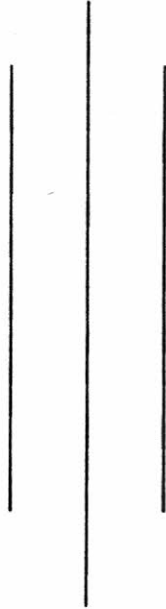


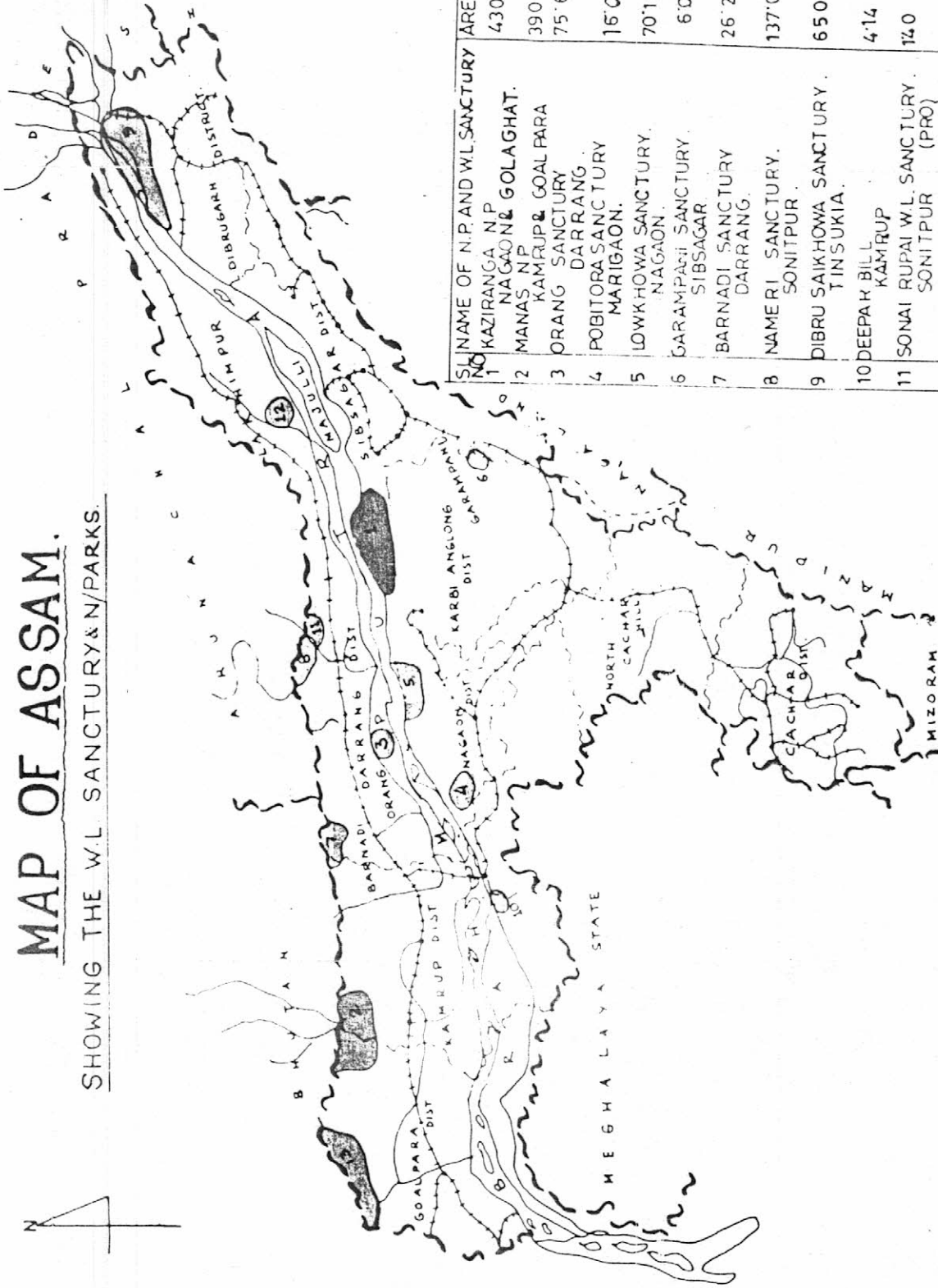
STATUS REPORT
ON
PABITORA WILDLIFE SANCTUARY



ASSAM FOREST DEPARTMENT

MAP OF ASSAM.

SHOWING THE W.L. SANCTUARY & N/PARKS.



Sl. No.	NAME OF N.P. AND W.L. SANCTUARY	AREA IN SQ. KM.
1	KAZIRANGA N.P.	430.50
2	NAGAON & GOLAGHAT.	390.00
3	MANAS N.P.	75.60
4	KAMRUP & GOALPARA	15.00
5	ORANG SANCTUARY	70.13
6	POBITORA SANCTUARY	6.00
7	MARIGAON.	26.21
8	LOWKHOWA SANCTUARY.	137.07
9	NAGAON.	650.00
10	GARAMPANI SANCTUARY.	4.14
11	SIBSAGAR.	14.00
12	BARNADI SANCTUARY	49.00
13	DARRANG.	
	NAME RI SANCTUARY.	
	SONITPUR.	
	DIBRU SAIKHOWA SANCTUARY.	
	TINSUKIA.	
	DEEPAK BILL	
	KAMRUP	
	SONAI RUPAI W.L. SANCTUARY.	
	SONITPUR (PRO)	
	POBHA W.L. SANCTUARY. (PRO)	
	LAKHIMPUR	
	KACHUGAON GAME RESERVE	
	KOKRAJHAR (PRO)	

INTRODUCTION :

50 Km. east of Guwahati on the Southern bank of the river Brahmaputra, in the District of Morigaon, Assam, situates the Pabitora Wildlife Sanctuary. Though it covers only about 16 Sq. Km. presently, it harbours the highest density of Indian One Horned Rhino in the World. The Sanctuary can be approached from National Highway 37 at its 32 Km. east of Guwahati from the meeting point of a gravelled road going upto Pabitora located at a distance of 18 Km.

2. PAST HISTORY :

Present Pabitora Wildlife Sanctuary was a grazing Reserve (P.G.R.) before 1971 providing grazing facilities to the surrounding villages together with permanent Buffalo "Khuties". During that time also at the end of second decade, few Rhinos strayed probably from Laokhowa or Orang became resident at Pabitora P.G.R. Finally during 1971, two P.G.Rs. covering an area of 1,584.62 Hectares was constituted into a Reserved Forest vide Government Notification No. FOR/SETT/542/65/54, Dt. 8.11.1971.

Due to the increase of Rhino population, areas shown below were subsequently added to the Pabitora Reserved Forest and was declared as Pabitora Wildlife Sanctuary vide Government's preliminary notification No. FWR.19/87/39, Dt. 16.7.87 in order to provide better protection of Rhinos and the extended habitat.

1. Pabitora R.F.	1,584.62 Hectares (Original)
2. Pajamaying Hill R.F.	1,198.86 "
3. Kamarpur area	490.24 " (Khas area)
4. Diprang area	171.00 " (Khas area)
5. Muskala I & II area	446.00 "
<hr/>	
Total	3,883.78 Hectares
	Say - 38.84 Sq. Km.

The final constitution of the extended area into a well defined protected area is under process. There are 20 (twenty) numbers of villages surrounding the Proposed Wildlife Sanctuary.

3. BASIC INFORMATION :

3.1. Climate :

The climate of the area may be described as sub-tropical moist climate having four distinct periods of season variations, viz. Winter, Pre-monsoon, Monsoon and Post-monsoon.

3.2. Rainfall :

Rainfall in the area is distributed almost through out the year. The heaviest rainfall occurs during July and August. January is the driest month.

3.3. Drainage and Water supply :

The Garang beel (lake) and Maduk beel are the perennial sources of water in the sanctuary. The shallow nallahs on its eastern part though dried up during the driest month, there is no water scarcity in the area due to small deep nallahs and beels scattered through out the area.

3.4. Flood :

Pabitora Wildlife Sanctuary entirely situates in a lowlying area. Flood water from Brahmaputra and Ualong rivers, which passes through its northern and southern boundary respectively flooded the entire area. During the flood season, flood water from the Brahmaputra river enters through a small river, viz. Pakaria. The anti-poaching camps situated in and around the Sanctuary, most of them get submerged during the

high flood. Except the Tuplung-Hoduk Road (350 X 4.0 Meters) passing through the heart of the area and two artificial high lands (about 250 Sq. Mt.) all areas remain submerged during the very high floods and during this period Rhinos go outside the Sanctuary in search of high land. Every year, flood causes major damages to the temporary camps constructed for anti-poaching measures.

3.5. Fire :

Approximately 30% of the Sanctuary being marshy low lying, the dampness along with the retarded growth of grasses due to excessive grazing had prevented use of burning as a tool management for maintenance and prevention of vegetative progression.

4. TERRAIN AND SOIL :

4.1. Terrain :

The entire area is a basin like structure in the midst of Mayang Hill, Kamarpur Hill, Monoha Hill, which surround the basin. The area has a slight slope from east to west with depressions every where evenly distributed.

4.2. Soil :

The soil of the area is mostly the alluvial deposits of the rivers. In some places, alluvial with higher percentage of clay is noticed. No proper soil survey has yet been done.

5. FLORA AND FAUNA :

5.1. Flora :

Due to excessive grazing for years together, a 'Pan' has already been formed on the soil for which growth of

grasses inside the Sanctuary are stunted comparatively than similar areas in outside. The intensity of grazing is highest during the winter season. The affect is so much that almost half of the present sanctuary area converted into a more or less foot ball ground.

An area of 1 Sq.Km. area was fenced up during 1990 for releasing Brow Antlered Deer at the heart of the Sanctuary. As a result of protection from grazing, better growth of grasses and profuse regeneration of *Albeggia procera* could be seen in this area. A thin layer of tree belt covers the southern corner of the Sanctuary along the bank of Garanga beel. This part is comparatively a bit higher than the rest of the area.

Proper survey of growing stock of the flora has not yet been taken out. Roughly, the present land use may be estimated as follows :

1. Tree land	2%
2. Thatch area with Albezia regeneration	8%
3. Thatch area	40%
4. Thatch area with Nal and Ekra	20%
5. Perennial water logged area	5%
6. Swampy area	25%

Following species are common found in the Sanctuary :

Albezia procera, *Salmalia malabaricum*, *Baringtonia acutengua*, *Strabler asper*, *Sterculia vilosa*, *Triwia mediflora*, *Casia fistula*, *Tetramilis mudiflora*, *Legerstromea flosreganae*, *Ugenia spps.*, *Ficus spp.*, *Lenea grandis*, *Toona ciliata*, etc.

Erianthus ravanae, *Saecharum elephantimus*, *Imparata cylindrica*, *Pollinia ciliata*, *Phongmites karka*, *Saecharum*

munja, Arundo danx, Cynodon doctylon, Iopomea reptans, Enhydra fluctuans, etc.

Andropogon spp., Eichhorenia spp., etc.

5.2. Fauna :

As stated earlier that the Pabitora had been a grazing ground where Barking deer, Hog deer were sighted but recently only Wild boar, some Lesser Cats, Civets alongwith Indian One Horned rhinos are inhabiting in the area. Occasionally one or two transient Leopards are sighted in the area straying in from Mayong Hill and Panbari Hill.

6. CENSUS :

Census operation was conducted in the Wildlife Sanctuary for the first time in March, 1987 and a total of 54 Rhinos were counted. The population break-up is shown as follows :

Adult		Sub-Adult		Calf	Total
Male	Female	Male	Female		
17	19	5	8	5	54

On 0.4.93, after a gap of 6 years, census of wild animals was carried out by inclusion of adjacent Rhino habitat outside the Sanctuary. Four census blocks covering 1,584 Sq. and eight external blocks covering an area of about 200 Sq. Km. comprised the total area covered by the census. The findings of the census operation is as follows :

Name of block	Adult			Sub-Adult			Calf		T O T A L
	M	F	Unsex	M	F	Unsex	Above 2 Yrs	1 & below 1 Year	
1.Kamarpur-I	4	7	-	1	-	-	1	1	14
2.Kamarpur-II	5	10	1	-	2	2	3	4	27
3.Thengbhanga	6	4	-	-	-	-	2	-	12
4.Anarmul	3	-	-	-	-	-	-	-	3
Total	10	21	1	1	2	2	6	5	56

Though the emphasis was on the Rhino population, following species of mammals and avifauna were also sighted.

Wild Boar 29 Nos.
 Buffalo 7 Nos. (M - 1, F - 2, Sub-Adult - 1 and Calf - 3).

Birds About 80 species of birds were also seen in the Sanctuary.

7. MORTALITY OF RHINOS :

As the Sanctuary is surrounded by villages from its all sides, every part of the area is susceptible to poaching. The intensity of poaching has become alarming due to the straying out of Rhino for foraging. About 20 Rhinos on average stray out of the core notified area raiding agricultural crops in the surrounding villages. Even Rhinos are sighted straying out upto 30 - 49 Km. away from the limits of the Sanctuary. From 1.7.87 to 30.11.93, out of the total 29 Rhino deaths, 18 Nos. were killed by poachers, forcing the management to set up 14 Nos. of camps outside the Sanctuary as against the 13 Nos. located within the notified area. A break up of the mortality is shown below :

Year	Adult		Sub-Adult			Flood			Illness			Infighting			Total (Nos.)	Remarks
	M	F	M	F	C	M	F	C	M	F	C	M	F	C		
1987	-	*1	-	-	*1	-	-	-	-	-	-	-	-	-	2	M-Male
1988	2	2	-	-	-	-	-	1	-	1	1	-	-	1	8	F-Female
1989	2	-	-	1	-	-	-	-	-	-	1	-	-	-	4	A-Adult
1990	-	-	1	1	-	-	-	-	1	1	-	-	-	-	4	SA-Sub-Adult
1991	+1	-	-	-	-	-	-	-	-	-	-	-	-	1	2	*-Poisoning
1992	+3	-	-	-	-	1	-	-	1	-	-	-	-	-	5	+-Electrocuti
1993	1	1	-	2	-	-	-	-	-	-	-	-	-	-	4	
(27.11.93)																
Total	9	4	1	4	1	1	-	1	2	2	2	-	-	1	29	

It is evident from the above that though the area is flood prone, the rate of mortality due to flood is comparatively low being 2 Nos. constitutes only 18% of the total death (11 Nos.).

9% of the total poaching of Rhinos occurred outside the Sanctuary, where they are more vulnerable even against constant vigil. 4 Nos. of death had occurred through electrocution taking advantage of the high and low transmission Electric transmission lines. Poaching by electrocution had occurred for the first time in Pabitora in 1989 and then in 1992.

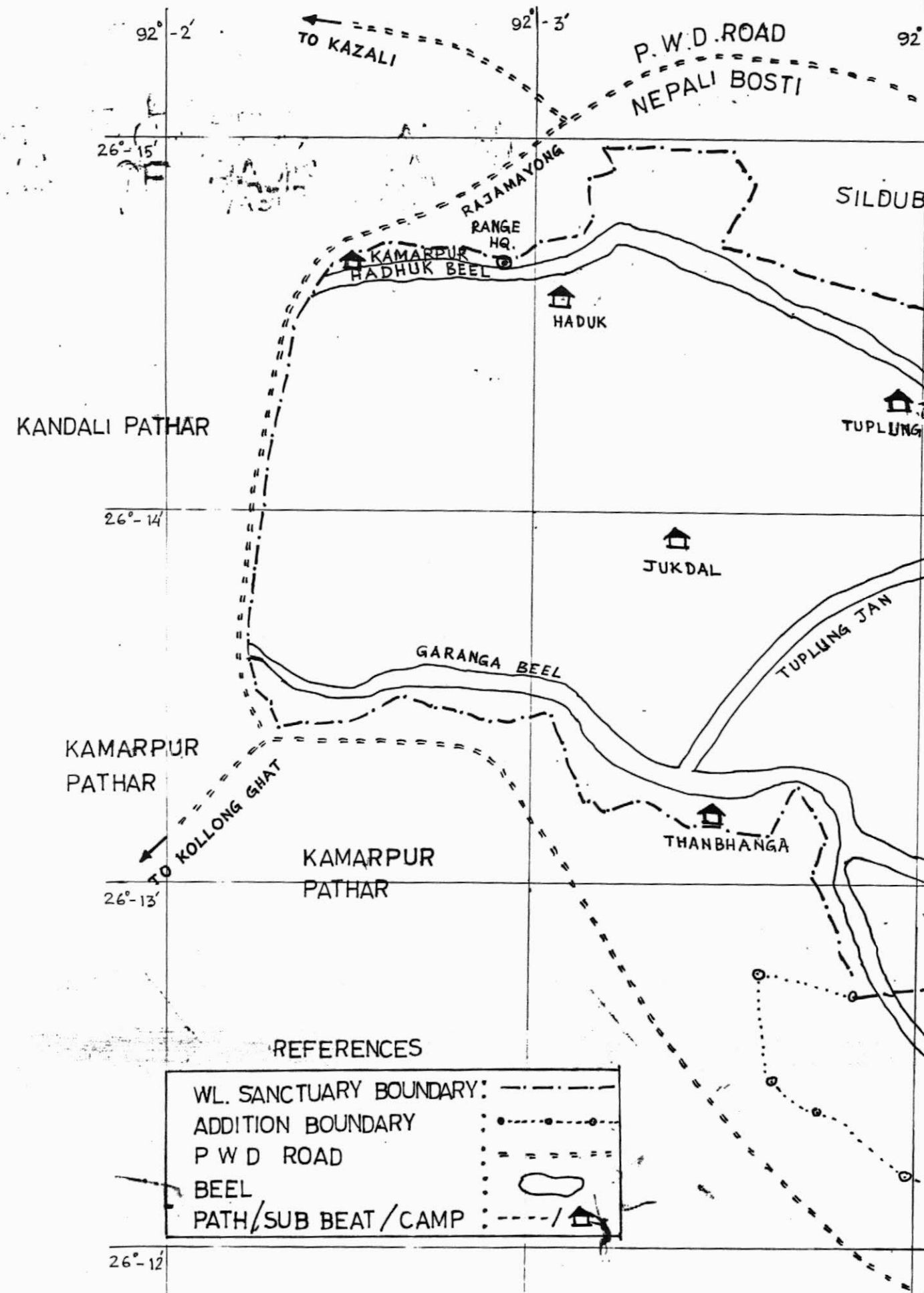
8. FUTURE PLAN :

The poaching of Rhinos being the major threat for very survival of the Rhinos, fight against the poaching is the major thrust for future plan for which following measures are in process :


1. Consolidation of the proposed areas for extended habitat.
 2. Improvement and strengthening in the establishment sector as well as infrastructures with adequate logistic support.
 3. Building up of intelligence system and adequate rewards.
 4. Eco-development programmes in the surrounding villages (20 Nos.).
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MAP OF POBITARA W

SCALE: 1 CM = 250 METERS
AREA: 1584.76 HECTARES



REFERENCES

WL. SANCTUARY BOUNDARY:	---
ADDITION BOUNDARY	- - - - -
P W D ROAD	====
BEEL	○
PATH/SUB BEAT/CAMP	- - - - - / 

WILDLIFE SANCTUARY

RES
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