



# ANNUAL REPORT

2024 - 2025



SUNDARBAN TIGER RESERVE





# Memoriam

## Sh. Amalendu Halder, Forest Guard

Shri Amalendu Halder, a devoted forest guard at the Sundarban Tiger Reserve paid supreme sacrifice on 18<sup>th</sup> May, 2024 defending the reserve against miscreants who had crossed the border from Bangladesh. Known for his dedication and unwavering commitment to duty, Shri Halder confronted the intruders with a fierce and able hand saving countless wildlife and protected the delicate ecosystem he loved and respected.

After joining the service in 2002 (17.07.2002), he served in almost all the ranges of Sundarban Tiger Reserve and has earned a great reputation for his bravery, integrity, and compassion. On the day of the unfortunate incident, he was posted at Netidhopani beat under National Park West Range of the Sundarban Tiger Reserve. His fearless attitude has inspired the staff and will continue to



guide us in the ardent task of protecting the natural boundaries against all the tides.

In memory of his supreme sacrifice, the Sundarban Tiger Reserve authority dedicated a creek in his name, now called as **Amalendu Khal**. We pay homage to the brave-heart.

## Foreword

The annual report of an organization serves as a vital compilation of relevant information, offering valuable insights for field officers and serving as an effective management tool. It is my privilege to present the annual report of the Sundarban Tiger Reserve (STR) for the financial year 2024-25.

This year was marked by both challenges and achievements. We mourn the tragic loss of one of our courageous forest guards, **Mr. Amalendu Halder**, who made the supreme sacrifice in the line of duty. In a determined response, STR staff conducted a decisive raid within the mangroves, leading to the arrest of the perpetrators. Despite this adversity, we are proud to report **zero cases of major species poaching** and a **significant reduction in tiger straying incidents**, a testament to the relentless efforts of our frontline staff.

Embracing **modern technology** and **optimal resource utilization** has been central to our management strategy. The **M-STrIPES-based E-patrolling application** and **UAV drones** have proven highly effective in monitoring the challenging Sundarban terrain. The **camera trap exercise** conducted during winter provided critical data on tigers, cubs, co-predators, and herbivores. Additionally, the **3rd Sundarban Bird Festival 2025** and the **Saltwater Crocodile Estimation 2024-25** were conducted with remarkable success, furthering our conservation goals.

Community engagement remains a cornerstone of our efforts. The **Joint Forest Management Committees (JFMCs)** have been actively supported through various initiatives, strengthening our collaborative relationship. Notably, **art and handicraft training programs** emerged as one of the most successful ventures this year, empowering local communities while promoting sustainable livelihoods.

Capacity-building initiatives were prioritized, with **staff training programs** conducted throughout the year. Key events such as **Global Tiger Day**, **Van Mahotsav**, and **Wildlife Week** were celebrated with enthusiasm, fostering awareness and participation. Furthermore, the **artificial conservation breeding program for Batagur baska (Northern River Terrapin)** continues to progress successfully.

In conclusion, I extend my deepest gratitude to all the **officers and staff** of the Sundarban Tiger Reserve for their unwavering dedication and hard work in preserving this ecologically critical protected area. Their commitment ensures that STR remains a beacon of conservation excellence.



Rajendra Jakher, IFS  
Chief Conservator of Forests & Field Director  
Sundarban Tiger Reserve

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## Chapter 1

### General Introduction & Background



## BACKGROUND

India's globally renowned conservation scheme 'Project Tiger' was launched on 23rd December 1973, in Sundarbans. It thus has the distinction of being one of the first nine Tiger Reserves to be declared in the country.

The Sundarbans Tiger Reserve (STR) is situated in the coastal districts of West Bengal, *i.e.* South 24-Parganas and North 24-Parganas (Arbesi Block only). It lies at the southernmost extremity of the lower Gangetic delta bordering the Bay of Bengal. The Sundarbans can be described as a maze of estuaries, river channels, and creeks encompassing a number of islands (105) of various shapes and sizes. The Tiger Reserve has an area of 2584.89 sq. km. and along with Bangladesh's Sundarbans forms the largest contiguous tract of mangrove forest anywhere in the world. It is the only mangrove forest throughout the world (besides Bangladesh) to harbour a significant tiger population. Apart from the tiger, the Sundarban Tiger Reserve also has a rich array of biodiversity values both floral and faunal.

## PRESENT STATUS

The Indian Sundarban has a forest area of 4,263 sq. km. of which 2,584.89 sq.km. has been designated as Sundarban Tiger Reserve (STR), *w.e.f.* 23.12.1973. Within this Tiger Reserve, 1699.62 sq. km. has been designated as the Critical Tiger Habitat (CTH) vide Notification No. 6028-For, dated 18.12.2007. Within this CTH, lies the Sundarban National Park having an area of 1330.12 sq. km. area notified vide No. 2867-FOR, dated 04.05.1984. The area outside the CTH is known as Buffer Zone notified vide No. 615-For/11M-28/07, dated 17.02.2009. Within the buffer area is located the Sajnekhali Wildlife Sanctuary covering an area of 362.42 sq. km. vide Notification No. 5396-FOR, dated 24.06.1976. Rest of the area is the multiple use zone, which is used by the local population to fulfill their *bonafide* needs. The importance of this area was recognized by the UNESCO and the area was accorded the status of a World Heritage Site in the year 1987.

## SIGNIFICANCE OF SUNDARBAN MANGALS

- One of the first nine Tiger Reserves declared under the Project Tiger scheme in the year 1973.
- The National Park area of the Tiger Reserve is a natural World Heritage Site, which was declared in the year 1987.
- The Sundarban Tiger Reserve is a part of the Sundarban Biosphere Reserve, which is one of the few globally recognized Biosphere Reserves in the country. It was declared as a Biosphere Reserve in the year 1989.
- It constitutes over 60% of the total mangrove forest area in the entire country and has 90% of the total Indian mangrove species.
- The Sundarbans has been classified as a Tiger Conservation Landscape of global priority, as it is the only mangrove habitat (along with the Bangladesh), which support a significant tiger population.

- Mangrove biomass and deep peat soils store massive amounts of carbon—up to four times more per hectare than many terrestrial forests—mitigating climate change. The mangrove forests trap debris and silt and stabilize the near shore environment. Certain mangrove species also act as bio-filters as they have been found to bio-accumulate heavy metals. Mangrove roots trap sediments and absorb pollutants, enhancing water clarity and quality in tidal waterways. They filter ground-water and storm-water runoff which often contains harmful pesticides. They recharge the ground water by collecting rain water and slowly releasing it to the underground reservoir.
- The dense root network attenuates wave energy and storm surges, reducing shoreline erosion and safeguarding inland communities from cyclonic impacts. The mangrove forests act as a natural shelter belt and protect the hinterland from storms, cyclones, tidal surges, sea-water seepage and intrusion.
- The Tiger Reserve is abode to a large number of endangered and globally threatened species like the tiger (*Panthera tigris tigris*), fishing cat (*Prionailurus viverrina*) and estuarine crocodile (*Crocodilu porosus*), Gangetic Dolphin (*Platanista gangetica*) and Irrawaddy Dolphin (*Oracella brevirostris*), King Cobra (*Ophiophagus hannah*), water monitor lizard (*Varanus salvator*, *V. bengalensis*) etc.
- It harbours significant populations of the Northern River terrapins (*Batagur baska*), which was once believed to be extinct. It is the nesting ground for marine turtles like Olive Ridley (*Lepidochelys olivacea*), Green Sea turtle (*Chelonia mydas*) and Hawksbill turtle (*Eretmochelys imbricata*).
- Two species of horseshoe crabs (which are considered as living fossils as they are thought to be more than 400 million years old), i.e. *Tachypleus gigas* and *Carcinoscorpius rotundicauda* out of the four species found in the world are found here.
- More than 300 species of birds are recorded from the Sundarbans. It is known as a kingfisher's paradise as out of the 12 species of kingfishers found in the country 10 species are commonly found here. A number of heronries are formed here during monsoon, which harbour large bird populations, which come and breed here. Also, during the winters it is home for Trans-Himalayan migratory birds. Goliath heron (*Ardea goliath*) is another important bird is found in the area.
- The Sundarbans acts as nursery grounds for shrimp, crabs, and commercially important fish species boost fisheries productivity in adjacent coastal waters. More than 350 species recorded from the Indian Sundarbans.
- Local populations depend on sustainable fishing, honey harvesting for income and subsistence. The Sundarbans harbors unique genetic variants adapted to saline, waterlogged conditions—valuable for crop improvement and biotechnological research.
- By exchanging moisture and heat with the atmosphere, mangroves help stabilize local temperatures and humidity levels. Decomposition of mangrove litter retains and recycles nutrients, sustaining high primary productivity in coastal ecosystems. In this work, ecotone biodiversity like- mudskippers, fiddler crabs help a lot.



- Cultural cornerstone embedded in local folklore and religious traditions, mangroves shape community identity and traditional spiritual practices.
- Eco-tourism resource like Birdwatchers, photographers, and wildlife enthusiasts flock to the Sundarbans, generating revenue and fostering conservation awareness.
- Scientists study the Sundarbans to understand mangrove ecology, climate adaptation strategies, and restoration techniques.



- Highly sensitive to sea-level rise, salinity shifts, and pollution, the Sundarbans provides environmental sentinel and early warning of broader ecological changes.

## BOUNDARIES

The Sundarban Tiger Reserve is bound in the east by the international boundary with Bangladesh formed by the rivers Harinbanga, Raimangal and Kalindi. On the south lies the Bay of Bengal. The western border is formed by the river Matla, which acts a common boundary with the territorial Forest Division of South 24-Parganas. Towards the north-west, the area is bound by rivers Bidya and Gomdi. All the fringe villages lie outside the Tiger Reserve along the northern boundary.

There exist two distinct ecological units of mangrove vegetation as are given below:

The western portion lying west of river Thakuran where a trickle of sweet water reaches from the river Hooghly, *i.e.* mostly in the South 24-Parganas Forest Division.

The central mangrove patch, which is practically cut off from the upstream flow and is fed by backwaters of Bay of Bengal lying between rivers Harinbanga and Thakuran.

The Sundarban Tiger Reserve falls under this area. The salinity regime is very high here. However, on the eastern side bordering Bangladesh river Kalindi receives some sweet-water flow, as a result, the salinity levels are comparatively low.

## Chapter 2

### Legal Status of Sundarban Tiger Reserve



**LEGAL STATUS:**

<b>Category</b>	<b>Area (in sq. Km.)</b>	<b>Notification No.</b>	<b>Legislation</b>
<b>Sajnekhali Wildlife Sanctuary</b>	362.42	5396-FOR,24.06.1976 dt.	As per sub-section (1) of section 18 of the Wildlife (Protection) Act, 1972 (53 of 1972).
<b>Sundarban National Park</b>	1,330.12	2867-FOR, 04.05.1984 dt.	As per clause (b) of section 21 of the Wildlife (Protection) Act, 1972.
<b>Critical Habitat Tiger</b>	1,699.62	6028-FOR, 18.12.2007dt.	As per sub-section (4) of Section 38 V of the Wildlife (Protection) Act, 1972.
<b>Buffer Area</b>	885.27	615-FOR/11M- 28/07 dt.17.02.2009	The Sanctuary area along with adjacent RA is a part of Buffer.
<b>Total Area:</b>	2584.89		





# AREA STATEMENT OF SUNDARBAN TIGER RESERVE:

<b>(a) Core Area or Critical Tiger Habitat</b>			
<b>Sl. No.</b>	<b>Block and Compartments</b>	<b>Total Area (in sq.km.)</b>	<b>Legal Status</b>
<b>1</b>	Matla (1-4)	176.30	NP
<b>2(a)</b>	Chamta (1-3)	96.32	RF
<b>2(b)</b>	Chamta (4-8)	124.37	NP
<b>3</b>	Chotahardi (1-3)	175.67	NP
<b>4</b>	Goasaba (1-4)	171.73	NP
<b>5</b>	Gona (1-3)	139.03	NP
<b>6(a)</b>	Bagmara (1)	24.30	RF
<b>6(b)</b>	Bagmara (2-8)	269.63	NP
<b>7</b>	Mayadwip (1-5)	273.36	NP
<b>8</b>	Netidhopani (1-3)	93.00	RF
<b>9</b>	Chandkhali (1-4)	155.91	RF
	<b>TOTAL:</b>	<b>1699.62</b>	<b>-</b>
<b>(b) Buffer Area</b>			
<b>Sl. No.</b>	<b>Block and compartments</b>	<b>Total Area (in sq.km.)</b>	<b>Legal Status</b>
<b>1</b>	Panchamukhi (1-5)	176.66	WLS
<b>2</b>	Pirkhali (1-7)	185.76	WLS
<b>3</b>	Arbesi (1-5)	150.43	RF
<b>4</b>	Jhilla (1-6)	123.14	RF
<b>5</b>	Khatu Jhuri (1-3)	132.41	RF
<b>6</b>	Harinbhanga (1-3)	116.87	RF
	<b>TOTAL:</b>	<b>885.27</b>	<b>-</b>

Entire area has the status of Reserved Forest (RF) also.



## Administration



Here is the administrative set up of STR:

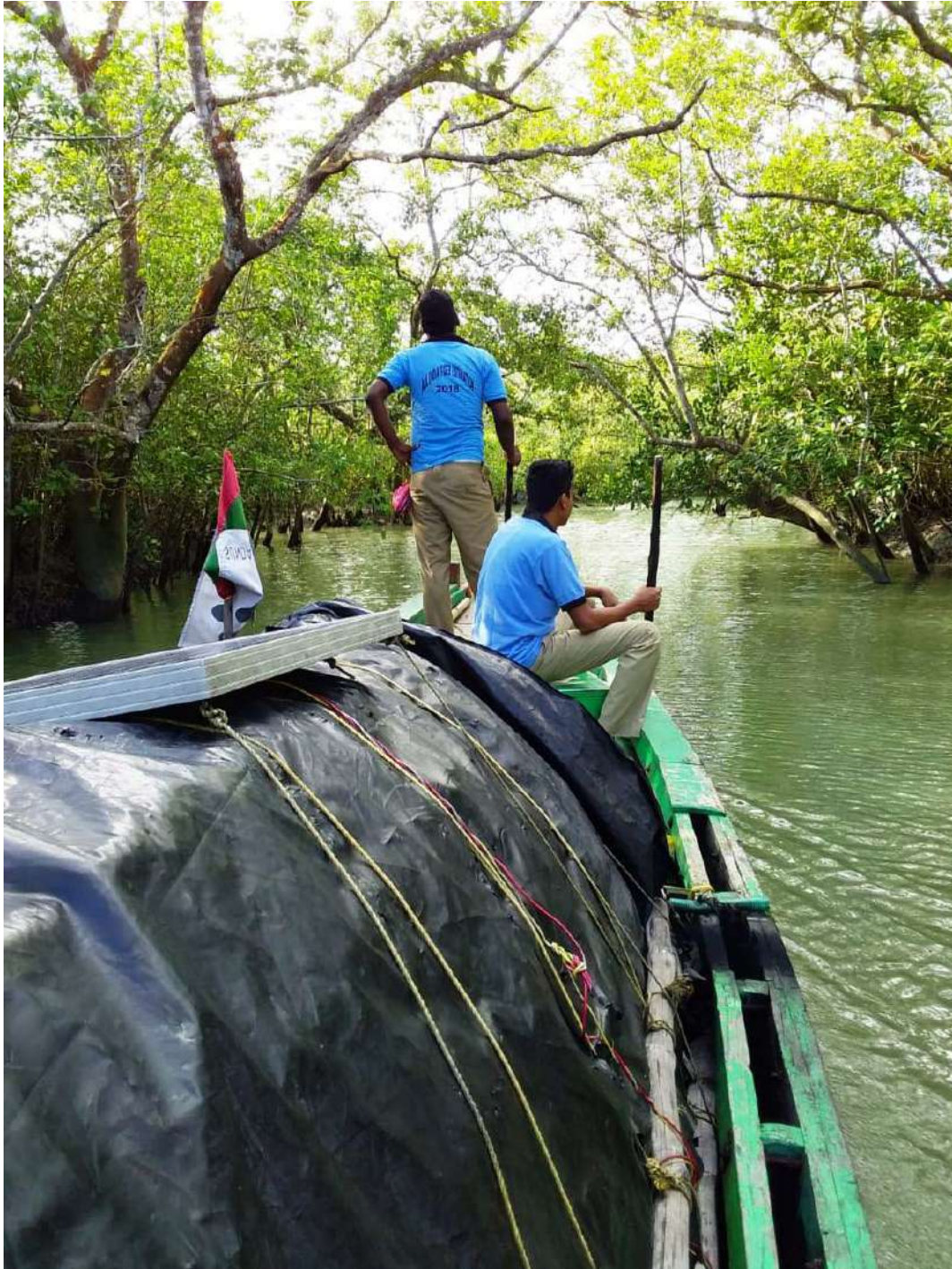
Sl.	Range	Beat	Camps/ Floating Camps under respective ranges
1	Sajnekhali WLS (Hq – Pakhiralay)	Sajnekhali, Duttar, Dobanki	Chayan, Sudhanyakhali, Pirkhali, Sadakkhali, Bijoy varani (Tentultala)
2	NP West (Hq- Vidya)	Netidhopani	Havati
		Haldibari	
		Kendo	
		NPW Hq- Vidya	
3	NP East (Hq- Gosaba)	Chamta	Chandkhali (Green camp), Luthirduani
		Bagmara	
		NPE Hq- Gosaba	
4	Basirhat (Hq- Jhila)	Bagna	Kaksa, Chilmari, Kakmari, Samsernagar
		Jhingekhali	
		Burirdabri	
		Khatuajhuri	
		Harikhali	
5	Head Quarter (Hq- Canning Town)	Canning HQ	
6	Land and Law cell		
7	Research		
8	Rampura Mobile	Rampura HQ	
9	Eco-tourism		





## Chapter 4

### Staff Strength



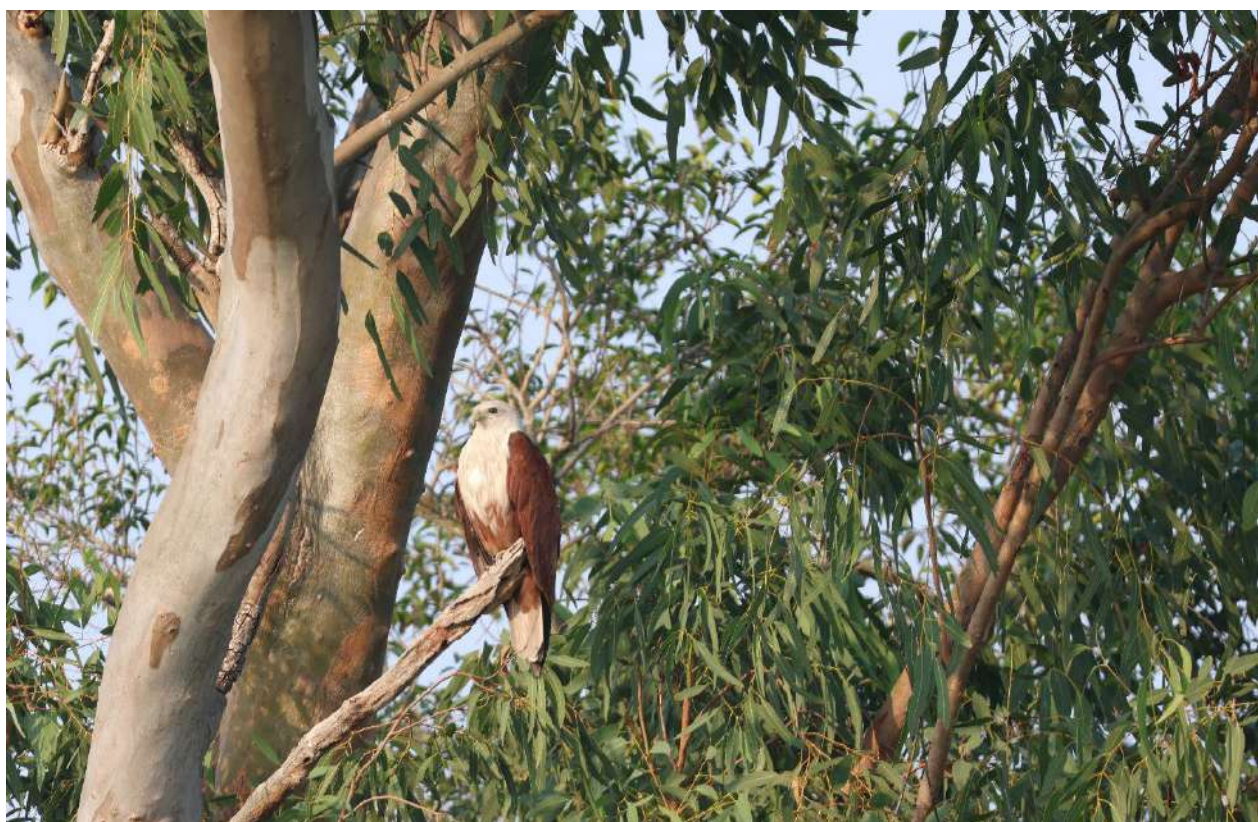
Sundarban Tiger Reserve is headed by Field Director, an officer of the rank of Chief Conservator of Forests. He is supported by one Deputy Field Director, two Assistant Field Directors, Range Officers and other frontline staff, the details of which are given in the table below:

**EXISTING SANCTIONED STAFF STRENGTH AS ON 31.03.2025**

Sl. No.	Category of Post	Sanctioned Strength	Existing	Vacant	Audited Against	Existing G.O. No.
1.	CCF & FD	1	1	-	-	PCCF, WB's O.O. No.20-Misc/2001 dt. 18.05.2001
2.	DFD	1	1	-	-	-do-
3.	AFD	2	2	-	-	1234-For dt. 27.2.1974
4.	Research Officer	1	-	1	-	11343-For dt. 21.12.1976
5.	Lab. Asstt.	1	-	1	-	4253-For dt. 10.7.1978
6.	Veterinary Officer	1	-	1	-	1130-For/11B-22/88 dt.14.2.1991
7.	Head Clerk	1	1	-	-	PCCF, WB's O.O. No. 26-Misc/PMC/15, dt.30.03.2015
8.	Accountant	1	1	-	-	PCCF, WB's O.O. No. 26-Misc/PMC/15, dt.30.03.2015
9.	UDC	6	3	3	-	PCCF, WB's O.O. No. 26-Misc/PMC/15, dt.30.03.2015
10.	PA	1	1	-	-	PCCF, WB's Letter No.11062/ PMC/2E-212 dt. 15.09.97
11.	Clerk-cum-Typist	7	5	2	-	PCCF, WB's O.O. No. 26-Misc/PMC/15, dt.30.03.2015
12.	Typist	1	-	1	-	PCCF, WB's O.O. No. 26-Misc/PMC/15, dt.30.03.2015
13.	Forest Ranger	11	7	4	-	PCCF, WB's O.O. No. 20-Misc/2001 dt. 18.05.2001
14.	DR/Fr.	28	13	15	-	PCCF, WB's O.O. No.07-Misc/PMC/2018, dt.19.01.2018
15.	Head Forest Guard	8	2	6	-	-do-
16.	Forest Guard	110	35	75	-	-do-
17.	Majhi	21	3	18	-	CCF/WB's O.O. No. 45/S, dt. 24.9.1975
18.	BoatMan	54	5	49	-	4192-For dt. 19.9.1981
19.	Forest Watcher	1	-	1	-	769-For dt. 9.2.1974
20.	Karmabandhu	1	-	1	-	5295-For/11B-41/80-I dt.21.7.1984



21.	Mali	1	1	-	-	769-For dt. 9.2.1974
22.	Driver	2	-	2	-	8815-For dt. 20.9.1976
23.	Chowkidar	2	1	1	-	769-For dt. 9.2.1974
24.	Karmasathi	2	-	2	-	769-For dt. 9.2.1974
25.	Peon	4	2	2	-	*Audited against PCCF, WB. G.O. No. 760-For dt. 9.2.1974 & 5295-For/11B-41-80-I dt. 21.7.1984
26.	Orderly	8	3	5	-	769-For dt. 9.2.1974 & 5926-For dt. 2.9.1977 & 2661-For dt. 27.4.1974
27.	Engine Driver	5	3	2	-	1170-For dt. 17.12.76 & 4128-For dt. 19.7.1980
28.	Sereng	3	1	2	-	4128-For dt. 17.09.80 & 4192-For dt. 19.09.1981
29.	Sukhani	2	-	2	-	1170-For dt. 17.12.76 & 4128-For dt. 19.07.1980
30.	OMG	3	-	3	-	-do-
31.	Laskar	8	-	8	-	-do-
	Total	298	93	207	-	
	Banasramik		5			





## Chapter 5

### Infrastructure & Assets



Infrastructure and assets are the one of the valuable materials of a forest division. These are discussed in the following.

Sl.	Items	SWLS	BHT	NPE	NPW	RPP	ET	HQ
1	RANGER'S QUARTER	1	1	1	1	1	1	0
2	VETERINARY OFFICER'S / DOCTOR'S QUARTER	1	0	0	0	0	0	0
3	DR/FR QUARTER	4	3	3	3	1	0	0
4	TWIN DR/FR BUILDING (PUKKA)	0	0	0	0	0	0	0
5	TWIN FG QUARTER (PUKKKA)	3	0	0	0	0	0	0
6	OTHER STAFF QUARTER	0	0	0	0	0	0	0
7	BOATMANS BARRACK	0	0	0	1	1	0	0
8	STAFF BARRACK	9	12	10	9	2	0	0
9	TWIN STAFF BARRACK (PUKKA)	1	0	0	0	2	0	0
10	TWIN STAFF BARRACK (WOODEN)	0	0	0	0	0	0	0
11	WATCH TOWER	3	3	3	3	0	0	0
12	LABORATORY	0	0	0	0	0	0	1
13	HONEY GOWDOWN	1	1	0	0	0	0	1
14	STORE HOUSE (WOODEN)	0	0	0	0	1	0	0
15	PUMP AND GENERATOR ROOM	5	4	0	4	0	0	0
17	RCC WATER RESERVOIR	1	0	0	0	0	0	0
18	COMMON KITCHEN FOR STAFF	3	0	0	3	0	0	0
19	MOTOR CYCLE	2	1	1	2	0	0	1
20	MECHANIZED DINGHI BOAT	4	0	3	5	0	0	0
21	SPEED BOAT	1	2	2	4	0	0	0
22	RT BASE SET	14	18	12	11	0	1	1
23	WALKIE TALKIE	8	11	7	8	0	0	0
24	COMPUTER - DESKTOP	2	2	1	1	0	1	27

Sl.	Items	SWLS	BHT	NPE	NPW	RPP	ET	HQ
25	LAPTOP	3	2	1	1	0	0	1
26	GPS MACHINE	8	4	9	10	0	0	0
27	PRINTER	3	2	2	1	0	1	25
28	SCANNER	0	0	1	0	0	0	1
29	MULTIMEDIA PROJECTOR	2	0	0	0	0	0	0
30	16 MM PROJECTOR	0	1	0	0	0	0	0
31	XEROX MACHINE	0	0	0	0	0	0	1
32	REFRIGERATOR	0	2	0	1	0	0	2
33	VIDEO CAMERA	0	0	0	0	0	0	0
34	35 MM ANALOG CAMERA	2	0	0	0	0	0	0
35	DIGITAL CAMERA	2	0	0	0	0	0	0
36	STILL CAMERA	0	4	3	0	0	0	0
37	NIGHT VISON BINOCULAR	0	0	0	0	0	0	0
38	BINOCULAR (NORMAL)	6	7	6	7	0	1	0
39	TV SET	4	9	4	5	0	0	2
40	INTERCOM	0	0	0	0	0	0	1
41	MOBILE PHONE (ANDRIOD )	9	12	7	7	0	1	0
42	GENERATOR	7	4	4	6	0	0	1
43	PUMP SET	0	6	3	5	0	0	0
44	AIR-CONDITION	2	0	0	0	0	0	3
45	SEARCH LIGHT	21	28	10	12	0	1	0
46	SOLAR LANTERN	0	1	3	0	0	0	0
47	TRAP CAGES	4	4	0	2	0	0	1
48	SMALL TRAP CAGE	1	4	0	1	0	0	0
49	TRANSLOCATION CAGE	4	3	0	1	0	0	0
50	SQUEEZE CAGE	0	1	0	0	0	0	0
51	DRONE	2	1	0	0	0	0	0



**Other structures: (as per 31.03.2025)**

Sl.	Category	No(s).	Location
1	Officers' Rest Rooms	4	SWLS-3 (MIC), NP(E)-1
2	Subordinates' Rest House	3	SWLS-1, NP(E)-1, BHT-1
3	Research Range Office	1	Hqr.-1.
4	Office Shed (Wooden)	7	SWLS-1, BHT.-3, NP(W)-1, RPP-1, ET-1.
5	Veterinary Clinic	1	SWLS-1.
6	Mangrove Interpretation Centre (MIC)	1	ET-1.
7	Cage trail	1	BHT
8	Canopy Walk	1	Dobanki
9	Tourist Shed & Ticket Counter	6	SWLS-2, NP(E)-1, ET-1, BHT-3
10	Two Unit Toilet (for tourists)	10	SWLS-2, BHT-3, NPW-2, ET-3.
11	Post-Mortem Unit	1	SWLS-1.

**Trap cameras:**

Sl.	Description of the camera items	No(s).	Research Range
1	CUDDY BACK C1 DIGITAL	972 (50 nos. donated by WWF-India)	
2	BHARTI COMMUNICATION	456 only	
3	BUSHNELL	06 only	
4	Nikon mirrorless DSLR with lens	01 only	

**Dehumidifier/ Dry Cabinet Box for camera traps:**

15 nos. dry cabinet boxes are kept at Research Range, to protect and safe upkeep of the trap cameras from moisture and humidity.

**Vehicles (including hired): record as on 31.03.2025**

<b>Type</b>	<b>Nos.</b>	<b>Remarks/ Condition</b>
Mahindra Scorpio	01 (WB-08G-4116)	Departmental Vehicle of CCF & FD/STR
Mahindra Scorpio	01 (WB-08G-4112)	Departmental Vehicle of DFD/STR
Maruti Swift Dzire	01	Hired Vehicle
Mahindra Bolero Camper	01 (WB-95A-7563)	Donated by WWF-India*
Launch (Departmental)	HQ- 01 (Banasova)NPE - 01 (Banaraj)	Good condition
Launch (Hired)	HQ-02 (Debraj, BharatLaxmi)	Good condition
Accommodation Boat (Departmental)	SWLS-01 (Chayan), NPW-01(Havati)	Good condition
Accommodation Boat (Hired)	HQ-02 (Maa Sumitra, BharatLaxmi)	Good condition

\*The Mahindra Bolero Camper car was donated by WWF-India vide NTCA letter no. F. No. 7-1/2015-NTCA, New Delhi, the 7<sup>th</sup> February 2024 and WWF-India letter to NTCA dated 22.02.2024. file memo no. 2776/ 2M-1, 22 OCT 2024.

**Tranquilization Guns:**

<b>Category</b>	<b>No.</b>
Dist- inject	06
Dan-inject	01

**Arms & Ammunitions:**

<b>Rifle stock</b>	<b>Defective</b>	<b>DBBL stock</b>	<b>Defective</b>	<b>Pump Action Gun</b>	<b>Defective</b>	<b>Total Stock</b>	<b>Total Defective</b>
54	16	31	09	18	0	103	25

## Renovation & maintenance of Staff staying & office facilities: 2024-25

Sl.	Work	Range
1	Construction of jetty at Chotomollakhali	Bashirhat
2	Paver Block Road at Sudhanyakhali	SWLS
3	Construction of C.C. Ghat at Burirdabri	Basirhat
4	Construction of C.C. Ghat at Sudhanyakhali	SWLS

### SCRAP MATERIAL:

List of the scrap items in various ranges of the reserve were made and were put to auction in the year FY 2024-25.





## Chapter 6

### Financial Performance



Budget (2024-25):

**a) State Plan:**

Sl. No.	Scheme	Fund received (in Rs.)	Expenditure (in Rs.)
1.	State Development Scheme	4,35,79,362.00	2,93,87,780.00

**b) Centrally Sponsored Schemes:**

Sl. No.	Scheme	Fund received (in Rs.)	Expenditure (in Rs.)
1.	Centrally Development Scheme (Project Tiger)	5,15,90,750.00	4,73,01,265.00

**c) Any other schemes:**

Sl. No.	Scheme	Fund received (in Rs.)	Expenditure (in Rs.)
1.	WB-CAMPA	98,000.00	70,023.00
2.	CSS-IDWH	0.00	0.00

**Number of Man days Generated in various Forestry Activities (2024-25)**

Activity (Please specify)	Man-days generated	Average Labour rate (Rs.)
Control of poaching and illegal trade etc. at different range in Sundarban Tiger Reserve	3103	322
Hiring of manpower for habitat improvement measures	1588	322

## Performance Report of Works in 2024-25:

Works in JFMC area in 2024-25		
Sl. No.	Particulars	Amount (in Rs.)
1	Maintenance of nylon net fencing over 2.00 K.M.at Jhilla – 3, Basirhat Range, maintenance of nylon net fencing and khal guard at Duttar beat over 1 Km. Kapura river side khali near Nakulvarani side khal, SWLS Range, renovation of nylon net fencing over 3 Km. at Jhila 1 compartment, of Bagna Beat under Basirhat Range, renovation of nylon net fencing over 170 metre near watch tower, road at Burirdabri Beat under Basirhat Range, renovation of nylon net fencing in connection with creation of Goran Posts fencing near watch tower at Burirdabri Beat under Basirhat Range over 170 Metre long, repairing of nylon net fencing over 1000 metre from Laxman Khal to Nirmal Khal of Pirkhali - 2 under NPW Range maintenance of nylon net fencing and khal guard over 3 Km under SWLS Range.	3,87,504
2	Maintenance of tourist spot. Cost of soling bricks & CC path in front of Souvenir shop at Dobanki camp under SWLS Range. (Length 9.14 metre X Breadth 3.200 metre).	28,469.00
3	Plastic cleaning drive in and around STR.	2,31,462.00
4	Development of earthen embankment at Jhila of Basirhat Range.	99,000.00
5	Installation of 70 nos. street lights in JFMC village, Chargheri Santigachi & Samsernagar,	377,300.00

## ECO-DEVELOPMENT ACTIVITIES (STCFT): FY 2024-25

Sl. No.	Description of work	Expenditure (in Rs.)
1.	Patrolling & protection.	22,62,571.00
2.	Anti-poaching camps and staff welfare	5,23,336.00
3.	Mitigation of human animal conflict & rescue operation.	8,76,104.00
4.	Eco-tourism.	4,77,182.00
5.	Conservation and management of species.	8,79,063.00
6.	Research and estimation exercise.	7,38,604.00
7.	Awareness and allied activities.	2,15,659.00
8.	J.F.M.C. Capacity building and & alternative livelihood.	2,31,462.00
9.	Fringe area development activities.	2,98,800.00
	<b>TOTAL</b>	<b>65,02,781.00</b>



## Chapter 7

### Non-Timber Forest Produce



## NON-TIMBER FOREST PRODUCE

Honey and bees-wax are the minor forest produce, which are collected during the months of April and May. Sundarban Tiger Reserve issues permit(s) every year for honey collection. The honey collected is deposited at different godowns of the Tiger Reserve for storage and subsequent disposal by handing over the same to West Bengal Forest Development Corporation Limited. Earlier, Golpata (*Nypa sp.*) and Hental (*Phoenix sp.*), which were collected by the fringe villagers, were discontinued in 1978 and 1991 respectively, due to environmental causes. The coupe operation has been discontinued since the year 2001.

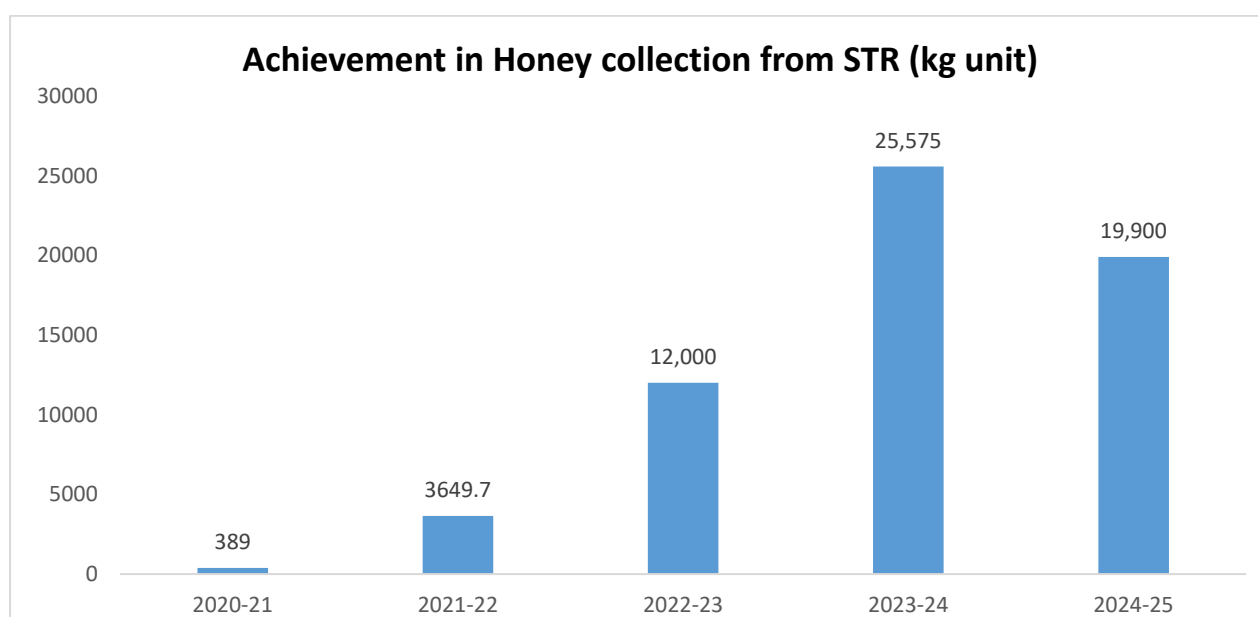
### Details of Crude honey collection in past 5 financial years at STR:

Sl. No.	Year	Target in Kg.	Achievement in Kg.	Collection cost per Kg.	Incidental cost per Kg.	Total cost in Rs.	Remarks
1	2020-21	18,000	389	150	15	64,185	
2	2021-22	30,000	3649.7	160	17	6,45,997	
3	2022-23	16,000	12,000	180	20	24,00,000	
4	2023-24	25,000	25,575	225	25	63,93,750	Grade "B"
5	2024-25	25,000	19,900	235	30	52,73,500	Grade "B"

It was stressed in the meeting of collection of crude honey from Sundarbans during 2023 – 2024 held on 17.03.2023 in the office of Managing Director, West Bengal Forest Development Corporation Ltd., Kolkata that Crucial parameter of moisture % in honey which ultimately determines its quality and value.

1. A Grade: Crude Honey containing up to 23% moisture
2. B Grade: Crude Honey containing 23% to 26% moisture

\* Crude Honey containing more than 26% moisture will be rejected.



## Chapter 8

### Plantation

To meet the local demand of small-wood and fuel-wood, mangrove plants are artificially regenerated on the mud-flats adjoining the fringe villages of the Tiger Reserve. Non-mangrove plantations were also raised along village roads and earthen embankments to cater to the needs of the local people. But in recent financial year, mangrove plantation was not taken place in Sundarban Tiger Reserve jurisdiction.

#### Plantation during 2023-24:

Year	Mangrove Plantation (Creation)
2024-25	NIL

#### Maintenance of Mangroves in FY 2024-25:

Particulars	Area (in Ha)	Fund (in Lakh)
1st Year Maintenance of Greening Sundarban Plantation	Nil	Nil
2nd Year Maintenance of Greening Sundarban Plantation	Nil	Nil
2 <sup>nd</sup> Year Maintenance of Mangrove Plantation under State Development Scheme	Nil	Nil





## Chapter 9

### Joint Forest Management (JFMC) & Self-Help Group (SHG)





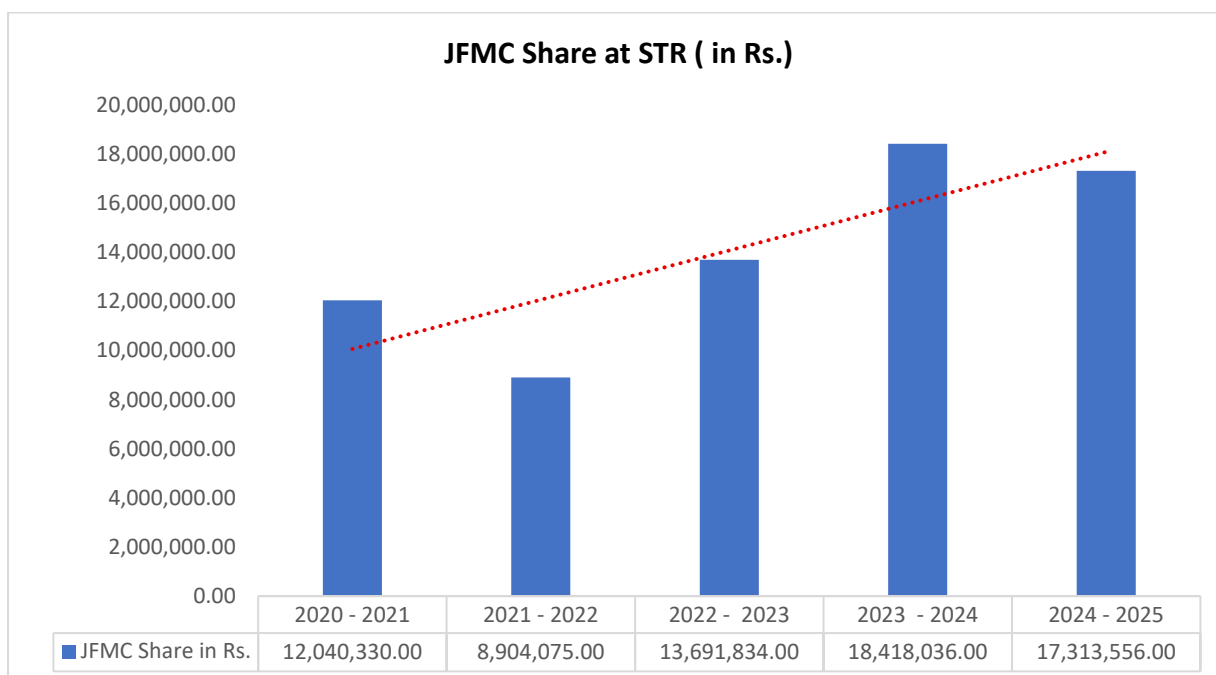
India has a long history of co-existence of people and the wild so that there is space for both to thrive in harmony. The oldest examples are the sacred groves, which are an indigenous community approach for protecting patches of forests for a variety of ecosystem services. Many communities have historically protected local forests. Joint Forest Management (JFM) is an approach and programme initiated in the context of the National Forest Policy of 1988 wherein state forest departments support local forest dwelling and forest fringe communities to protect and manage forests and share the costs and benefits from the forests with them. JFM has the potential to meet local subsistence needs, of fuel wood, fodder, other non-timber forest produce (NTFP) etc. to provide livelihood through sale of produce, while at the same time, preventing degradation of the forests that provide local, national and global environmental benefits. JFMCs are an integral part of public dealings in forest areas. The people of the JFMCs are more or less dependent on the forest department in several developmental activities.

### **Demography & Socio-Economy:**

Some 4.5 million people live in the biosphere reserve (2011 Population Census). They depend directly on forest and forest-based resources since agriculture is not productive enough due to saline water. Emphasis is given to schemes that generate additional income and economic security to people through Joint Forest Management, Animal husbandry, Popularization of energy alternatives, Habitat improvement, Aquaculture, Apiary- Honey and wax culture, Local Cottage Industry: development of crafts and education.

No. of JFMCs	26
No. of JFMCs registered	26
No. of Revenue villages covered	38
Total Forest area covered (in ha.)	26,474
No. of JFMC having Women as Executive Committee Members	26

The share money for the eco-developmental works in different JFMCs is distributed by the forest department from the total collection from the eco-tourism.



### Status of Self-Help Groups (SHG) in Sundarban Tiger Reserve: 2024-25

Name of Range	Years				
	2020-21	2021-22	2022-23	2023-24	2024-25
<b>National Park (W) Range</b>	20	20	20	20	<b>20</b>
<b>Sajnekhali Wildlife Sanctuary Range</b>	38	38	47	47	<b>47</b>
<b>Basirhat Range</b>	85	85	106	106	<b>106</b>
<b>Grand Total:</b>	143	143	173	173	<b>173</b>

List of SHGs is attached in the Annexure 1.

**List of JFMCs under STR jurisdiction (2024-25):**

<b>Sl. No.</b>	<b>Range</b>	<b>Name of JFMC</b>
1	Basirhat	Adharpara JFMC
2	Basirhat	Adibasipara JFMC
3	Basirhat	Bagnapara JFMC
4	Basirhat	Bhrulipara JFMC
5	Basirhat	Emlibari JFMC
6	Basirhat	Gobindapur JFMC
7	Basirhat	Hemnagar JFMC
8	Basirhat	Hentalbari JFMC
9	Basirhat	Kalidaspur JFMC
10	Basirhat	Kalitala-Perghumti JFMC
11	Basirhat	Mitrabari JFMC
12	Basirhat	Samsernahgar JFMC
13	NPW	Bijohnagar JFMC
14	NPW	Mathurakhanda JFMC
15	NPW	Satyanaranpur JFMC
16	NPW	Amlamethi JFMC
17	NPW	Bali JFMC
18	SWLS	Lahiripur Chargheri JFMC
19	SWLS	Lahiripur Santigachi JFMC
20	SWLS	Luxbagan Bidhancolony Parasmani JFMC
21	SWLS	Dayapur JFMC
22	SWLS	Jamespur JFMC
23	SWLS	Dulki JFMC
24	SWLS	Sonagaon JFMC
25	SWLS	Anpur Rajatjuble JFMC
26	SWLS	Pakhirala JFMC

- **Forest Village and Encroachment during 2024-25: Nil**
- **Status of implementation of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006: Not applicable in STR.**
- **Diversion of Forest Land during 2024-25: Nil**

## Chapter 10

### Forest Protection



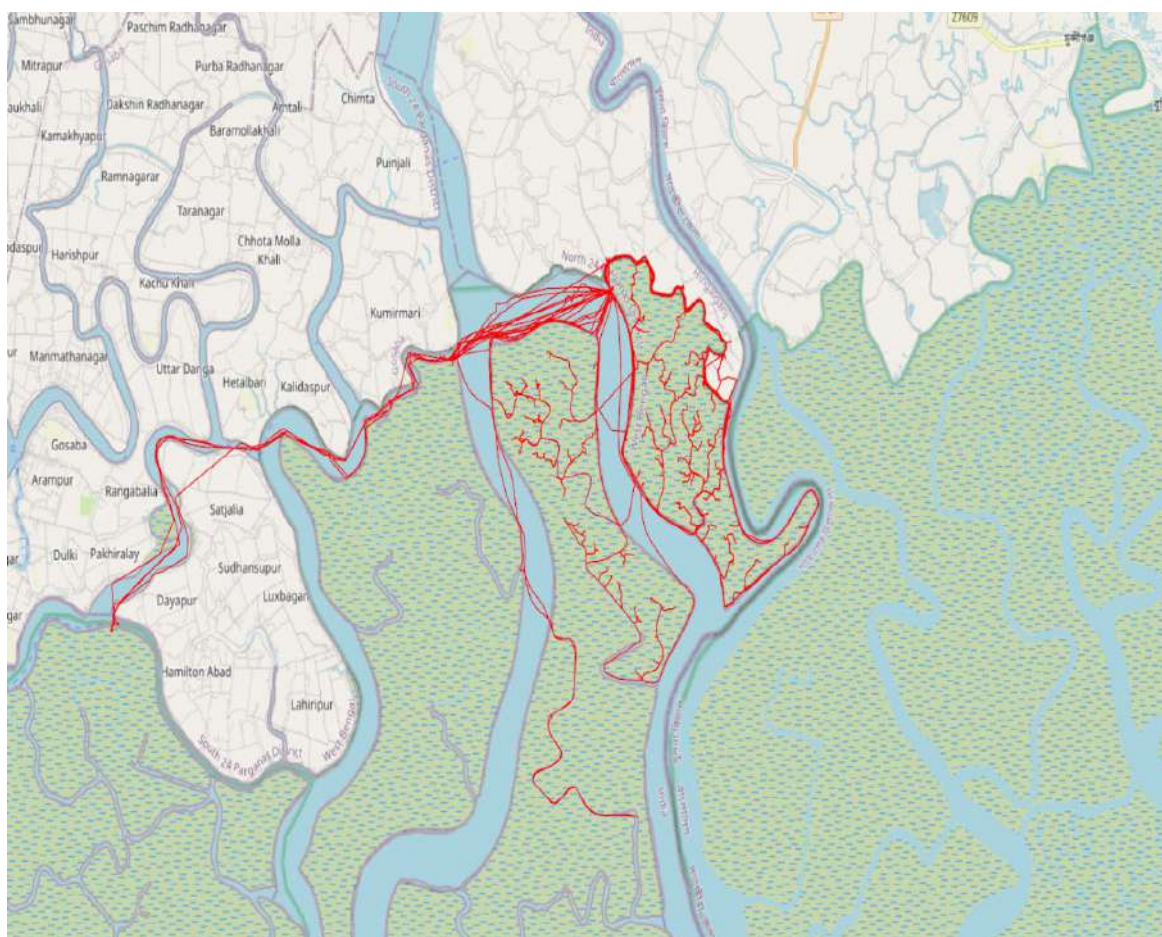


**List of anti-poaching camps:**

Land- based Camps			Floating Camps/ Check Posts		
Sl.	Range	Camp Location	Sl.	Range	Camp Location
1	Sajnekhali WLS	Pakhiralay	1	Sajnekhali WLS	Pirkhali
2		Sajnekhali	2		Sadak Khali
3		Dobanki	3		Tentualtala
4		Duttar	4		Panchamukhani (Chayan)
5		Sudhanyakhali			
6	Basirhat	Jhila	5	Basirhat	Kakmari
7		Bagna	6		Chilmari
8		Jhingekhali			
9		Khatuajhuri			
10		Burirdabri			
11		Kaksa			
12		Harikhali			
13		Samsernagar			
14	NP East	Chamta	7	NP East	Luthirduani
15		Chandkhali	8		Banaraj (Moving Patrolling Camp)
16		Bagmara			
17	NP West	Netidhopani	9	NP West	Havati
18		Haldibari			
19		Kendo			
20	Rampura	Rampura, North 24 Pgs			
21	HQ Canning	Canning Town			

### **Protection strategy and Liaison with other departments:**

- One State Armed Police Camp posted at Jhila under Bashirhat Range headquarters. It also functions as a Special Strike Force and assists the field staff in patrolling and rescue operations.
- State Armed Police Force Camp established in the year: 2000
- No. of State Armed Police personnel posted: 5
- Rank of highest ranked officer posted in the Camp: Head Constable
- Two BSF camps have been established at Khatuajhuri and Bagna camps under Bashirhat Range. They along with the field staff carry out joint patrolling operations besides performing their day-to-day duties.
- No. of BSF personnel posted: 7 in Khatuajhuri and 7 in Bagna Camp.
- Name of highest ranked officer posted in the Camp: Sub-Inspector.



A demo picture of M-STrIPES e patrolling in STR.

**Offence scenario during last 4 years\*:**

Sl. No.	FOREST OFFENCE	2021-22	2022-23	2023-24	2024-25
1.	POR (in Nos.)	00	01	07	01
2.	COR (in Nos.)	2196	3171	4024	3286
3.	UDOR (in Nos.)	03	11	09	19
4.	No. of Persons Arrested	00	04	25	27
5.	Incidences of Firing by Staff (in Round)	00	00	00	00
6.	No. of Offender Died	00	00	00	00
7.	No. of Offender Injured	00	00	00	00
8.	No. of Forest Staff Killed	00	00	00	01
9	No. of Forest Staff Injured/Assaulted	00	00	00	00
10.	Total Compensation Realized (in Rs.)	1991100.00	3223350.00	4702652.00	4394650.00
11.	Quantity of Timber Seized (Sawn & Log)	0.001 m <sup>3</sup>	00	Garan log- 03 nos (L= 5 feet, G= 6 inch), Gnewa log- 08 nos (1.4 m X 10.6 cm each), Garan log- 02 nos (1.4 m X 10.8 cm each), Sundari log- 02 nos (L= 2.25 m , G= 2.20 m)	Garan log- 02 nos (L= 4 feet, G= 4 inch)
12.	No. of Vehicle Seized	00	00	00	00
13.	No. of Dingi Seized	00	10	09	17
14.	No. of Mechanized Boat / Trawler Seized	01	01	03	02
15.	No. of Cattle Seized	00	23	45	24

### Wildlife Offence Cases (under Wildlife Protection Act, 1972) during 2024-25:

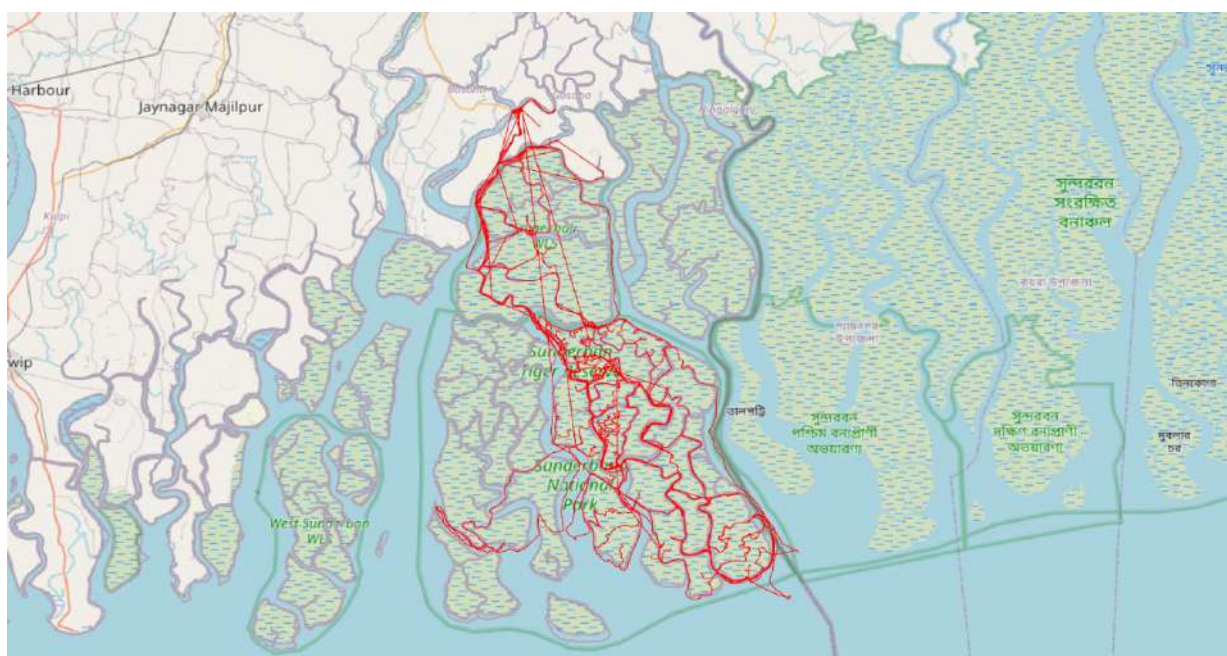
POR	COR	UDOR	Person arrested	Conviction details (if any)
01	3286	19	27 (7- Indian, 20- Bangladeshi)	04 (Case No. TR-39, TR-36, TR-30, TR-297)

### \*Corrigendum:

In the previous annual report 2023-24, the digits were mistyped for the offence report. We strongly apologies for this.

### Patrolling at STR:

Age-old pattern, procedure and practice of traditional patrolling and wildlife monitoring had some limitations with only use of manual pen, pencil and papers along with prolonged and time-bound use of RT system. Main constraints were time dependency on RT network, errors and time-consumptions in manual entry, possibilities of data manipulation and absence of real-time data. To overcome all of these limitations E-patrol was introduced in Sundarban Tiger Reserve in the FY 2021-22 at a preliminary level. In this new system every camp has been given a smart phone with a mobile application installed on it for monitoring and patrolling purposes. With this



software/application the front-end staff are recording every possible activity like patrolling, fencing checking, night patrols, offence detections, wildlife sightings etc. That patrolling data is submitted by the Range officers and therefore analyzed by the Research Range of STR and presented to the senior officers on Protection Monitoring Protocol meeting.



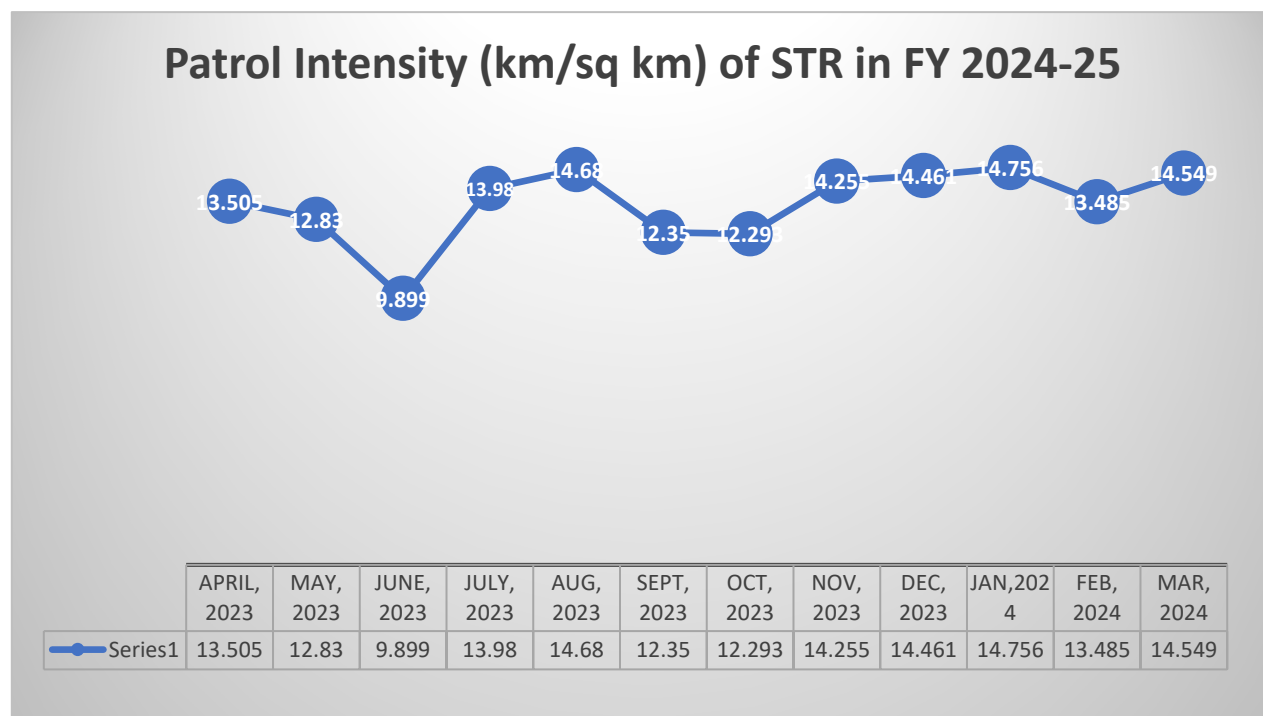
## E-Patrol Android Application Software: M-STrIPES

In the past FY 2021-22, Wildlife Institute of India made M-STrIPES android patrolling application 'E-Patrol', that has been installed in new mobile phones and the field staff are well trained with this. In the PMP meetings there is a technical session for data



entry operators and other staff to train them about the mobile application for betterment of the strategic patrolling. the Initially it faced several challenges due to the global positioning system and data loading but after rigorous training the field staff overcame the situation.

In the following chart, the patrol intensity of the FY 2024-25 at STR is tabulated below:



## Chapter 11

### Wildlife Management



Wildlife management and mitigation of conflicts are another important attribute for any tiger reserve. Here it goes:

**Death of wild animals during 2024-25:**

Sl.	Date	Species (with details - age, sex etc.)	Place of incidents	Details of cause of death (as per Post Mortem Report)	Category (Natural, Poaching, Accidental, Retaliatory killing, Other)	Whether any body part (horn / tusk / hair/ teeth/ meat/ hoof/ skin, etc.) is missing
1	13-05-24	Salt water crocodile	Jhila	actual cause of death cannot be ascertained as the carcass was fully decomposed	Natural	right hind limb missing
2	11-01-2025	Irrawaddy Dolphin (L- 1.60 m,Girth - 0.95 m)	Jhila	actual cause of death cannot be ascertained as the carcass was fully decomposed	Natural	N/A

**Poaching Cases in STR in past few years:**

YEAR	NAME OF ANIMAL	NUMBER
2020-21	NIL	NIL
2021-22	NIL	NIL
2022-23	NIL	NIL
2023-24	NIL	NIL
<b>2024-25</b>	<b>NIL</b>	<b>NIL</b>

**Rescue of wild animals during 2024-25:**

Sl. No.	Date/ Month	Animal Name	No.	Release Date	Release Place
1	09-04-2024	Softshell Turtle	1	10-04-2024	Sajnekhali pond
2	17-05-2024	Juvenile Hawk Eagle	1	03-07-2024	Pirkhali- 1
3	18-07-2024	Olive ridley Turtle	1	21-07-2024	Goasaba river,NPW Range
4	19-08-2024	Moniter Lizard	1	21-08-2024	Pirkhali - 2
5	25-08-2024	Adult Rhesus Macaque	1	28-08-2024	Chamta -1
6	16-09-2024	Indian Flap shell turtle	1	18-09-2024	Sajnekhali pond
7	18-09-2024	Monocled Cobra	1	29-09-2024	Pirkhali -3
8	03-10-2024	Tokay Gecko	1	06-10-2024	Pirkhali- -1
9	09-10-2024	Flap shell Turtle	1	10-10-2024	Sajnekhali pond
10	22-10-2024	Monocled Cobra	1	23-10-2024	Pirkhali-3
11	05-11-2024	Flap shell Turtle	1	05-11-2024	Sajnekhali pond
12	18-11-2024	Monocled Cobra	1	20-11-2024	Pirkhali - 2
13	21-11-2024	Pond Heron	1	26-11-2024	Pirkhali -1
14	27-11-2024	Leopard Cat	1	30-11-2024	Pirkhali -1

**Tiger Capture/ Radio collaring of Tigers during 2024-25: Nil**

**DNA fingerprinting of tigers in Sundarban Tiger Reserve in FY 2024-25: Nil.**





## Census of Wildlife:

### 2024-25 Phase IV Tiger Estimation:

In Sundarbans landscape, tigers occupy 1895 sq. KM area (published report of AITE 2021-22, Govt of India). 81 tigers were photo captured in Sundarban Tiger Reserve, and 20 tigers were photo-captured in adjoining South 24 Parganas. However, one tiger was common between two divisions. The best model for estimating tiger density took into account the heterogeneity associated with tiger gender for both the detection probability at the activity centre and the movement parameters. Tiger density was estimated as 4.27 (SE 0.43) tigers per 100 sq. KM. The  $g_0$  (detection at activity centre) for females was 0.009 (SE 0.0006) while for males it was 0.007 (SE 0.0005). The  $\sigma$  (movement/scale parameter) for females was 4.1 (SE 0.1) km while for males it was 6.4 (SE 0.2) km. The detection corrected sex ratio was 2 females per male. In this FY 2024-25, the tiger estimation exercise was carried out with full devotion between November 2024 and January 2025. The data has been sent to WII- Dehradun for further analysis.



Tigress with her cub, Phase IV camera trap exercise, 2024-25, STR.

### **Sundarban Bird Festival (3rd SBF, January 2025):**

Sundarban Tiger Reserve (STR) and South 24 Parganas Division under the guidance of Wildlife Wing of the West Bengal Forest Department has organized the 3rd Sundarban Bird Festival (SBF) on 22nd to 26th January, 2025 with the objective of bringing in awareness about the conservation

of Avifauna in Sundarbans. The 3rd Bird Festival was inaugurated in the gracious presence of Shri Dhritiman Mukherjee, eminent photographer cum conservationist, Shri S. Jones Justin IFS, Deputy Field Director STR, Assistant Field Directors STR, Range Officers of



STR on 22<sup>nd</sup> January, 2025. The festival was inaugurated with the photography exhibition at Sajnekhali MIC Hall, post the inaugural session, the orientation and training session continued. Short informative sessions were held on the topics like Evolutionary aspect of ornithology, Training and identification of waders, Bird migration all with specific focus to Sundarbans followed by a photography orientation session by renowned wildlife photographer Shri Dhritiman Mukherjee. A thorough orientation on the data collection protocol, roles of different persons in the team, and the expected outcome of the exercise was completed. Six resource persons along with twenty-four (24) participants and other field staff were then divided into 6 different teams each with the responsibility to cover the specific routes within a 3-day period (23 January- 25 January, 2025). Each team was led by the Resource person as the knowledge head and the staff member as the team head. The weather condition was almost good but some areas were partly cloudy during the exercise. Despite that, more than 150 avian species were recorded. Near about 31900 numbers of birds were sighted in the 3-day exercise. Note that, in the previous bird festivals the authority offered only 2 days for birding, but due to increasing enthusiasm, this year the festival was increased to 1 day more with sea-side visits. Hence, recorded species have also increased. 7 species of Kingfishers were recorded in the 3rd Sundarban Bird Festival, 2025. Out of all the threatened species of birds as per the State of Indian Birds Report (SoIB) 2023, 13 species were recorded during the bird trails. The panel discussion on the 26th January, 2025 with the Resource Persons and the participants, existing and emergent issues related to the conservation of avifauna were discussed in detail and deliberated for determining the future course of action. STR owes their deep gratitude to the officials of the South 24 Pgs forest division, the resource persons, the participants, the research range of STR and the frontline staff for their support, dedication and encouragement that made the 3rd Sundarban Bird Festival a resounding success. The final report is yet to be published and will be uploaded in the official website of STR.



### **Saltwater Crocodile Estimation (2024-25):**

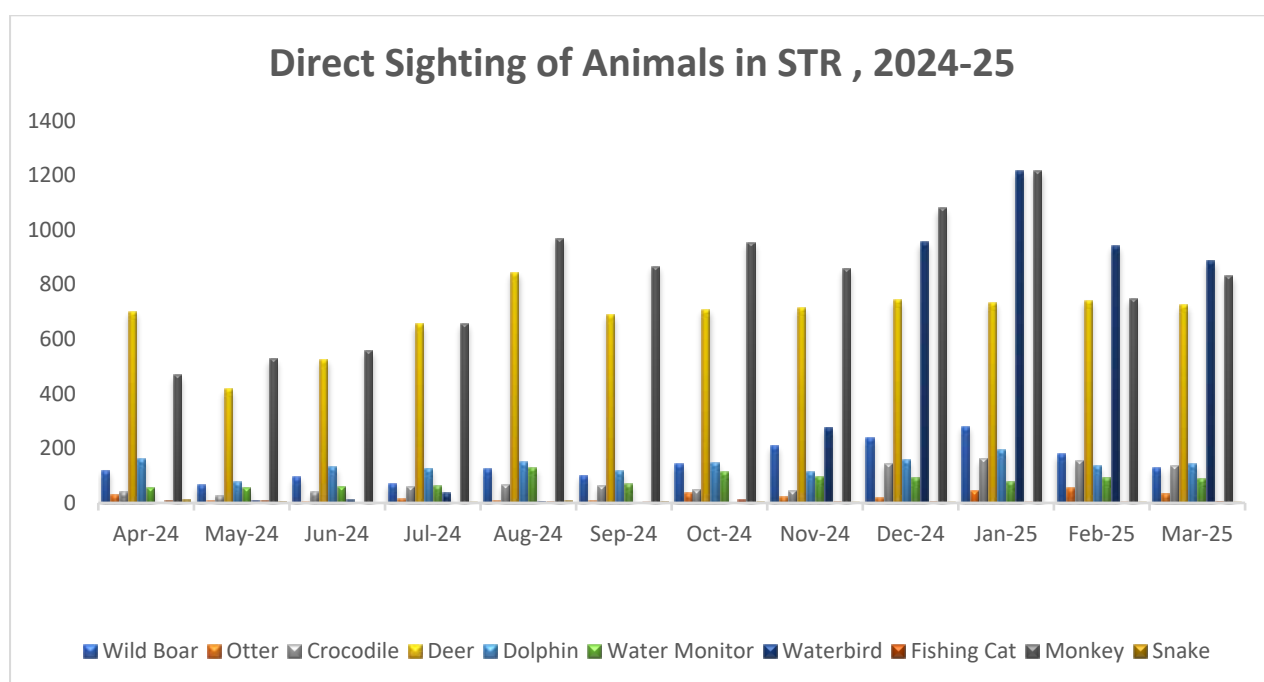
Saltwater crocodiles are one of the apex predators in the Sundarban landscape and they play an important role in maintaining the health of the aquatic ecosystem. Saltwater crocodiles are an important indicator species of the health of the aquatic ecosystem. The conservation of aquatic ecosystems is important to conserve the overall biodiversity of the region apart from supporting the fringe population which depends on fishing and crab collection for their livelihood. A detailed population assessment exercise was planned and conducted during the months between December 2024 to February 2025 to assess the population status of the saltwater crocodiles in Indian Sundarbans and to increase the understanding of the habitat ecology of the species. This exercise is in continuation of the previous year's exercise with the necessary modifications and additions. The exercise captured the direct and indirect sighting data of saltwater crocodiles, salinity, surface water and ambient temperature for basking, creek widths and other parameters like slope of the banks and vegetation. The exercise was conducted for 3 months i.e. 3 days in each of the 3 months covering the whole transect length in Sundarbans. The days of the exercise were finalized using the neap phase dates of the moon and forecasted temperature range. The transect length was also increased in comparison to the previous exercise (2023-24) covering all the most probable creeks for sighting the saltwater crocodiles. The inferences and learnings from the previous year's exercise was used to fine tune the methodology and transects so as to get more statistically significant data for further analysis. The exercise was successful in capturing the requisite data for a comprehensive analysis of the population and the habitat ecology parameters of Saltwater crocodiles in Indian Sundarbans. Analysis of the data shows the number of saltwater crocodiles in Sundarbans has increased in comparison to the previous exercise that was held in 2012 and 2024. Total direct sighting along the transect length of around 1168 kilometres was 213 for the whole of Sundarban Biosphere Reserve (SBR). The final report is yet to be published and will be uploaded in the official website of STR.



**Direct Sighting of other Animals in respect of Sundarban Tiger Reserve in 2024-25, based on daily RT reporting:**

Months	Wild Boar	Otter	Crocodile	Deer	Dolphin	Water Monitor	Waterbird	Fishing Cat	Monkey	Snake
Apr-24	119	31	39	701	160	57	0	6	468	13
May-24	67	7	27	416	76	55	8	8	527	5
Jun-24	95	4	40	525	132	59	12	0	555	1
Jul-24	70	15	60	656	126	63	35	0	657	3
Aug-24	125	7	67	844	149	127	5	4	968	7
Sep-24	100	8	62	689	116	68	0	3	866	5
Oct-24	142	35	46	709	146	115	0	9	951	4
Nov-24	208	21	43	714	113	95	274	4	858	2
Dec-24	240	20	144	742	158	93	956	4	1081	3
Jan-25	280	43	161	734	193	77	1216	3	1215	0
Feb-25	179	56	155	741	137	91	941	3	749	3
Mar-25	129	32	135	725	143	89	886	5	830	2

The graphical representation is given below:



**Translocation of wild animals during 2024-25: Nil.**

**Rescue of Saltwater crocodiles: Annexure 2**



### ***Batagur baska* Conservation Breeding Project:**

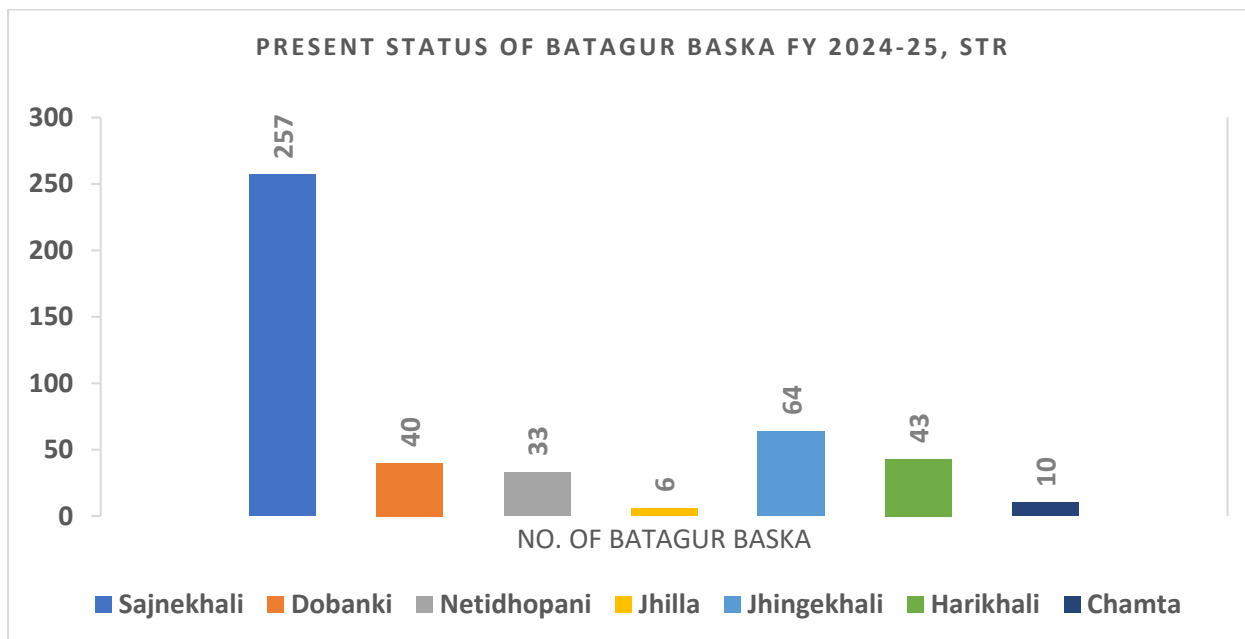
Batagur Baska, generally known as Northern River Terrapin, is a river dweller terrapin, currently classified as the critically endangered species as per the IUCN Red List. In the past, this species has spread throughout the vast river basin of Bangladesh, India, Myanmar, Thailand and Malaysia. In the context of India, its historic habitat was Odisha, Hooghly and Brahmaputra River estuarine region including the Sundarbans.

At present, the natural population of this species is virtually extinct. However, the Sundarbans Tiger Reserve (STR) has been operating a long-term conservation program since 2002 in collaboration with TSA Foundation India, which is currently the only active protected breeding project in the country. The turtle of different ages is being raised individually in the seven (07) assurance colonies across the four different territorial ranges STR, through which efforts to create a stable population for conservation and future release. For the past few years, the reserve environment has made significant progress in the breeding of Batagur Baska. The eggs that were

found in 2021 were divided into two groups - in the incubation center and the rest were kept in the breeding pool of Sajnekhali in a natural sand. About 5% of them have been hatching success in the 2021 season. More than 5 hatchlings are already successfully erupted in naturally eggs. Special emphasis is given to maintain the health of the hatchlings so



that they are safe from the risk of excess crowds and infections. This is why the incubation and hatching units are operated individually, maintaining regular cleanliness, every hatchling is properly taken care of after birth, and the morphometric measurements like -weight of their body, the length of the carapace and the plastron, etc. is measured so that long-term analysis of their growth is possible. In 2022, 3 male and 7 female *Batagur baska* were attached to the satellite transmitter and softly released into the nature. The main aim of this effort was to expand the release of turtles, natural movement and to understand the preferred type of habitat, so that the reintroduction program could be further efficient in the future. These released terrapins have crossed the Indian Sundarbans and entered Bangladesh and Myanmar. Future soft release program, we can use this information to adopt more advanced and permanent strategies. This whole success story is not just a conservation project - it is a reflection of the relentless hard work of the forest workers of the Sundarbans, the cooperation of the TSAFI team and learning from daily experience. This effort will play a leading role in reinstating this species in a natural environment in the coming days.



### The process of Ex-Situ Conservation of *Batagur baska* in Sundarbans:

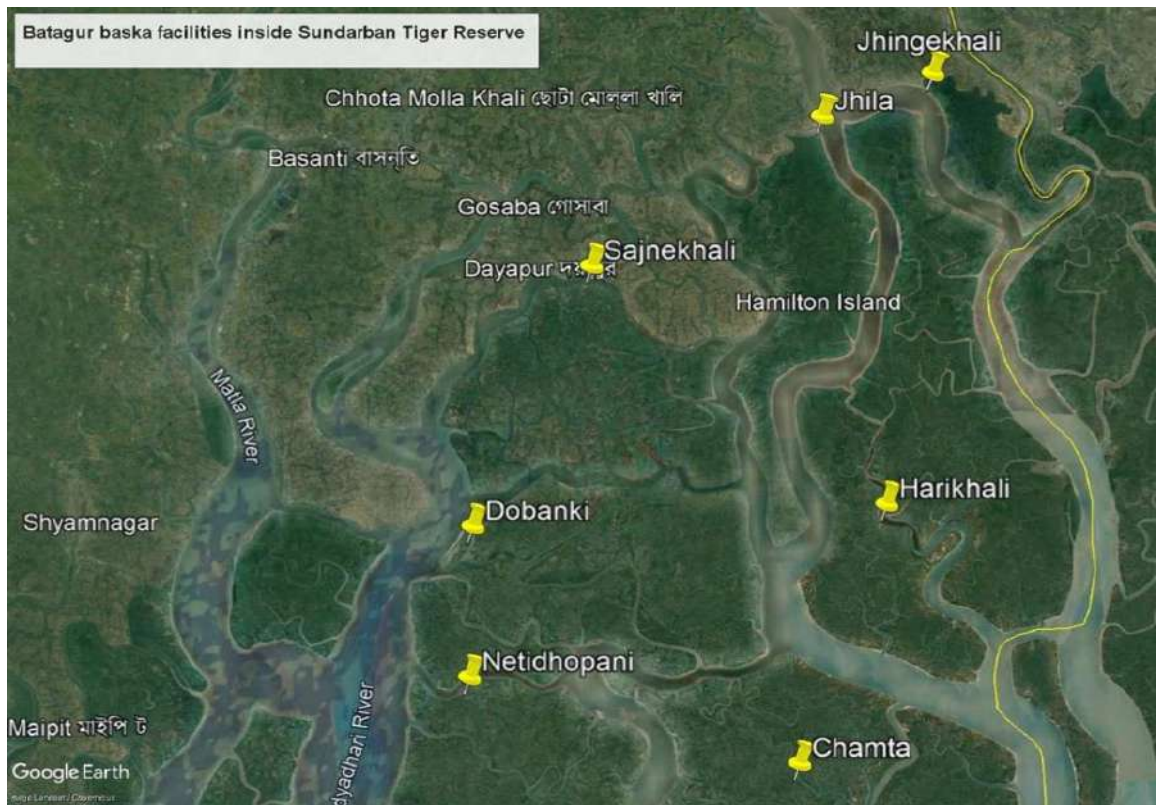
- Identification and transfer of gravid females from adult ponds to the hatchling enclosure.
- Generally, the adult Northern Terrapin females are found to be gravid during the first week of March.
- These individuals are then shifted to an artificial sand beach at one corner of the hatchling



pool, for laying eggs.

- The hatchling pool is well protected with nylon net fencing and mosquito-net as a preventive measure from harsh weather and predators.
- By the third week of March the females lay their eggs in clutches of 19-37. By the first week of April, all individuals finish laying their eggs after which the adult females are then transferred back to the adult pond.
- Hatching of the eggs and tending of the hatchlings and transfer to yearling pool.

- The eggs laid by the females are kept on the artificial sand beach and a temperature of about 33°Celsius is maintained. The incubation period was found to about 60-66 days.
- A strict surveillance of the eggs is maintained during the entire incubation period.
- After the eggs hatch, i.e. during the end of May, the hatchlings are collected and shifted to the hatchling enclosure.
- The artificial beach area is also monitored for about five days from the time the first hatchling hatched out of the eggs, however, it was observed that all the eggs hatch in about two days.
- After the transfer of all the hatchlings to the hatchling enclosure, all the individuals are carefully tended and nurtured with proper food (*Ipomea* shoots and pumpkin, cut into small pieces) for the next six months. A one-day old hatchling was found to measure about 6.5 cm in length and 6.5 cm in breadth. After one year, when hatchlings were observed to attain a weight of about 240 grams, they are transferred to the yearling ponds.
- Transfer to adult pond: When the individual ages to about two years and attains a weight of about one kilogram, they are finally transferred to the adult pond. This stage has also been deemed appropriate for soft release of the turtle to its natural habitat.



Map showing the Assurance Colonies of *Batagur baska* in Sundarban Tiger Reserve.



## Chapter 12

### Man- Animal Conflict





Nestled at the delta of the Ganges and Brahmaputra rivers, the Sundarbans is a sprawling mangrove labyrinth celebrated for its extraordinary biodiversity, including its iconic Bengal tiger. Yet this verdant wilderness is also the stage for recurring clashes between human communities and wildlife. Farmers and fishers venturing deeper into the forest to sustain their livelihoods increasingly encounter tigers, crocodiles, and venomous snakes, resulting in devastating losses of life and property on both sides. Habitat destruction from agricultural expansion, aquaculture development, and rising sea levels exacerbates these confrontations by pushing wildlife into human settlements. Addressing this escalating conflict demands integrated strategies that reconcile local livelihoods with the imperative of conserving one of the world's most unique and fragile ecosystems. The present status is depicted below:

1. Human Casualties by wild animal (2024-25): Nil
2. Human injuries by wild animal (2024-25): Nil
3. Crop damage (2024-25): Nil
4. Hut damage (2024-25): Nil
5. Livestock killed (2024-25): Nil
6. Details of staff casualties / injuries (2024-25): 01 (Sh. Amalendu Halder, FG)
7. Straying of wild animals during 2024-25: Nil

## **PROTOCOL FOR CREATION AND MAINTENANCE OF NYLON NET FENCING:**

Nylon-net fences have been found to play an important role in preventing the straying out of tigers into village's areas from forest. A protocol for maintenance of the nylon-net fencing has been designed with an aim of carrying out thorough checking and proper maintenance. The Protocol includes involvement of local stakeholders of JFMC members also along with forest staff.

To mitigate the tiger straying a thought of mechanical barrier came out in field level by obstructing the route of the tiger from where it strayed in the villages. Therefore, the concept of fencing along the forest villages interface was developed and interestingly it works as a psychological barrier rather than a mechanical barrier. Forest officials in the early 2000s noticed that the villagers erected Fishing Nets in and around the safe shed and homes so as to prevent them from the tiger if it strayed in the villages. On further questioning and deliberations, a new innovative idea of passively fencing the forest boundaries with such nets came up and was tried using locally available materials like Bamboo and Nylon rope nets on a trial and pilot basis. This actually resulted in reduction in the tiger straying incidences in the area where the Nylon Net fencing was installed. Then slowly the Nylon Net fencing was increased to the whole stretch of the forest boundary which is adjacent to the villages which has reduced the tiger straying incidences significantly. Slowly the erection and maintenance of Nylon Net Fencing became a part of the management plan and a routine activity for the staff. The practice of Nylon Net fencing is discussed in the following segment in detail.

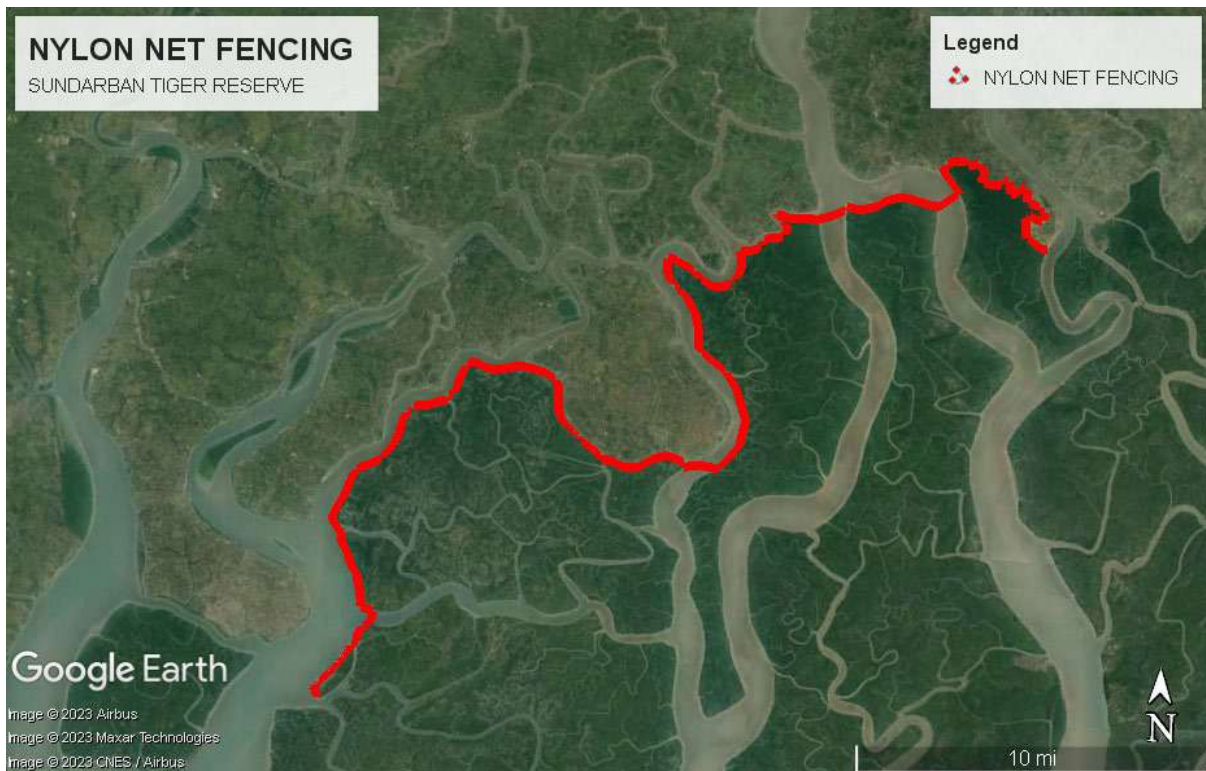
### Practicing Nylon Net Fencing:

- Initially the boundaries of the vulnerable forest areas along the river, associated lands with fringe villages were fenced by vegetative cover i.e. *Ceriops- Excoecaria* combination with nylon rope, commonly known as ‘Garan chitte’.
- Avicenna* post changes to bamboo post on soft soil and RCC post on hard ground.
- The height of the fencing initially was 6-8 now bamboo posts help to erect the fencing at a height of 10 – 12 ft.
- The normal mesh size remains 4” X 4” to avoid any strangulation of wild animals like deer. The net is made of 4mm, 3-strand IP- PARA yellow Nylon rope.
- Fencing checking Protocol: A Fencing Register will be kept in each station and records will be kept in accordance to the parameters given below:

Sl.	Rank	Frequency	Remarks
1	Concerned Forest Guard	Daily	He will take at least one concerned JFMC Member & both will jointly sign in Fencing checking Register.
2	Concerned Beat Officer	Weekly once	He will take the Joint Convenor of concerned JFMC Member & both will jointly sign in Fencing checking Register.
3	Concerned Range Officer	Once in 15 days	He will take the Concerned Forest Guard or Beat Officer along with and will report to DFD/STR in detail as well as mention in the fencing checking Register.
4	Asstt. Field Director/STR	Once in a month	They will check the fencing in the field to verify that the same has been maintained properly.
5	Dy. Field Director/STR	Once in six weeks	He will check the fencing in the field to verify that the same has been maintained properly.

### Parameters for fence checking:

- The total length of Nylon Net fencing has to be checked as proposed on following parameters:
- Height of Nylon Net fencing maintained (The height should be of 10 ft minimum; (in case of new fencing) and 8.0ft (in case of old fencing)
- Height of Khal guard to be maintained at least 5 ft above from the highest tidal level estimated for 'Kotal' period.
- Condition of nylon rope of the net (if the net found brittle, immediately it should be changed after bringing it to due notice to the concerned authority)
- Condition of the posts of the fencing (if found rotting at the base, to be changed immediately after bringing it to due notice to the concerned authority)
- Condition of the runner (the tensile strength to be checked) GI runners to be used.
- Condition of khal guard (if sagging noticed, to be repaired immediately)
- Monitoring frequency (as proposed)- 'Reverse funnels made by nylon-net fences at khal mouth should be maintained with at least 50mt. side wing. Fencing posts will be changed from 'Bain' to 'Goran' to bamboo in phases depending on availability of the same.

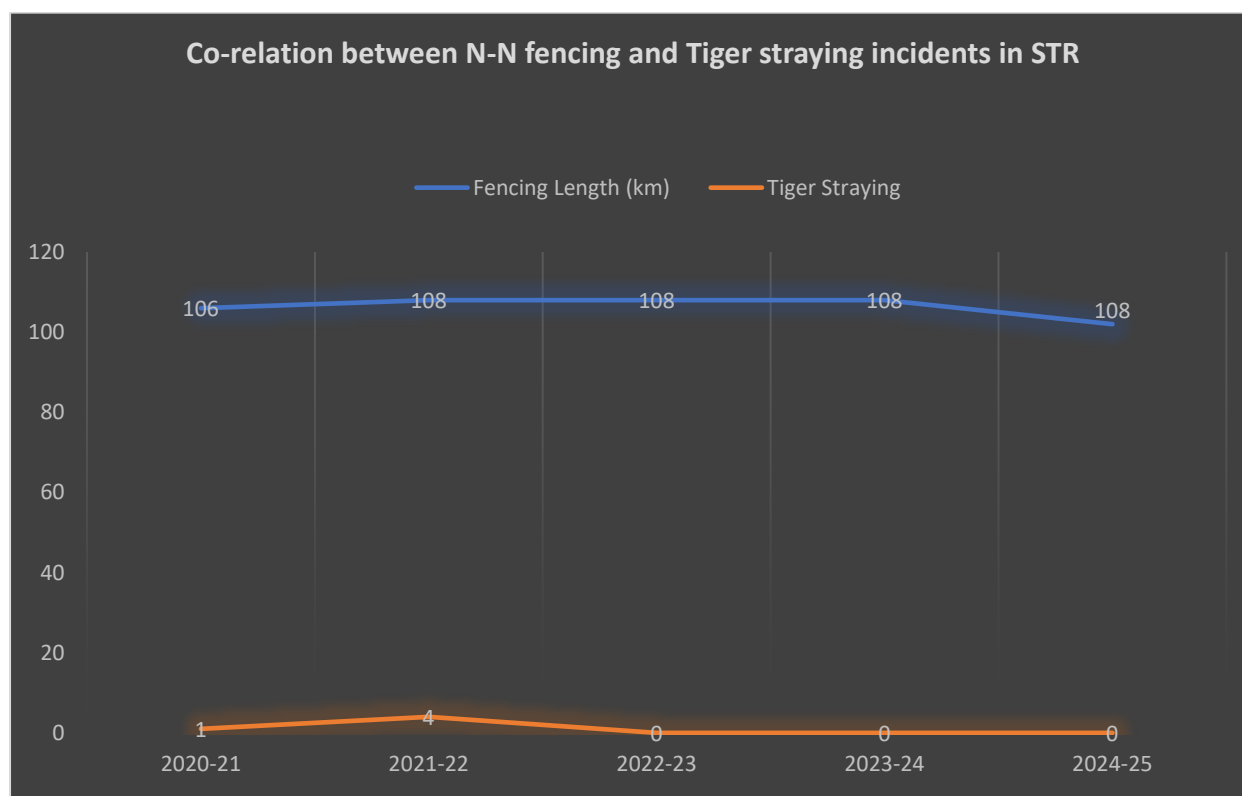


The map showing the N-N Fencing boundary in STR jurisdiction.

Range wise location of the existing Nylon-Net fencing in 2024-25 and its maintenance is given below:

Coverage area (Range/ Block/ Compartment)	Total Length of Nylon Net Fencing (Km)	Present status	Remarks
NP West (Hq Vidya)	22	Functional	Maintained daily as per net checking protocol
SWLS (Hq Pakhirala)	40		
BHT (Hq Jhila)	46		
<b>Total</b>	<b>108 Km</b>		

The co-relation graph between Nylon Net Fencing and Tiger straying incidents in STR jurisdiction shown below:





## Chapter 13

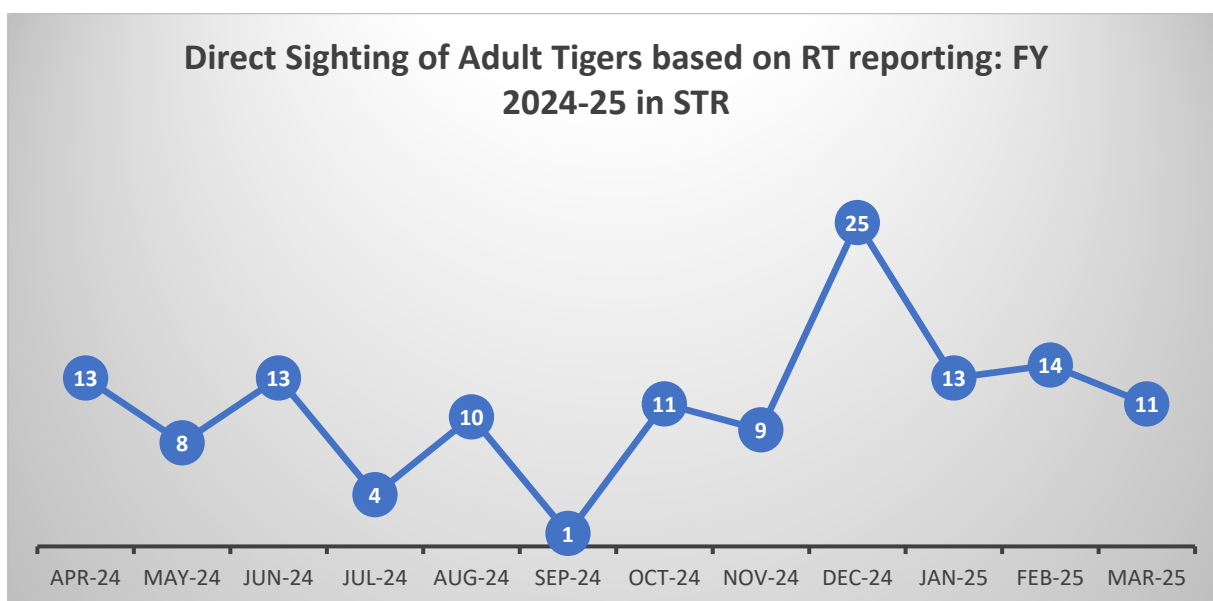
### Tiger Monitoring



## TIGER MONITORING IN STR

Tiger Monitoring a well-adapted monthly monitoring system where direct tiger sightings and other evidence (indirect) of presence of tigers and their movements in the Tiger Reserve are being recorded, as per the directive of National Tiger Conservation Authority (formerly known as ‘Project Tiger’). The table given below shows a summary of the month- wise scenario of tiger monitoring in STR.

Month	Frequency of Direct sighting		Heard of roaring	Frequencies of Sighting of fresh pugmarks	
	Adult	Cub		Adult	Cub
April 2024	13	0	3	61	0
May 2024	8	0	0	29	0
June 2024	13	0	0	31	0
July 2024	4	0	2	13	0
August 2024	10	2	0	43	0
September 2024	1	0	2	36	0
October 2024	11	0	3	40	0
November 2024	9	2	5	131	0
December 2024	25	0	7	142	0
January2025	13	0	6	131	
February 2025	14	0	2	124	0
March 2025	11	0	3	110	0



### **Tiger Population Estimation of 2024-25:**

#### **Planning and execution of the exercise-**

At the very first step, high resolution maps of four territorial ranges under STR were procured. The entire survey area was divided into grid cells of 2 sq. km each, as per NTCA protocol guided by the Wildlife Institute of India. The division of the study area into grid cells was done to systematically divide the area and allow teams to decide on sites such that maximum possible coverage could be ensured, while maintaining a sufficient minimum distance between camera trap stations. Beats are the units of the survey.

On November 19<sup>th</sup>, 2024 training programs were conducted for the field staff of the Sundarban Tiger Reserve and the 24 Parganas (South) Forest Division by the Deputy Field Director, Assistant Field Director and Research Assistant. These programs refreshed the skills of experienced forest staff in using camera traps and GPS devices and assisted in planning the exercise execution. These programmes helped in brushing up the skills of the experienced forest staff regarding the use of camera traps, GPS devices, and data collection methodology and also in planning the execution of the exercise.

#### **Field Team Formation-**

The teams were led by the Beat officers along with other frontline staff. The Range officers were engaged in overall management during the exercise. This is shown in the next chart.

Range	No. of Teams engaged
Basirhat	02
Sajnekhali WLS	02
NP East	03

NP West	03
---------	----

### Mode of transport-

Though the whole area is penetrable through the waterways, boats are the only means of transportation.

### Technical Attributes:

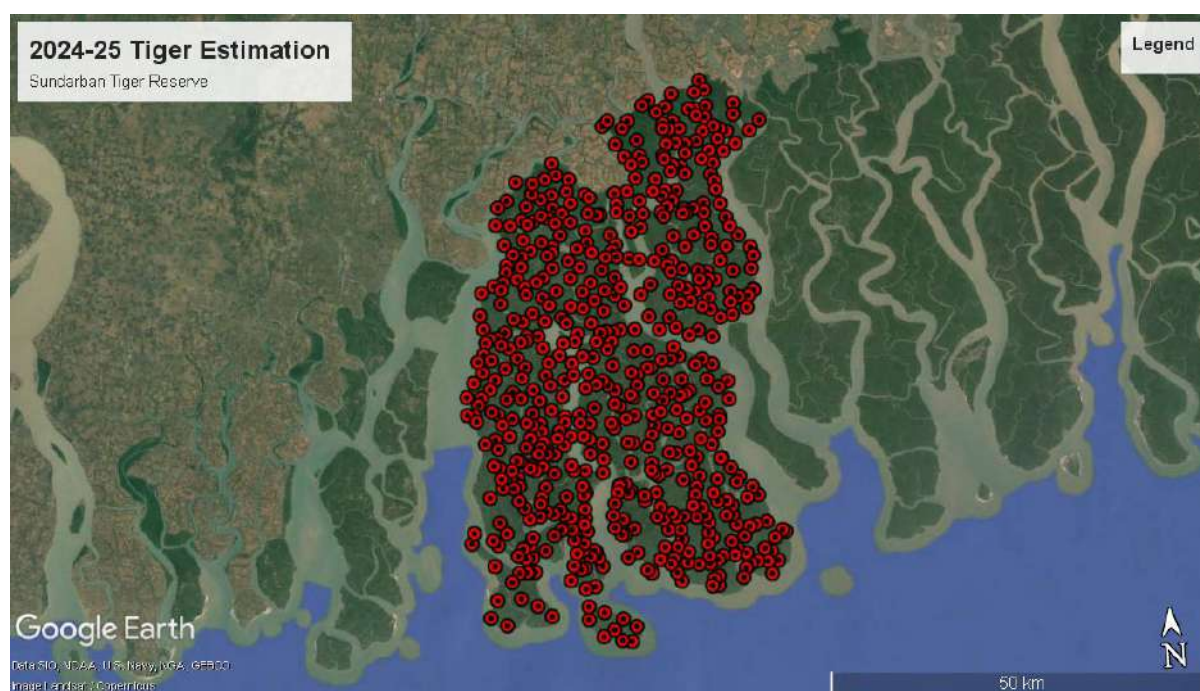
### Machinery used for survey-

GPS Machines (etrex 20X, 30X), Cuddyback digital trap camera, Cuddyback Professional Camera, Bharti telecom digital camera, Bushnell Trap camera.

### Camera installation and data Collection-

Study Area	Exercise		CT Pairs
	Installation*	Withdrawal	
Block 1 (STR)	21.11.2024 to 25.11.2024	04.01.2025 to 09.01.2025	578
Block 2 (South 24 Pgs)	21.11.2024 to 23.11.2024	06.01.2025 to 08.01.2025	160

\* This year for the first time the two adjacent tiger- bearing divisions installed their trap cameras simultaneously for the first time having the whole of tiger bearing area covered.



Picture showing trap camera installation points during Phase-IV Camera Trap Exercise in STR, 2024-25.



**Demography of Tiger Individuals captured in Sundarban Landscape (2018-19 to 2024-25):**

RANGE	NO OF INDIVIDUALS BY YEAR					
	2018-19 (AITE)	2019-20	2020-21	2021-22 (AITE)	2023-24*	2024-25*
Sajnekhali Wildlife Sanctuary	-	10	12	STR 81	16	17
Basirhat	-	19	17		19	19
National Park(West)	-	20	21		23	24
National Park(East)	-	24	24		25	23
24 Parganas (South) division	-	23	22	20	22	22
Total	88	96	96	101	105	105

\*Cubs are not considered in population estimation, as per the guideline of NTCA. Identification of tigers was carried out by ocular flank matching, so there may be some manual errors.

Over the past few years, the number of tiger cubs in the Sundarbans has been steadily rising. Conservation initiatives, stricter anti-poaching measures, and community involvement have played pivotal roles in this success. The most recent data shows an encouraging upward trend in the tiger population, with cubs making up a significant portion of this growth.



**Importance of Tiger Cubs:**

1. Indicator of a Healthy Ecosystem: Tigers are apex predators, and their presence indicates a balanced and healthy ecosystem. The increase in cub numbers suggests that the Sundarbans' environment is thriving, supporting a robust prey base and maintaining ecological stability.

2. Genetic Diversity: A growing number of cubs contributes to the genetic diversity of the tiger population, reducing the risks associated with inbreeding and increasing the resilience of the species to diseases and environmental changes.

3. Future Population Growth: Tiger cubs are the future of the species. Their survival into adulthood ensures the continuation and potential expansion of the population, helping to stabilize and eventually increase the overall tiger numbers in the Sundarbans.

**Status of Tiger Conservation Plan preparation as on 31.03.2024:**

Name of PA	Status			Covering period
	Approved	Under preparation	Not prepared	
STR	Approved on the 6th July, 2020	–	Prepared	2017-18 to 2026-27



A good number of prey species is present in STR and it is also important to maintain the equilibrium of the ecosystem, as per the Lotka- Volterra Model of Predator-prey relationship.

## Chapter 14

### Sabujshree

Sabujshree is a Govt of West Bengal Project, launched in May 2016. The idea is that for each child birth in every block, the parents are given a tree sapling of specific timber wood along with some fertilizer pack and a certificate of concerned Range Officer from Forest department, that the parents don't have to take permission from forest department for harvesting of the mature tree which would be grown from that distributed sapling.

The big goal of the scheme is that the fund procured by selling the matured tree is for the child's education purpose. No permission will be needed from the Forest Dept for the disposal of the tree to be harvested after maturity. Gosaba, the only fringe block of South 24 Pgs district under Sundarban Tiger Reserve had a nominal birth of children as per the requisition placed by the Block Development Officer, Gosaba CD Block.

<b>Date of Letter Issued from the Office</b>	<b>No. of children born on and after 27.05.2016 till date of reporting (A)</b>	<b>Cumulative No of beneficiaries to whom saplings have been distributed since the inception of the schemes (B)</b>	<b>C= (A-B)</b>
04.05.2024	15201	15162	39
04.06.2024	15237	15201	36
03.07.2024	15274	15237	37
07.08.2024	15323	15274	49
02.09.2024	15371	15323	48
21.10.2024	15419	15371	48
05.11.2024	15456	15419	37
16.12.2024	15509	15456	53
03.01.2025	15557	15509	48
05.02.2025	15593	15557	36
03.03.2025	15660	15593	67
07.04.2025	15704	15660	44

## Chapter 15

### Ecotourism

Sundarban has always been alluring to the tourists who come here to enjoy the scenic beauty of the pristine mangrove forests. Since inception of Tiger Reserve there has been a steady increase of visitors to the area. The tourists entering the Tiger Reserve have to take a permit after paying the entry fees. Presently, the entry of the tourists is restricted mainly within the Buffer area. Tourist inflow continuously increases in last year which have created huge pressure on Biodiversity.

#### **Eco-tourism aspects in the division:**

There are 7 tourist spots except the water body part, namely, Sajnekhali, Dobanki, Sudhanyakhali (SWLS Range), Harikhali, Burirdabri, Jhingekhali (BHT Range), and Netidhopani (NPW) Range.

#### **Tourists visited and amount collected in FY 2024-25:**

Name of Eco-tourism site (PA/Zoo/Eco-park/ NIC, etc.)	Number of tourists visited		Total amount collected (Rs.)
	Indian	Foreigner	
STR Jurisdiction	365583	3023	56316945.70

#### **List of Forest Rest Houses:**

Sl. No.	Name of the FRH	Booking done by	Contact details
Nil	Nil	Nil	Nil



## Chapter 16

### Other Important Activities



**Medical camp:**

<b>Sl.</b>	<b>DATE</b>	<b>AREA (JFMC/VILLAGE)</b>	<b>NO OF BENEFICIARY (MALE/FEMALE)</b>	<b>AGENCY / NGO</b>
1.	02-03-2025	DAYAPUR	210 NOS  (M- 47 F-157 CH-6)	PATHER SATHI

**Eye Checking Camp:**

<b>Sl.</b>	<b>DATE</b>	<b>AREA (JFMC/VILLAGE)</b>	<b>NO OF BENEFICIARY (MALE/FEMALE)</b>	<b>AGENCY / NGO</b>
1.	07-03-2025	SONAGAON, DULKI	96 NOS (M-39, F-55, CH-2)	GOSABA VISION CENTER
2.	08-03-2025	SHANTIGACHI	116 NOS (M-25, F- 81)	GOSABA VISION CENTER
3.	08-03-2025	ANPUR- RAJATJUBILEE	133 NOS (M-77, F- 56)	GOSABA VISION CENTER
4.	09-03-2025	PAKHIRAYALAYA, S.T.R- STAFF	46 NOS (M-38, F-8)	GOSABA VISION CENTER
5.	08.05.2025 & 09.05.2025	Bijoynagar (NPW Range Headquarter)	Male 55 nos. Female 70 nos.	Vivekananda Mission Ashram and Sight savers India

**Seminar / Workshop organized on wildlife management & other wildlife related matters during 2024-25:**

<b>Date</b>	<b>Location</b>	<b>Topic</b>	<b>Organized by</b>	<b>Participants</b>
11.05.2024 & 12.05.2024	Seminar Hall, Sajnekhali	Operating Drown	CCF & FD, STR	Field staff of STR
20.05.2024 & 21.05.2024	Sajnekhali Beat Office complex	Different forestry work, knowledge of speed boat, protection monitoring and various activities of the forest department	CCF & FD, STR	Field staff (Forest Volunteers and Banashayaks) of STR
24.06.24 to 28.06.24	ICFRE, Dehradun	Guiding Principles & implementation strategies of diversion conditions in Mining projects under FCA	To be organized at Ranchi	Jones Justin S., IFS, DFD/STR
14.08.2024 & 15.08.2024	Sajnekhali Beat Office complex	Different forestry work, knowledge of speed boat, protection monitoring and various activities of the forest department	CCF & FD, STR	Field staff (Forest Volunteers and Banashayaks) of STR
22.08.24	Bana Bhawan	One day training on Financial & Treasury Rule of ADFO/DDO	CF, Development	Debdarshan Roy, WBSF
04.09.24 to 07.09.24	North Eastern Police Academy, Umsaw, Meghalya	New Criminal Laws	Joint Secretary to Govt. of West Bengal	Sourav Biswas, DR/Fr., STR
22.10.24 & 23.10.24	Kolkata, FRH	Training on Law matters	CF, Development	Debdarshan Roy, WBFS, Sabir Ansari, FR, Siladitya Acharyya, FR, Nabakumar Sahoo, FR &

				Sumit Ghosh, FR
06.09.24	Kolkata	Master Trainer of Forest Right Act(FRA), 2006	CF, Development	Avik Das, FR & Siladitya Acharyya, FR
11.11.24 & 12.11.24	WCCB Training Centre, IF-5, Salt Lake, Kol-106	Capacity Building programme (Investigation of Wildlife Crime Cases)	Regional Deputy Director, Eastern Region Wildlife Crime Control Bureau, Kolkata	Biplab Ghosh, FR, Samya Roy, FR(T), Amar Kar, FR(T) & Mantu Das, DR/Fr.
22.11.2024	North Eastern Police Academy, Umsaw, Meghalaya	New Criminal Laws	North Eastern Police Academy, Umsaw, Meghalaya	Sumit Ghosh, FR
10.12.24 to 12.12.24	North Eastern Police Academy, Umsaw, Meghalaya	Demystifying RTI	North Eastern Police Academy, Umsaw, Meghalaya	Abhisek Dey, DR/Fr.
01.11.24 to 31.01.25	Wildlife Institute of India, Dehradun	39 <sup>th</sup> Certificate Course in Wildlife Management for in- service Range Forest Officer	Wildlife Institute of India	Nabakumar Sahoo, FR, Siladitya Acharyya, FR
20.01.2025 to 24.01.2025	CASFOS, Dehradun	Green Infrastructure	Central Academy for State Forest Service	Partha Debnath, WBFS, AFD, STR
19 <sup>th</sup> to 21 <sup>st</sup> Feb,2025	North Eastern Police Academy, Umsaw, Meghalaya	Application on New Criminal Laws	North Eastern Police Academy, Umsaw, Meghalaya	Goutam Dhali DR/Fr.
05.03.25 to 08.03.25	Similipal Tiger Reserve, Odisha	Field visit of staff of STR	CCF & FD, STR	Field staff of STR



### Visit of dignitaries in STR during 2024-25:

SL No.	Name of VIP	Designation	Purpose duration visit	Period of in Sundarban	
1	Central & North East India Tour for Officer trainees of Batch Gujarat FR College,Rajpipla (Gujarat)	Central & North East India Tour for Officer trainees of Batch Gujarat FR College,Rajpipla (Gujarat)	Study Visit to Sundarban	05.10.24	06.10.24
2	Central Academy for SFS, Coimbatore (30 <sup>th</sup> Batch) East India Tour	Central Academy for SFS, Coimbatore (30 <sup>th</sup> Batch) East India Tour	Study Visit to Sundarban	18.10.2024	20.10.2024
3	11 <sup>th</sup> Batch Forest Range Officer Trainees Tour Programme at Telangana Forest Academy, Dulapally	11 <sup>th</sup> Batch Forest Range Officer Trainees Tour Programme at Telangana Forest Academy, Dulapally	Study Visit to Sundarban	10.01.2025	11.01.2025
4	Five Officers from the Delhi Devt. Authority, led by Ms. Neelima Soni, Director(Landscape)	Five Officers from the Delhi Devt. Authority, led by Ms. Neelima Soni, Director(Landscape)	Study visit and meeting to Sundarban	16.01.2025	17.01.2025
5	10 <sup>th</sup> Batch Forest Range Officer trainees Tour Programme at Telangana Forest Academy, Dulapally,	10 <sup>th</sup> Batch Forest Range Officer trainees Tour Programme at Telangana Forest Academy, Dulapally,	Study Visit to Sundarban	28.01.2025	29.01.2025
6	IAS Professional Course Phase – IAS Officer Trainees of 2024 Batch	IAS Professional Course Phase – IAS Officer Trainees of 2024 Batch	Study Visit to Sundarban	30.01.2025	31.01.2025
7	18 IAS Officer Trainees of the 2024 batch	18 IAS Officer Trainees of the 2024 batch	Study Visit to Sundarban	29.01.2025	01.02.2025

8	WBRS officers & 39 officials and 2 NSATI officer	WBRS officers & 39 officials and 2 NSATI officer	Study visit and meeting to Sundarban	14.02.2025	-
9	Dr. Maria Fernandes, Vice Chairperson, Wbfdcl & others	Dr. Maria Fernandes, Vice Chairperson, Wbfdcl & others	Study visit and meeting to Sundarban	14.02.2025	16.02.2025
10	Batch-2 (2023-25) FRO trainees Chandrapur Forest Academy, Chandrapur	Batch-2 (2023-25) FRO trainees Chandrapur Forest Academy, Chandrapur	Study Visit to Sundarban	15.02.2025	16.02.2025
11	North-East India FRO Trainees – 2023-25(X) Batch, Tamil Nadu Forest Academy, Coimbatore	North-East India FRO Trainees – 2023-25(X) Batch, Tamil Nadu Forest Academy, Coimbatore	Study Visit to Sundarban	09.02.2025	10.02.2025
12	North East India study tour of FRO Trainee Officers Batch 2024-25, Kundal Academy of Development, Maharashtra	North East India study tour of FRO Trainee Officers Batch 2024-25, Kundal Academy of Development, Maharashtra	Study Visit to Sundarban	26.02.2025	-
13	North-East India Forest Range Officer Trainees – 9 <sup>th</sup> batch Karnataka Forest Academy, Dharwad	North-East India Forest Range Officer Trainees – 9 <sup>th</sup> batch Karnataka Forest Academy, Dharwad	Study Visit to Sundarban	14.03.2025	15.03.2025
14	East India tour Forest Range Officers Training 2024-25, Uttarakhand Forest Academy, Haldwani (Nainital)	East India tour Forest Range Officers Training 2024-25, Uttarakhand Forest Academy, Haldwani (Nainital)	Study Visit to Sundarban	29.03.2025	30.03.2025

## NGO's active in wildlife conservation during 2024-25:

WWF-INDIA, NATUREMATES, SHER, WPSI, NEWS, AIM FOUNDATION, JUKTIBADI SANSKRITIK SANSTHA, BALI NATURE club, SAFE, HEAL, SAVING TIGER SOCIETY, THE JUNGLEE, KOLKATA SOCIETY FOR CULTURAL HARITAGE etc.

### Rescue of Tiger Zeenath by STR staff:

Zeenat is a 3-year-old tigress that escaped from Similipal Reserve Forest in Odisha on December 10<sup>th</sup>, 2024. She was last seen in Bandwan (Purulia district, West Bengal) on 26 December and has since moved to Dangardi forests in Manbazar (Purulia). The tigress was staying near human settlements, so there were concerns about potential conflicts. The WB Forest Department sent an efficient team from Sundarban Tiger Reserve and captured the tigress successfully. Chief Minister of West Bengal Smt. Mamata Banerjee awarded the staff of the STR for this successful rescue operation.

**End of 21-day hunt, tigress Zeenat sedated and caged in Bengal**

On December 8, Zeenat wandered out of the reserve and strayed into Jharkhand. After roaming in Jharkhand's Chakulia area for over a week, Zeenat entered Jhargram in West Bengal.

Bhubaneswar, Kolkata | Updated: December 30, 2024 06:00 IST

5 min read

NewsGuard

Left: File photo of Tigress Zeenat. (Forest Department Odisha), right: Tigress Zeenat after being captured in West Bengal on Sunday. (Video grab/X@Mamata Banerjee)

After wandering through three states and covering 300 km over the last 21 days, the three-year-old tigress that had escaped from Odisha's Similipal Tiger Reserve (STR) earlier this month was on Sunday sedated and captured from a forest near Gosaindihi village in West Bengal's Bankura district, Chief Wildlife Warden Debal Ray said.

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Former Bengali actress found wandering on Purba Bardhaman roadside, rescued

Sl.	Name of the personnel who are involved in the rescue operation and awarded from the Hon'ble Chief Minister, West Bengal
1	Dr. Sankar Sekhar Biswas, Veterinary Officer
2	Mr. Mrityunjay Biswas, DrFR
3	Mr. Rajib Naskar, FG
4	Mr. Kalipada Gayen, Aranya Sathi
5	Mr. Sambhu Das, Aranya Sathi
6	Mr. Faruk Hossain Gayen, DL

### **Educational tour at Simlipal, Odissa:**

On March 6, 2025, 20 forest staff from Sundarban Tiger Reserve, including two Range Officers, five Beat Officers, three Forest Guards, and other Staff/workers, embarked on a three-day tour. They began at Gurguria FRH, exploring the Tribal Information Centre and the vibrant Orchidarium with its 70 indigenous orchids and a



small Pine Forest. On March 7, they visited Rama tirtha, soaking in the serene landscapes and local tribal culture, followed by the sacred Sita Kund waterfall. The final day, March 8, took them to Deokund's eco-tourism spot, where they admired the waterfall and Goddess Ambika's temple amidst diverse flora. The tour, weaving through Simlipal's moist deciduous and semi-evergreen forests, deepened their appreciation for the reserve's biodiversity and cultural heritage.





## ACKNOWLEDGEMENT

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The authority thanks to all frontline staff for the successful completion of the financial year 2024-25 and Research Range for compilation of the report. Moreover, we apologize in advance for any unintentional errors (typing and typesetting etc.) made in the report.



**Note:** All content provided by this annual report is for research, education and government purpose only. No digital copy, or printed copy of this report may not be produced without prior permission from the Field Director, STR.

For further information about Sundarban Tiger Reserve, please do visit our official website:

Link: <https://sundarbantigerreserve.org/>

## ANNEXURE



<b>Annexure 1: List of Self-Help Groups in STR</b>				
<b>Sl.</b>	<b>SHG List</b>	<b>Range</b>	<b>JFMC area</b>	<b>Members</b>
1	Banabithi	Sajnekhali	Luxbagan- parasmoni	10
2	Padma	Sajnekhali	Anpur- Rajatjuble	10
3	Bahobha	Sajnekhali		10
4	Banabithi	Sajnekhali		10
5	Champa	Sajnekhali		10
6	Jibontari	Sajnekhali		10
7	Soheli	Sajnekhali		12
8	Radharani	Sajnekhali		12
9	Shivani	Sajnekhali		11
10	Pritilata Waddedar	Sajnekhali		10
11	Ma Sarada	Sajnekhali	Lahiripur- Shantigachi	10
12	Ramkrishna	Sajnekhali		10
13	Banadevi	Sajnekhali		11
14	Sundari	Sajnekhali		10
15	Ma Laxmi	Sajnekhali	Lahiripur - Chargheri	10
16	Ma Banabibi	Sajnekhali		12
17	Joy Ma Kali	Sajnekhali		10
18	Baba Sri Hori	Sajnekhali		10

19	Sri Sri Ramkrishna	Sajnekhali		10
20	Joy Ma Kali	Sajnekhali		10
21	Bhaga Laxmi	Sajnekhali	Sonaga	10
22	Maa Basanti	Sajnekhali		10
23	Baba Hari	Sajnekhali		10
24	Maa Monasha	Sajnekhali		10
25	Tiger	Sajnekhali		10
26	Samrat	Sajnekhali		11
27	Baba Loaknath	Sajnekhali		10
28	Gitanjali	Sajnekhali	Dulki	10
29	Garjan	Sajnekhali		10
30	Shilya	Sajnekhali		10
31	Sundari	Sajnekhali		10
32	Maa Sitala	Sajnekhali		10
33	5 No Dulki	Sajnekhali		10
34	Chital	Sajnekhali	Dayapur	10
35	Ma Laxmi	Sajnekhali		10
36	Sonar Bangla	Sajnekhali		10
37	Palli Mata	Sajnekhali		10
38	Joy Maa Durga	Sajnekhali		10



39	SamagKaiayan	Sajnekhali		10
40	Dashabhuga	Sajnekhali	Gemspur	10
41	Srima	Sajnekhali		10
42	Bonamata	Sajnekhali		10
43	Chayanika	Sajnekhali		10
44	Radharani	Sajnekhali		10
45	Maa Banabibi	Sajnekhali		10
46	Swapnalok	Sajnekhali		10
47	Bibekananda	Sajnekhali		10
48	Ma Ganga	NP West	Bijoynagar	10
49	Nirmala	NP West		11
50	Shuchetana	NP West		10
51	Akata	NP West		10
52	Bijaya	NP West		10
53	Sundari	NP West		10
54	Banolata	NP West		10
55	Banadabi	NP West	Bali	10
56	Sagarika	NP West		10
57	Biswakarma	NP West	Mathurakhanda	10
58	Bhagabati	NP West	Amlamethi	10

59	Saradiya	NP West		10
60	BisshaMundha	NP West		10
61	Kalimata	NP West		10
62	Ranirashmoni	NP West		10
63	Srima	NP West		10
64	Joy Ma Durga	NP West		10
65	Kshudiram	NP West		10
66	Annapurna	NP West		10
67	Ma Laxmi	NP West		10
68	Kachipata	Basirhat	Adibasipara	
69	Shyama	Basirhat		10
70	Bangashree	Basirhat		10
71	Kanakchanpa	Basirhat		10
72	Akasganga	Basirhat		10
73	Banamata	Basirhat		11
74	Annadata	Basirhat		10
75	Maa Bhabani	Basirhat		12
76	Banaful	Basirhat		11
77	Sarathi	Basirhat		10
78	Golap	Basirhat		10

79	Sristhti	Basirhat		10
80	Priyojon	Basirhat		10
81	Kumari Ma	Basirhat		10
82	Bagna	Basirhat		10
83	Aranyashikha	Basirhat		10
84	Amrita	Basirhat	Bhruliapara	10
85	Madhar	Basirhat		12
86	Bishnupriya	Basirhat		10
87	Kalorab	Basirhat		12
88	Krishna Sudama	Basirhat		10
89	Nayan	Baisrhat		10
90	Sapna Sandhani	Basirhat		10
91	Banasrijani	Basirhat	Bagna para	10
92	Srijani	Basirhat		10
93	Banabeethi	Basirhat	Kalidaspur	10
94	Monikanchan	Basirhat		12
95	Kollooloni	Basirhat		10
96	Uttaran	Basirhat		10
97	Agradut	Basirhat		10
98	Golpata	Basirhat		10

99	Bharat Darshan	Basirhat		10
100	Mongalmoyee	Basirhat		10
101	Parinita	Basirhat		10
102	Sibsankar	Basirhat		10
103	Maa Saradamayee	Basirhat	Hentalbari	12
104	Sachimata	Basirhat		10
105	Ma Mangalchandi	Basirhat		10
106	Aaikatan	Basirhat		10
107	Bangadarshan	Basirhat		10
108	Sonali	Basirhat		10
109	Bharat tirtha	Basirhat		10
110	Rupali	Basirhat		10
111	Suprabhat	Basirhat	Gobindapur	10
112	Anandamayee	Basirhat		10
113	Matrinayani	Basirhat		12
114	Sagar	Basirhat		11
115	Ma Trinayanee	Basirhat		12
116	Ma Mahamaya	Basirhat	Emlibari	10
117	Ma Etuidebi	Basirhat		11
118	Ma mati	Basirhat		10



119	Nabajagaran	Basirhat		10
120	Ma Basanti	Basirhat		12
121	Sundarban Nabajagaran	Basirhat		10
122	Maa Bhairabi	Basirhat		10
123	Ma Jayanti	Basirhat		10
124	Ma Bipattarini	Basirhat		10
125	Ma tara	Basirhat		10
126	Ma Annapurna	Basirhat		10
127	Swanirbhar	Basirhat		10
128	Banasree	Basirhat		10
129	Emlibari	Basirhat		10
130	Radharani	Basirhat	Mitrabari	10
131	Vidyasagar	Basirhat		10
132	Sundari	Basirhat		10
133	Banamata	Basirhat		10
134	Banabhumi	Basirhat		10
135	Bana Lakhi	Basirhat		10
136	Lakshmi Priya	Basirhat		10
137	Harichand	Basirhat		10
138	Juii	Basirhat	Kalitala- Parghumti	13

139	Vivekananda	Basirhat		10
140	Ichhamati	Basirhat		9
141	Mohuya	Basirhat		10
142	Barnali	Basirhat		10
143	Golpata	Basirhat		10
144	Nibedita	Basirhat		11
145	Bana barta	Basirhat		10
146	Hental	Basirhat		10
147	Mouchak	Basirhat		10
148	Machranga	Basirhat		11
149	Kankara	Basirhat		10
150	Swadhen	Basirhat		10
151	Sabuj Banani	Basirhat		10
152	Rajani	Basirhat	Samsernagar	10
153	Jibandwip	Basirhat		12
154	Tiger	Basirhat		11
155	Nabadiganta	Basirhat		10
156	Tiya	Basirhat		10
157	Mina	Basirhat		10
158	Bande Mataram	Basirhat		10

159	Kalindi	Basirhat		10
160	Purnima	Basirhat		10
161	Maya	Basirhat		10
162	Ma Durga	Basirhat		10
163	Rupasi	Basirhat		9
164	Projapati	Basirhat		10
165	Bangabandhu- 2	Basirhat		10
166	Aila	Basirhat		10
167	Rupa	Basirhat		10
168	Radharani	Basirhat	Hemnagar	10
169	Niribili	Basirhat		10
170	Ma Bipattarini	Basirhat		10
171	Banabibi	Basirhat		9
172	Banalata	Basirhat		10
173	Banabithi	Basirhat		10

## ANNEXURE 2

### Rescue of Saltwater Crocodiles in and around STR

Year	Date	Location		Age (year)	Sex	Remarks
		Village Name	Gram Panchayat			
2022	06.06.2022	Bijoynagar	Bali 2	3	Female	
	13.05.2022	Sonagaon	Gosaba	17 to 18	Female	
	07.06.2022			12	Female	
2023	21.05.2023	Manmatha Nagar	Bali 2	10 to 12	Female	
	17.06.2023	Pathan khali	Shambhu Nagar	08 to 10	Female	
	22.05.2023			15-17	Female	
2024	21.05.2024	Mondalpara	Gobindapur	15-17	Female	
	13.06.2024	Gosaba , NPE				17 Eggs collected only 1 hatched at SWLS details
	19.09.2024					1 hatched at Sajnekhali
2025	29.02.2025	Birajmoni	Bali 2	8-9	Female	
	07.05.2025	Bijoynagar	Bali 2	10-11	Female	
	29.05.2025	Birajmoni	Bali 2	7-8	Female	

In FY 2024-25, the staff of NP East range had collected 17 unknown eggs from the field while patrolling on 13.06.2024, the eggs were then kept under incubation centre at Sajnekhali under the supervision of Veterinary Officer, STR. One egg hatched on 19.09.2024 at Sajnekhali and taken care of.



# Appendix 2

## Notification of Sajnekhali Wildlife Sanctuary

GOVERNMENT OF WEST BENGAL

FOREST DEPARTMENT

### FOREST NOTIFICATION

No. 5396-For/—24<sup>th</sup> June 1976—Whereas the area whose situation and boundaries are described in the Schedule below (hereinafter referred to as the said area) is considered to be of adequate ecological, faunal, natural and zoological significance;

Now, therefore, in exercise of the power conferred by sub-section (1) of section 18 of the Wild Life (Protection) Act, 1972 (53 of 1972), and in supersession of such part of all previous notifications as declared the said area or part thereof as a sanctuary, the Governor is pleased hereby to declare, with effect from the date of publication of this notification in the Official Gazette, the said area to be a sanctuary to be known as Sajnekhali Wild Life Sanctuary for the purpose of protecting, propagating and developing wild life and its' environment.

### The Schedule

#### A. Situation

District: 24-Parganas

24-Parganas Forest Division, Basirhat Range (Part) covering an approximate area of 362.40 Sq. Km. and comprising following forest blocks and compartments:

Blocks	Compartments
Panchamukhani	1 to 5
Pirkhali	1 to 7

#### B. Boundaries

North	:	Bara Herobhanga Khal, Gomdi Khal and Pitch Khal.
East	:	Duttar Gang.
South	:	Part of Gosaba river and Netidhopani Khal.
West	:	Bidya river.

By order of the Governor,  
A.K. GUPTA  
Dy. Secy. to the Govt. of West Bengal

# Appendix 3

## Notification of National Park

GOVERNMENT OF WEST BENGAL

FOREST DEPARTMENT

### FOREST NOTIFICATION

No. 2867-For./11B-6/83.—4<sup>th</sup> May 1984.—Whereas by notification No. 3640 For., dated the 6<sup>th</sup> June 1978 published at page 1361 of Part I of the "Calcutta Gazette" dated the 13<sup>th</sup> July 1978, the Governor was pleased to declare his intention to constitute the forest lands covering an approximate area of 1330.10 sq. kms. and comprising reserve forest blocks and compartments, in the district of 24-Parganas, more fully described in the Schedule below (hereinafter referred to as the said lands) as a National Park to be called the "**Sunderbans National Park**" for the purpose of protecting, propagating and developing wild life therein;

And whereas more than two months from the date of such proclamation have elapsed for preferring claim, as required under clause (b) of section 21 of the Wild Life (Protection) Act, 1972, (53 of 1972), (hereinafter referred to as the said Act);

And whereas no claim has been preferred under section 19 of the said Act;

And whereas all rights in respect of the said lands have been vested in the State Government;

Now, therefore, in exercise of the power conferred by sub-section (4) of section 35 of the said Act, the Governor is pleased hereby to specify in the Schedule below the limits of the said lands comprising the reserve forest blocks and compartments and declare that with effect from the 14<sup>th</sup> May 1984, the same shall be a National Park to be called the "**Sunderbans National Park**" for the said purpose.

### The Schedule

#### A. Situation

District: 24-Parganas

Forest lands covering an approximate area of 1330.10 sq. kms. and comprising the following reserve forest blocks and compartments:

Blocks	Compartments
Matla	1 to 4
Chamta	4, 5, 6, 7 and 8
Chhotahardi	1 to 3
Gosaba	1 to 4
Gona	1 to 3
Baghmara	2 to 8
Mayadwip	1 to 5

#### B. Boundaries

North	:	Reserve forest blocks and compartments, namely, Netidhopani-1, 2 and 3; Chamta-3 and 2; Chandkhali-2 and 4; and Baghmara-1.
East	:	Harinbanga river adjoining the international boundary with Bangladesh.
South	:	Bay of Bengal.
West	:	Matla river.

By order of the Governor,		
R.N. DE		
Secy. to the Govt. of West Bengal		



TIGER CONSERVATION PLAN

# Appendix 10

## Notification of Critical Tiger Habitat

Government of West Bengal  
Forests Department  
Forest Branch

Writers' Buildings, Kolkata – 700 001

NOTIFICATION  
No. 6028-For

Dated: 18.12.2007

WHEREAS it has been established on the basis of scientific and objective criteria that the area described in the Schedule below (hereinafter referred to as the said area) is required to be kept as inviolate for the purpose of tiger conservation, without affecting the rights of the Scheduled Tribes or such other forest dwellers;

WHEREAS the State Government agrees with the recommendation of the Expert Committee set up vide P.C.C.F. (Wildlife), Govt. of West Bengal's Office Order No. 12-M/8-2007 dt. 4.11.2007 that the said area should be maintained as the Core or Critical Tiger Habitat of Sundarban Tiger Reserve.

WHEREAS National Tiger Conservation Authority, Govt. of India, vide its memo No. 1501/11/2007-PT (Part) dated December 3, 2007, has also recommended that the said area be notified as the Core or Critical Tiger Habitat of Sundarban Tiger Reserve.

NOW, therefore, in exercise of the power conferred by paragraph (1) of the Explanation following sub-section (4) of Section 38 V of the Wildlife (Protection) Act, 1972, the Governor is pleased hereby to declare, with effect from the date of issue of this Notification, the said area to be the Core or Critical Tiger Habitat of Sundarban Tiger Reserve.

### THE SCHEDULE

Sl. No.	Block	Compartment	Total Area (in Ha.)	Legal Status
1	Matla	1-4	17630	National Park
2	Chamta	1-3	9632	Reserved Forest
		4-8	12437	National Park
3	Chotahardi	1-3	17567	National Park
4	Goasaba	1-4	17173	National Park
5	Gona	1-3	13903	National Park
6	Baghmara	1	2430	Reserved Forest
		2-8	26963	National Park
7	Mayadwip	1-5	27336	National Park
8	Netidhopani	1-3	9300	Reserved Forest
9	Chandkhali	1-4	15591	Reserved Forest
			169962	

By order of the Governor

(K. Chaudhury)

Addl. Chief Secretary to the Govt. of West Bengal



TIGER CONSERVATION PLAN



**Sundarban Tiger Reserve**  
Canning Town, Dist: 24 Pgs (South), PIN: 743329, West Bengal, India  
[sundarbantigerreserve.org](http://sundarbantigerreserve.org), [sundarbantigerreserve@gmail.com](mailto:sundarbantigerreserve@gmail.com)