

STATUS REPORT
ON
ORANG WILDLIFE SANCTUARY
(RAJIV GANDHI WILDLIFE SANCTUARY)

ASSAM FOREST DEPARTMENT

ORANG WILDLIFE SANCTUARY

The Orang Wildlife Sanctuary, renamed as Rajiv Gandhi Wildlife Sanctuary, since October/92, is located within the Geographical limits of 92 -15'E to 92- 30'E longitudes and 26 -30' N to 26 -40'N latitudes. The Sanctuary straddles two civil district viz. Darrang and Sonitpur of Assam on the north bank and abuts of the Brahmaputra river.

Orang can be approached by road from NH-52 from Orang town and also from Dhenuguri. The distance from Guwahati and Tezpur, the nearest Airports, are 70 kms and 90 kms respectively. The sanctuary consists of a very good network of Jeepable road inside.

1.1. Past History:- The area was previously an abandoned village where 26 Nos of manmade ponds of different sizes still exist with an old temple. There are two distinct layers of alluvial deposits. The higher layer exists on the north and the lower one on the south which emerges with the bank of the river Brahmaputra. Subsequently, due to secondary succession, thatch and other grass species covered the area inviting wildlives and on 31.05.1915 vide Govt. O.No.2276/R, the area is declared as Orang Game Reserve covering an area of 8054.0 hets.

1.2. In 30-11-1931, an area of 1729.0 hets. had been dereserved from the northern side of the reserve for settling the immigrants from the Bengal (Now Bangladesh) in Line System under Grow More Food scheme. Subsequently an area of 873.0 hect. had been added to the Game Reserve by 18-6-1969. Thus total area of the Game Reserve came as 71.980 sq.kms

No.2276/R dated 31-5-1915-		80.54 sq.kms.
No.3378/R dated 30-11-1931 (dereserved)	(-)	17.29 "
1st addition dated 18-6-1969:	(+)	8.73 "

Total: 71.98 Sq.km.

The area was notified as Wildlife Sanctuary during 1985 covering an area of 75.60 sq.km.

3.3. As a part of the afforestation programme during 1960-62 Orang Game Reserve was taken by Afforestation Branch and from 1962 to 1965 a total of 1328.03 hect. area of the reserve were planted by fast-growing species like Gmelina arborea, Albizia procua, Legerspromea flosregeneae, Bomax inalabaricren, terminalia myriocarpa, Dalbugia Sissoo, Acacia catuhus, Biscofia Jarponica, Anthruphalus Kadamba, Tectona grandes, Eucaliptus sp. etc. The northern high layer of

the reserve was covered up by these plantations. Although, plantation had not been a complete success, the presence of additional staff for executing the works led to better surveillance of the area and indirectly resulted in better protection of Wildlife, speciall Rhinos. As a result there was an apparent increase in the animals in the area. Attempts to raise plantations were ultimately given up in 1965 and the reserve was transferred to the Western Assam Wildlife Divn. in 1972. Since then area is completely dedicated to the course of Wildlife Conservation and managed as an Wildlife Sanctuary.

3.4. On 20-9-1985 vide Govt. notification No.FRS.133/85/5 Orang was constituted to an Wildlife Sanctuary covering an area of 75.60 hecets. and the final stage is in under process. During February/90 an area of 267.0 hect. has been included into the sanctuary from the adjacent Govt. khas land on its western boundary.

4. Surrounding and status of boundary:

The northern boundary runs along the dereserved portion done during 1931 and is now in the form of a Forest Road upto Barsola accrossing the Pachnoi river . The south and eastern boundary comprise the channels and islands of the river Brahmaputra. The western boundary is also a artificial boundary demarcated by a trench from the villages.

4.1. The entire area is covered by the villages from its all sides. Even in the southern also, the islands of the river Brahmaputra are now inhabited by human beings . Because of the varey situation the are is in contant biotic pressures in the form of grazing by domestic cattle as well as professional graziers, fishing, collection of thatch, fire-wood etc.

5. Climate:

The area enjoys typical subtropical monsoon climate, the major precipitation being during the period from May to September. The average rainfall is approximately 300 mm. The temperature varies from 7'c to 35'c. The relative humidity is high which never falls below 66% and may goes upto 90% or more.

5.1. Drainage:

Both the Dhansiri and Pachnoi rivers originate from the Bhu-tan Himalaya and flows by the side and through the Sanctuary respectively. The area is dotted by a number of nallah (cannels) abandoned courses of river (Ulbow lack) and artificial ponds.

5.2. Flood:

Orang experiences annual flooding of the area being situated in the flood basin of the river Brahmaputra. The higher northern terrace remains free from floods. The flush flood caused by the river Dhansiri and Pachnoi causes damage to the higher layer of the area. The effect of flood in Orang is not much due to the northern higher terrace, as a result no death to rhinos has so far been reported due to flood in the area. The Brahmaputra and the Dhansiri river are eroding the southern as well as western parts of the area every year which is one of the threat to the sanctuary.

6.1. Flora:

6.1.1. About 70% of the area is covered by grass land. In areas with freshly deposits from the river Saccharum Spps in the dominant grass with tamarix dioica as coloniser. A little further away association of Erianthus ravaneal-saccharum arundinalceum-Arundo donax occur. The shorter grasses Imperata cylindrica predominate along the banks of Dhansiri and Pachnoi. The higher alluvial terrace is occupied mostly by the warser grasses. Along the edges of waterbodies, on the seasonally in undated regions contain shorter grasses like Cynoden doctylon, Hemarthia compressa, Chrysopogon spps., Pennisetum spps. Eragrostasis sppsetc. Such grass land areas are the favourite foraging for the herbivours.

6.1.2. The waterbodies support a variety of aquatic vegetations some of which are predominated by water hyacinth. Other species occurring in these areas are Andropogon spps., Ipsmea spps., Enhydra fluchians, Pislia spps. Lemna spps., Nymphaea spps. etc. The main waterbodies of the higher terrace contain Nelsembo.

6.1.3. In addition to plantations woodlands are mostly confined to the highland only. There are five natural patches of miscellaneous formation containing mainly Aceacia catclhu, Bomax ceiba, Albezga procera, Strabler asper, Triewia nudiflora, priscofia gavo-nila, Litsca spps., Dalbergia sisoo etc.

6.2. Fauna:-

6.2.1. The Indian One-horned rhino is the dominant species of the sanctuary. The other species sharing the habitat are Asiatic Elephant, Hog Deer, Wild Boar and Tiger. Besides these, there are other small mammals like the smooth Indian Otter, Large Indian Civet, Small Indian Civet, Leopard Cat etc.

6.2.2. The first ever detail census in Orang was conducted on 27-2-1985 covering an area of about 61.70 hets. A total of 65 Nos rhino were counted in the area which are shown as per sex and age group:

Adult			Sub-aduly			Total
M	F	U/S	M	F	U/S	
23	23		7	2	10	65

6.2.3. The detail census in Orang was carried out on 30-9-91 covering an area of about 80 sq.km. including the islands of the Brahmaputra river which comprises the South and eastern parts of the sanctuary. The rhino population counted in 20 census blocks are shown as follows:

Adult			Sub-adult			Calf	Total
M	F	Un Sexed	M	F	Un Sexed		
28	41	5	-	13 1	14 14	8	97

The other mammals counter during the census are:

Hog deer-	897
Wild Boar-	241
Tiger (Sighted)	9
Elephant-	5
Porcupine-	12
Civet Cate-	2
Hare-	5
Monkey (Reasus)-	8
Python-	5
Lizzard-	3
Cobra-	1

Amongst avifouna 8 Bengal Floricans were also sighted during census. A total of 131 species of birds were identified and listed in the area.

6.3. Mortality of Rhino:

The mortality figures since 1980 are shown below:

Year	Natural death	Death due to poaching	Total
1980	2	3	5
1981	3	2	5
1982	8	5	13
1983	9	4	13
1984	7	3	10
1985	1	8	9
1986	1	3	4
1987	3	4	7
1988	2	5	7
1989	3	3	6
1990	1	Nil	1
1991	2	1	3
1992	3	2	5
1993	2	Nil	2
(Till date)			

From these figures it is evident that poaching presents the greatest threat to the survival of the rhino population in this sanctuary. There had been reports that 5 Rhinos died due to Anthrax in 1966.

7. Infrastructure:

7.1. Establishment:

There is a total of 70 Nos of permanent staff distributed throughout 23 Nos of camps which is shown below category wise:-

Forest Ranger-	1
Dy Forest Ranger-	1
Forester- I	9
Forester-II	3
Forest Guard-	19
Game Watcher-	9
Boat man-	9
Mahut-	9
Grass cutter-	5
Driver-	2
Dak-Runner-	1
Office Peon-	1
Chowkidar-	1

Total: 70

7.2. Fire Arms:

Departmental staff equiped as under for carrying out anti-poaching activities:

S.B.B.L. Gun-	2 Nos.
D.B.B.L.Gun-	6 Nos.
Rifle (.315)-	21 Nos.
<hr/>	
Total=	29 Nos.

7.3. Vehicle:-

Jeep (Petrol run)	1 No.
Van (-do-)	1 No.

7.4. Boats:

The south and western parts of the sanctuary comprises the channels of the river Brahmaputra. Over and above these the southern part remain submerged during flood season. Boat is then the only means of conveyance for the sanctuary area during folld days. Follow- ing boats are available in the sanctuary:

Country Boat-	15 Nos.
Fibre Glass boat-	1 No.

There are two OBM.

7.5. Wireless:-

The wireless networks for the sanctuary comprises of ~~fixed~~

Fixed Station at R.H.Q-	1 No.
Mobile sets for camps:	9 Nos.

7.6. Camps:

The sanctuary posses a established net work of camps spreading all over the area. All together there are 23 such camp in the area most of which are temporary thatch huts.

7.7. Roads/Path":

During winter season all camps of the area can be approached by Jeep or van. A total of 120 kms. of jeepable roads are available for the sanctuary which gives a good network for supervising the area.

To patrol the vulnerable areas a total of 73 kms of patrolling paths are maintained.

7.8. Elephant:

Out of 14 Nos of departmental elephant of different areas only 5 (five) elephants can be pressed into service.

8. Financial Input:-

Fund flow from two schemes viz. Plan budget under state and central sector and Non Plan budget provision under State Sector:

	<u>Plan Schemes</u>	<u>Plan Schemes</u>	<u>Non Plan Schemes</u>	<u>Total</u>
1989-90	Rhino Conservation Scheme (Centrally Sponsored Scheme)	7.76 lacs	-	7.76 lacs
	Other Wildlife Area:	-	-	-
1990-91	Rhino Conservation Scheme (CSS)	13.04		19.47
	O.WL. Area:	6.43		
1991-92	Rhino Conservation Scheme (CSS)	9.18	14.25	29.79
	Other W.L. Areas:	6.36		
1992-93	Rhino Conservation Scheme (CSS)	6.93	16.30	27.43
	Other W.L. Area:	4.20		
1993-94	Protected Areas:	5.96	18.80	31.78
	Other W.L. Area:	7.02		

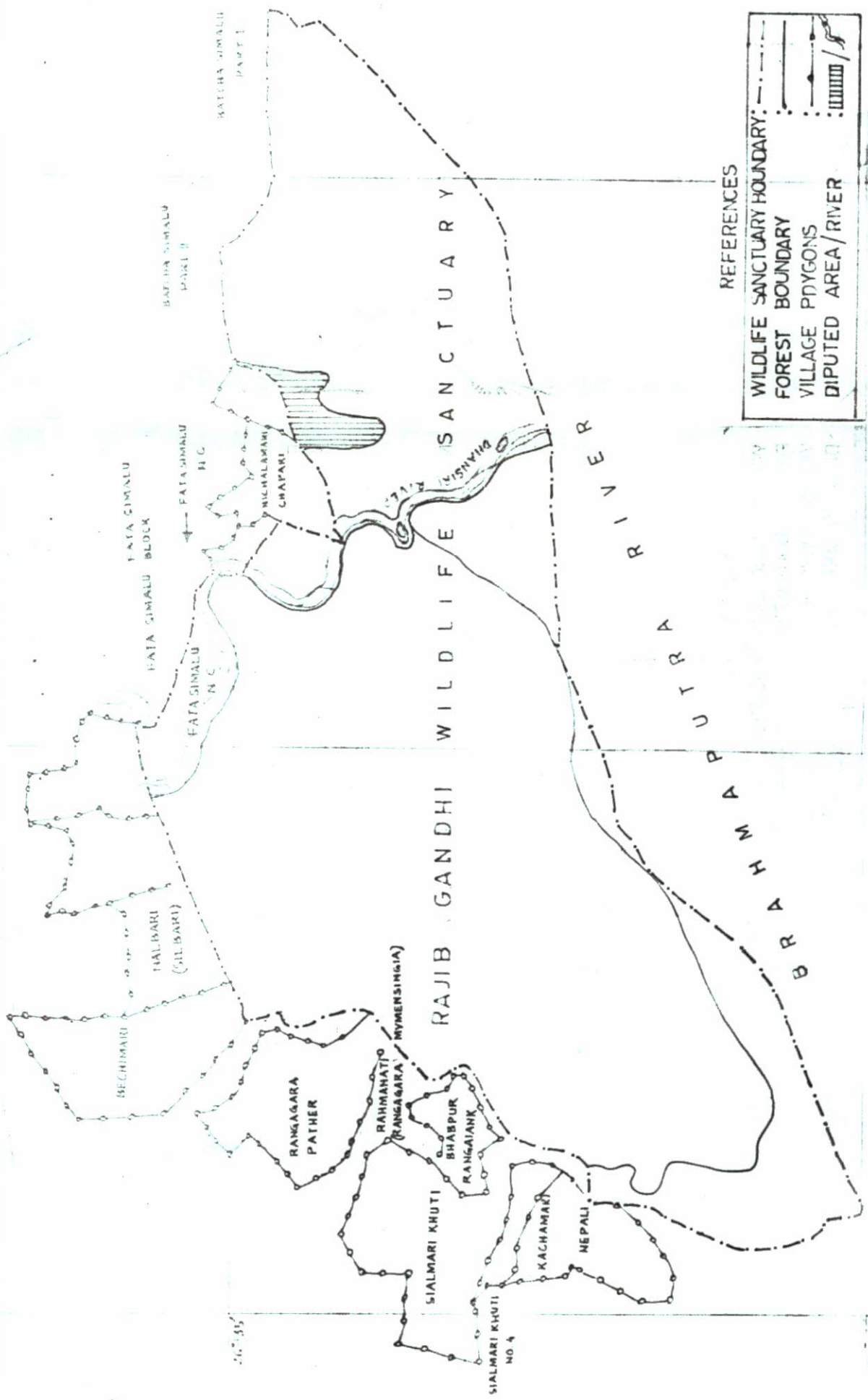
Future Plans:

The main thrust of all plans in the near future are aimed at combating the menace of poaching. In this direction efforts are on to increase the numbers of guards, Guard Posts equiped with better arms, improving communication network by roads as well as surface communication by roads and speed boats.

The extension of the sanctuary is not possible further on its three sides except the southern parts. The riverian areas of the river

Brahmaputra being external extension of the habitat is strategically important from the point of view of poachers mostly coming from southern part of the river Brahmaputra. One in the consideration to include in the sanctuary. Combating poachers activities originating from these areas which serves as launching pads is an integral part of conservation strategy. However, the present infrastructure and logistic support leaves little scope to undertake effective steps. The weakness in this sector need immediate attention.

MAP OF RAJIB GANDHI WILDLIFE SANCTUARY
 SCALE: 1:10000
 AREA: 7560 HECTARES



REFERENCES

WILDLIFE SANCTUARY HOUNDARY: - - - - -
 FOREST BOUNDARY: —————
 VILLAGE POLYGONS: —●—●—●—
 DIPUTED AREA/RIVER: [Hatched] / [Wavy]