii) Biosphere Reserve. The Wild Life (Protection) Act, 1972 (**hereinafter referred as The Act**) provides for four types of protected areas namely (i) WSs, (ii) NPs, (iii) Conservation Reserves and (iv) Community



Grassland, water bodies, highlands with big trees – essence of wildlife conservation in Assam



Rhinoceros Unicornis (Rhinos) - pride of Assam



Panthera Tigris - Royal Bengal Tiger

Reserves. No human activity is allowed inside a NP while limited activities are permitted within the WS and Biosphere Reserves. The protected areas account for approx. 4.5 per cent of the country's geographical extent and include more than 500 WSs, 104 NPs and 18 biosphere reserves.

1.3 The Wildlife areas of the State house nearly 44 types of endangered and rare species and mammals and 14 types of reptiles and amphibian. There are nine species of primates in Assam, which also include the only ape of India, the Hollock Gibbon (*Hylobates Hoolock*). As many as eight cat species are found in the State. Moreover, Assam holds the entire known world population of Pygmy hog (*Sus salvanius*), 75 per cent of the world population of the Indian Rhinoceros (*Rhinoceros unicornis*) and wild water buffalo (*Bubalus bubalis*) and a sizeable population of Asian elephant (*Elephus maximus*) and tigers (*Panthera Tigris*).



Factors placing Assam in the International map

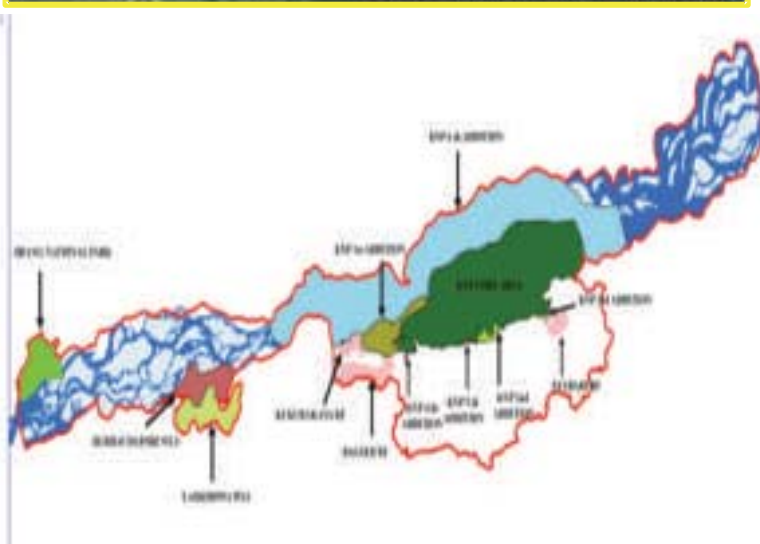
1.4 Assam – counted among the world's 34 biodiversity hotspots, has been a biological frontier well into the 21st century. In Assam, there are 18 WSs¹ and five NPs² covering 1,840.14 sq km and 1,947.21 sq km area respectively besides two bio-sphere reserves namely Dibru-Saikhowa and Manas. The five NPs had been notified between 1974 and 1999. Of the NPs and WSs in the State, Kaziranga National Park (KNP) is the largest NP with 858.92 sq km³.

¹ Garampani, Laokhowa, Bornadi, Chakrasila, Bura chapori, Pani dihing, Hollongapar Gibbon, Pobitora, Sonai Rupai, Beherjan-Borajan Padumoni, East Karbi Anglong, Nambor, Morat Longri, Nambor Doigurung, Amchang, Dihing patkai, Borail and Deepor Beel.

² Dibru-Saikhowa, Kaziranga, Manas, Nameri and Orang.

³ Original area 429.93 sq km, 1st addition – 43.79 sq km, 4th addition – 0.89 sq km and 6th addition – 376 sq km. (2nd, 3rd and 5th addition areas involving 6.47, 0.69 and 1.15 sq km respectively are yet to be officially taken over by the KNP authorities).

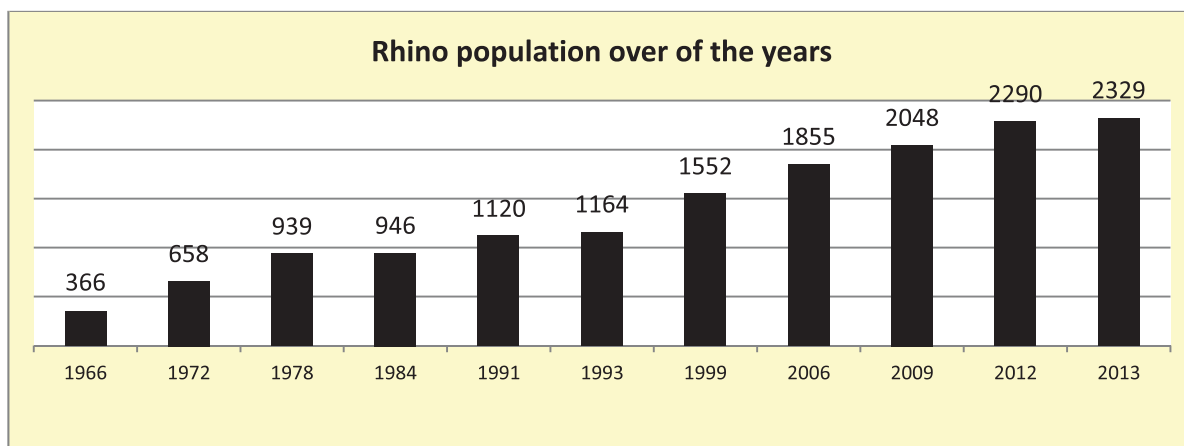
1.5 KNP lies between Latitudes 26°34' N to 26°46' N and Longitudes 93° 08' E to 93° 36' E. It is spread over the civil jurisdictions of Nagaon and Golaghat districts in Assam with mighty Brahmaputra river on the North and verdant Karbi Anglong hills on the South. The history of KNP dates back to 1st June 1908 when it was first declared as a Reserve Forest. It was subsequently upgraded to a Game Sanctuary in 1916, a Wildlife Sanctuary in 1950 and finally a NP in 1974. Spread over an area of 429.93 Sq.Km in the flood plains of Brahmaputra, it harbours the World's largest population of one horned Rhinoceros, Wild Buffalo and the Swamp Deer (*Cervus duvauceli ranjitsinghi*). Since then, six areas have been added/



Satellite imagery of KNP (core area marked) and the map of KNP with additional areas

proposed to be added to the existing NP. These are- 1st Addition (43.79 Sq.Km., notified on 28-05-97), 2nd Addition (6.47 Sq.Km., preliminarily notified on 10-07-85), 3rd Addition (0.69 Sq.Km., preliminarily notified on 31-05-85), 4th Addition (0.89 Sq.Km., notified on 13-06-85), 5th Addition (1.15 Sq.Km., preliminarily notified on 13-06-85) and the 6th Addition (376 Sq.Km., notified on 07-08-99). Besides these, the reserved forests of Panbari (7.65 Sq.Km.) and Kukurakata (15.93 Sq.Km.) are also under the administration of KNP.

1.6 A symbol of dedication to the conservation of animals and their habitat, Kaziranga, with a NP status represents the single largest protected area within the North-east Brahmaputra valley Bio-geographical Province. On account of the outstanding conservation values KNP was inscribed on the World Heritage List of “Convention concerning the protection of the world cultural and natural heritage” under criteria N (ii) and N (iv) of the Natural Heritage notified in India by UNESCO in the year 1985. The statistics in the following table testifies the efforts made by the KNP authorities to increase the Rhino population over the years.



1.7 The Department stated (November 2014) that the public outcry against the Rhino poaching led to the Hon'ble High Court of Gauhati to take up a suo-motu Public Interest Litigation on the issue.

1.8 Since then the National Park has seen fluctuations in its population. While there has been an increase in Rhino population in recent years, there has also been immense pressure from the poachers due to demand of Rhino horns in the international market. This has emerged as a major threat to the safety of the endangered species attracting negative attention of the conservationists worldwide. The enormity of the poaching issue is such that the matter is being investigated by the premier investigation agency of the country. Besides, there are other challenges like biotic disturbance from human encroachment and industries around the NP.

1.9 In view of the emerging threats posed to the conservation of Rhinos in Assam as discussed above, this performance audit on the topic titled 'Kaziranga National Park - issues and challenges' has been planned.

Audit Objectives

2.1 The objective of this Performance Audit was to ascertain whether:

- there was a long term perspective plan supported by annual action plans aligned to the former - for long term conservation, protection and development;
- funds allocated were adequate to manage the activities of the wildlife habitats and funds were made available to the wildlife managers in time;
- manpower available was sufficient and adequately trained to effectively face the challenges;
- the protection measures undertaken by the authorities were adequate and effective in view of the present threats;
- efforts were made to continuously develop the wildlife habitat and notify additional areas to make it favourable for the wild animals and the existing territorial integrity of the park was intact; and

- efforts were made to reduce the biotic disturbance caused by human settlements and industrial activities around it.

Scope and methodology of Audit

3.1 The records of the office of the Principal Secretary to the Government of Assam, Environment and Forests Department and Finance Department, Office of the Principal Chief Conservator of Forests, Wildlife (PCCF, Wildlife), KNP, pertaining to the period 2008-09 to 2012-13 were test checked. Critical issues like poaching, human settlement and biotic pressure had, however, been covered upto the date of Audit. The field audit was carried out between March and mid-July 2014. Two sets of Questionnaires were issued to the PCCF, Wildlife and KNP for their response. Discussions were also held with the Divisional Forest Officer (DFO)/Assistant Conservators of Forests (ACF)/Range Officers (RO) (**hereinafter referred as the Wildlife Officers**) on various issues and challenges and minutes of meetings were drawn. Joint physical verification and surveys along with KNP officials were conducted in and around the KNP. The Offices of the Circle Officers, Bokakhat and Kaliabor were also visited to collect the data/information on land use pattern around KNP alongwith the extent of encroachment in 2nd, 3rd and 5th additional areas. Besides, interviews with the Presidents of Eco-Development Committees (EDC) and other stake holders were held to understand the local issues better.

Organisational set up

4.1 At the State level, the Principal Secretary, Environment and Forests is in overall charge of the Department. The Directorate is headed by the PCCF, Wildlife who is also the Chief Wildlife Warden of the State. He is assisted by a CCF, a CF, four Deputy CFs⁴. There is also one ACF, one Wildlife Research Officer reporting to the head of the Directorate. The NPs and WSs are governed by 10 Wildlife divisions in the State which are headed by Field Directors/Directors (Manas and Kaziranga) and DFOs. The following chart depicts the organisational structure of the Department, Directorate and the field formations.

⁴ (i) Sr. Wildlife warden, (ii) publicity, (iii) enforcement officer and (iv) attached to the CF, Wildlife.

6.2 Prior to commencement of the Audit, an entry conference was held (February 2014) wherein the Secretary to the Government of Assam represented the Environment and Forest Department, CCF (Wildlife) represented the Directorate while the Officer on Special Duty represented the Finance Department, Government of Assam.

6.3 The draft Performance Audit Report consisting of the audit findings and the recommendations was sent to the Department with copy to the Finance and the Directorate in August 2014.

6.4 The audit findings were discussed in an exit conference held in October 2014. The PCCF, Wildlife, Assam along with the Director, KNP represented the Directorate while the Joint Secretary, Environment and Forest Department and the Deputy Secretary, Finance Department represented the Government of Assam. The Officers of the Directorate and the Government thanked the Indian Audit and Accounts Department for taking up the topic and stated that the Performance Audit had brought out a number of issues which hitherto remained unattended. They also informed that all the recommendations are well taken and the Department was working on them. Response of the Department during the exit conference and replies furnished (November 2014) had been appropriately incorporated at various places in the Report.