

BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONAL BENCH AT KOLKATA

ORIGINAL APPLICATION NO. 127/2024/EZ

IN THE MATTER OF:

News Item Titled "Erosion pushes turtle nests 14 km in Odisha" appearing in The Times of India dated 14.04.2024

Versus

National Coastal Zone Management Authority
& Others ...Respondents

SL. NO.	PARTICULARS	PAGES
1.	Reply affidavit on behalf of Respondent No.3, Principal Chief Conservator of Forests & Chief Wildlife Warden, Odisha.	1-10
		11

Through



[SOUMYAJIT PANI]

Advocate for Respondent No. 3
25/2, First Floor, Pant Nagar
Jangpura, New Delhi-110014
011-41513200; 9312224025
Email: spadv103@gmail.com

Dated: 23.08.2024
New Delhi

**BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONAL BENCH AT KOLKATA**

ORIGINAL APPLICATION NO. 127/2024/EZ

IN THE MATTER OF:

News Item Titled "Erosion pushes turtle nests 14 km in Odisha" appearing in The Times of India dated 14.04.2024

Versus

National Coastal Zone Management Authority

Others

...Respondents



REPLY AFFIDAVIT ON BEHALF OF RESPONDENT NO.3,
PRINCIPAL CHIEF CONSERVATOR OF FORESTS & CHIEF
WILDLIFE WARDEN, ODISHA

I, Dr. Jagyandatt Pati S/o Rajanikant Pati, working as Wildlife Conservation Officer in the Office of the Principal Chief Conservator of Forests Wildlife & Chief Wildlife Warden, in the Government of Odisha, do hereby solemnly affirm and state as under:

1. I am working as Wildlife Conservation Officer in the Office of the Principal Chief Conservator of Forests, Wildlife & Chief Wildlife Warden with the Government of Odisha and fully acquainted with

Jagyandatt Pati 14.8.24



the facts and circumstances of the case as such competent to swear the present reply affidavit.

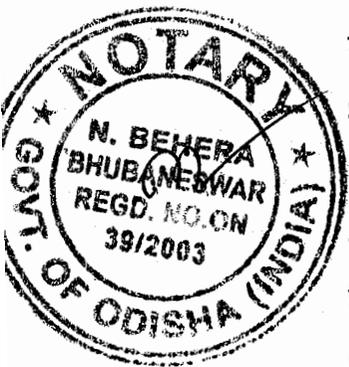
2. That the Principal Chief Conservator of Forests, Wildlife & Chief Wildlife Warden, Odisha has been impleaded as Respondent No.3 herein.
3. That the present Original Application is registered suo-motu on the basis of the news item titled "Erosion pushes turtle nests 14 km in Odisha" appearing in The Times of India dated 14.04.2024.
4. That the news item published in The Times of India dated 14.04.2024 is based on a study done by Researchers from Fakir Mohan University, Odisha, Zoological Survey of India, Western Regional Centre, Pune and other Institutions from India and abroad. The result of this study has been published in Marine Pollution Bulletin in article titled "Dynamic shoreline alterations and their impacts on Olive Ridley Turtle (*Lepidochelys olivacea*) nesting sites in Gahirmatha Marine Wildlife Sanctuary, Odisha (India)". The study has indicated significant erosion of shoreline and subsequent northward sediment displacement has resulted in northward shifting of mass nesting site of Olive Ridley Sea Turtles from mainland shores to a northern beaches of Wheeler



Jagjyandutt Pk'ti
14.8.24

Island in Gahirmatha Marine wildlife Sanctuary. In the said study, this coastal dynamics have been attributed to climate change and human activities in coastal areas.

5. That the Olive Ridley Sea Turtle is the smallest among the sea turtles. They come to sea shores in very large numbers for nesting and prefer mostly sea beaches near river mouths as nesting grounds. There are very few mass nesting sites around the world for the Olive Ridges out of which in India, mass nesting of these turtles is happening only in Rushikulya and Gahirmatha beaches of Odisha. Though large stretches of beaches are available, the reason of the turtles preferring a particular small stretch of beach for mass nesting has not been conclusively studied and some researchers assume the factors such as beach profile, sand texture, salinity, tidal movement direction etc. scientists have reported regarding dynamic shifts in topography at many nesting beaches around the world (Marine News Letter, January, 2021). This article suggests that in Odisha, with the northeast monsoon and seasonal cyclones, the mass nesting beaches experience significant process of erosion and accretion every year. Heavy rains or storms often result in changes in the course of rivers and



Jagbandh P. H.
14.8.24

locations of river mouths. Thus, stretches of beach keep getting washed away on a periodic basis. At the same time, new beaches and sand bars are created that were not present before the accretion of sand. In Gahirmatha, the Olive Ridley turtles prefer the nesting in Wheeler island in a beach of about 2.5 km length and 100 mt. width though large stretches of beaches are available nearby. Hence it may not be conclusively ascertained that the turtles are forced to lay egg in the limited space of Wheeler island.

6. That the Gahirmatha Marine Wildlife Sanctuary with an area of 1435 sq. km. was created in the year 1997 with the purpose of protection and conservation of Olive Ridley sea turtles and other marine fauna. Mass nesting of Olive Ridley occur in about 100 mt. width and 2-3 km long stretch of beach in Wheelers island on the extreme North of the Sanctuary. The present report says erosion of the nesting beach happens because of natural and human-induced factors. The natural causes include severe flood, frequent cyclonic events and storm surges as well as heavy monsoonal rainfall. The report also says the human factors triggering erosion of the beach is mostly in the form of continuation dredging of the nearby sea ports.

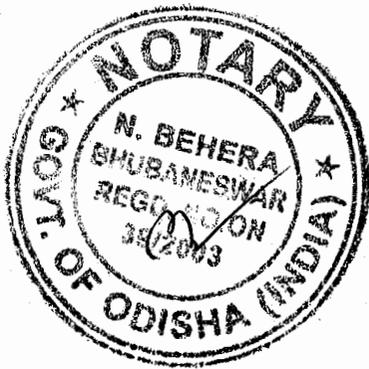


Jagjyandeth P.H
14.8.24

There is Dhamara port at about 15 km north of the nesting beach and Paradip port established at about 70 km South of the nesting beach. Integrated Coastal Zone Management Project (ICZMP), Odisha under its World Bank aided project have prepared Shoreline Management Sub-Plan for Odisha Coast, the key recommendations of which relating to Gahirmatha are reproduced below:

- i. Paradip Port has had a significant impact of the longshore sediment transport and sedimentary regime. The blocking of sediments from south of Paradip is suggested to be the key cause for erosion and shoreline change at Pentha-Gahirmatha coast. Erosion of seawall north of Paradip is recommended to be arrested by beach nourishment of 0.4 Mm³/year and dredging of the approach channel to the Paradip fishing harbor located at the mouth of Mahanadi river.

- ii. For Pentha-Gahirmatha, beach nourishment is recommended using sediments from the spit/shifting sands/islands of Hukitola Bay. Hard engineering structures are not recommended as they may hinder turtle nesting and also reduce sediment inputs at Ekakula spit and the Dhamra-Brahmani-Baitarini estuarine complex.

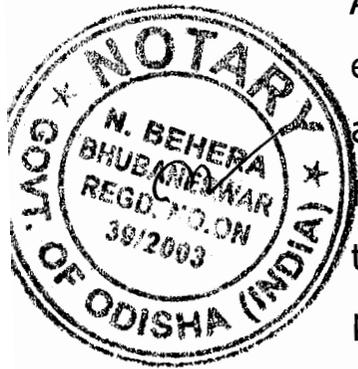


Jugyanditt P-ti 14.8.24

7. That the Olive Ridley sea turtle is listed in Schedule-I of the Wildlife (Protection) Act, 1972. While the species and its habitat is protected under the said Act apart from provisions of CRZ notification, part of its migration route in near shore areas is also within the Gahirmatha Marine Wildlife Sanctuary and hence protected under the said Act also.

8. That the nesting season of Olive Ridley turtles stretch from November to March every year wherein the turtles from deep sea congregate in the near shore areas of nesting beach for mating and the females come to the beach to lay egg. After 45-60 days the hatchlings emerge from the eggs and return back to the sea. Gahirmatha being a Sanctuary, protection activities are undertaken by Forest Department throughout the year. Some of the major interventions of Forest department for protection and conservation of turtles in Gahirmatha are submitted below for appraisal of the Hon'ble Court.

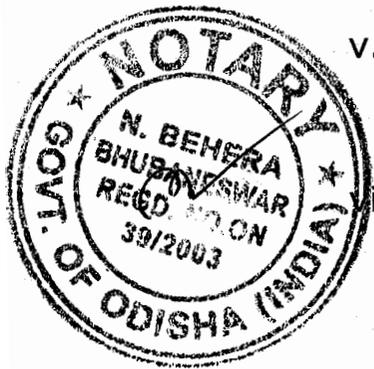
i. Sea patrolling by Forest staff in coordination with Indian Coast Guards, Marine Police Stations conducted round the year to prevent illegal entry of fishing boats. Patrolling is



Jagjyandutt 12th
14.8.24

enhanced in nesting season with deployment of additional protection squad and patrolling boats.

- ii. Ban on fishing by local fishermen in country boats imposed from November to March for which they are compensated by Fisheries Department of the State through cash incentives.
- iii. Awareness of local stakeholders done in association with NGOs and local community based organizations during nesting season.
- iv. Local people are engaged in habitat protection activities including beach cleaning, protection of nesting site and as patrolling squad.
- v. Nesting beach is fenced for protection of eggs from predators.
- vi. The nesting beach of Gahirmatha lies in Wheeler island where missile testing Range of DRDO is established. All missile testing activities are stopped during turtle nesting period.
- vii. The lights of Dhamra port situated north to the nesting site and DRDO establishment present on the nesting island are dimmed during



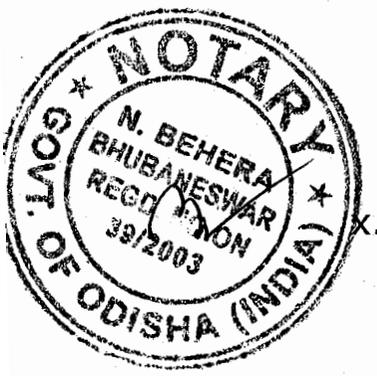
Jagjyandutt P. ti
14.8.24

nesting and hatchling emergence to prevent disorientation of the turtles by strong lights.

viii. Sea side boundary of the Gahirmatha Marine Sanctuary has been demarcated with floating buoys to help staying away from the sanctuary limits by sea fishing trawlers.

ix. Hon'ble High Court of Orissa have registered Suo Moto W. P. (C) PIL No. 7118 of 2021 (In Re: Olive Ridley Turtle Vs. Principal Secretary, Forest and Environment Department and others) on the issue of protection of Olive Ridley sea turtles wherein Hon'ble High Court is monitoring the sea turtle protection activities in the State and have issued several orders to various stakeholders Departments in this respect for implementation.

x. The mass nesting figure of Olive Ridley Turtles in Gahirmatha since 1995- 96 is submitted below for kind appraisal of Hon'ble Court.



Jagjyoti # P-41 14.8.24

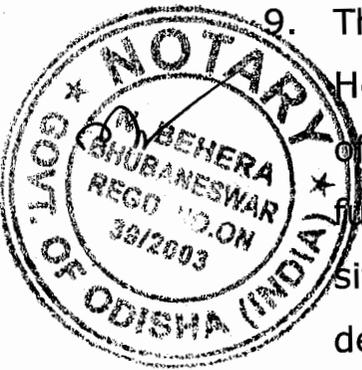
Season	No. of nesting turtles (in lakhs)
1995-1996	2.90
1996-1997	No mass nesting
1997-1998	No mass nesting
1998-1999	2.98
1999-2000	7.11
2000-2001	7.41
2001-2002	No mass nesting

2002-2003	0.73
2003-2004	2.43
2004-2005	2.34
2005-2006	2.67
2006-2007	1.46
2007-2008	No mass nesting
2008-2009	1.67
2009-2010	3.57
2010-2011	4.72
2011-2012	1.68
2012-2013	4.06
2013-2014	No mass nesting
2014-2015	4.13
2015-2016	0.52
2016-2017	6.04
2017-2018	6.65
2018-2019	4.51
2019-2020	4.07
2020-2021	3.50
2021-2022	5.01
2022-2023	5.12
2023-2024	3.01

Jagprekash P. S. 14.8.24

9. That the answering Respondent craves leave of this Hon'ble Tribunal to add, amend and/or modify any of the averments made hereinabove and to file a further affidavit or affidavits or documents if the situation so warrants or if this Hon'ble Tribunal so desires.

10. That the contents of this reply affidavit have been read over and explained to me and I have understood the contents thereof and I say that the facts stated hereinabove are true and correct to the



best of my knowledge and belief as derived from the official records.

11. That no part of this affidavit is false and nothing material has been concealed therefrom.

IDENTIFIED BY ME

ADVOCATE, BHUBANESWAR
NAME: Rajendra Kumar Saha

14.08.2024

The above named deponent being

duly identified by Sri. R. K. Saha

Advocate and appears before me

dated 14/8/24 at about 9:30 AM

AM/PM 9:30 AM at the name Govt

content is true to the

best of His/Her knowledge

DEPONENT

VERIFICATION:

Deponent

Executive Magistrate

14/8/24
N. BEVERA
BHUBANESWAR
GOVT. OF ODISHA (INDIA)
REGD. NO. ON-39/2003

Verified at Bhubaneswar on this the 14 day of August, 2024. I, the above named deponent do hereby verify that the contents of the above reply affidavit are true and correct, no part of it is false and nothing material has been concealed therefrom.

Jagjyandutt P. Ch

14.8.24

DEPONENT

Wildlife Conservation Officer
O/o the PCCF (WL) & CWLW
Odisha, Bhubaneswar

Through

[Signature]

[SOUMYAJIT PANI]

Advocate for Respondent No. 3
25/2, First Floor, Pant Nagar
Jangpura, New Delhi-110014
011-41513200; 9312224025
Email: spadv103@gmail.com

Dated: 23.08.2024
New Delhi

