

Sundarban Tiger Reserve

Annual Report
2022-23



FOREWORD

Annual report of an organization is very important since it is a compilation of various relevant information that can be used by the field officers. This can be used as an effective tool for management. I am pleased to present the annual report of the Sundarban Tiger Reserve (STR) for the year 2022-23.

This has been a successful year for STR for many reasons. First and foremost is that there has been no case of poaching of major species. Almost nil tiger straying cases were there, the frontline staff of the division have worked really hard to achieve the success.

Use of modern technology and optimum utilization of resources are two most important attributes of management. As a part of strategy, M-STrIPES based E-patrolling application has been introduced in the last year and it is working successfully in the Sundarban terrain. The demography of tiger touched One hundred (100) as per the latest All India Tiger Estimation 2021-22, declared by the National Tiger Conservation Authority this year. This year Phase IV Tiger Estimation (2022-23) has been performed with full devotion by using the camera traps in all over Sundarban Tiger Reserve circle.

The division works hard for the upliftment of the Joint Forest Management Committees (JFMC) as well as the local Self Help Groups (SHG) constantly. The hand-in-hand co-operation makes the relationship stronger. Art and handicraft training, promotion and its practices are one of the most successful events in the financial year.

Staff training Different activities were taken up throughout the year in STR. The events viz. Global Tiger Day, Ban-Mahotsav, Wildlife week celebration, Azadi Ka Amrut Mahotsav etc has been observed. Ongoing artificial conservation breeding programme of Batagur baska is running successfully.

I would like to place on record my thanks and appreciation for all staff and officers of Sundarban Tiger Reserve for their sincere efforts for conservation for the ecologically important protected area.

Ajoy Kumar Das, IFS
Chief Conservator of Forests and Field Director
Sundarban Tiger Reserve



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Chapter 1

General Introduction & Background



GENERAL INFORMATION

- **Background**
- **Present Status**
- **Significance of Sundarban Mangroves**
- **Boundaries**

- **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 southern-most 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 the 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 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 MANGROVES

- 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.
- The Tiger Reserve is home to a large number of endangered and globally threatened species like the tiger (*Panthera tigris*), fishing cat (*Prionailurus viverrina*) and estuarine crocodile (*Crocodilus porosus*), Gangetic (Platanista gangetica) and Irrawady Dolphin (*Oracellabrevirostris*), 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*).
- The mangroves serve as nurseries to shell **fish and fin-fishes and sustain the coastal fisheries** of the entire eastern coast.
- It is known as a kingfisher's paradise as out of the 12 species of kingfishers found in the country 10 species are found here.
- Two species of horse shoe 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.
- The mangrove forests act as a natural shelter belt and protect the hinterland from storms, cyclones, tidal surges, sea-water seepage and intrusion.
- 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.
- It is known as a kingfisher's paradise as out of the 12 species of kingfishers found in the country 8 species are found here.
- Two species of horse shoe 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.
- The mangrove forests trap debris and silt and stabilise the near shore environment. Certain mangrove species also act as bio-filters as they have been found to bio-accumulate heavy metals. 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 mangrove forests act as a natural shelter belt and protect the hinterland from storms, cyclones, tidal surges, sea-water seepage and intrusion.



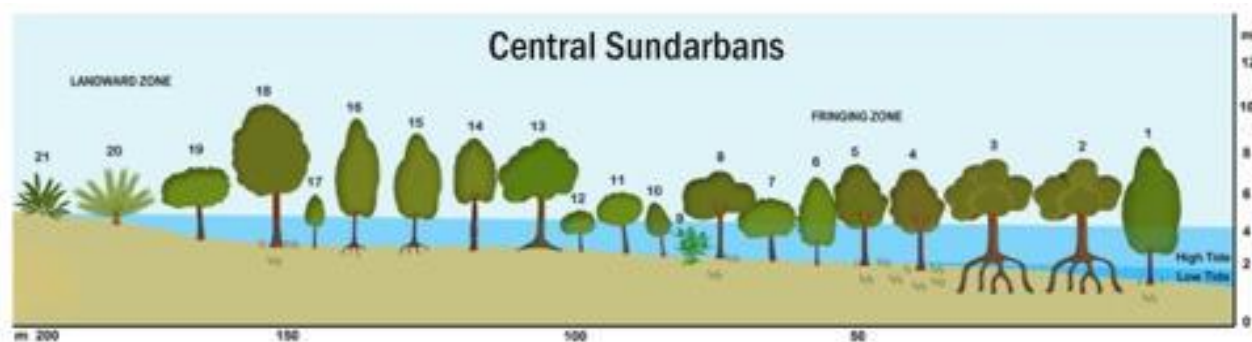
BOUNDARIES

The Sundarbans Tiger Reserve is bound in the east by the international boundary with Bangladesh formed by the rivers Harinbhanga, Raimangal and Kalindi. On the south lies the Bay of Bengal. The western border is formed by the river Matla, which acts as 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:

1. 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.
2. 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 Harinbhanga and Thakuran. The Sundarbans 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.

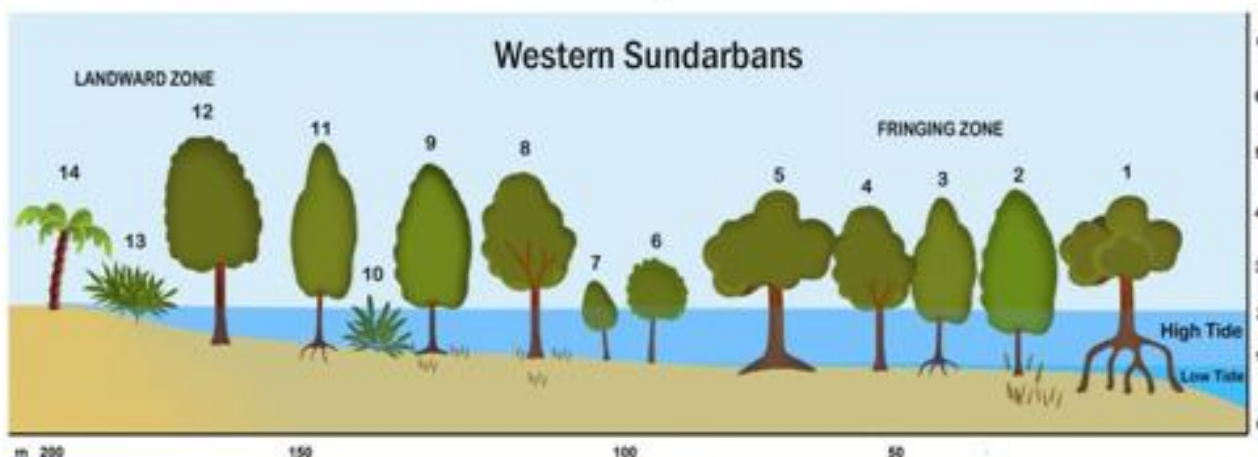




1. *Sonneratia griffithii*
2. *Rhizophora mucronata*
3. *Rhizophora apiculata*
4. *Avicennia alba*
5. *Avicennia marina*
6. *Sonneratia apetala*
7. *Kandelia candel*

8. *Avicennia officinalis*
9. *Acanthus ilicifolius*
10. *Aegialitis rotundifolia*
11. *Ceriops tagal*
12. *Aegiceras corniculatum*
13. *Xylocarpus granatum*
14. *Excoecaria agallocha*

15. *Bruguiera gymnorrhiza*
16. *Bruguiera cylindrica*
17. *Lumnitzera racemosa*
18. *Sonneratia caseolaris*
19. *Heritiera fomes*
20. *Nypa fruticans*
21. *Acrostichum aureum*



1. *Rhizophora mucronata*
2. *Sonneratia alba*
3. *Bruguiera gymnorrhiza*
4. *Avicennia marina*
5. *Xylocarpus mekongensis*

6. *Scyphiphora hydrophyllacea*
7. *Aegialitis rotundifolia*
8. *Avicennia officinalis*
9. *Sonneratia ovata*
10. *Acrostichum aureum*

11. *Bruguiera cylindrica*
12. *Heritiera littoralis*
13. *Acrostichum speciosum*
14. *Phoenix paludosa*

Chapter 2

Legal Status of Sundarban Tiger Reserve



LEGAL STATUS**LEGAL STATUS OF SUNDARBAN TIGER RESERVE:**

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

Entire area has the status of Reserved Forest also.

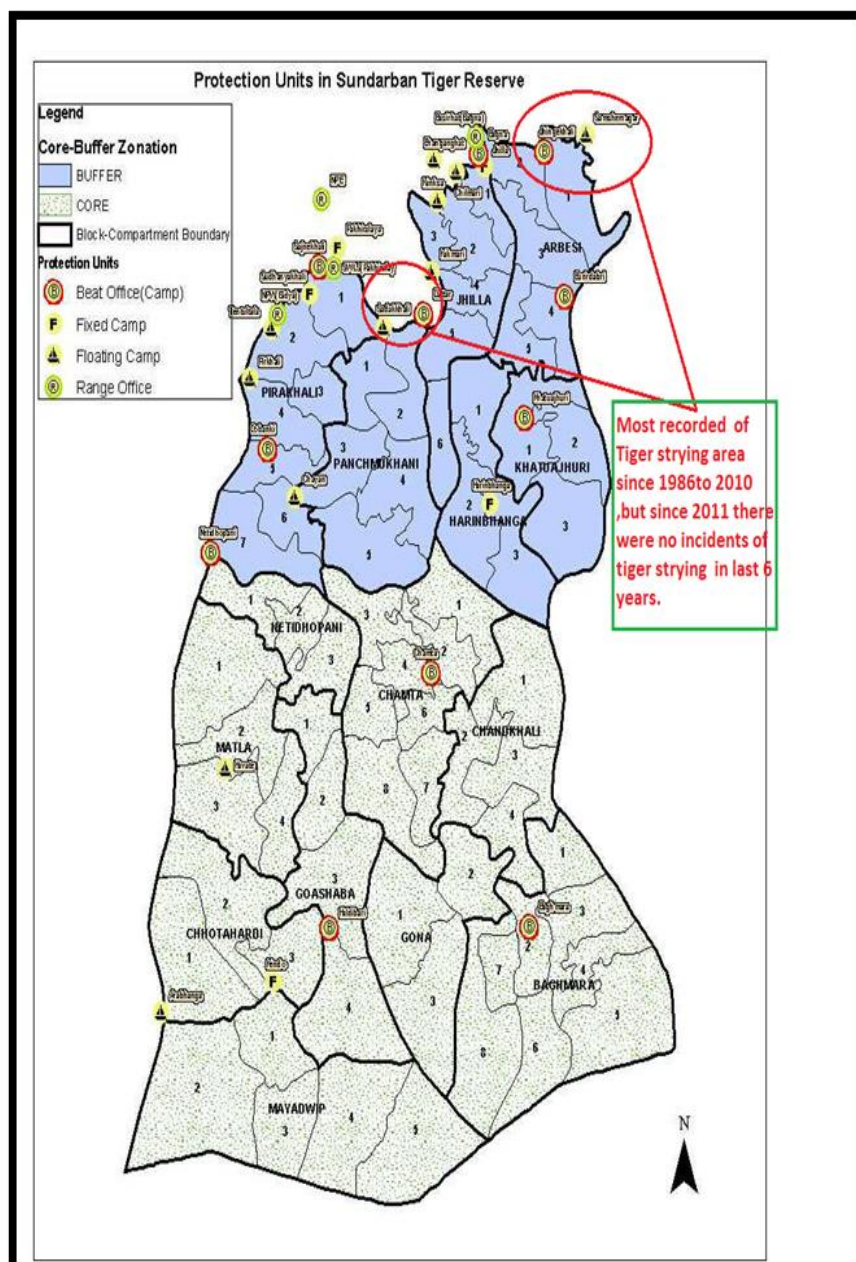
AREA STATEMENT OF SUNDARBAN TIGER RESERVE:

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



Chapter 3

Administration



ADMINISTRATION

Administrative Unit	Range/Beat/Camp		No.
Range (<i>Territorial</i>)	Bashirhat Range, Sajnekhali Wildlife Sanctuary Range, National Park (East) Range, National Park (West) Range		4
Range (<i>Functional</i>)	H.Q./AFR Range, Land and Law Cell, Research Range, Rampura Mobile Range, Eco-Tourism Range		5
Beat (<i>Territorial</i>)	<i>Name of Beat</i>	<i>Range</i>	14
	Chamta, Bagmara, Chandkhali (New)	National Park (East) Range	
	Haldibari, Netidhopani, Kendo	National Park (West) Range	
	Dobanki, Sajnekhali and Duttar	Sajnekhali Wildlife Sanctuary Range	
	Bagna, Burirdabri, Jhingekhali, Khatuajhuri and Harinbhanga (in Harikhali)	Basirhat Range	
Beat (<i>Functional</i>)	Sonakhali, Rampura H.Q., Canning H.Q., National Park H.Q. (West), National Park H.Q. (East) and Research.		6
Camp (<i>Land-based Camps</i>)			20
Camp (<i>Floating Camps/ Check-posts</i>)			11

GPS locations of the Range beats/camps of Sundarban Tiger Reserve:

Range	Beat/Camp	Lat	Long
SWLS	Sajenkhali	22.12393056	88.830175
	Duttar	22.09818889	88.8965
	Dobanki	21.98897778	88.755083
	Pakhirala (HQ)	22.12855278	88.820806
	Sudhanyakali	22.10130833	88.801422
	Sadakhali FC		
	Tentultala FC		
	Panchamukhani (Chayan) FC		
BHT	Jhila (HQ)	22.18892778	88.959147
	Bagna Beat	22.19405833	88.960711
	Jhingekhali	22.20771667	89.019556
	Khatuajhuri	22.05455	88.989206
	Burirdabri	22.07730833	89.029378
	Harikhali	21.98718333	88.971531
	Samsernagar	22.18394444	89.05355
	Kaksa	22.15870833	88.921228
	Kakmari FC		
	Chilmari FC		
NPE	Gosoba (HQ)	22.16811944	88.799306
	Chamta	21.86033611	88.913803
	Bagmara	21.72569722	88.97875
	Chandkhali	21.84414444	88.973789
	LuthirDuani FC		
NPW	Haldibari	21.72573056	88.783278
	Netidhopani	21.91904167	88.74675
	Bidya (HQ)	22.09239444	88.766858
	Kendo	21.68363889	88.733375
	Havati FC		
Rampura Patrolling		22.35171111	88.877764

Chapter 4

Staff Strength



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 (IFS), two Assistant Field Directors, Range Officers and other frontline staff, the details of which are given in the table below:

Sl. No.	Category of Post	Sanct ioned Stren gth	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	-	-	- do-
9	UDC	6	4	2	-	-do-
10.	PA	1	1	-	-	
11.	Clerk-cum-Typist	7	1	6	-	-do-
12.	Typist	1	-	1	-	-do-
13.	Forest Ranger	11	9	2	-	PCCF, WB's O.O. No. 20-Misc/2001, dt. 18.05.2001
14.	DR/Fr.	28	19	9	-	PCCF, WB's O.O. No. 07-Misc/PMC/2018, dt. 19.01.2018
15.	Head Forest Guard	8	3	5	-	-do-
16.	Forest Guard	110	50	60	-	-do-
17.	Majhi	21	05	16	-	CCF/WB's O.O. No. 45/S, dt. 24.9.1975
18.	Boatman	54	09	45	-	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	1	1	-	8815-For, dt. 20.9.1976
23.	Chowkidar	2	1	1	-	769-For, dt. 9.2.1974

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24.	Karmasathi	2	-	2	-	769-For, dt. 9.2.1974
25.	Peon	4	3	1	1*	*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
28	Engine Driver	5	3	2	-	1170-For, dt. 17.12.76 & 4128-For, dt. 19.7.1980
29	Sareng	3	2	1	-	4128-For, dt. 17.09.80 & 4192-For, dt. 19.09.1981
30.	Sukhani	2	-	2	-	1170-For, dt. 17.12.76 & 4128-For, dt. 19.07.1980
31	OMG	3	-	3	-	do-
32	Laskar	8	-	8	-	-do-
	TOTAL	298	122	176	1	
	Banashramik	-	12	-	-	



Chapter 5

Infrastructure & Assets



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Infrastructure and Assets:

- Staff Quarter
- Other Constructions
- Communication
- Vehicle
- RT sets
- Tools and machineries
- Dart guns
- Cages
- Arms and ammunitions

Infrastructure and assets as on 31.03.2023

Staff Quarters: (as per 31.03.2023)

Category	No.	Location
R0s Quarter	5	SWLS-1, BHT-1, NP(W)-1, RPP-1, ET-1 .
V0s Quarter	1	SWLS-1.
DR/FRs Quarter	9	SWLS-3, BHT.-3, NP(W)-1 , RPP-1 , ET-1.
Twin DR/FRs Building (Pukka)	3	BHT.-1
Twin FGs Quarter (Pukka)	2	NP(W)-2.
Other Staff Quarter	2	ET-2 (wooden).
Boatmans' Barrack	2	SWLS-1, RPP-1.
Staff Barrack	24	SWLS-7, BHT.-11, NP(E)-6, RPP-2, NP(W)-1
Twin Staff Barrack (Pucca)	12	SWLS-7, NP(W)-4, RPP-1,
Twin Staff Barrack (Wooden)	4	BHT.-3, RPP-1.

Other structures: (as per 31.03.2023)

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

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Laboratory	1	H.Q.-1.
Honey Godown	3	SWLS-1, BHT.-1, H.Q-1.
Store House (Wooden)	3	SWLS-1, NP(W)-1, RPP-1.
Pump and Generator Room	13	SWLS-3 BHT.-3, NP(W)-2, NP(E)-2, ET-3.
Dock Shed	3	SWLS-1, NP(W)-1, NP(E)-1.
RCC Water Reservoir	1	SWLS-1.
Common Kitchen for Staff	11	SWLS-4, BHT-3, NP(E)-2, NP(W)-3.
Post-Mortem Unit	1	SWLS-1.

Various infrastructure developments works at Ranges, Beats & camps under Sundarban Tiger Reserve: 2022-23

Renovation & maintenance of Staff staying & office facilities: 2022-23

Item of work	Range	Beat/Camp	Qty
Renovation of Staff Barrack	Canning HQ	HQ	1
	BHT	Samshernagar	1
	SWLS	Duttar	1
Extension of Beat Office	SWLS	Sudhanyakhali	1
Maintenance of Staff Barrack	NPW	Vidya (HQ)	1
		Haldibari	1
	BHT	Bagna	1
	BHT	Kaksa	1
	BHT	Burirdubri	1
	SWLS	SWLS range	1
Repairing of Staff Barrack	NPE	Chandkhali	1
Establishment of Submersible Pump	SWLS	Sudhanyakhali	1
Repairing of Submersible Pump	NPW	Vidya (HQ)	1
Maintenance of Toilet	NPW	Vidya (HQ)	1
Repairing of the toilet pipe line	SWLS	SWLS range	1
Repairing and maintenance of electrical work	BHT	Jhingekhali	1
Plumbing work for staff	NPW	Vidya (HQ)	1
Printing work	BHT	Jhingekhali	1
Repairing and plumbing work at Rest House	BHT	Jhingekhali	1

Maintenance of Infrastructure for Staff Facility: 2022-23

Item of Work	Range	Beat/Camp	Qty
Maintenance of CC Path	NPW	HQ (Vidya)	100 m
	NPW	Haldibari	100 m
	Basirhat	Jhingakhali	100 m
	NPE	Chamta	100 m
	Basirhat	Kaksa	100 m
Deep Tube Well	SWLS	Lahiripur Chargheri	1
		Luxbagan Parasmoni Bidhan Colony	1
	NPW	Satyanarayanpur	1
		Mathurakhanda	1
	BHT	Hentalbari	1
		Emlibari	1
Installation of 5 KVV Solar Power Plant	NPE	Chandkhali	7 KVV
		Chamta	6 KVV
		Bagmara	5 KVV
	NPW	Haldibari	8KVV

Renewal of new Chain Link Fencing & Maintenance of Old ones at several Camps of Sundarban Tiger Reserve for better protection of Front Line Staff: 2022-23

Item of Work	Range	Beat/Camp	Qty
Renewal of New Chain Link Fencing	SWLS	Sudhanyakhali	100 m
		Sajnekhali	100 m
	NPW	Kendo	100 m
		Netidhopani	100 m
	BHT	Jhingakhali	100 m
		Burirdubri	100 m
Maintenance of Chain Link Fencing	BHT	Khatuajhuri	100 m
		Burirdubri	100 m
		Jhingakhali	100 m
		Kaksa	100 m
	SWLS	Sajnekhali	100 m
		Sudhanyakhali	100 m
		Dobnaki	100 m
		Duttar	100 m
	NPE	Bagmara	100 m
		Chamta	100 m
	NPW	Kendo	100 m
		Haldibari	100 m

Vehicles (including hired): record as on 31.03.2023

Type	Nos.	Condition
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 (WB-11C-1237)	Hired Vehicle
Ertiga	01WB-95-8174	Hired Vehicle
Motor Cycle	04(HQ-01),(SWLS-01), (BHT-01), {NP(w)-01}	Need for servicing
Mechanised dingi	21 (SWLS-08, BHT- 10, NP(W)-04, NP(E) - 05	
Speed Boat	04 (BHT -1, NPE-1, NPW-2)	Good condition
Launch (Departmental)	HQR- 01 (Banasova) NPE - 01 (Banaraj)	Good condition
Launch (Hired)	HQR-02 (Debraj, BharatLaxmi)	Good condition
Accommodation Boat (Departmental)	SWLS-01 (Chayan), NPW-01(Havati)	Good condition
Accommodation Boat (Hired)	HQR-01 (Maa Sumitra)	Good condition

RT Sets used in 2022-23

Fixed station (No.)		Mobile station (No.)		Walkie Talkie (No)		No. of Mobiles
Short Wave	Long Wage	Short	Long	Short wave	Long wave	
56 nos.	10 nos.	--	01 no.	67 nos.	06 nos.	29 nos.

RT Stations with Code numbers in Sundarban Tiger Reserve: 2022-23

Sl. No.	Station Name	Station code
1	Canning Head Quarter	1
2	A.F.D's Control office, Canning	Cobra
3	A.F.D. Boat (Maa Sumitra)	Shardul
4	A.F.D. Lunch (Barat Lakshmi)	Goliath
5	D.F.D. Lunch (Debraj)	Shark
6	F.D. Lunch (Banashobha)	Dolphin
7	Bidya Range Office (N.P. W)	Control
8	Bidya Range Officer's Boat (N.P. W)	2 Mobile
9	Nethi dhopani Beat Office	2/1
10	Nethi dhopani Beat Officer's Boat	2/1 Mobile
11	Haldibari Beat Officer	2/2
12	Haldibari Beat Officer's Boat	2/2 Mobile
13	Habhati Floating camp	Viper

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14	Kendo Beat	2/4
15	Kendo Beat Officer's Boat	2/4 Mobile
16	Sajnekhali Range Office (Pakhiralya)	3
17	Sajnekhali Range Officer's Boat	3 Mobile
18	Chayan	3/0
19	Sajnekhali Beat	3/1
20	Sajnekhali Beat Officer's Boat	3/1 Mobile
21	Sudhanya khali Beat	3/2
22	Sudhanya khali Beat Officer's Boat	3/2 Mobile
23	Duttar Beat	3/3
24	Duttar Beat Officer's Boat	3/3 Mobile
25	Dobanki Beat	3/4
26	Dobanki Beat Officer's Boat	3/4 Mobile
27	Sadak khali camp	Kite
28	Pirkhali Floating camp	Eagle
29	Gosaba Range Office (N.P.E)	4
30	Gosaba Range Officer's Boat (N.P.E)	4 mobile
31	Chamta Beat	4/1
32	Chamta Beat Officer's Boat	4/1 mobile
33	Bagmara Beat	4/2
34	Bagmara Beat Officer's Boat	4/2 mobile
35	Ludhirduani Floating camp (Banaraj Lunch)	Crocodile
36	Chandkhali Beat	Green camp
37	Basirhat Range Office (Jhilla)	5
38	Basirhat Range Officer's Boat (Jhilla)	5 Mobile
39	Bagna Boat	5/0
40	Bagna Boat Officer's Boat	5/0 Mobile
41	Jhingakhali Beat	5/1
42	Jhingakhali Beat Officer's Boat	5/1 Mobile
43	Burirdabri Beat	5/2
44	Burirdabri Beat Officer's Boat	5/2 Mobile
45	Khatuajhuri Beat	5/3
46	Khatuajhuri Beat Officer's Boat	5/3 Mobile
47	Harikhali Beat	5/4
48	Harikhali Beat Officer's Boat	5/4 Mobile
49	Kakmari Floating camp	Kingfisher
50	Chilmari Floating camp	Stork
51	Kaksha Protection camp	5/7
52	Samshernagar Protection camp	5/8
53	Rampura Patrol Range	6
54	Rampura Range Officer's Boat	6 Mobile
Call time – 6 a.m, 8 a.m, 10.30 a.m, 12 Noon, 2.30 p.m, 4.30 p.m, 7 p.m., 8.30 p.m, 10 p.m.		

Tools and Machineries: up to 31.03.2023

Category	No.	Location
Computer	17	NP(W)-2, NP(E)-2, SWLS-3, BHT-2, HQ -8.
Laptop	4	H.Q.-3, NPW-1
Arc View (PalmTop)	1	H.Q.-1
GPS	46	Different Ranges
Printer	20	NPE-2, NPW-4, BHT-2, SWLS-3, H.Q.-9
Scanner	3	H.Q.-3.
Electronic Typewriter	1	HQ.-1.
Multimedia Projector	3	HQ.-3.
16 mm Projector	1	H.Q.-1.
Overhead Projector	2	HQ.-2.
Slide Projector	1	H.Q.-1.
DVD Player	2	H.Q.-2.
Fax Machine	2	H.Q.-2.
Xerox Machine	2	1 No.
Refrigerator	7	NP(W) -1, BHT- 1, SWLS-2, HQ-3.
Video Camera	1	Hqr.-1.
35 mm Analog Camera	12	NP(E)-2, NP(W) -1, BHT- 2, SWLS-2, HQ-5.
Digital Camera(camera trap)	8	NP(W)-4, BHT-1, SWLS-3.
Digital Camera	14	NP(E)-2, NP(W)-3, SWLS -2, BHT-2, H.Q.-5.
Still Camera	16	
Night-vision Binocular	1	H.Q.-1.
Binocular	19	NP(W)-4, BHT-4, H.Q.-5, SWLS-3, NP(E)-3.
Television Set	9	NP(W)-2 HQ-3, SWLS-4
Telephone	12	H.Q.8., NPW-2, NPE-2
Intercom	1 Set	H.Q.-1 Set.
Mobile Set	34	.BHT-8, HQ-9, SWLS-8, NPW-5, NPE-4
Generator	13	BHT-3, SWLS-5, NPW-4, NPE-1
Pump Set	16	BHT-2, HQ-1, SWLS-7, NPW-2, NPE-4
Air-Conditioner	5	H.Q.-3, SWLS-2.
Search Light	59	SWLS-11 (2 Nos. defective), BHT-15 NP(W)-25, NPE-8.
Solar Lantern	20	SWLS-4. NP(W)-7, NP(E)-9.

Dart Guns:

Category	No.	Location
Tranquillizing Gun	4	SWLS-1, BHT.-1, NP(W)-1 , HQR- 1, Research-1.
Dart Pistol	6	SWLS-2, H.Q.-1, Research-2, BHT-1.

Cages:

Category	No.	Location
Trap Cages	11	SWLS-7, BHT.-2, NP(W)-2.
Trap Cages (SMALL)	02	SWLS- 2
Translocation Cages	09	SWLS-5,NP(W)-1.BHT-2
Squeeze Cage	01	BHT-1 (transferred from SWLS)

Unmanned Aerial Vehicle (UAV) or Drone :

Category	No.	Location
Drone	02	SWLS-1, BHT.-1

Arms & Ammunitions:

Type	No.	Distribution of arms
Rifles	53	SWLS-11, BHT-8, NP(W)-14, NP(E)-13, HQR-07
Air Rifles	07	SWLS-01, BHT-01, NP(W)-02, HQR- 02, Research-01
DBBL	31	SWLS-15, BHT-04, NP(W)-05, NP(E)-03, HQR-04
SBBL	02	NP(E)-01, Research-01
Pump Action Gun	16	SWLS-04, NP(E)-04, NP(W)-03, BHT-02, HQR- 03.



Chapter 6

Financial Performance



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Budget (2022-23):

SI No.	Schemes	Fund received in Rs.	Expenditure in Rs.	Remarks
1	CSS-Project Tiger	2,84,79,550	2,84,79,550	Central scheme
2	CSS-IDWH (Conservation of <i>Batugur baska</i>)	NIL	NIL	Central scheme
3	State Development Scheme	4,94,71,495	4,86,00,699	State scheme
4	WB-CAMPA	22,500	18,000	others

WBFBCP (JICA): 2022-23

Fund received	NIL
Expenditure	N.A.
Balance	NIL

Status Report on NREGS during 2022-23:

District	24 South PGS
Balance Fund BF from 31.03.22	Nil
Fund received from DM during 2022-23	Nil
Name of Range	SWLS, BHT, NP(E) & NP(W)
Administrative Block	Gosaba
Expenditure on Labour (Rs.)	Nil
Expenditure on Material (Rs.)	
Expenditure on contingencies	
Total expenditure during 2021-22	
Person days generated	
Number of Families benefitted	
Number families provided with 100 days employment	
Balance fund as on 31.03.23 (Rs.)	

Number of Man days Generated in various Forestry Activities in F.Y. 2022-23:

Activity (Please specify)	Man days generated	Average Labour rate
Anti-plastic Drive	2275	284/- per day
Maintenance of eco-tourism	8275	284/- per day
Patrolling, Fencing checking and other regular government duty	67320	284/- per day

Community Development		Target		Achievements		Remarks
Head of Service	Item of Works	Phy	Fin (in Rs.)	Phy	Fin (in Rs.)	
2406-01-102-026-27	Maintenance of Double soling path at Amlamethi	1	2,50,000.00	1	2,49,919.00	Work for G.O. 125(Sanction)- For/DOFR-12011(25)/12/2022-SEC(DOFR)-DOFR,Dt-11.07.2022 Allotment-30,00,000.00 Expenditure - 29,76,982.00
	Maintenance of Double soling path at Bali	1	2,50,000.00	1	2,49,919.00	
	Deep Tube Well at LahiripurCharghari	1	2,50,000.00	1	2,49,906.00	
	Deep Tube Well at LuxbaganParasmoniBidan colony	1	2,50,000.00	1	2,49,906.00	
	Deep Tube Well at Satyanarayanpur	1	2,50,000.00	1	2,49,576.00	
	Deep Tube Well at Mathurakhand	1	2,50,000.00	1	2,49,576.00	
	Deep Tube Well at Hentalbari	1	2,50,000.00	1	2,42,797.00	
	Deep Tube Well at Emlihari	1	2,50,000.00	1	2,49,925.00	
	Re-digging of Sweet water pond at Sonagaon	1	1,00,000.00	1	98,189.00	
	Re-digging of Sweet water pond at Jemshpur	1	1,00,000.00	1	99,973.00	
	Re-digging of Sweet water pond at	1	1,00,000.00	1	98,189.00	

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AnpurRajatjublee						
Re-digging of Sweet water pond at Dulki	1	1,00,000.00	1	99,973.00		
Re-digging of Sweet water pond at Samsernagar	1	1,00,000.00	1	98,189.00		
Re-digging of Sweet water pond at Hemnagar	1	1,00,000.00	1	98,189.00		
Re-digging of Sweet water pond at Adibasipara	1	1,00,000.00	1	98,189.00		
Re-digging of Sweet water pond at Kalidaspur	1	1,00,000.00	1	98,189.00		
Re-digging of Sweet water pond at Bali	1	1,00,000.00	1	98,189.00		
Re-digging of Sweet water pond at Bijohnagar	1	1,00,000.00	1	98,189.00		
Maintenance of Double soling path at Samsernagar	1	2,50,000.00	1	2,43,913.00		
Maintenance of Double soling path at Kalitalaparghumti	1	2,50,000.00	1	2,49,875.00		
Maintenance of Double soling path at Bagna para	1	2,50,000.00	1	2,43,188.00		
Maintenance of Double soling path at Kalidaspur	1	2,50,000.00	1	2,49,925.00		
Maintenance of Double soling path at Mitrabari	1	2,50,000.00	1	2,49,924.00		
Maintenance of Double soling path at Dayapur	1	2,50,000.00	1	2,43,913.00		
Maintenance of Double soling path at Jemshpur	1	2,50,000.00	1	2,43,863.00		
Maintenance of Double soling path at Pakhirala	1	2,50,000.00	1	2,49,828.00		
Maintenance of Double soling path at	1	2,50,000.00	1	2,49,975.00		
						Work for G.O. 131(Sanction)- For/DOFR-12011(25)/11/2022- SEC(DOFR)-DOFR,Dt-13.07.2022 Allotment-30,00,000.00 Expenditure - 29,74,043.00

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	Sonagaon					
	Maintenance of Double soling path at Dulki	1	2,50,000.00	1	2,49,857.00	
	Maintenance of Double soling path at LahiripurCharghari	1	2,50,000.00	1	2,49,857.00	
	Maintenance of Double soling path at Bijohnagar	1	2,50,000.00	1	2,49,925.00	
			60,00,000.00		59,51,025.00	

Performance Report of Other Allied Works in 2022-23:

Division -Sundarban Tiger Reserve		Target		Achievements	
Head of Service	Item of Works	Phy	Fin (in Rs.)	Phy	Fin (in Rs.)
2406-01-102-027-27	Maintenance of C.C. path at LuxbaganParasmoniBidhan Colony in SWLS Range	1	200,000.00	1	199,541.00
	Maintenance of C.C. path at AnpurRajatjublee in SWLS Range	1	200,000.00	1	197,667.00
	Maintenance of C.C. path at LahiripurSantigachi in SWLS Range	1	200,000.00	1	197,667.00
	Maintenance of C.C. path at Emliabari in Bashirhat Range	1	200,000.00	1	200,000.00
	Maintenance of C.C. path at Gobindapur in Bashirhat Range	1	200,000.00	1	200,000.00
	Maintenance of C.C. path at Hemnagar in Bashirhat Range	1	200,000.00	1	196,378.00
	Maintenance of C.C. path at Bijohnagar in Bashirhat Range	1	200,000.00	1	199,968.00
	Maintenance of Community hall at Pakhirala in SWLS Range	1	250,000.00	1	244,987.00
	Maintenance of Community hall at Amlamethi in Bashirhat Range	1	250,000.00	1	244,776.00
	Maintenance of Community hall at Buruliapara in Bashirhat Range	1	100,000.00	1	97,116.00
	TOTAL-	10	20,00,000.00	10	19,78,100.00

Ice Block Making Machinery		Target		Achievements	
Head of Service	Item of Works	Phy	Fin (in Rs.)	Phy	Fin (in Rs.)
2406-01-102-027-Other Allied Works Component-50-Other Charges	Supply of 500 Kg Ice Block Machine /24 hours , External Dimension-L=5.5' X W =3' X H=3.2' , 190 TO 240 Voltage.	2	8,88,870.00	2	8,88,400.00
	Supply of 50 Ltr Crate for preserving fish for distribution to JFMC Villagers.	36	89,532.00	36	89,532.00
	Supply of Tea (2 cup each) to the Participants -100 Persons and resource persons -3 Persons =103Heads × 2 = 206 teas for hand held training of operation of ice block making machine	206	1,030.00	206	1,030.00
	Supply of Drinking water (20 Nos. water barrel 20Lit) (including supply, carriage, loading and unloading) for hand held training of operation of ice block making machine	20	2,000.00	20	2,000.00
	Working lunch (rice, dal, seasonal vegetable, fish, sweet (1pc)) for 100 number participants and 3 resource =103 persons for hand held training of operation of ice block making machine	103	18,540.00	103	18,540.00
			9,99,972.00		9,99,502.00



ECO-DEVELOPMENT ACTIVITIES (STCFT)

Sl. No.	Description of work	Fund in Rs.	Expenditure in Rs.
1.	Renovation of nylon net fencing. SWLS Range. Rs.6,26,584.00. Total - 16,400 Rmt. Jhila 4 compartment. Pirkhali 1 compartment. Jhila – 4, Panchmukhani – 2, Pirkhali 1 compartment, Deer enclosure at Dobanki Camp – 600 rmt, for Rs.19,312.00. *** Basirhat Range – 4,000 Rmt. Rs.2,94,484.00. Jhila – 1, 2, 3 compartments. *** NPE – 200 Rmt. Rs.1,96,400.00. Chamta, Baghmara. NPW Range – Rs.32,660.00.	11,90,000.00	11,50,128.00
2.	Augmentation of prey base – translocation of spotted deer.	8,00,000.00	8,00,000.00
3.	Fuel for boats engaged in Government duties.	8,05,000.00	8,04,196.00
4.	Supply of food to Crocodile & other rescued animals.	2,00,000.00	1,30,515.00
5.	Hiring charge of boats for special patrolling duty.	10,00,000.00	9,24,800.00
6.	Hiring charge of boats for regular official duty.	7,10,000.00	7,08,350.00
7.	Repairing of camp equipments.	1,70,000.00	1,63,813.00
8.	Maintenance of building and street light, etc. in camps.	3,60,000.00	3,30,324.00
9.	Maintenance of MIC.	66,000.00	36,000.00
10.	Fuel for boats engaged in protection mechanism.	2,42,000.00	2,41,236.00
11.	Supply of food for <i>Batagur baska</i> .	6,00,000.00	4,68,490.00
12.	Hiring charge of boats for research and others.	8,00,000.00	7,97,475.00
13.	Supply of fuel for boats engaged in research works.	9,00,000.00	7,32,420.00
14.	Hiring of boat for awareness campaigning.	1,00,000.00	90,000.00
15.	School adoption programme. i). Dakshin Kumirmari F.P. School under Basirhat Range. ii). P.C. Sen School at Dayapur village under SWLS Range. One class room of each School was renovated, fitted with public address system, projector, white board, classroom materials, etc.	3,00,000.00	2,99,973.00
16.	Electrification on JFMC area. Charcheri JFMC area under Duttar Beat area under SWLS Range.	1,00,000.00	84,240.00
17.	Protection of fringe area from tiger straying. SWLS Range – erection of nylon net fencing – Rs.7,91,591.00. Total 23,450 rmt. Basirhat Range – Rs.1,03,573.00. NPW Range – Rs.30,352.00 Total 1000 rmt.	9,30,000.00	9,25,516.00
18.	Installation of 62.5K.V.A. 3 phase Generator for power supply at Sajnekhali under SWLS Range.	8,30,000.00	8,26,885.00

Chapter 7

Non-Timber Forest Produce

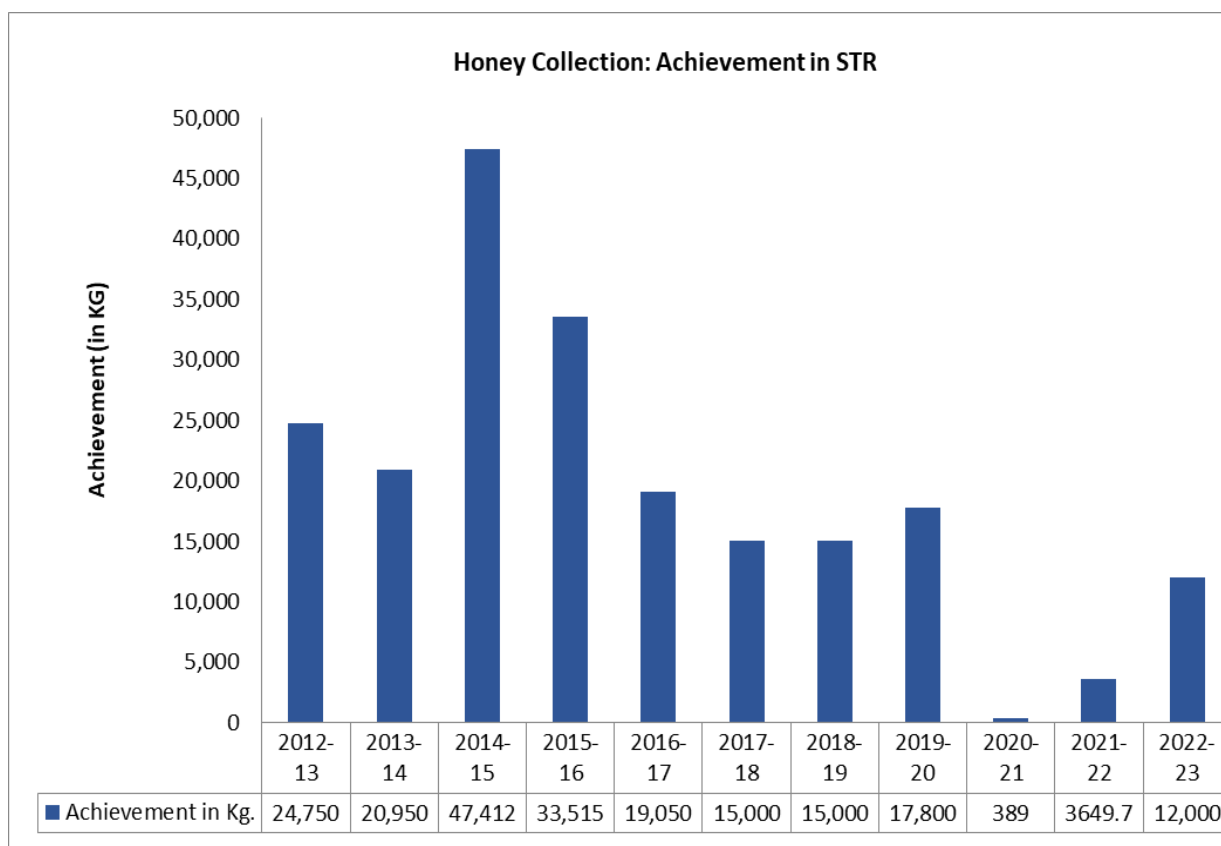


NON-TIMBER FOREST PRODUCE

Honey and bees-wax are the minor forest produce, which are collected during the months of April and May. Sundarban Tiger Reserve issues permits every year for honey collection. The honey so 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 was discontinued in 1978 and 1991 respectively. The coupe operation has been discontinued since the year 2001.

Non-timber Forest Produce (wild honey collection):

Sl. No.	Year	Target in Kg.	Achievement in Kg.	Collection cost per Kg.	Incidental cost per Kg.	Total cost in Rs.	+ Wastage 1%
1.	2012-13	25,000	24,750	50	13	15,59,250	--
2.	2013-14	20,000	20,950	75	15	18,85,500	--
3.	2014-15	60,000	47,412	100	15	54,52,380	54,524
4.	2015-16	75,000	33,515	110	15	41,89,375	41,894
5.	2016-17	20,000	19,050	115	15	24,76,500	--
6.	2017-18	15,000	15,000	120	15	20,25,000	--
7.	2018-19	15,000	15,000	125	15	21,00,000	--
8.	2019-20	18,000	17,800	135	15	26,70,000	--
9.	2020-21	18,000	389	150	15	64,185	--
10.	2021-22	30,000	3649.7	160	17	6,45,997	--
11.	2022-23	16,000	12,000	180	20	24,00,000	--



Chapter 8

Plantation



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 are also raised along village roads and earthen embankments to cater to the needs of the local people. Plantations (Mangrove and Non-mangrove) rose by Sundarban Tiger Reserve during last 8 (*eight*) years are given below:

- **MANGROVE PLANTATION**
- **NON-MANGROVE PLANTATION**

Year	Mangrove Plantation (Creation)
2022-23	NIL

Year	Non-Mangrove Plantation (Creation)
2022-23	NIL

Maintenance of Mangroves in FY 2022-23:

Particulars	Area (in Ha)	Fund (in Lakh)
1 st Year Maintenance of Greening Sundarban Plantation	60	2,40,000.00
2 nd Year Maintenance of Greening Sundarban Plantation	500	20,00,000.00
1 st Year Maintenance of Mangrove Plantation under State Development Scheme	1.546	9994



Chapter 9

Joint Forest Management & Self Help Group

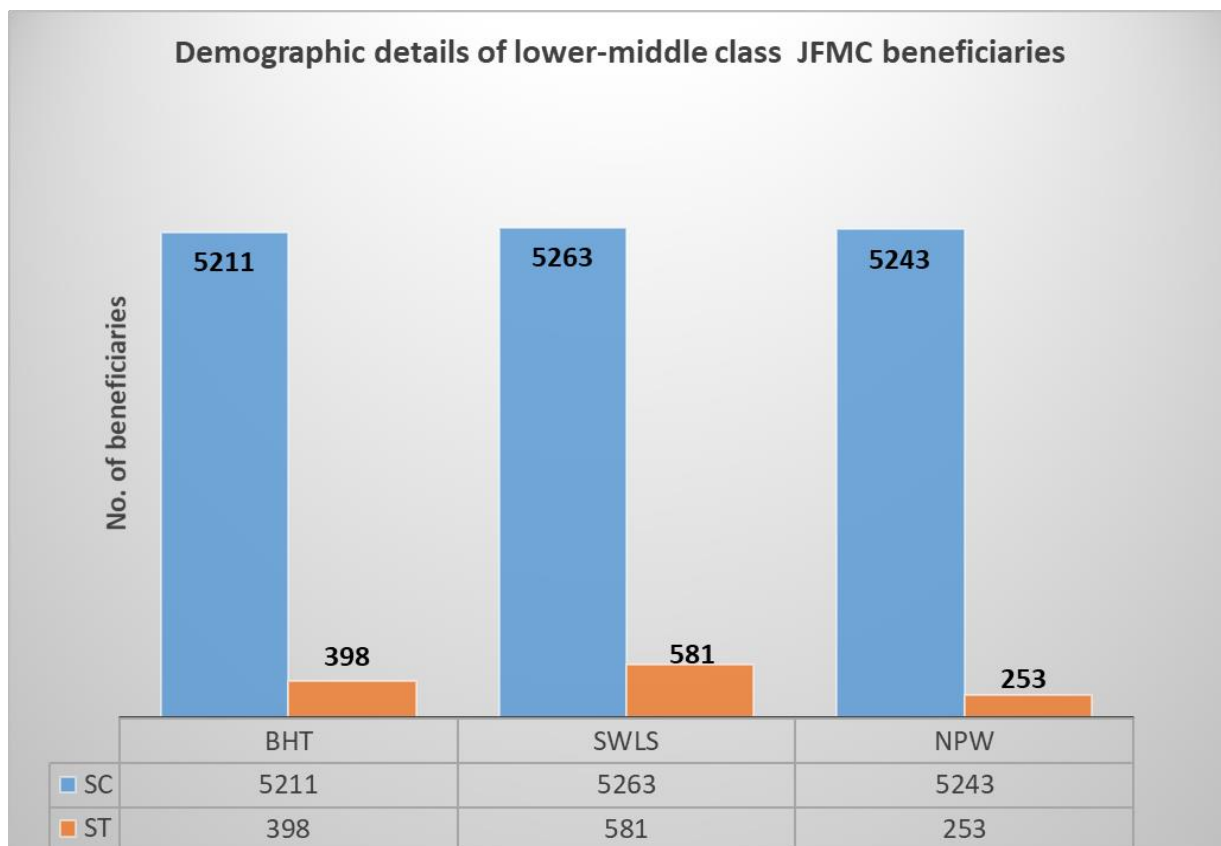


India has a long history of co-existence of people and the wild so that there is space for both to thrive in harmony. The oldest examples are the sacred groves, which are an indigenous community approach for protecting patches of forests for a variety of ecosystem services. Many communities have historically 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 integrated part of public dealings in forest areas. The people of the JFMCs are more or less dependent on forest department in several developmental activities.

• **Demography & Socio-Economy:**

- Some 4.5 Million people live in the biosphere reserve (2011 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, viz. 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.

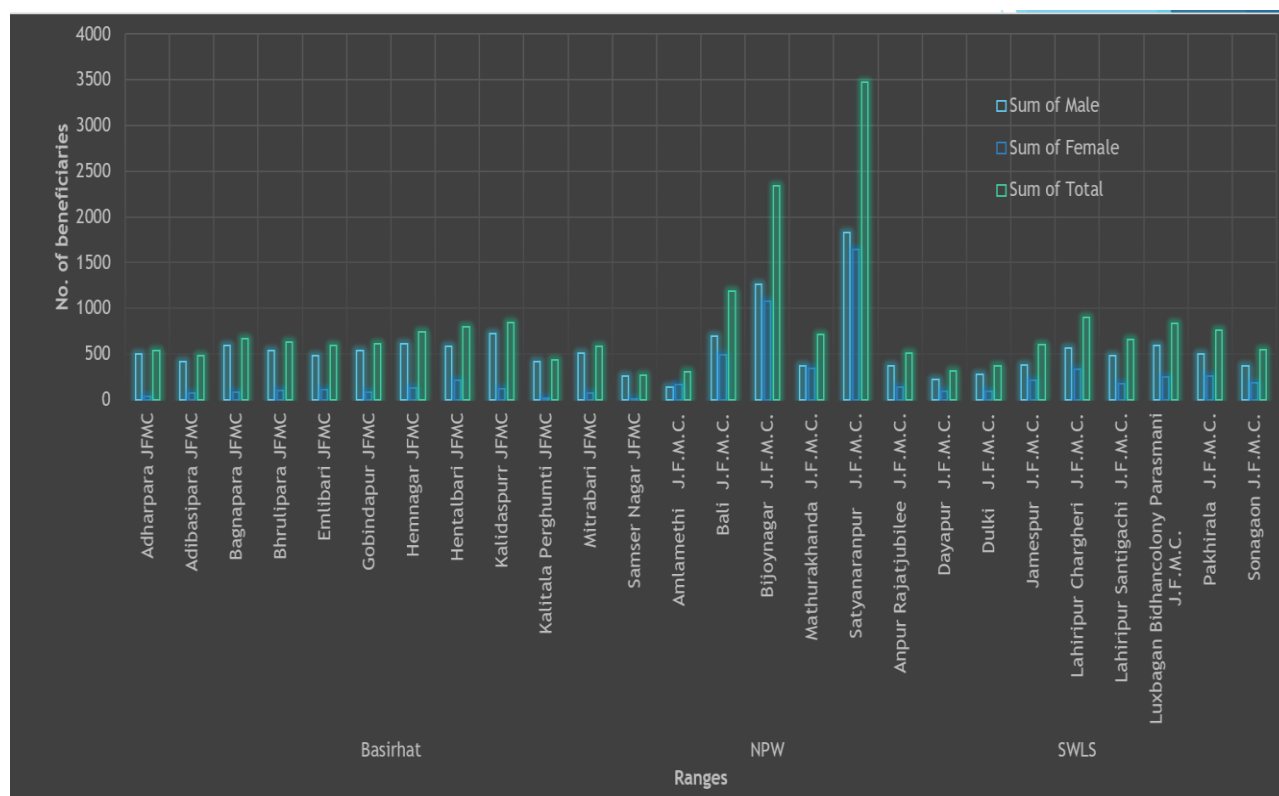




Details regarding JFMCs: as on 31.03.2023

•	<i>No. of JFMCs</i>	26
•	<i>No. of JFMCs registered</i>	26
•	<i>No. of Revenue villages covered</i>	38
•	<i>No. of Family members</i>	9,098
•	<i>No. of SC Family members with percentage</i>	8,174(89.84%)
•	<i>No. of ST Family members with percentage</i>	370(4.066%)
•	<i>Total Forest area covered (in ha.)</i>	26,474
•	<i>No. of JFMC having Women as Executive Committee Members</i>	26

Demographic Dividend of JFMC beneficiaries in different Ranges under STR:



The activities under these JFMCs in the FY 2022-23, are mentioned below:

Community development and Livelihood Development in JFMC areas:

The livelihood of the Sundarban people is based on agrarian economy, followed by the extensive fishing, honey-collection and crab collection. In local areas, people are dependent on the practice of Pisciculture. To boost up the situation, the Sundarban Tiger Reserve distributed fish fingerlings among the local villagers. Thereby, a sustainable livelihood generation will reach.

<i>Item of work</i>	<i>Range</i>	<i>JFMC Areas</i>	<i>Nos. of Beneficiaries (Family)</i>	<i>Fingerlings Distributed (Kg/family)</i>
<i>Distribution of Fish fingerlings for alternative livelihood generation.</i>	<i>Basirhat</i>	<i>Kalitala-Parghumti</i>	100	1 kg/ family
		<i>Gobindapur</i>	100	1 kg/ family
		<i>Hentalbari</i>	100	1 kg/ family
		<i>Kalidaspur</i>	100	1 kg/ family
		<i>Bagna Para</i>	100	1 kg/ family
		<i>Bhrulia Para</i>	100	1 kg/ family
		<i>Adharpara</i>	100	1 kg/ family
		<i>AdibasiPara</i>	100	1 kg/ family
		<i>Samserngar</i>	100	1 kg/ family
		<i>Hemnagar</i>	100	1 kg/ family
	<i>Sajnekhali</i>	<i>Dulki,</i>	30	10 kg/family
		<i>Chargheri</i>	36	10 kg/ family
		<i>Jamespur.</i>	32	10 kg/ family
	<i>National Park West (HQ Vidya)</i>	<i>Bali,</i>	100	2.5 kg/ family
		<i>Bijoynagar,</i>	100	2.5 kg/ family
		<i>Amlamethi,</i>	100	2.5 kg/family
		<i>Mathurakhanda,</i>	100	2.5 kg/family
		<i>Satyanarayanpur</i>	100	2.5 kg/family

Ice-Block Machine Installation:

<i>Item of work</i>	<i>Range</i>	<i>JFMC Areas</i>	<i>No. of Machines Installed</i>
Installation of Ice block machine.	<i>Sajnekhali</i>	<i>Chargheri</i>	<i>01</i>
	<i>National Park West (HQ Vidya)</i>	<i>Amlamethi</i>	<i>01</i>







Developmental Activities in Fringe Village Areas:

Deep Tube well boring:

Water harvesting is an important work in JFMC areas. In the last FY 2022-23, boring of deep tube well was carried out in the following areas:

<i>Item of Work</i>	<i>Range</i>	<i>JFMC Areas</i>	<i>No. of Tube wells</i>
Boring of Deep Tube well.	<i>Basirhat</i>	<i>Hentalbari</i>	<i>01</i>
		<i>Emlibari</i>	<i>01</i>
			<i>01</i>
	<i>Sajnekhali</i>	<i>Lahiripur-Chargheri</i>	<i>01</i>
		<i>Luxbagan-Parasmani (Bidhan Colony)</i>	<i>01</i>
	<i>National Park West (HQ Vidya)</i>	<i>Satyanarayanpur</i>	<i>01</i>
		<i>Mathurakhanda</i>	<i>01</i>

Re-digging of Sweet water Pond:

Water is an important resource in community structure. In the FY 2022-23 re-digging of sweet water pond was an important attribute of JFMC development.

<i>Item of Work</i>	<i>Range</i>	<i>JFMC Areas</i>
Sweet water Pond	Basirhat	Samsernagar, Hemnagar, Adibasipara, Kalidaspur, Bhrulia Para
	Sajnekhali	Jamespur, Sonagaon, Anpur-Rajatjubilee, Dulki
	National Park West (HQ Vidya)	Bali, Bijohnagar



Water Treatment Plant:

Sundarban is a deltaic region with a huge scarcity of ground water. Maintaining the Water treatment plants thus help in the village people.

<i>Item of Work</i>	<i>Range</i>	<i>JFMC Areas</i>
Repairing and maintenance of water treatment plant.	Basirhat	Mitrabari

Repairing of Jetty Ghat:

<i>Item of Work</i>	<i>Range</i>	<i>JFMC Areas</i>
Repairing and maintenance of jetty.	Basirhat	Kumirmari, Kalitala, Choto- Mollakhali

Maintenance of Community Hall:

Community hall is a public interaction place in JFMCs. Maintenance works were carried out in the FY 2022-23, as follows:

Item of Work	Range	JFMC Areas
Maintenance of Community Hall	Basirhat	Bhrulia Para
	Sajnekhali	Pakhirala
	National Park West (HQ Vidya)	Amlamethi

Maintenance of Double Soling Brick path:

Maintenance of any infrastructure is an important attribute in JFMC development. In the last FY 2022-23 several areas were considered under double soling path, as follows.

Item of Work	Range	JFMC Areas	Running Meters
Maintenance of Double soling path.	Basirhat	Samernagar	100
		Kalitalaparghumti	100
		Bagna para	100
		Kalidaspur	100
		Mitrabari	100
	Sajnekhali	Dayapur	100
		Jemshpur	100
		Sonagaon	100
		Pakhirala	100
		Dulki	100
		Lahiripur	100
		Charghari	100
	National Park West (HQ Vidya)	Bijoynagar	100
		Bali	100
		Amlamethi	100







Latitude: 22.15729
Longitude: 88.891018
Elevation: 6.93±23 m
Accuracy: 7.5 m
Time: 31-10-2022 11:33
Note: এমলিবাড়ি JFMC চিডেবয়েল

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Creation and Renovation of C.C. Path:

CC path is one of the convenience modes of JFMCs. In the last FY 2022-23 several areas were considered under CC path creation activity, as follows:

Item of Work	Range	JFMC Areas	Running Meters
Creation and Renovation of C.C. path	Basirhat	Emlibari	100
		Gobindapur	100
		Hemnagar	100
		Bagna Para	100
		Kalidaspur	100
	Sajnekhali	Luxbagan	100
		ParasmoniBidhan Colony	100
		AnpurRajatjublee	100
		Lahiripur-Santigachi	100
	National Park West (HQ Vidya)	Bijohnagar	100





Supply of Solar Street Lights:

Solar street lights along the earthen embankments of straying prone area often repel the movement of strayed tigers at night and hence works as a mental barrier against tiger straying.

<i>Item of Work</i>	<i>Range</i>	<i>JFMC Areas</i>	<i>No. of lights distributed</i>
Street light supply	<i>Basirhat</i>	<i>Kalidaspur</i>	30
	<i>Sajnekhali</i>	<i>Chargheri</i>	16



Establishment of Marichjhapi Farmer Producer Company:

Fishing and crab collection are the basic livelihood generation operation in the Sundarbans. Every year, a good number of people are losing their lives in the crab collection activity. Now, community-based crab farming company is established and registered for the sustainable use of the natural resources by the stakeholders of the local JFMC. This is the first such approach by the departmental intervention for the upliftment of the JFMCs.

Item of Work	Range	JFMC Areas
Registration and set up of a farmer producer company As on 09.09.2022	Basirhat	Bagna Para (Kumirmari Gram Panchayat)





GOVERNMENT OF INDIA
MINISTRY OF CORPORATE AFFAIRS

Central Registration Centre

Certificate of Incorporation

[Pursuant to sub-section (2) of section 7 and sub-section (1) of section 8 of the Companies Act, 2013 (18 of 2013) and rule 18 of the Companies (Incorporation) Rules, 2014]

I hereby certify that KUMIRMARI MARIJJHAPI FARMERS PRODUCER COMPANY LIMITED is incorporated on this Thirteenth day of October Two thousand twenty-two under the Companies Act, 2013 (18 of 2013) and that the company is limited by shares.

The Corporate Identity Number of the company is U01100WB2022PTC257741.

The Permanent Account Number (PAN) of the company is AAJCK8439M *

The Tax Deduction and Collection Account Number (TAN) of the company is CALK14703D *

Given under my hand at Manesar this Thirteenth day of October Two thousand twenty-two .



Digital Signature Certificate
Ms Sheetal Kumari

For and on behalf of the Jurisdictional Registrar of Companies

Registrar of Companies

Central Registration Centre

Disclaimer: This certificate only evidences incorporation of the company on the basis of documents and declarations of the applicant(s). This certificate is neither a license nor permission to conduct business or solicit deposits or funds from public. Permission of sector regulator is necessary wherever required. Registration status and other details of the company can be verified on www.mca.gov.in

Mailing Address as per record available in Registrar of Companies office:

KUMIRMARI MARIJJHAPI FARMERS PRODUCER COMPANY
LIMITED
C/O-ANKAN MONDAL, KUMIRMARI,, SUNDARBON COASTAL,,
KOLKATA, Kolkata, West Bengal, India, 743378



* as issued by the Income Tax Department

Anti- Plastic Drive:

Plastic pollution is an emerging topic, now a day. Entire Sundarban Tiger Reserve is a plastic free zone. Several Anti Plastic drive programmes were held in the FY 2022-23.

Item of Work	Range	JFMC Areas
Anti-plastic campaigns.	Basirhat	Kumirmari Bazar, Satjelia Bazar, Budhbar Bazar, Mollakhali Bazar
	Sajnekhali	Dayapur, Pakhirala, Lahiripur, Dulki
	National Park West (HQ Vidya)	Bali





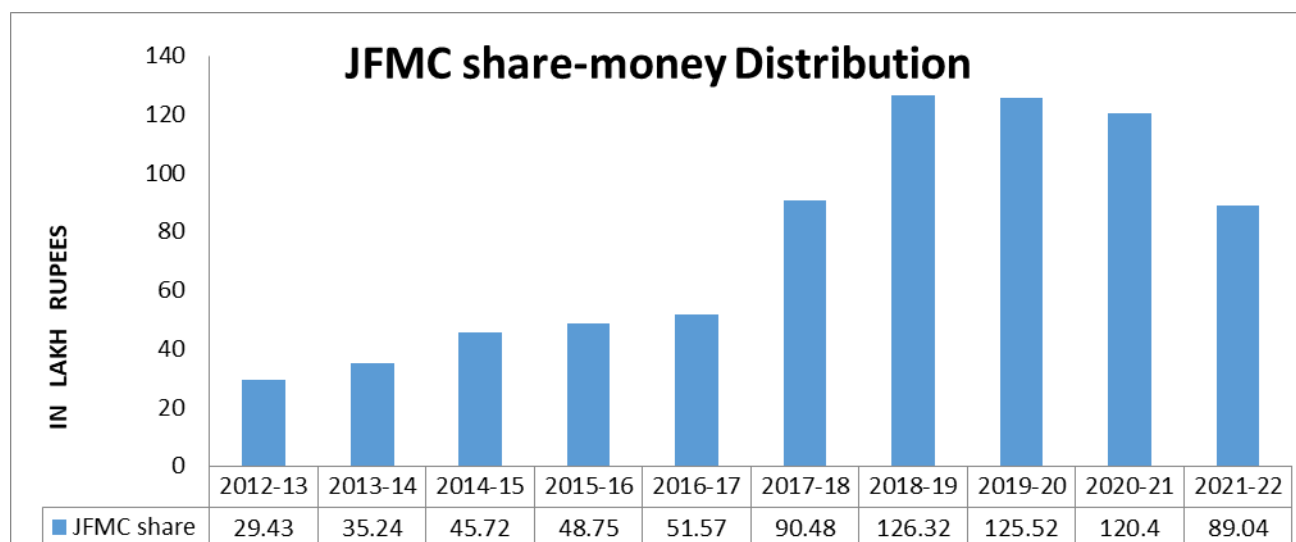
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The share money for the eco-developmental works in different JFMCs is distributed by the forest department from the total collection from the eco-tourism. Actually 40% from the eco-tourism collection was given to the JFMCs according to the rules.

JFMC SHARE MONEY DISTRIBUTION up to 2022-23:

Accounting year	Amount in Rs.
2012 - 2013	29,43,035.00
2013 - 2014	35,24,193.00
2014 - 2015	45,71,925.00
2015 - 2016	48,75,365.00
2016 - 2017	51,56,735.00
2017 - 2018	90,48,338.00
2018 - 2019	1,26,32,244.00
2019 - 2020	1,25,51,554.00
2020 - 2021	1,20,40,330.00
2021- 2022	89,04,075.00
2022- 2023*	1,36,91,834.00
TOTAL	6,73,43,719.00

* Fund allocation of Rs. 1,36,91,834.00/- only for 2022-23 (yet not disbursed).



STATUS OF REGISTERED SELF-HELP GROUPS IN SUNDARBAN TIGER RESERVE: 2022-23

Name of Range	Years					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
National Park (W) Range	20	20	20	20	20	20
Sajnekhali Wildlife Sanctuary Range	38	38	38	38	38	47
Basirhat Range	85	85	85	85	85	106
Grand Total:	143	143	143	143	143	173





Self Help Group (only for Wildlife Wing): 2022-23

Sl. No.	Name of SHG	Range	JFMC	Members
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	Sajnekhali		10

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	Durga			
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	Bijohnagar	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	Adharpara	10
69	Shyama	Basirhat		10
70	Bangashree	Basirhat		10
71	Kanakchanpa	Basirhat		10
72	Akasganga	Basirhat		10
73	Banamata	Basirhat		11
74	Annadata	Basirhat	Adibasipara	10
75	Maa Bhabani	Basirhat		12
76	Banaful	Basirhat		11
77	Sarathi	Basirhat		10
78	Golap	Basirhat		10
79	Sristhti	Basirhat		10
80	Priyjon	Basirhat		10
81	Kumari Ma	Basirhat		10
82	Bagna	Basirhat		10

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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	Sapna Sandhani	Basirhat		10
90	Banasriyani	Basirhat	Bagna para	10
91	Sriyani	Basirhat		10
92	Banabeethi	Basirhat	Kalidaspur	10
93	Monikanchan	Basirhat		12
94	Kollooloni	Basirhat		10
95	Uttaran	Basirhat		10
96	Agradut	Basirhat		10
97	Golpata	Basirhat		10
98	Bharat Darshan	Basirhat		10
99	Mongalmoyee	Basirhat		10
100	Parinita	Basirhat		10
101	Sibsankar	Basirhat		10
102	Maa Saradamayee	Basirhat	Hentalbari	12
103	Sachimata	Basirhat		10
104	Ma Mangalchandi	Basirhat		10
105	Aaikatan	Basirhat		10
106	Bangadarshan	Basirhat		10
107	Sonali	Basirhat		10
108	Bharat tirtha	Basirhat		10
109	Rupali	Basirhat		10
110	Suprabhat	Basirhat	Gobindapur	10
111	Anandamayee	Basirhat		10
112	Ma Trinayanee	Basirhat		12
113	Ma Mahamaya	Basirhat	Emlibari	10
114	Ma Etuidebi	Basirhat		11
115	Ma mati	Basirhat		10
116	Nabajagaran	Basirhat		10
117	Ma Basanti	Basirhat		12
118	Sundarban Nabajagaran	Basirhat		10
119	Maa Bhairabi	Basirhat		10
120	Ma Jayanti	Basirhat		10
121	Ma Bipattarini	Basirhat		10

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122	Ma tara	Basirhat	Mitrabari	10
123	Ma Annapurna	Basirhat		10
124	Radharani	Basirhat		10
125	Vidyasagar	Basirhat		10
126	Sundari	Basirhat		10
127	Banamata	Basirhat		10
128	Banabhumi	Basirhat		10
129	Harichand	Basirhat		10
130	Juii	Basirhat	Kalitala-Parghumti	13
131	Vivekananda	Basirhat		10
132	Ichhamati	Basirhat		9
133	Mohuya	Basirhat		10
134	Barnali	Basirhat		10
135	Golpata	Basirhat		10
136	Nibedita	Basirhat		11
137	Bana barta	Basirhat		10
138	Hental	Basirhat		10
139	Mouchak	Basirhat		10
140	Machranga	Basirhat		11
141	Kankara	Basirhat		10
142	Swadhen	Basirhat		10
143	Sabuj Banani	Basirhat		10
144	Rajani	Basirhat	Samsernagar	10
145	Jibandwip	Basirhat		12
146	Tiger	Basirhat		11
147	Nabadiganta	Basirhat		10
148	Tiya	Basirhat		10
149	Mina	Basirhat		10
150	Bande Mataram	Basirhat		10
151	Kalindi	Basirhat		10
152	Purnima	Basirhat		10
153	Maya	Basirhat		10
154	Ma Durga	Basirhat		10
155	Rupasi	Basirhat		9
156	Projapati	Basirhat		10
157	Bangabandhu-2	Basirhat		10
158	Aila	Basirhat		10
159	Rupa	Basirhat		10
160	Nayan	Baisrhat	Bhruliapara	10

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161	Swanirbhar	Basirhat	Emlibari	10
162	Banasree	Basirhat		9
163	Emlibari	Basirhat		10
164	Bana Lakhi	Basirhat	Mitrabari	10
165	Lakshmi Priya	Basirhat	Mitrabari	10
166	Matrinayani	Basirhat	Gobindapur	12
167	Sagar	Basirhat		11
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

Forest Village and Encroachment during 2022-23:

Sl. No.	Name of Forest Village	Location (Block/ Comptt.)	Type of Encroachment	Total Area (ha.) encroached till 31.03.22	Total Area (ha.) recovered till 31.03.21	Remarks
Not applicable						







Meetings and Social Contact with SHGs and JFMCs



Chapter 10

Forest Protection



Forest Protection:

Forest protection is the first and foremost work of any forest division, and STR is not an exception. Here we discuss about the forest protection under different heads.

List of anti-poaching camps

Protection strategy

Offence scenario during last few years

E-Patrolling at STR

Land-based Camps			Floating Camps/ Check-Posts		
Sl. No.	Location	Range	Sl.No.	Location	Range
1	Pakhiralaya	Sajnekhali Wild Life Sanctuary Range	1	Kakmari	Bashirhat Range
2	Sajnekhali				
4	Dobanki				
5	Sudhanyakhalali		2	Chilmari	
6	Jhila	Bashirhat Range	3	Pirkhali	Sajnekhali Wild Life Sanctuary Range
7	Bagna		4	Sadakkhali	
8	Jhingekhali		5	Tentultola	
9	Khatuajhuri-Harinbhanga		6	Chayan (Moving Patrolling Camp)	
9	Burirdabri				
10	Harikhali				
11	Samsernagar		7	Banaraj (Moving Patrolling Camp)	NP East Range
12	Kaksa				NP West Range
13	Canning H.Q.	H.Q Range			
14	Chamta	National Park (East)			
15	Bagmara				
16	Gosaba H.Q.				
17	Sonakhali				
18	Chandkhali				
19	Haldibari	National Park (West)			
20	Netidhopani				

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21	Bidya		
22	Kendo		
23	Rampura	Rampura Mobile Range	

One State Armed Police Camps posted at Jhila under Bashirhat Range headquarters. It also functions as a Special Strike Force and assists the field staffs in patrolling, raids and tiger rescue operations.

State Armed Police Force Camp established in the year: 2000

No. of State Armed Police personnel posted: 5+1

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: 6+1(Khatuajhuri) and 9+1(Bagna Camp)

Name of highest ranked officer posted in the Camp: Sub-Inspector

Details of Offence & Seizure:

Sl. No.	FOREST OFFENCE	2018-19	2019-20	2020-21	2021-22	2022-23
1.	POR (in Nos.)	-	04		2196	01
2.	COR (in Nos.)	2254	2090	2273	2196	3169
3.	UDOR (in Nos.)	05	11	04	03	11
4.	No. of Persons Arrested	-	24	-	-	04
5.	Incidences of Firing by Staff (<i>in Round</i>)	-	-	-	-	-
6.	No. of Offender Died	-	-	-	-	-
7.	No. of Offender Injured	-	-	-	-	-
8.	No. of Forest Staff Killed	-	-	-	-	-
9.	No. of Forest Staff Injured/Assaulted	-	-	-	-	-
10.	Total Compensation Realised (<i>in Rs.</i>)	1736400.00	1671850.00	2115500.00	2009330.00	3218000.00
11.	Quantity of Timber	-	5.6385 m ³	-	0.001 m ³	-

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	Seized (<i>Sawn & Log</i>)					
12.	No. of Vehicle Seized	-	-	-	-	-
13.	No. of Dingi Seized	05	7	04	-	10
14.	No. of Mechanised Boat / Trawler Seized	-	-	-	01	01
15.	No. of Cattle Seized	02	21	05	-	23

Wildlife Offence Cases (under Wildlife Protection Act, 1972) during 2022-23:

POR	COR	UDOR	Person arrested	Conviction details (if any)
1	3169	11	4	Nil

Seizure of wildlife (2022-23): 23 cattle from Basirhat Range.



E-Patrolling at STR:

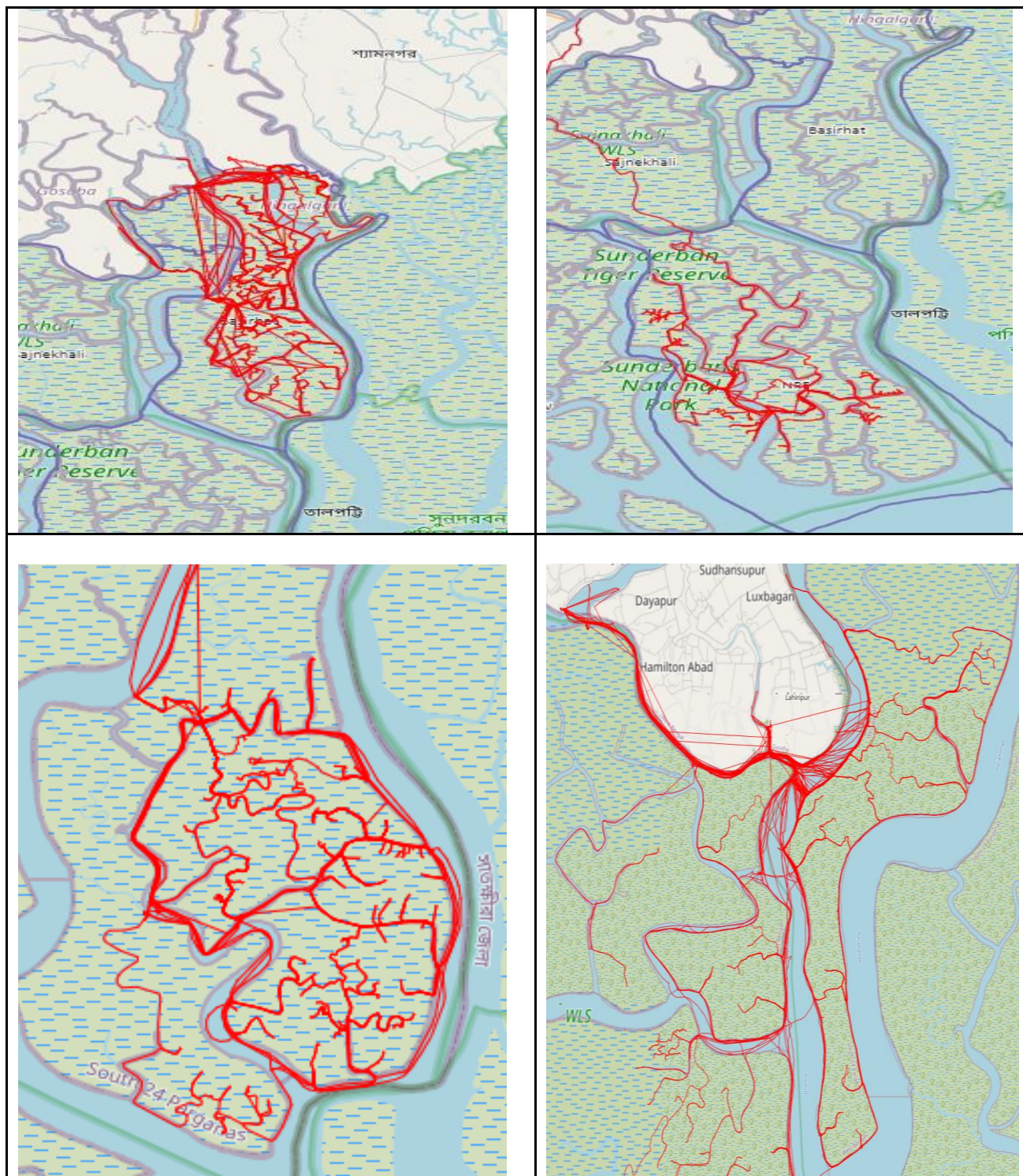
Age-old pattern, procedure and practise of traditional patrolling and wildlife monitoring had some limitations with only use of manual pen, pencil and papers along with prolonged and time-bound use of RT system. Main constraints were time dependency on RT network, errors and time-consumptions in manual entry, possibilities of data manipulation and absence of real-time data. It was to overcome all of these limitations E-patrol/ Smart patrolling was introduced in Sundarban Tiger Reserve in the last FY. In this new system every camp has been given a smart phone with a mobile application (encrypted in Java language) installed on it for monitoring and patrolling purpose. With this software/application the front-end staffs are recording their every possible activity like patrolling, fencing checking, night patrols, offence detections wildlife sightings etc. That real time patrolling data, which has been well tabulated, analysed and synchronised into the main server database, can directly be monitored instantly by the monitoring applications loaded in the smart phones of senior hierarchy. Other than that multiple reports of versatile types and patterns can easily be fetched out from that said database at any time through the web.



E-Patrol Android Application Software:

In last FY 2021-22, Wildlife Institute of India made M-STrIPES based android patrolling application 'E-Patrol' has been installed in new mobile phones and the field staffs are well trained with this. Initially it faced several challenges due to global positioning system and data loading but after rigorous training the field staff overcomes the situation.

Here are some images of patrolling in different ranges in different months in FY 2022-23:



Chapter 11

Wildlife Management



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Wildlife management and mitigation of forest offences regarding wildlife is another important attribute for any tiger reserve. Here it goes:

- **DEATH CASES (OTHER THAN POACHING)**
- **POACHING CASES**
- **WILD ANIMALS (OTHER THAN TIGER) RESCUED**
- **TIGER CAPTURED/IMMOBILIZED**
- **WILDLIFE CENSUS (TIGERS &IF ANY)**
- **TRANSLOCATION OF ANIMALS (IF ANY)**
- **BATAGUR BASKA CONSERVATION PROJECT**

Death of wild animals during 2022-23:

<i>Sl. No.</i>	<i>Date</i>	<i>Species (with details - age, sex etc.)</i>	<i>Place of incidents</i>	<i>Details of cause of death (as per Post Mortem Report)</i>	<i>Category (Natural, Poaching, Accidental, Retaliatory killing, Other)</i>	<i>Whether any body part (horn / tusk / hair/ teeth/ meat/ hoof/ skin, etc.) is missing</i>
1.	08.06.2022	5 nos. Carcass of Batagur Baska	RO/Bashirhat (Jhila)	Disposed off after performing p.m Examination	Due to high salinity(23.2 p.p.t.)	No
2	20.06.2022	Jungle Cat	RO/NPW	Disposed off after performing p.m Examination	Natural	No
3	21.09.2022	Dolphin	RO/Bashirhat	Disposed off after performing p.m Examination	Natural	No
4	28.09.2022	Monocled Cobra	RO/SWLS Range	Disposed off after performing p.m Examination	Natural	No
5	10.12.2022	Olive Ridley	BO/ Dobanki	Disposed off after performing p.m Examination	Natural	No
6	15.12.2022	Olive Ridley	BO/ Dobanki	Disposed off after performing p.m Examination	Natural	No
7	01.03.2023	Carcass of Batagur Baska	RO/SWLS Range	Disposed off after performing p.m. Examination	Natural	No
8	07.03.2023	Carcass of Batagur Baska	RO/SWLS Range	Disposed off after performing p.m. Examination	Natural	No
9	18.03.2023	Carcass of Batagur Baska	RO/SWLS Range	Disposed off after performing p.m. Examination	Natural	No

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10	05.01.2023	Carcass of Batagur Baska	RO/SWLS Range	Disposed off after performing p.m. Examination	Natural	No
11	25.01.2023	Carcass of Batagur Baska	RO/SWLS Range	Disposed off after performing p.m. Examination	Natural	No
12	03.03.2023	Carcass of Batagur Baska	RO/SWLS Range	Disposed off after performing p.m. Examination	Natural	No
13	08.01.2023	Carcass of Batagur Baska	RO/SWLS Range	Disposed off after performing p.m. Examination	Natural	No
14	19.03.2023	Carcass of Batagur Baska	RO/SWLS Range	Disposed off after performing p.m. Examination	Natural	No
15	22.03.2023	Carcass of Batagur Baska	RO/SWLS Range	Disposed off after performing p.m. Examination	Natural	No
16	15.03.2023	Carcass of Batagur Baska	RO/SWLS Range	Disposed off after performing p.m. Examination	Natural	No
17	31.03.2023	Adult female crocodile	RO/SWLS Range at Khonakhali River near pirkhali – 4 compt.	Disposed off after performing p.m. Examination	Due to congestive cardiac failure	No
18	23.01.2023	spotted deer	Sudhanyakhali	Disposed off after performing p.m. Examination	Cardio-respiratory failure	No
19	02.02.2023	1 no. Female spotted deer	RO/SWLS Range BO/ Dobanki	Disposed off after performing p.m. Examination	Cardio-respiratory failure	No
20	03.02.2023	1 no. Male spotted deer	RO/SWLS Range BO/ Dobanki	Disposed off after performing p.m. Examination	Cardio-respiratory failure	No
21	04.02.2023	1 no. Female spotted deer	RO/SWLS Range BO/ Dobanki	Disposed off after performing p.m. Examination	Cardio-respiratory failure	No
22	05.02.2023	3 nos. female spotted deer	RO/SWLS Range BO/ Dobanki	Disposed off after performing p.m. Examination	Cardio-respiratory failure	No
23	06.02.2023	1 no. female spotted deer	RO/SWLS Range BO/ Dobanki	Disposed off after performing p.m. Examination	Cardio-respiratory failure	No
24	08.02.2023	Deer Fawn	RO/SWLS Range BO/ Dobanki	Disposed off after performing p.m. Examination	Cardio-respiratory failure	No
25	10.02.2023	1 no. female spotted deer	RO/SWLS Range	Disposed off after performing p.m.	Cardio-respiratory	No

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			<i>BO/ Dobanki</i>	<i>Examination</i>	<i>failure</i>	
26	<i>11.02.2023</i>	<i>1 no. Male spotted deer</i>	<i>RO/SWLS Range BO/ Dobanki</i>	<i>Disposed off after performing p.m. Examination</i>	<i>Cardio-respiratory failure</i>	No
27	<i>14.02.2023</i>	<i>1 no. female</i>	<i>RO/SWLS Range BO/ Dobanki</i>	<i>Disposed off after performing p.m. Examination</i>	<i>Cardio-respiratory failure</i>	No
28	<i>19.02.2023</i>	<i>1 no. female spotted deer</i>	<i>RO/SWLS Range BO/ Dobanki</i>	<i>Disposed off after performing p.m. Examination</i>	<i>Cardio-respiratory failure</i>	No
29	<i>25.02.2023</i>	<i>1 no. female spotted deer</i>	<i>RO/SWLS Range BO/ Dobanki</i>	<i>Disposed off after performing p.m. Examination</i>	<i>Cardio-respiratory failure</i>	No
30	<i>01.03.2023</i>	<i>1 no. female spotted deer</i>	<i>RO/SWLS Range BO/ Dobanki</i>	<i>Disposed off after performing p.m. Examination</i>	<i>Cardio-respiratory failure</i>	No
31	<i>03.03.2023</i>	<i>spotted deer</i>	<i>RO/SWLS Range BO/ Dobanki</i>	<i>Disposed off after performing p.m. Examination</i>	<i>Cardio-respiratory failure</i>	No
32	<i>05.03.2023</i>	<i>1 no. female spotted deer</i>	<i>RO/SWLS Range</i>	<i>Disposed off after performing p.m. Examination</i>	<i>Cardio-respiratory failure</i>	No
33	<i>13.3.2023</i>	<i>1 no. female spotted deer</i>	<i>RO/SWLS Range</i>	<i>Disposed off after performing p.m. Examination</i>	<i>Cardio-respiratory failure</i>	No
34	<i>14.03.2023</i>	<i>spotted deer</i>	<i>RO/SWLS Range BO/ Dobanki</i>	<i>Disposed off after performing p.m. Examination</i>	<i>Cardio-respiratory failure</i>	No

POACHING CASES IN SUNDARBAN TIGER RESERVE:

YEAR	NAME OF ANIMAL	NUMBER
2015-16	Spotted Deer	2 Nos. (Accused arrested & POR drawn)
2016-17	NIL	NIL
2017-18	NIL	NIL
2017-18	NIL	NIL
2018-19	NIL	NIL
2019-20	NIL	NIL
2020-21	NIL	NIL
2021-22	NIL	NIL
2022-23	NIL	NIL

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Rescue of wild animals during 2022-23:

Sl. No.	Date of Rescue	Species	Rescue range or place	Number	Remarks
1	13.05.2022	Estuarine Crocodile	Sonaga	1	After examination by V.O., released in nature
2	15.05.2022	Spotted Owlet	RO/NPE	1	
3	07.06.2022	Estuarine Crocodile	RO/NPW	1	
4	19.06.2022	Monocled Cobra	Rustom More	1	
5	24.06.2022	Hawksbill Turtle	RO/BHT.	1	
6	29.06.2022	Olive Ridley Turtle	Panchamukhani-I	1	
7	04.07.2022	Olive Ridley Turtle	RO/NPE	1	
8	08.07.2022	Olive Ridley Turtle	RO/BHT.	1	
9	13.07.2022	Olive Ridley Turtle	RO/BHT.	1	
10	30.08.2022	Olive Ridley Turtle	RO/BHT.	1	
11	04.09.2022	Estuarine Crocodile	Bagbagan	1	
12	10.09.2022	Wild Boar	Pakhirala	1	
13	28.09.2022	Monocled Cobra	DULKI	1	

Tiger Capture/ Radio collaring of Tigers during 2022-23:

Date of radio collaring	Location	Animal description (species, age, sex, etc.)	History of the animal	Remarks
Nil				

DNA fingerprinting of tigers in Sundarban Tiger Reserve / 24-Parganas (South) Division – details: - Nil.

Census of Wildlife:- Latest Census figures of wild animals & birds-

Year of Census	Species	Male	Female	Sex unidentified	Calf /cub	Total
2022-23 Phase IV Tiger Estimation (aite)	As the result of the All India Tiger Estimation, 2021-22 the nos. of Tigers is 100 declared by the NTCA. Cubs are not considered under the survey. Near about <i>One hundred Eight</i> Tigers are found through Camera Trapping in the year 2022 – 2023, in ocular estimation of Phase – IV Tiger Estimation.					

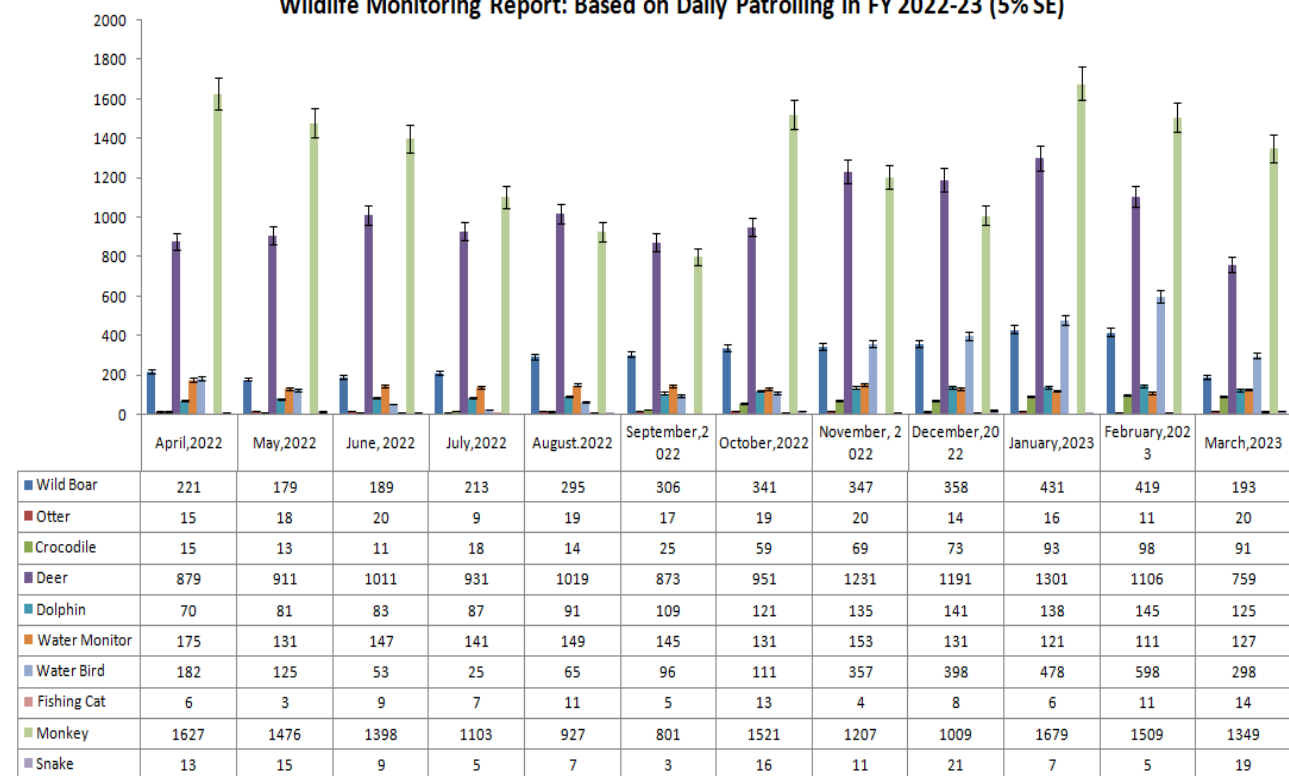
Annual Report 2022-23

Record of sightings of wild animals in FY 2022- 23:

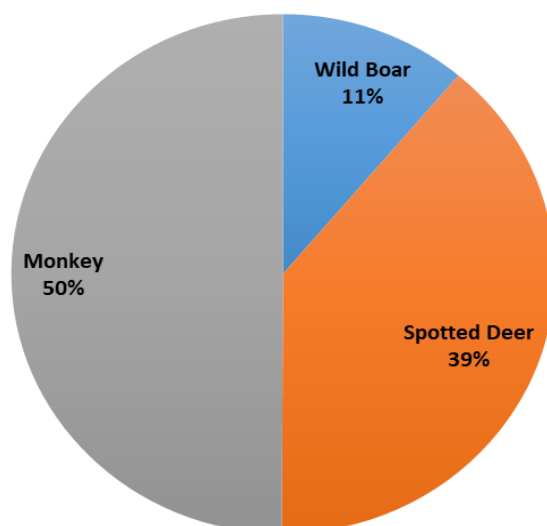
Month	Wild Boar	Otter	Crocodile	Deer	Dolphin	Water Monitor	Water Bird	Fishing Cat	Monkey	Snake
April, 2022	221	15	15	879	70	175	182	6	1627	13
May, 2022	179	18	13	911	81	131	125	3	1476	15
June, 2022	189	20	11	1011	83	147	53	9	1398	9
July, 2022	213	9	18	931	87	141	25	7	1103	5
August, 2022	295	19	14	1019	91	149	65	11	927	7
September, 2022	306	17	25	873	109	145	96	5	801	3
October, 2022	341	19	59	951	121	131	111	13	1521	16
November, 2022	347	20	69	1231	135	153	357	4	1207	11
December, 2022	358	14	73	1191	141	131	398	8	1009	21
January, 2023	431	16	93	1301	138	121	478	6	1679	7
February, 2023	419	11	98	1106	145	111	598	11	1509	5
March, 2023	193	20	91	759	125	127	298	14	1349	19

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Wildlife Monitoring Report: Based on Daily Patrolling in FY 2022-23 (5% SE)



Major Prey Species of Tigers: Based of Record Sightings in STR in FY 2022-23



First Sundarban Bird Festival (SBF, February 2023):

Sundarban, the only mangrove tiger habitat is an abode for avian biodiversity. Two important flyways overlap in the Ramsar site of international importance, namely- the Central Asian flyway and the East Asia-Australasian flyway. This UNESCO World Heritage Site is daily inundated by the tidal influx and thereby creating various ecosystems and niches like the aquatic, shores, mudflats, and the mangrove forests. A diversity of microhabitats with hyper-volume niche exists in the Mangals. The back mangrove possesses a variety of avian diversity; on the other hand the shoreline ecotone supports the specialists of that particular ecosystem. This year, the first ever Sundarban Bird Festival (SBF 2023) was organised from 7th to 10th February, 2023 comprising of a inauguration cum orientation session and transects through 6 different routes, almost covering the whole forest area (4000 sq KM) of the Indian Sundarban. Boat transects and point count methods were followed by the teams. Out of the total of approximately 5065 Total sighting of birds, 145 different species were identified by the experts in 2 days. This amount to 33.7% of the bird species sighted in just 2 days just by boat transects. The bird species of Major concern are the shorebirds, as per qualitative and quantitative data analysis. Statistical tools are also used for the better understanding of the habitat preferences of the birds. The authority of STR owes their thanks to the officials of the South 24 Pgs forest division, the NGOs, the participants and the frontline staff for the holistic support and encouragement. The comprehensive communication of the first Sundarban Bird Festival, 2023 has been compiled and based on the discussions on the final day for conservation of birds in Sundarbans, the suggestions and management interventions that will be required are also mentioned in the respective report.



Habitats of birds in STR:

Habitat(s)	Exclusivity
Shoreline ecotone-	mudflats and sandy beaches, often sighted with Whimbrel, Eurasian Curlew etc.
Mangrove canopy habitat-	Mostly raptors are sighted, namely- White breasted Sea Eagle, Brahminy Kite etc.
Mangrove Forest Floor-	Highest mixing of organic matters, i.e. leaf litter with nutrients. Some of the birds are- Red Jungle Fowl, Ruddy- breasted Crake etc.
Mangrove branches and hollow deadwood-	Most of the birds do roost and build nests in seasons; namely- Rose-ring Parakeet, Asian Green Bee-eater, Buffy Fish Owl, Spotted Owlet etc.



Ruddy Turnstone



Collared Kingfisher



Great Knot



Buffy Fish Owl



Ruddy Turnstone



Shikra



Peregrine Falcon



Crested Serpent Eagle





Installing mud pitchers at nesting site of small birds at Sajnekhali WLS for the promotion of sustainable practices by Shri A. K. DAS IFS.

Translocation of wild animals during 2022-23:

Sl. No.	Species	Number	Captured from	Place of Release	Capture method Tranquilization, Trap Cage, others (specify)	Remarks
1.	Spotted Deer (<i>Axis axis</i>)	100 nos.	Received from 100 nos. Spotted Deer (Female – 66, Male- 34) Bibhutibhusan Wildlife Sanctuary, Bongaon, under 24 Parganas (North) Division	Dobanki Camp at Sajnekhali Wildlife Sanctuary under STR	Received from 100 nos. Spotted Deer (Female – 66, Male- 34) Bibhutibhusan Wildlife Sanctuary, Bongaon, under 24 Parganas (North) Division	Received from 100 nos. Spotted Deer at present (Female – 53, Male- 32, new born 03 & died 15) stay at Dobanki Camp, under Sajnekhali Wildlife Sanctuary Range in STR.

BATAGUR BASKA CONSERVATION PROJECT:**Objective(s):**

To conserve the gene pool of the species,

Restock, and reintroduce the species in the wild,

To re-establish a self- sustaining population in its natural habitat.

Importance of Setting up Assurance Colonies.

General

In order to avoid congestion and contagious disease breakdown

Depredation,

Over-crowding of individuals hatching every year.

Natural calamities

Sundarban is a storm prone area it became compulsory to set up assurance colony in order to avoid mishaps. In 2009 Alia hit Sundarban 1male was lost due to overflow of the breeding pool.

To strengthen the conservation effort, the division made a vision plan, as follows-

***Batagur baska* Vision Plan 2030:**

PLAN OF ACTION	PROPOSED TIMELINE
Objective 1: To strengthen the conservation breeding program by developing model facilities	
Developing conservation breeding infrastructure in Sundarbans (viz. breeding, incubation, nursery, quarantine and veterinary care facilities for accommodating 100 breeding adults)	2022-2024
Constructing an integrated conservation facility at Jhila and satellite centres at Chamta and Sajnekhali (only Sajnekhaliis open for tourists)	2022-2026
Procuring essential equipment, developing SOPs (standardization of salinity, pH, TDS, etc. of different facilities) and shifting animals for husbandry and management	2022-2023
Objective 2: To sustain the re-wilding of captive-reared turtles with robust monitoring protocols	
Raising 200 to 300 juveniles every year until they attain the size of a minimum of 2 kg	2022-2030
Sustaining phase-wise release to target wild populations of 800-1000 individuals with pre-release health assessments	2022-2030
Creating soft-release facilities by utilizing natural creeks followed by post-release monitoring of 10-20 individuals	2022-2030
Objective 3: To build capacity and impart awareness among selected target groups for turtle conservation	
Training of Frontline FD Staff for husbandry and sensitization of licensed fishermen, JFMC members and the general public	2022-2025
Encouraging community based ecological monitoring through licensed fishermen	2022-2030
Designing quality Information, Education and Communication materials (IEC), displays and community incentivization products	2022-2025
Objective 4: To protect key nesting and highly utilized habitats	
Evaluating critical habitats based on data gathered through satellite tracking	2022-2024
Mapping preferred nesting and foraging habitats of <i>Batagur baska</i>	2023-2029
Implementing habitat management practices (protecting and de-weeding historic nesting beaches, regulating fishing pressure, etc.)	2022-2030
Objective 5: To perform research influencing conservation management decisions	
Conducting scientific studies on temperature sex determination,	2022-2030

disease screening, eco-tolerance, parasitic load, behavioural ecology, etc. on different life stages	
Preparing genetically informed assurance colonies	2022-2025
Evaluating soft-release strategies involving various sites, size classes for refining survival and dispersal studies	2022-2025
Objective 6: To formulate strategies for initiating a trans-boundary conservation program with Bangladesh	
Developing an information exchange system to share technical know-how with Bangladesh Forest Department	2022-2025
Holding independent meetings and utilising CoP/SAARC transboundary platforms for concerted actions	2022-2025
Exchanging animals with other facilities to infuse new bloodlines in conservation breeding project	2022-2025

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

1. Identification and transfer of gravid females from adult ponds to the hatchling enclosure:
2. Generally, the adult Northern Terrapin females are found to be gravid during the first week of March.
3. These individuals are then shifted to an artificial sand beach at one corner of the hatchling pool, for laying eggs.
4. The hatchling pool is well protected with nylon net fencing and mosquito-net as a preventive measure from harsh weather and predators.
5. 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 to back to the adult pond.
6. Hatching of the eggs and tending of the hatchlings and transfer to yearling pool:
7. 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.
8. A strict surveillance of the eggs is maintained during the entire incubation period.
9. After the eggs hatch, i.e. during the end of May, the hatchlings are collected and shifted to the hatchling enclosure.
10. The artificial beach area is also monitored for about five days from the time the first hatchling hatch out of the eggs, however, it was observed that all the eggs hatch in about two days.

11. 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.



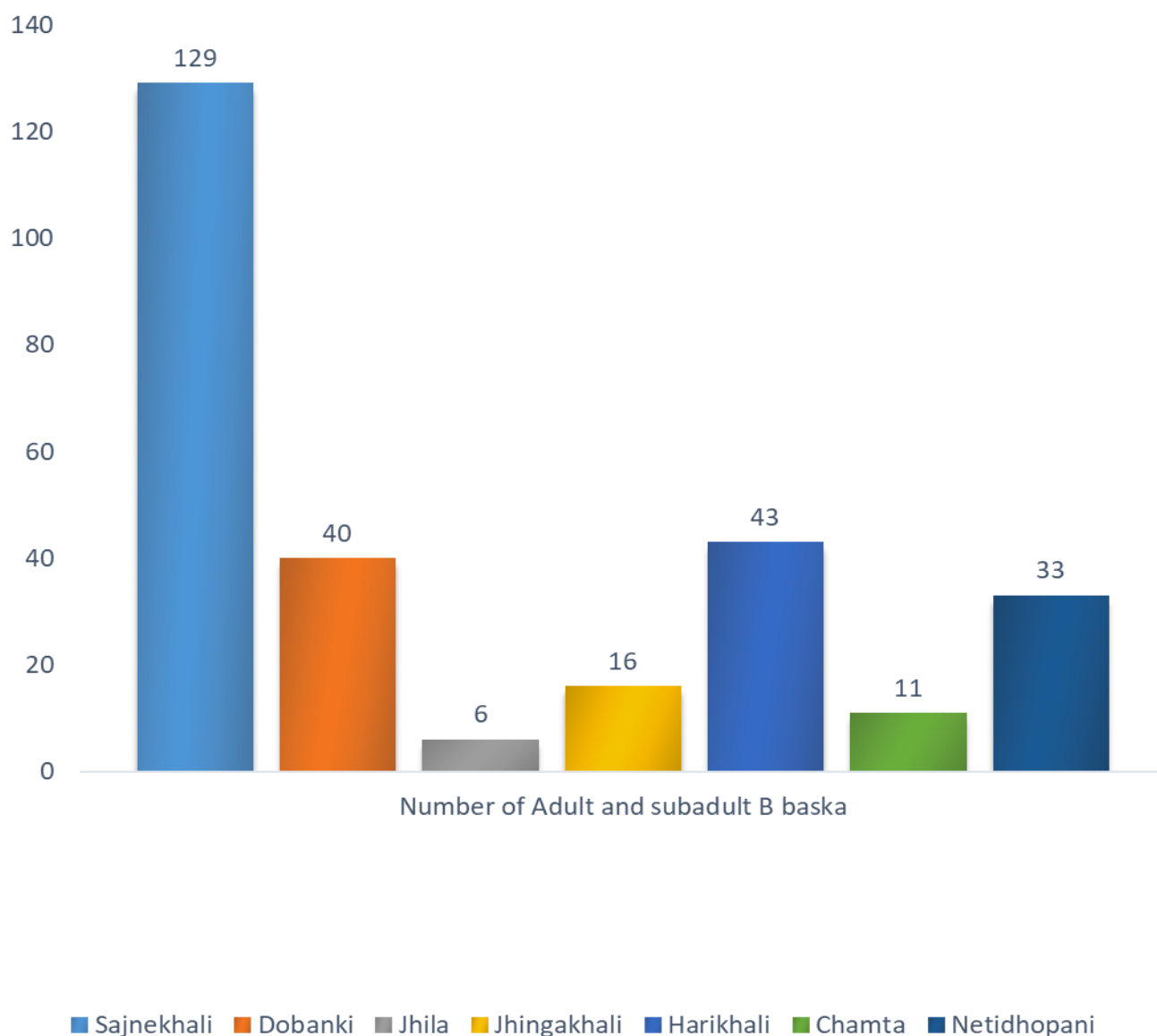
Transfer to adult pond:

When the individuals 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.



Present stock in Assurance Colony 2022-23:

No. of *Batagur baska* in assurance colonies



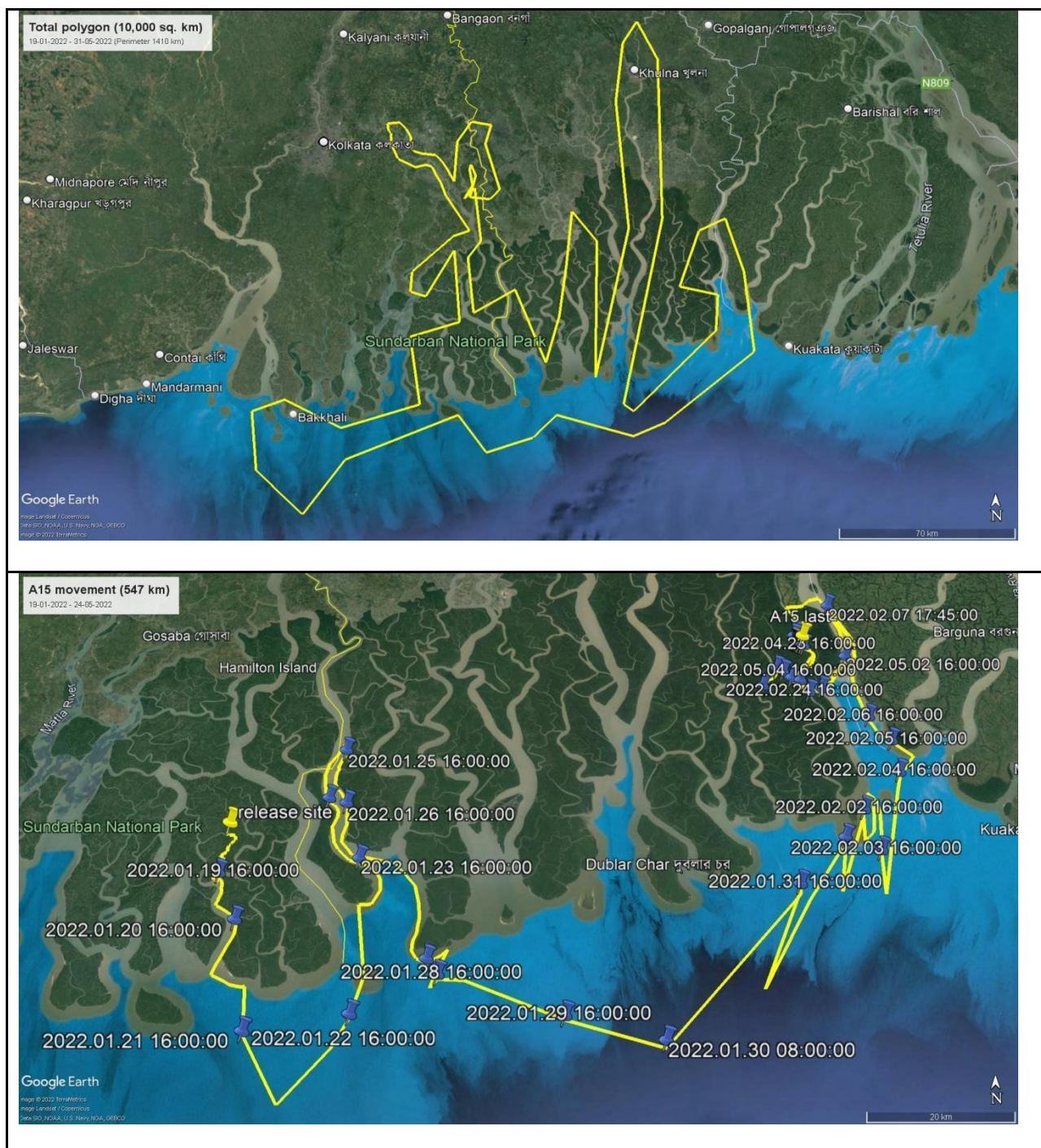


Map Showing the Assurance Colonies of *Batagur baska* in Sundarban Tiger Reserve.

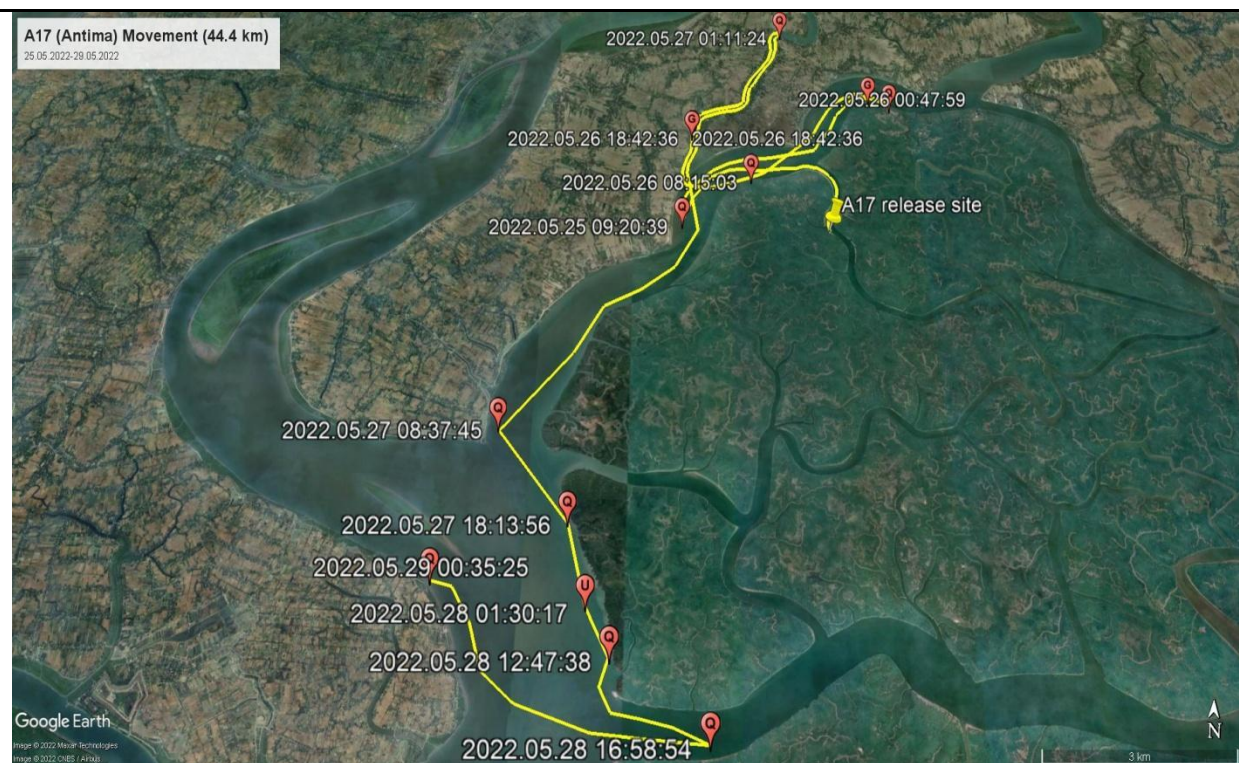
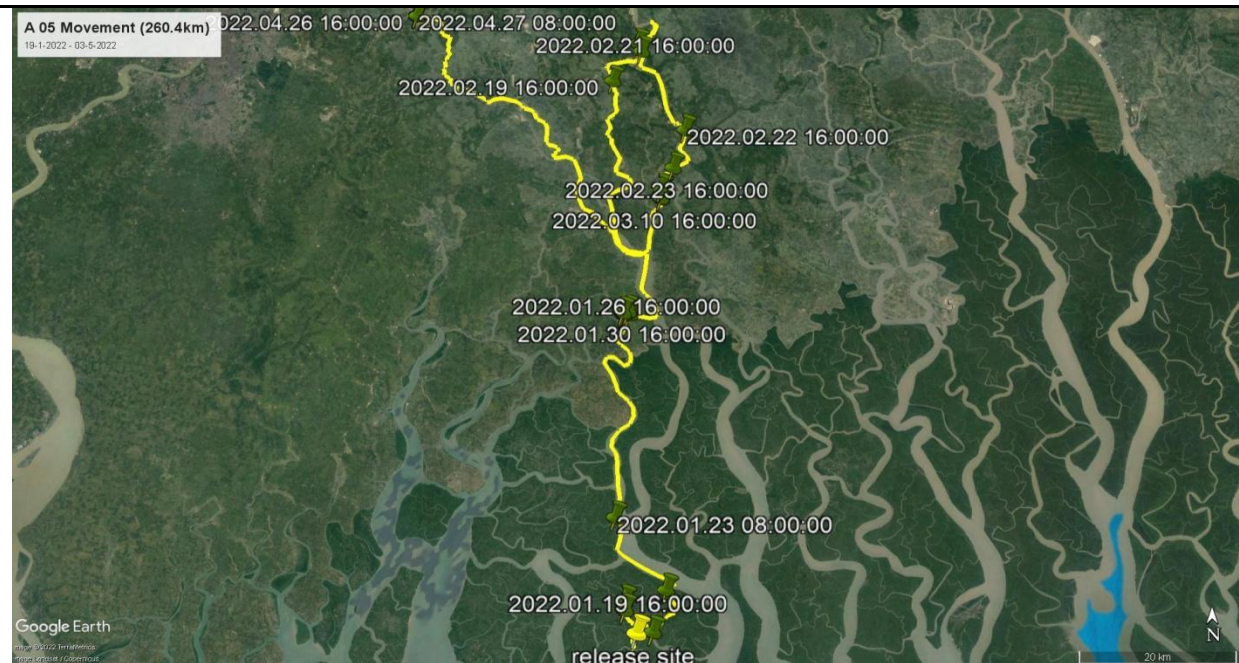


Satellite tagged tracking map of Batagur baska individuals in Sundarban Tiger Reserve:

In the FY 2021-22 ten terrapins are satellite tagged. The regular movement monitoring of the satellite-tagged terrapins is shown below: there movements are shown in the following maps:



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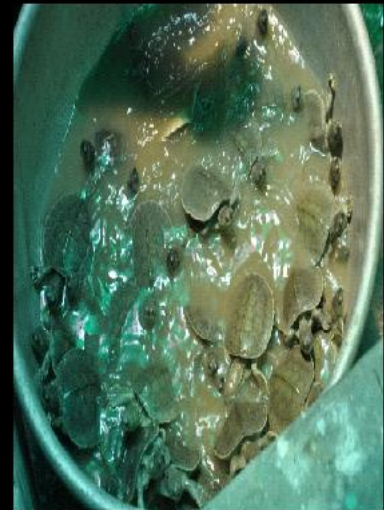
Up-to- date monitoring report of *Batagur baska*.



Eggs of Northern River Terrapin on artificially prepared sand beach



Freshly hatched Northern River Terrapin being measured



Hatchlings of Northern River Terrapin



Yearlings of Northern River Terrapin in the Yearling pool



Transfer of the adult females back to the adult pond

Chapter 12

Man Animal Conflict



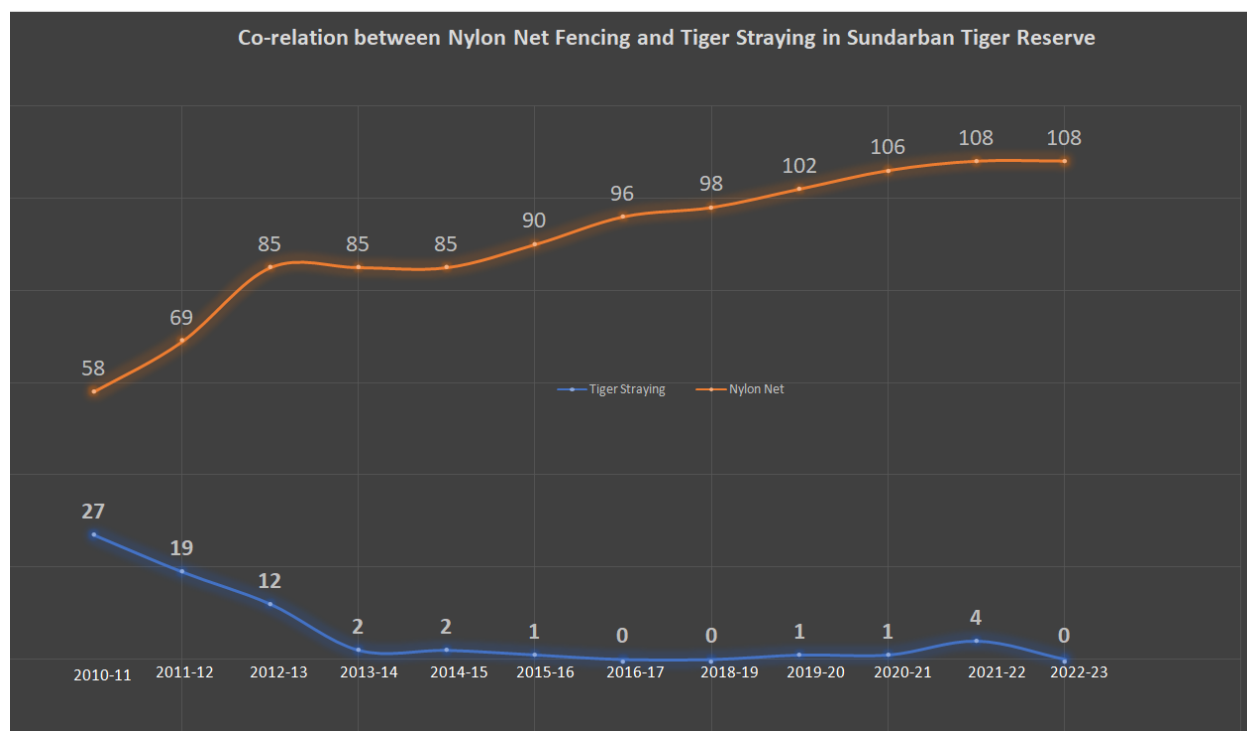
Man-Animal Conflict (2022-23):-**Human Casualties by wild animal (2022-23):-**

Sl. No.	Name of the person died with details (age, sex, address etc.)	Date	By which species	Place of incidence	Compensation paid (in Rs.) (during 2022-23)
1.	Name - Nanigopal Mondal S/o. Lakshipada Mondal, Vill.+P.O-Satjelia, P.S-S.B.Coastal, Dist. 24 PGS(S). Age - 35 years, Sex-Male.	25.02.2023	Tiger	Jhilla –IV under SWLS range.	Will be paid

In some regions, due to anthropogenic and biotic pressure, the tigers entered inside the village areas, known as tiger straying incidents. Here the presentation depicts the straying incidents in Sundarban Tiger Reserve.

Tiger straying incidents in 2022-23:

Date	Animal description	Location	Management action	Extent of damage (if any)	Remarks
Nil					



Human injuries by wild animal in 2022-23:

Name of the person died with details (age, sex, address etc.)	Date	By which species	Place of incidence	Compensation paid (in Rs.) (during 2022-23)
Name – Chaybar Karigar, S/o. Bahil Karigar, Vill.- Mithakhali, Dakshin Para, Manipur, dist. North 24 PGS, Pin – 743446.	20.02.2022	Tiger	Chimter Char, BHT Range	Rs.25000/-

Details of staff casualties / injuries in 2022-23:

Name	Rank	Injured or Killed	Injured / Killed by	Date of incidence	Remarks
Nil					

Straying of wild animals during 2022-23:

Date	Animal description	Location	Management action	Extent of damage (if any)	Remarks
Nil					

Details of tranquilization of wild animals during 2022-23:

Date	Animal description (species, age, sex, etc.)	Location	Immobilizing Drug used with quantity	Post tranquilization status of the animal	Remarks
Nil					

Hut damage in 2022-23:

Hut damage (in No.)	Compensation paid (in Rs.)
Nil	Nil

Livestock killed in 2022-23:

Livestock killed (in No.)	Compensation paid (in Rs.)
Nil	Nil

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

Nylon-net fence has 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 in FPC/EDC members also along with forest staff.

Range wise location of the existing Nylon-Net fencing in 2022-23 and its maintenance is given below:

Sl. No	Type of fencing (energized fencing / nylon net fencing)	Coverage area (Block, Comptt.)	Length (in Km.)	Year of erection	Present status (Functional/non functional)	Remarks
1	Nylon net fencing	NPW Range	22 KM.	-	Functional	Maintained daily as per net checking protocol
2	Nylon net fencing	SWLS Range	40 KM	-	Functional	
3	Nylon net fencing	BHT Range	46 KM	-	Functional	
			Total: 108 Km.			

Innovation by a Psychological strategy:

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 discussed in the following segment in details.

Practicing Nylon Net Fencing:

- Initially the boundaries of the vulnerable forest areas along the river, associated lands withy fringe villages was fenced by vegetative cover i.e. *Ceriops- Excoecaria* combination tide with nylon rope.
- 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. No.	Rank	Frequency	Remarks
1	Concerned Forest Guard	Daily	He will take at least one concerned FPC/EDC Member & both will jointly sign in Fencing checking Register.
2	Concerned Beat Officer	Weekly once	He will take the Joint Convenor of concerned FPC/EDC 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 will mention in 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.



Chapter 13

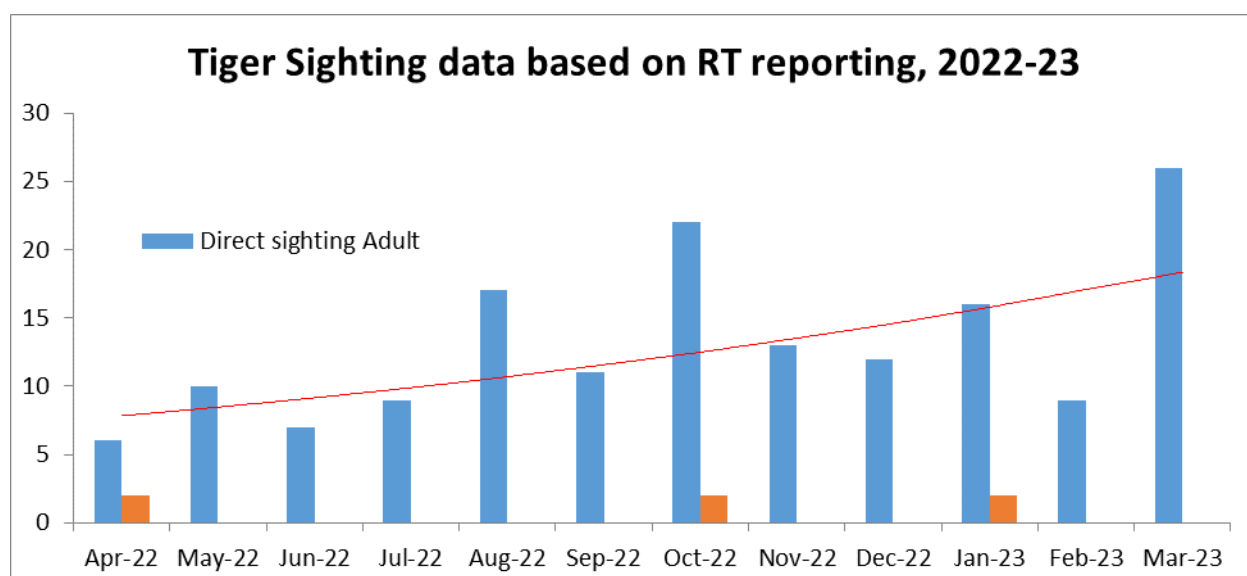
Tiger Monitoring



TIGER MONITORING IN SUNDARBAN TIGER RESERVE

Tiger Monitoring a well-devised monthly monitoring system where direct tiger sightings and other evidences (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 for the whole year:

Month	Direct sighting		Heard of roaring	Sighting of fresh pugmarks	
	Adult	Cub		Adult	Cub
April 2022	6	2	0	--	--
May 2022	10	0	0	--	--
June 2022	7	0	0	--	--
July 2022	9	0	0	--	--
August 2022	17	0	0	--	--
September 2022	11	0	8	43	--
October 2022	22	2	10	55	--
November 2022	13	0	8	122	--
December 2022	12	0	6	102	--
January 2023	16	2	2	80	--
February 2023	9	0	6	57	--
March 2023	26	0	3	114	--
Total	158	06	43	573	



1. PLANNING:

1.1 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 Wildlife Institute of India standard protocol. 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 21st November, 2022 hands-on training programs were organized for the field staff of the division by the Deputy Field Director, Assistant Field Director and Research Assistant (instead of 29th November, 2022). 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.

1.2 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.

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





Figure: 2 sq. Km. Grid Maps (A) National Park East Range, (B) Basirhat Range (C) Sajnekhali Range, (D) National Park West Range.

1.3 Mode of transport:

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

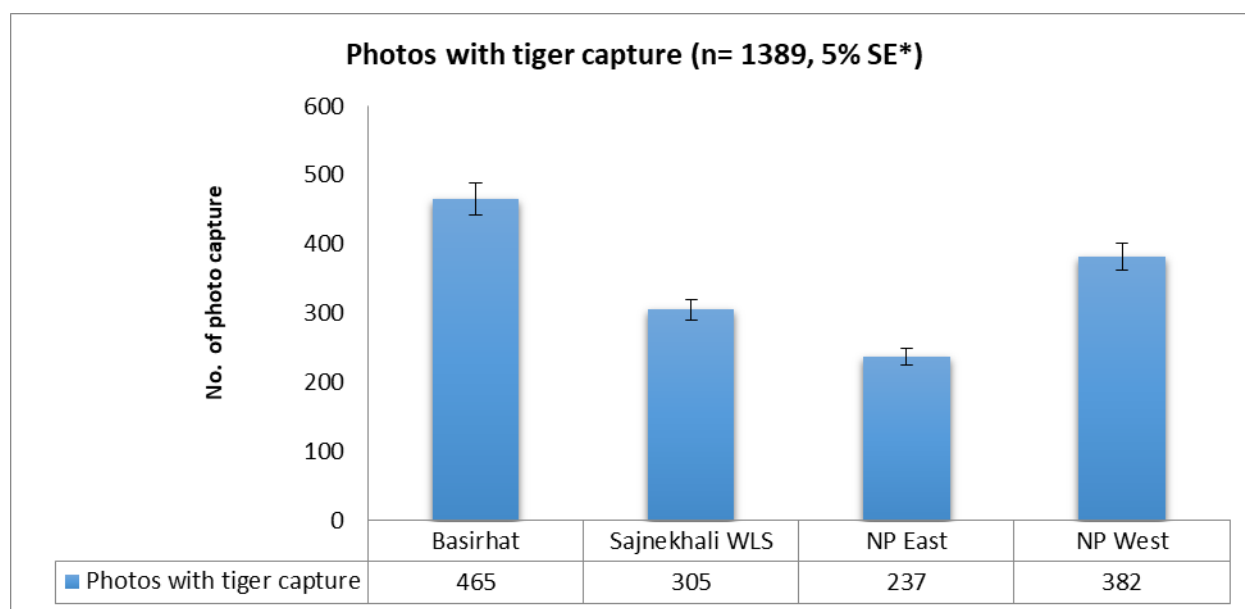
2. Technical Attributes:**2.1 Machinery used for survey-**

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

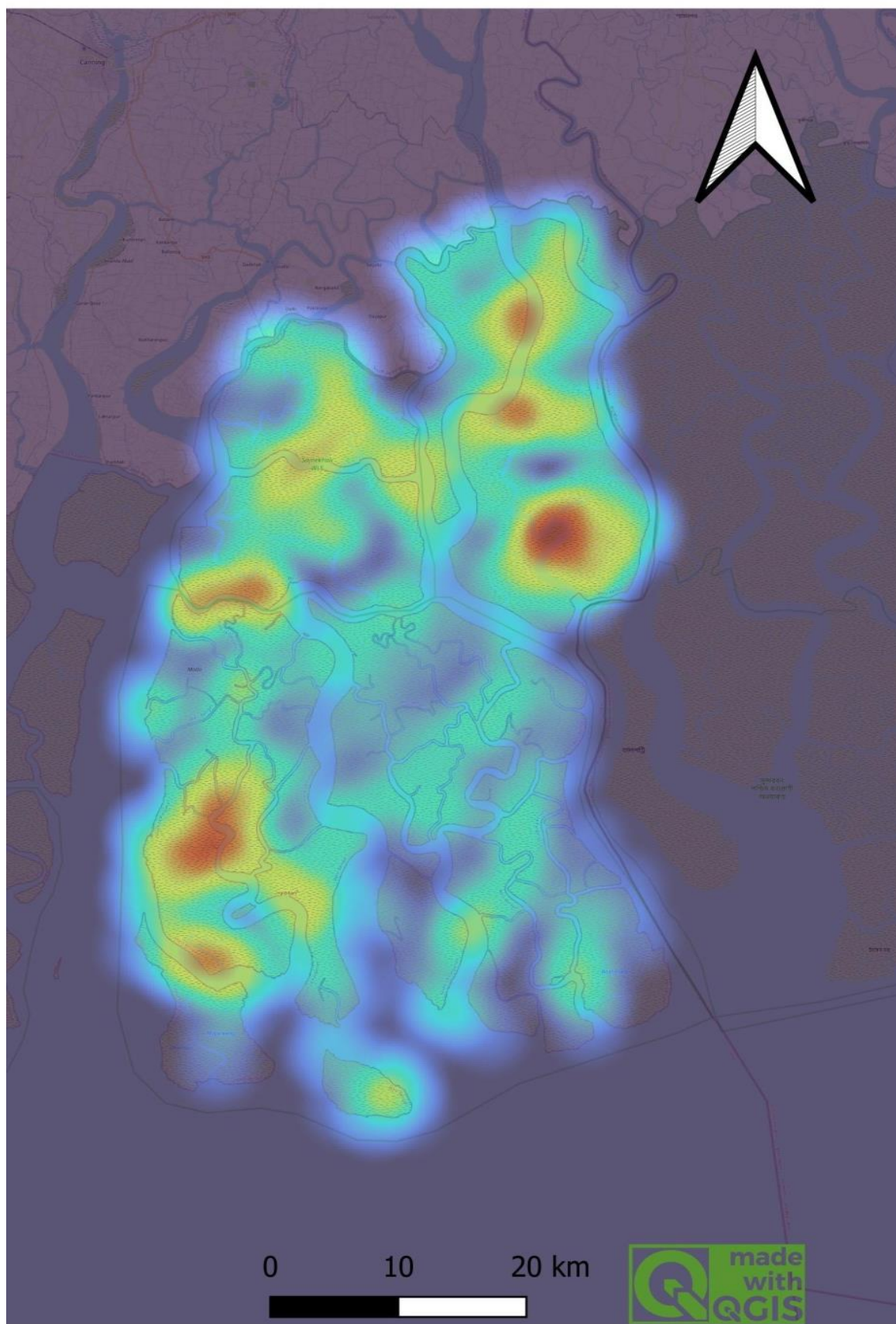
2.2 Camera installation and data Collection-

Cameras were installed between the 3rd and 9th of December, 2022 and were retrieved between 6th and 12th January, 2023. 32 GB SD cards were given for photograph and video capture.

Range	Area in Sq. KM	No. of grids with camera traps	Installed camera (pairs)	Photos with tiger capture
Basirhat	432.86	117	230	465
Sajnekhali WLS	452.44	122	236	305
NP East	809.56	152	342	237
NP West	890.06	187	330	382
Total	2584.92		1138 (in nos.)	1389



* Though the departmental system is considered under ocular estimation, therefore to get rid of manual errors, 5% Standard Error is calculated.



Spatial Distribution map of the Royal Bengal Tigers in STR
(Red>Yellow> Green>Blue, Colour variation depicts the frequency of the individual tiger capture).

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Note:

- Though Sundarban is a unique landscape with numerous rivers, rivulets and creeks, so, Boat transect methodology was carried out.
- No scat/dung/pellet collection was performed in the landscape during 2022-23.
- The distance between two camera trap stations was kept at a minimum of 1.2-1.4 km to maximize the capture probability. At each station, two camera units were deployed between 40 and 50 cm height (mean= 42 Cm) from the ground in such a way that both flanks of the animal are captured.
- The camera delay was minimized to ensure photo captures of tigresses with cubs in case such an event occurred.
- To maximize both tiger captures as well as recaptures, an olfactory lure was applied. All the camera trap stations at the Range were monitored periodically to check the status of camera traps and if required the height of camera trap was changed or comparatively high elevation sites within the same grid were selected.

Trap photographs are very important for wildlife data analysis. Different activity pattern, occupancy i.e. presence- absence etc all things is detected with time-and- space dimension. It is evident that, a viable population of tiger is maintained throughout the tiger reserve area, with good number tiger cubs in different locations.

Picture shows the tiger cub presence in Trap Id: 466B in 2022-23 Phase IV tiger estimation.





Picture shows the tiger cub presence in Trap Id: 322A in 2022-23 Phase IV tiger estimation.



Trap Id: 460B- Presence of tigers near wildlife ponds of the protection camps signifies the quality of water and protected biodiversity, as the Tiger is the keystone species of mangrove ecosystem.

A good number of prey species is also important to maintain the equilibrium of the ecosystem, as per the Lotka- Volterra Model of Predator-prey relation.



A viable population of Cheetal (Spotted Deer, *Axis axis*) is found in the mangroves (Trap Id: 457B, Phase IV, 2022-23).

2.3 Submission of field data and raw data sheet:

The Research Range is the custodian of the tiger estimation data. Raw datasheet, trap cameras and SD cards were submitted to the Range Officer, Research Range. After that, Camera Id specific folder creation, data matrix creation, GIS mapping etc all are done by the Research Range according to the data submitted by the territorial ranges, after 12th January, 2023.

Note: 320 nos. of trap cameras were given to the adjacent tiger-bearing ranges under 24 Parganas (South) division as per departmental written order.

Trap effort and Data Processing:

- Trap Night = (No. of days camera X No. of locations)

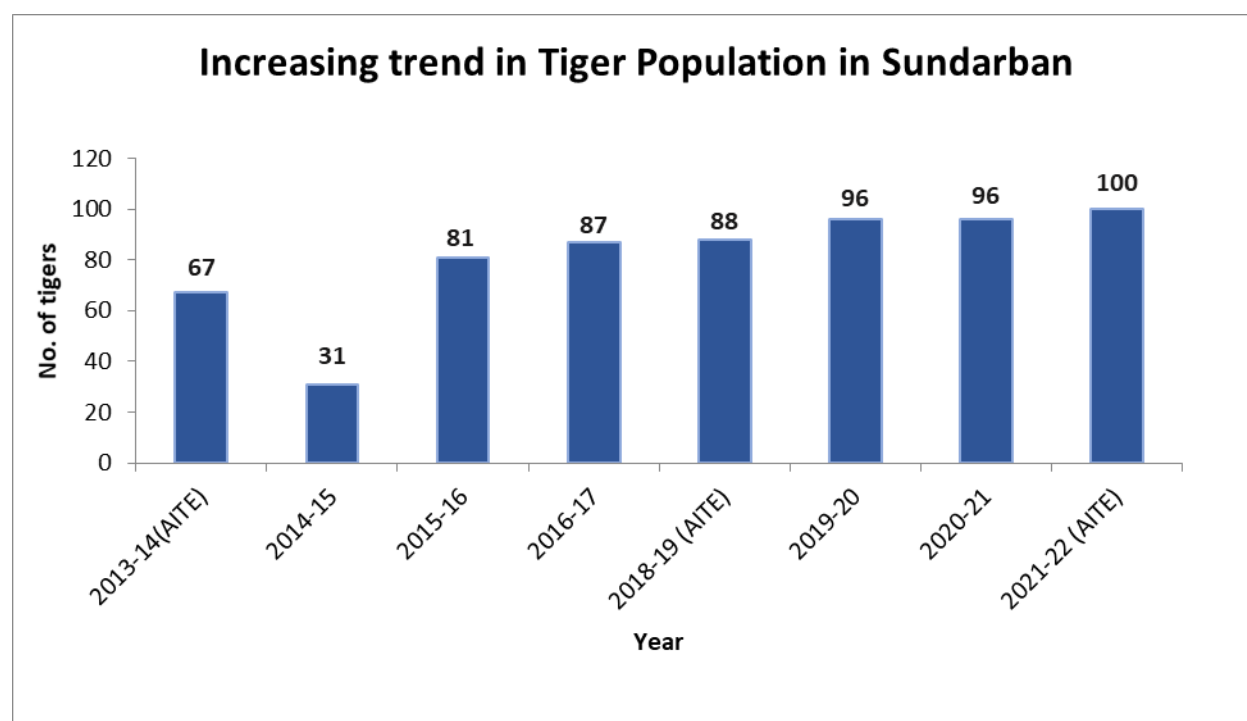
Since the data was collected over a period of 35 days, the total camera trapping effort for the Sundarban Tiger Reserve therefore comes to 19,985 trap nights.

Demography of Tiger Individuals (2018-2023):

The following table highlights the number of unique tiger individuals captured during intensive tiger monitoring in Sundarban Tiger Reserve. The data spans 4 seasons (from 2018-19 to 2022-23).

Range	2018-19 (AITE)	2019-20	2020-21	2021-22 (AITE)*
Sajnekhali Wildlife Sanctuary	-	10	12	-
Basirhat	-	19	17	-
National Park(West)	-	20	21	-
National Park(East)	-	24	24	-
24 Parganas (South) Division	-	23	22	-
Total	88	96	96	100*

*The National Tiger Conservation Authority (NTCA) has declared a minimum population estimate of 100 tigers in the entire Sundarban Landscape.





Status of Tiger Conservation Plan preparation as on 31.03.2023:

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



Chapter 14

Sabujshree



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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.

Updated report of Sabujshree scheme: 2022-23

Time Period	No. of children born on and after 27.05.2016 till date of reporting (A)	Cumulative No of beneficiaries to whom saplings have been distributed since the inception of the schemes till March 2022 (B)	C= (A-B)
02.05.2022	13758	13684	74
01.06.2022	13801	13758	43
04.07.2022	13852	13801	51
02.08.2022	13905	13852	53
06.09.2022	13972	13905	67
13.10.2022	14030	13972	58
04.11.2022	14131	14030	71
15.12.2022	14127	14101	26
04.01.2023	14210	14127	83
01.02.2023	14260	14210	50
14.03.2023	14325	14260	65

Chapter 15

Ecotourism



ECO-TOURISM IN SUNDARBAN TIGER RESERVE:

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:

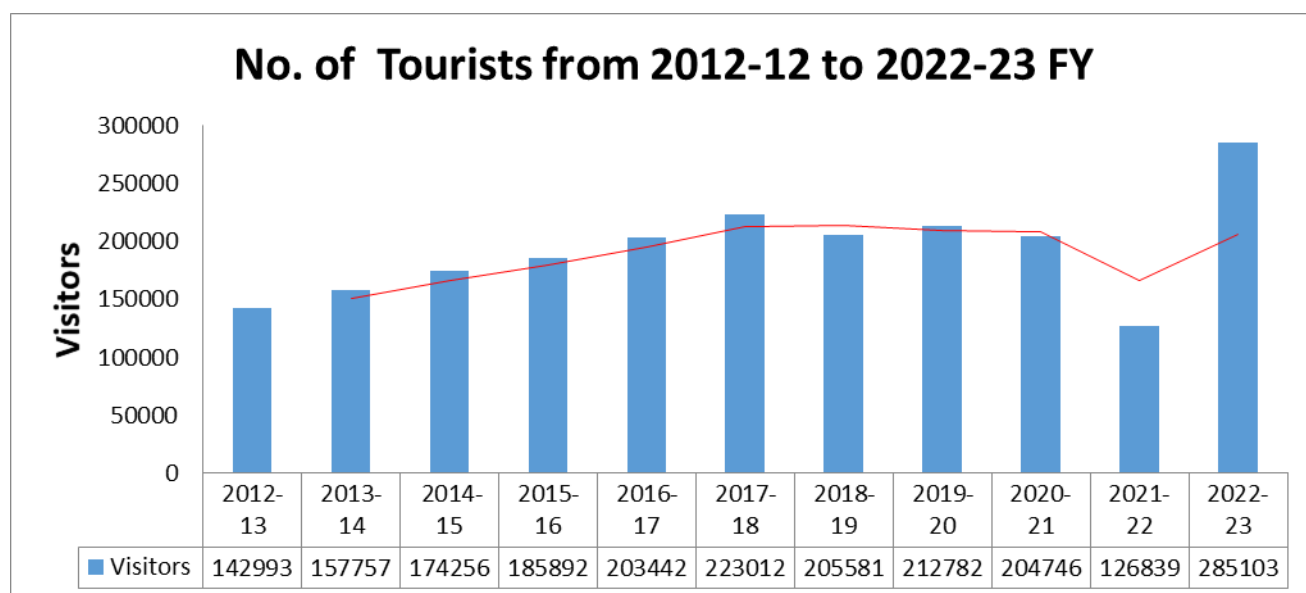
There are 7 tourist spots except the water body part, Viz. Sajnakhali, Dobanki, Sudhanyakhali (SWLS Range), Harikhali, Buridabari, Jhingakhali (BHT Range), and Netidhopani (NP(W) Range).

Tourists visited and revenue earned during 2022-23 (as on 31.03.2023):

Name of Eco-tourism site (PA/Zoo/Eco-park/ NIC, etc.)	Number of tourists visited during 2022-23		Revenue earned (in Rs.)
	Indian (Adult +students)	Foreigner	
STR Jurisdiction	2,82,834	2269	46655284.12

List of Forest Rest Houses:

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





Chapter 15

Other Important Activities



Protection Monitoring Protocol (PMP) Meeting:

The division maintains quarterly PMP meetings for the betterment of the forest protection and wildlife monitoring. The meeting is chaired by the Field Director along with Dy. Field Director and two Assistant Field Directors, all the territorial range officers, beat officers and the field staff.

The update PMP meetings of 2022-23:

Sl.	Date	Venue
1	05 th April, 2022 at 11.00 a.m.	Office of the CCF and Field Director, Sundarban Tiger Reserve, Canning Town
2	8 th July, 2022 at 2.00 p.m.	Sajnekhali WLS, SIC Hall
3	21 th November, 2022 at 10.00 a.m.	Sajnekhali WLS, SIC Hall
4	24 th January, 2023 at 10.30 a.m.	Sajnekhali WLS, SIC Hall



Relief Works:

Every year the forest department arranges a good number of medical camps and veterinary camps in the JFMC areas. As agrarian economy is best practiced in the fringe areas of the Sundarban, the cattle and livestock maintenance is an important aspect for the local stakeholders.

Medical Camps:

Item of Work	Range	JFMC Areas	No. of Beneficiary
Medical Camps	Basirhat	Bagna Para	Male= 40 Female= 60 Children= 31
			Total: 131

Veterinary Camps:

Item of Work	Range	JFMC Areas	Nos. of Livestock checked
Veterinary Camps- free medical check-up of the livestock.	Basirhat	Mitrabari	1738
		Emlibari	1265
		Gobindapur	787
		Hentalbari	1397
		Kalidaspur	943
		BagnaPara	933
		Bhrulia Para	2172
		Adibasi Para	1495
		Hemnagar	1379
		Kalitala- Parghumti	1311
		Samsernagar	938
	Sajnekhali	Dulki	2054
		Sonagaon	1462
		Pakhirala	4806
		Jamespur	1645
		Dayapur	1412
		Anpur- Rajatjubilee	1050
		Lahiripur- Santigachi	2643
		Chargheri	1563
		Luxbagan- ParashmaniBidhan Colony	2686
	National Park West (HQ Vidya)	Amlamethi	705
		Mathurakhand	1385
		Satyanarayanpur	2228
		Bali	1142
		Bijoynagar	1446

School Adoption Programme:

In recent FY 2022-23, school adoption programme has taken place, for the betterment of the understanding of wildlife. Mass awareness is the major motto for the adoption programme.

Item of Work	Range	JFMC Areas	Wok Description
School Adoption Programme	Basirhat	Dakshin Kumirmari F.P. School (Kumirmari village)	Renovation of 1- classroom of each school, Fitted with public addressing, Projector (A/V mode), White board, Classroom materials.
	Sajnekhali	P.C. Sen School (Dayapur village)	







Seminar / Workshop organized on wildlife management & other wildlife related matters during 2022-23:

Date	Location	Topic	Organized by	Participants
14.06.2022	MIC Hall, Sajnekhali	Legal initiative for Forest and Environment	CCF & FD / STR	Field Staff of STR
21.06.22 to 23.06.22	Conference Room of IWAR & IFC, Salt Lake City,	Training on capacity Building of Frontline staff	CCF & CF, WL(HQ), WB	Sri Abhijit Mondal, FG & Shri Ranjit Bauri, FG
12.07.22 to 13.07.22	MIC Hall, Sajnekhali	Wildlife Law and enforcement issues.	CCF & FD / STR	All Staff of STR
17.08.22	Aranya Bhawan, Salt Lake Kol- 106	Implementing Tally Accounting System in Divisions funded by WBSFDA.	CCF, SDP & MS, WBSFDA	Sanat Bhadra, Divisional Accountant, & Tamojit Debnath, DEO
11.10.22 to 13.10.22	Chandrapur Forest Administration, Development Resource & Management Academy Chandrapur,	Best practices of human and Wildlife conflict mitigation and damage control	Dy. Inspector General of Forests (PT), MoEF&CC, GOI	Shri Tapas Das, IFS, CCF & FD/STR

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	Maharashtra			
17.10.22 to 21.10.22	IGNFA, Dehradun	Best Practices in forestry	Dy. Inspector General of Forests (PT, MoEF&CC, GOI)	Shri S. Jones Justin, IFS, DFD/STR
17.10.22 to 20.10.22	Mandapam, Tamil Nadu, India	Handling Marine Mammal Standing and Response	Dean, Faculty of Wildlife Sciences, Wildlife Institute of India	Shri Avik Das, Forest Ranger
15.11.22 to 17.11.22	Zoological Survey of India, Kolkata	"Skill and techniques of Taxidermy"	Training and Extension Division, Zoological Survey of India, Kolkata	Shri Debojyoty Ghosh, Research Assistant, STR
11.12.2022	Conference Hall, MIC, Sajnekhali, STR.	2 days training programme for 30 Wildlife Guides of Sundarban Tiger Reserve.	CCF & FD /STR	30 Wildlife Guides of STR
22.12.22	Aranya Bhavan, 6 th Floor,	Official Procedure	CF, Development Circle.	Ganesh Ch. Mondal, UDC, Atanu Ray, UDC
25.02.23 to 27.02.23	IBRAD Campus, Kolkata	Biodiversity Conservation for Climate-resilient Sustainable Development	Indian Institute of Bio-Social Research & Development	Sri Animesh Mondal, Member of Dayapur, JFMC

Training and awareness generation programme on wildlife including foreign training during 2022-23:

Date	Location	Topic	Organized by	No. of participants
05.06.2022	All over STR	World Environment Day	STR	49 nos.
11.07.2022	All over STR	Global Tiger Day	STR	73 nos.
29.07.2022	All over STR	International Tiger Day		52 nos.
11.09.2022	All over STR	Forest Masters day	STR	87 nos.
14.12.2022	Sajnekhali, MIC	Wildlife Week	STR	20 nos.
26.01.2023	All over STR	Republic day	STR	30 nos.
02.02.2023	All over STR	World Wetland Day	STR	20 nos.
07.02.23 to 10.02.23	Sajnekhali, MIC (and all over STR)	Sundarban Bird Festival	STR	61 nos.

Programme of International Importance in 2022-23:

Date	Location	Topic	Organized by	No. of participants
17-20 January 2023	Sundarban National Park World Heritage Site (Netidhopani Beat)	World Heritage: Making Regional Heritage Global Opportunities and Threats	STR	65 nos.





Visit of dignitaries in Sundarbans during 2022-23:

SL No.	Name of VIP	Designation	Purpose duration visit	Period of in Sundarban	
1	Karnatake Forest Academy 6th batch, 2020-22(Group-A), Dharwad	Karnatake Forest Academy 6th batch, 2020-22 (Group-A), Dharwad	Study Visit to Sundarban	10.04.22	11.04.22
2	Karnatake Forest Academy 6th batch, 2020-22(Group-B), Dharwad	Karnatake Forest Academy 6th batch, 2020-22 (Group-B), Dharwad	Visit to Sundarban	16.04.22	17.04.22
3	Honble Justice Satisfy Kr. Shama, High Court of Madhya Pradesh with family	Honble Justice Satisfy Kr. Shama, High Court of Madhya Pradesh with family	Visit to Sundarban	23.04.22	23.04.22
4	East India Tour Programme for the FRO Batch 2021-23, Uttarakhand Forest Academy Haldwani	East India Tour Programme for the FRO Batch 2021-23, Uttarakhand Forest Academy Haldwani	Study Visit to Sundarban	04.05.22	05.05.22
5	East India Tour Programme for the FRO Batch 2021-22	East India Tour Programme for the FRO Batch 2021-22	Study Visit to Sundarban	29.04.22	01.05.22
6	JICA team consisting of Dr. Hiroshi Nakata, Dr. Wataru Yamamoto & Mr. Koji Asano	JICA team consisting of Dr. Hiroshi Nakata, Dr. Wataru Yamamoto & Mr. Koji Asano	Visit to Sundarban & study tour	10.05.22	12.05.22
7	Honble Justice Sri Kumar Goswami, Commercial Court of Alipore with family	Honble Justice Sri Kumar Goswami, Commercial Court of Alipore with family	Visit to Sundarban	14.05.22	16.05.22
8	East India Tour Programme for the FRO Batch 2021-23	East India Tour Programme for the FRO Batch 2021-23	Study Visit to Sundarban	25.05.22	26.05.22
9	French Delegation	French Delegation	Visit to Sundarban	08.07.22	09.07.22
10	Ursuline Convent Girls H.S. Khunti, Jharkhand Educational excursion	Ursuline Convent Girls H.S. Khunti, Jharkhand Educational excursion	Visit to Sundarban	26.09.22	
11	East India Tour Programme for the FRO Batch 2021-23, Himachal Pradesh Forest Academy Sundernagar	East India Tour Programme for the FRO Batch 2021-23, Himachal Pradesh Forest Academy Sundernagar	Study Visit to Sundarban	23.10.22	25.10.22
12	Forest Ranger Officer trainees Batch-Odisha Forest Rangers College, Angul	Forest Ranger Officer trainees Batch-Odisha Forest Rangers College, Angul	Study Visit to Sundarban	29.10.22	01.11.22
13	Meenesh Shah, Hon'ble Chairman of National Dairy Development Board	Meenesh Shah, Hon'ble Chairman of National Dairy Development Board	Visit to Sundarban	3.11.22	06.11.22
14	Central and East India Tour programme of Forest Range Officer 2021-23 batch,	Central and East India Tour programme of Forest Range Officer 2021-23 batch,	Study Visit to Sundarban	17.11.22	18.11.22
15	Hon'ble Minister of State , Department of SHG & SE and team	Hon'ble Minister of State , Department of SHG & SE and team	Visit to Sundarban	17.12.22	18.12.22
16	East India Tour Programme for the FRO Batch 2021-23(VIII), Tamil Nadu Forest Academy, Coimbatore	East India Tour Programme for the FRO Batch 2021-23(VIII), Tamil Nadu Forest Academy, Coimbatore	Study Visit to Sundarban	21.12.22	22.12.23
17	Honble Justice Subrata Talukdar, High Court of Calcutta with family	Honble Justice Subrata Talukdar, High Court of Calcutta with family	Visit to Sundarban	30.12.22	31.12.22
18	Consul General of the United States of America	Consul General of the United States of America	Visit to Sundarban	08.12..22	09.12.22

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19	Hon'ble Justic Amrita Sinha, Judge High Court, Calcutta with family	Hon'ble Justic Amrita Sinha, Judge High Court, Calcutta with family	Visit to Sundarban	24.12.22	25.12.22
20	Hon'ble Justice S. H. Vora, JUDGE High Court of Gujrat, Ahmedabad	Hon'ble Justice S. H. Vora, JUDGE High Court of Gujrat, Ahmedabad	Visit to Sundarban	27.12.22	28.12.22
21	Hon'ble Justic Sandeep N. Bhatt, Judge High Court, Gujrat, Ahmedabad with family	Hon'ble Justic Sandeep N. Bhatt, Judge High Court, Gujrat, Ahmedabad with family	Visit to Sundarban	29.12.22	30.12.22
22	Hon'ble JusticRaharsgu Bharadwaj, Judge High Court, Calcutta with family	Hon'ble JusticRaharsgu Bharadwaj, Judge High Court, Calcutta with family	Visit to Sundarban	26.01.23	29.01.23
23	Director, Zoological Survey of India with staff and other others officer	Director, Zoological Survey of India with staff and other others officer	Visit to Sundarban	02.02.22	02.02.22
24	B. Amit Sthalekar, Hon'ble Judicial member of Natrional Green Tribunal, Eastern Zone Bench, Calcutta.	B. Amit Sthalekar, Hon'ble Judicial member of Natrional Green Tribunal, Eastern Zone Bench, Calcutta.	Visit to Sundarban	04.02.23	05.02.23
25	Hon'ble Justice Anil Kr. Srivastava, former Justice, High Court at Allahabad	Hon'ble Justice Anil Kr. Srivastava, former Justice, High Court at Allahabad	Visit to Sundarban	11.02.23	12.02.23
26	Paresh Ram Das, Member of West Bengal Legislative Assebly, with team	Paresh Ra Das, Member of West Bengal Legislative Assebly, with team	Visit to Sundarban	11.02.23	12.02.23
27	51 st Batch of Forester Trainees 2022-23 batch, Forest Training Institute, Wimberlygunj, South Andaman	51th Batch of Forester Trainees 2022-23 batch, Forest Training Institute, Wimberlygunj, South Andaman	Study Visit to Sundarban	17.02.23	19.02.23
28	President, District Consumer Disputes Redressed Commission, South 24 PGS with their family.	President, District Consumer Disputes Redressal Commission, South 24 PGS with their family.	Visit to Sundarban	17.02.23	19.02.23
29	Hon'ble Justice Sujit Barman Roy former Chief Judge, Orissa High Court with family.	Hon'ble Justice Sujit Barman Roy former Chief Judge, Orissa High Court with family.	Visit to Sundarban	24.02.23	26.02.23
30	Hon'ble Justice P N Sinha, Former Judge, High Court at Calcutta with family.	Hon'ble Justice P N Sinha, Former Judge, High Court at Calcutta.	Visit to Sundarban	25.02.23	27.02.23
31	Ministry of Environment, Forest & Climate Change, Govt. of India, New Delhi with team	Ministry of Environment, Forest & Climate Change, Govt. of India, New Delhi with team	Field survey of Sundarban	02.03.23	08.03.23
32	Hon'ble Minister of State (IC), Deptt of SHG & SE and Minister of State Deptt of Forests	Hon'ble Minister of State (IC), Deptt of SHG & SE and Minister of State Deptt of Forests	Visit to Sundarban	04.03.23	05.03.23
33	East India Tour for Officer trainees of 2022-24 SFS induction Course.	East India Tour for Officer trainees of 2022-24 SFS induction Course.	Study visit to Sundarban	05.04.23	06.04.23
34	North East India 5 th Study Tour of 7 th Batch Forest Range Officer trainees, Karnatake Forest Academy, Dharward	North East India 5 th Study Tour of 7 th Batch Forest Range Officer trainees, Karnatake Forest Academy, Dharward	Study visit to Sundarban	13.04.23	15.04.23
35	Hon'ble Justice Md. Shabbar Rashidi Justice, High Court at Calcutta	Hon'ble Justice Md. Shabbar Rashidi Justice, High Court at Calcutta	Visit to Sundarban	18.03.23	19.03.23

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36	Hon'ble MIC, Disaster Management & Civil Defence Department desires with officers	Hon'ble MIC, Disaster Management & Civil Defence Department desires with officers	Study visit to Sundarban	18.03.23	19.03.23
37	East India Study tour of SFS Probationers 2022-24 Course of State Forest Service, Coimbatore	East India Study tour of SFS Probationers 2022-24 Course of State Forest Service, Coimbatore	Study visit to Sundarban	19.03.23	21.03.23
38	Sanjay K. Thade, IAS(Retd.) OSD, Backward Classes Welfare Deptt. With family	Sanjay K. Thade, IAS(Retd.) OSD, Backward Classes Welfare Deptt. With family	Visit to Sundarban	29.03.23	
39	Thakur Ram Singh, IAS(Retd), Hon'ble State Election Commissioner, Chhattisgarh State Election Commission.	Thakur Ram Singh, IAS(Retd), Hon'ble State Election Commissioner, Chhattisgarh State Election Commission	Visit to Sundarban	31.03.23	01.04.23
40	Committee on Petitions (2021-22 & 2022-23), West Bengal Legislative Assembly.	Committee on Petitions (2021-22 & 2022-23), West Bengal Legislative Assembly	Visit to Sundarban	05.04.23	06.04.23
41	East India Tour for Officer trainees of 2022-24 SFS induction Course.	East India Tour for Officer trainees of 2022-24 SFS induction Course.	Educational tour of Sundarban	05.04.23	06.04.23



NGOs active in wildlife conservation during 2022-23:-

WWF-India, SHER, NATUREMATES, WPSI, NEWS, AIM FOUNDATION, JUKTIBADI SANSKRITIK SANSTHA- Canning , SAFE, HEAL, SAVING TIGER SOCIETY, BANYAPRAN SATHI, THE JUNGLEE, KOLKATA SOCIETY FOR CULTURAL HARITAGE and HIMALAYAN EXPLORER.

Research or Project, if any:

In recent years, apart from continuous tiger monitoring, *Batagur baska* conservation breeding, satellite tagging and their soft release into the nature are the researches inside Sundarban Tiger Reserve.

Apart from the regular projects, some other researches carried out by the Research Range:

- **Fishing Cat Status Report 2022:** Fishing cat (*Prionailurus viverrinus*) is listed under Schedule I as per Indian Wildlife (Protection) Act, 1972 and globally vulnerable species, declared by the IUCN. A population study of a species is a very first step in conservation of the species as it provides the baseline for management interventions. In this regard, this Fishing Cat Population status report 2022 is the first such effort in the Government of West Bengal to estimate the population of Fishing Cats in Sundarban Tiger Reserve. More than 380 individuals of Fishing cats are recorded through camera trapping with two breeding population footage from STR. (Link: https://sundarbantigerreserve.org/web/pdf/FISHING_CAT_2022_STATUS_REPORT_p5_WEB.pdf)
- **Recording of a new species from the mangroves:** A new species, Madras Tree Shrew (*Anathana ellioti*) was recorded in the FY 2022-23, after the All India Tiger Estimation. The research finding is published in a prestigious scientific journal. (Citation: Justin S.J., A. Routh & D. Ghosh (2022). First photographic report on occurrence of Madras Tree Shrew from Mangrove-entangled Indian Sundarbans. Small Mammal Mail #443, In: Zoo's Print 37(5): 26–28.)
- **Climate change related research article on Sundarban Tiger Reserve was published in a prestigious journal in the FY 2022-23** (Citation: S. Jones Justin, & Debojyoty Ghosh. (2022). A CONTEMPORARY STUDY OF ENVIRONMENTAL CHALLENGES IN SUNDARBAN TIGER RESERVE: A UNESCO WORLD HERITAGE SITE. *EPRA International Journal of Multidisciplinary Research (IJMR)*, 8(12), 253–260.)

ANNEXURE

- Government orders

**GOVERNMENT OF WEST BENGAL
FOREST DEPARTMENT**

NOTIFICATION

No. 2867-For./11B-6/83.—4th May 1984.—Whereas by notification No. 3640 For., dated the 6th June 1978 published at page 1361 of Part I of the “Calcutta Gazette” dated the 13th 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 14th 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

GOVERNMENT OF WEST BENGAL
FOREST DEPARTMENT
FOREST
NOTIFICATION

No. 5396-For/—24th 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,
			Dy. Secy. to the Govt. of West Bengal

**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 38V 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
TOTAL:			169962	

By order of the Governor
(K. Chaudhury)
Addl. Chief Secretary to the Govt. of West Bengal

**Government of West Bengal
Forests Department
Forest Branch
Writers' Buildings, Kolkata – 700 001**

NOTIFICATION

No. 615-For/11M-28/07

Dated Kolkata the 17/02/2009

WHEREAS the core or critical tiger habitat of Sundarban Tiger Reserve has been notified vide Forest Department's G. O. No. 6028-For dated 18/12/2008.

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 ensure the integrity of the Core or Critical Tiger Habitat of Sundarban Tiger Reserve with adequate dispersal for tiger species, and which aim at promoting co-existence between wildlife and human activity with due recognition of the livelihood, developmental, social and cultural rights of the local people;

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, dated 04/11/2007 that the said area should be maintained as the Buffer or Peripheral area of Sundarban Tiger Reserve;

NOW, therefore, in exercise of the power conferred by paragraph (ii) 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 Buffer or Peripheral Area of Sundarban Tiger Reserve.

THE SCHEDULE

Block	Compartment	Total Area (Ha.)	Legal Sttatus
1. Panchamukhani	1-5	17666	Sanctuary
2. Pirkhali	1-7	18576	Sanctuary
3. Arbesi	1-5	15011	Reserved Forest
4. Jhilla	1-6	12311	Reserved Forest
5. Khatuajhuri	1-3	13241	Reserved Forest
6. Harinbhangha	1-3	11687	Reserved Forest
TOTAL :		88527	

By order of the Governor

Sd/-

Addl. Chief Secretary to the Govt. of West Bengal

No. 615/1-For/IIM-28/07

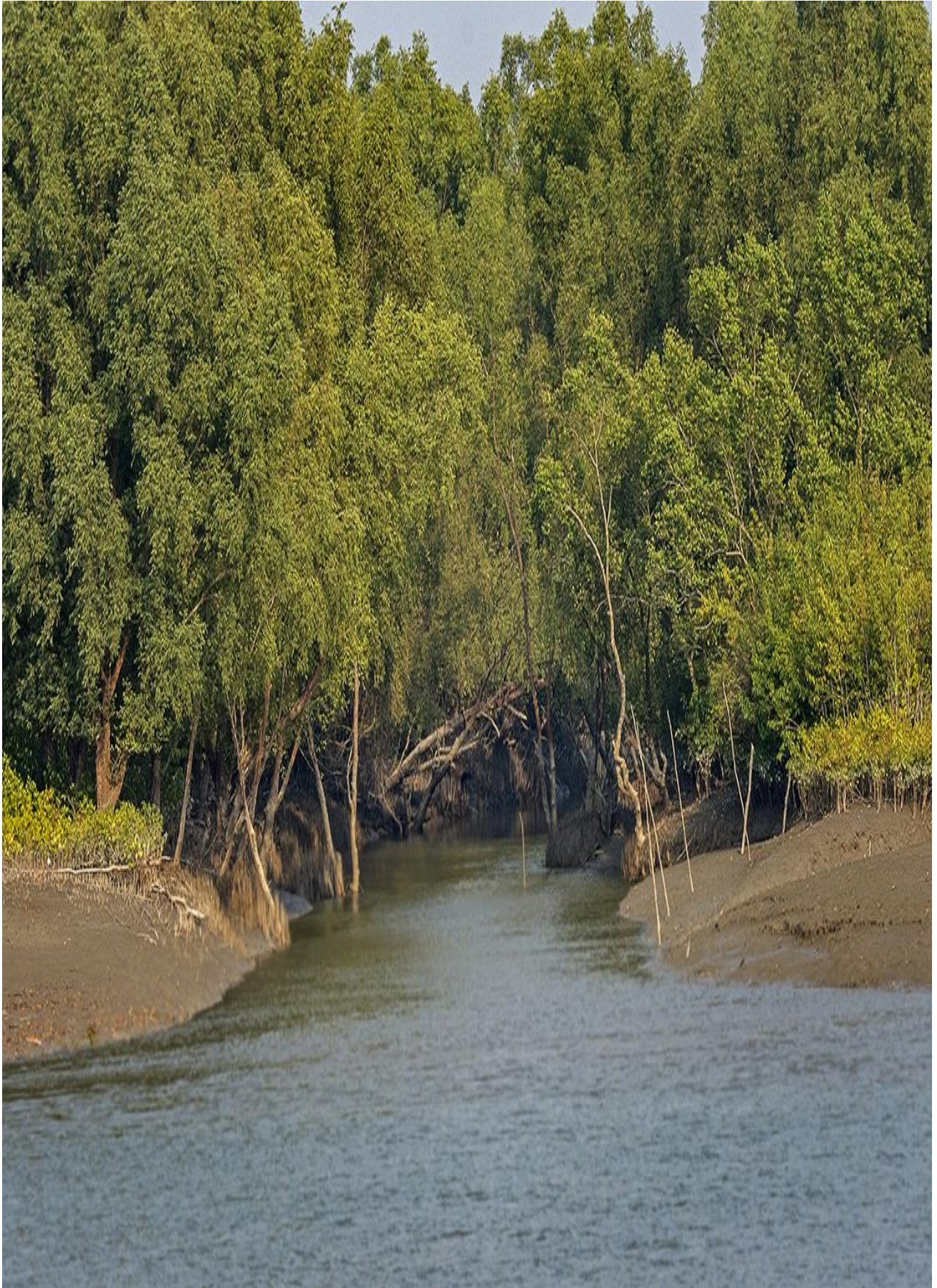
Dated Kolkata the 17/02/2009

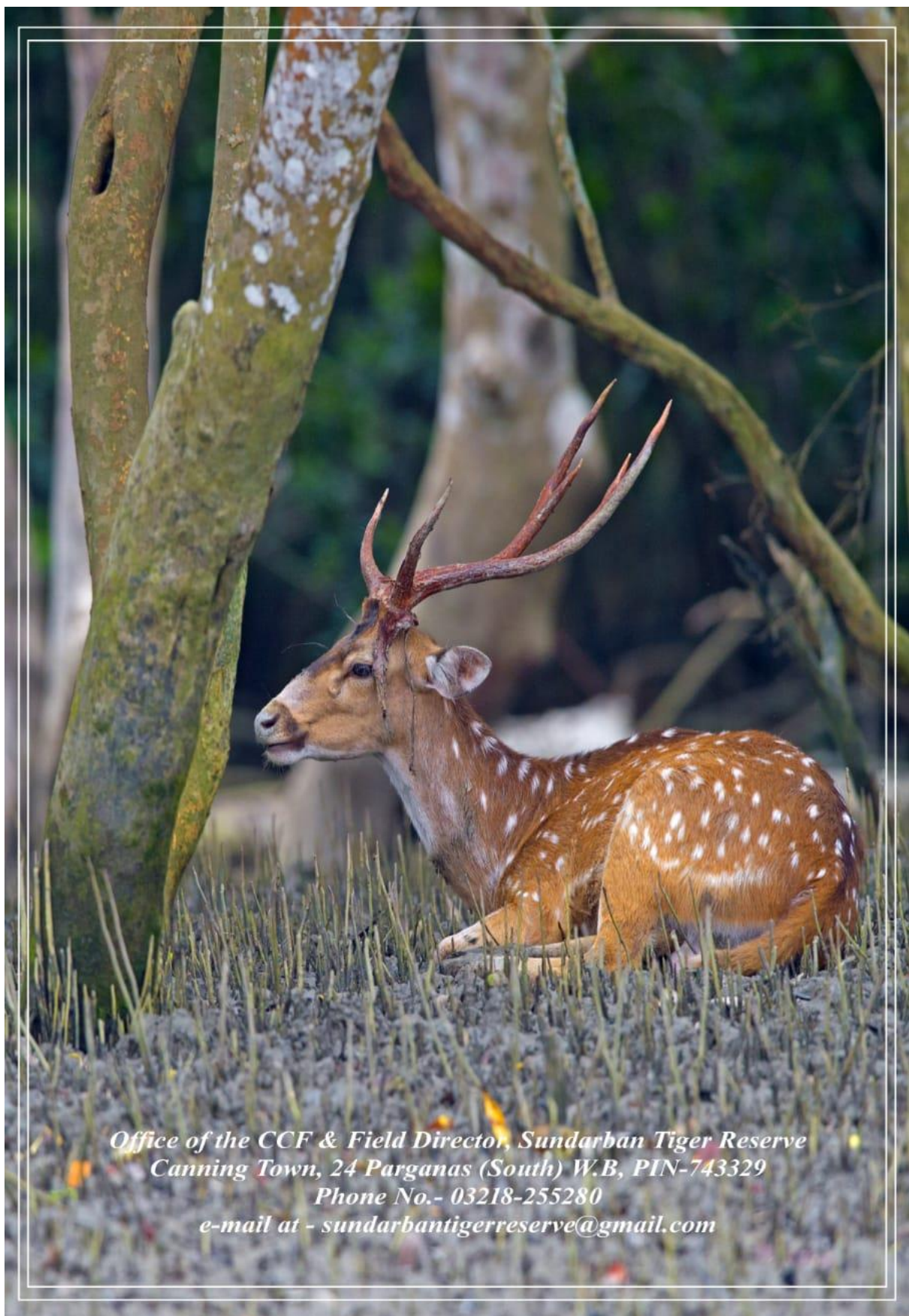
Copy forwarded to the Managing Director, Basumati Corporation Ltd. 166, B. B. Ganguly Street, Kolkata – 700 012.

He is requested to publish the Notification in the Kolkata Gazette (Extra Ordinary) and send 50 (fifty) copies of the same to this Department for Official Use.

Sd/-

Joint Secretary to the Govt. of West Bengal.





*Office of the CCF & Field Director, Sundarban Tiger Reserve
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