

**BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE BENCH
AT CHENNAI**

OA NO 256 OF 2024

IN THE MATTER OF:

**NEWS ITEM TITLED RAPID URBANIZATION TAKES TOLL ON MANGROVE IN
VIAG APPEARING IN THE NEW INDIAN EXPRESS DATED 25 06 2024**

..... Applicant

Vs

**MINISTRY OF ENVIRONMENT FOREST AND CLIMATE CHANGE THROUGH ITS
REGIONAL OFFICE & OTHERS**

... Respondents

REPORT FILED BY THE PCCF 2nd RESPONDENT

DATE - 25.11.2024



**M/s MADHURI DONTI REDDY
ADVOCATE**

STANDING COUNSEL FOR GOVERNMENT OF ANDHRA PRADESH

A.P. POLLUTION CONTROL BOARD

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**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE
BENCH AT CHENNAI**

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It is certified that all the documents contained in the above annexure are true copies.

Date: 25.11.2024

Report filed by Conservator of Forest on the Hon'ble NGT order dated 24.09.2024 in Original Application No.256 of 2024 (SZ) (Earlier O.A. No.881 of 2024 (PB) with reference to the News Item titled "Rapid urbanization takes toll on Mangroves in Vizag" appeared in The New Indian Express, dated: 25-06-2024.

1. It is submitted that the O.A.No.881/2024 was registered Suo-Moto by Hon'ble NGT Principal Bench, New Delhi based on the news item published in New Indian Express dated 25.06.2024 titled "Rapid urbanization takes toll on Mangroves in Vizag".
2. In the Hon'ble NGT order dated 23.07.2024, it was stated that "Let notice be issued to the Respondents for filing their response before the appropriate bench of the Tribunal. Since the matter relates to the Southern Zonal Bench, Chennai, therefore, OA is transferred to the Southern Zonal Bench for appropriate further action. Office is directed to transfer the original record of the OA to Southern Zonal Bench, Chennai. List before Southern Zonal Bench at Chennai on 23.09.2024". Copy of the order dated 23.07.2024 is submitted as **(Annexure-1)**.
3. In compliance to the Hon'ble NGT order dated 23.07.2024 in OA No. 881 of 2024, the District Forest Officer (DFO), Visakhapatnam, vide letter dated 02.08.2024 requested the Collector & District Magistrate, Visakhapatnam to issue proceedings for formation of a committee to look into the matter and submit a detailed report along with action taken to the District Collector Visakhapatnam for filing remarks before the National Green Tribunal." Copy of the letter dated 02.08.2024 is submitted as **(Annexure-2)**.

4. It is submitted that, the Collector & District Magistrate, Visakhapatnam in compliance to the DFO letter dated 02.08.2024, constituted a committee with the following vide proceedings dated 14.08.2024:

- i. District Forest Officer, Forest Department, Visakhapatnam,
- ii. Revenue Divisional Officer, Visakhapatnam,
- iii. Municipal Commissioner, Greater Visakhapatnam Municipal Corporation, Visakhapatnam,
- iv. VC & MD, Visakhapatnam Metropolitan Region Development Authority, Visakhapatnam,
- v. Joint Director, Fisheries Department, Visakhapatnam,
- vi. Superintending Engineer, Department of Irrigation, Visakhapatnam,
- vii. Environmental Engineer, Regional Office, A.P. Pollution Control Board, Visakhapatnam.

The committee was directed to submit detailed report duly mentioning remedial measures/ plan of action on the following so as to submit a report to the Hon'ble NGT:

- i. Assessing the impact on the Mangrove stretches in Visakhapatnam due to rapid urbanization / industrialization as alleged in the news article, especially in the following areas a) Meghadrigedda drain & b) Gosthani river mouth near Bheemili.
- ii. Suggesting remedial measures / plan of action to revive the coastal mangroves in the identified stretches.

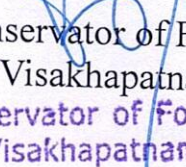
Copy of the Collector & District Magistrate, Visakhapatnam proceedings dated 14.08.2024 is submitted as **(Annexure-3)**.

5. The District Forest Officer, Visakhapatnam has submitted in his report **(Annexure-4)** that, since, the affected areas are all located outside the forest area and as the forest department has no direct control over the mentioned areas, the issue was addressed to the Collector & District Magistrate,

Visakhapatnam to constitute a committee vide DFO Rc.no.822/2024/S2, dt.02.08.2024. Accordingly, the Collector & District Magistrate, Visakhapatnam has constituted a committee under the Chairmanship of District Forest Officer, Visakhapatnam and other members to assess the impact of rapid urbanization and industrialization on the Mangrove stretches in Visakhapatnam. The committee members along with the Visakhapatnam Port Authority representatives have inspected the areas on Mangrove stretches in Meghadrigedda drain and Gosthani river mouth near Bheemunipatnam on 23.08.2024 and 24.08.2024 and certain observations have been made by the committee. The committee members of other departments have submitted their report on the above subject which is enclosed herewith (**Annexure-5**).

6. The District Forest Officer, Visakhapatnam has also reported that, the Forest Range Officer, Visakhapatnam has issued a notice to the Executive Engineer, Visakhapatnam Port Authority, Visakhapatnam on distraction of Mangrove Plantation vide Rc.no.137/2024, dt.01.09.2024 (**Annexure-6**).
7. Further, the DFO, Visakhapatnam has also reported that, since the Gosthani River mouth, Bheemili area does not come under the direct control of Forest Department.
8. Further, the DFO has also reported that, the Chairman, Visakhapatnam Port Authority, Visakhapatnam, Admiral Superintendent, Naval Dockyard, Visakhapatnam and CGM, HPCL, Visakhapatnam have been addressed to take suitable action on this issue and report compliance (**Annexure-7**). Report awaited from the concerned authorities. A letter was also addressed to the Collector & District Magistrate, Visakhapatnam by the DFO, Visakhapatnam vide Rc.no.822/2024-S2, dt.28.08.2024 duly informing the observations and suggestions of the committee to take suitable action in this regard (**Annexure-8**). Action taken report awaited from the District Administration and line departments.

9. Further, it is submitted that, the District Forest Officer, Visakhapatnam has addressed the Visakhapatnam Port Authority, Naval Dockyard, Visakhapatnam, Hindustan Petroleum Corporation Limited, Visakhapatnam and Collector and District Magistrate, Visakhapatnam to take necessary action, since the affected areas are not under the control of Forest Department. The Action Taken Report is awaited from the concerned authorities and further report will be submitted after receipt of the same.
10. In the above circumstances, it is humbly prayed that, this Hon'ble NGT (SZ), Chennai may be pleased to consider this report and pass such further or other orders, as this Hon'ble NGT (SZ), Chennai may deem fit and proper in the facts and circumstances of the case and thus render justice.


Conservator of Forests
Visakhapatnam
Conservator of Forests
Visakhapatnam

Item No. 06

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 881/2024

News Item titled "Rapid urbanisation takes toll on Mangroves in Vizag"
appearing in The New Indian Express dated 25.06.2024

Date of hearing: 23.07.2024

**CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

ORDER

1. This Original Application is registered *suo-motu* on the basis of the news item titled "Rapid urbanisation takes toll on Mangroves in Vizag" appearing in The New Indian Express dated 25.06.2024.

2. The matter relates to significant reduction in the Mangrove stretches in Vishakhapatnam in Andhra Pradesh due to rapid urbanization and industrialization. As per the article, these vital ecosystems have been reduced to a few small patches and are now threatened by ongoing development. The article highlights that this loss is concerning given the crucial role mangroves play in protecting shorelines from erosion and providing habitat for diverse wildlife.

3. The article alleges that historically extensive, these mangroves now exist in small, endangered patches. The Meghadri Gedda, a rain-fed drain flowing into the Bay of Bengal near Visakhapatnam harbour which once supported a vibrant mangrove ecosystem, has been particularly affected, with construction debris posing a significant threat. Furthermore, it is stated that in the 1990s, mangroves stretched from the Naval Dockyard Bridge to areas like Sheela Nagar and Gnanapuram, reaching heights up to 5 metres. However, due to construction and infrastructure development, their size has drastically reduced. By 2008, their height had diminished to 3 metres, and the canopy also shrank.

4. The article further alleges that the mangrove patch near the Gosthani river mouth in Bheemili is also diminished and awaits replantation approval. A 2023 study by the Indian Council of Forestry Research and Education-Coastal Ecosystem Centre (ICFRE-CEC) identified approximately 220 hectares of mangrove patches in the Visakhapatnam district, but these were not included in the Forest Survey of India report. It is stated that the decline in mangrove habitats has also impacted bird species. Near-threatened species like the Eurasian curlew, Oriental darter, and black-headed ibis have seen significant declines. The fishing community, which relies on the mangrove ecosystem for fish production is also facing economic and livelihood challenges.

5. The above news item indicates violation of the provisions of The Environment (Protection) Act, 1986, CRZ Rules 1991 and Forest (Conservation) Act, 1980.

6. The news item raises substantial issue relating to compliance of the environmental norms and implementation of the provisions of scheduled enactment.

7. Power of the Tribunal to take up the matter *suo-motu* has been recognized by the Hon'ble Supreme Court in the matter of "*Municipal Corporation of Greater Mumbai vs. Ankita Sinha & Ors.*" reported in 2021 SCC Online SC 897.

8. Hence, we implead following as respondents in this matter:

- (i) Ministry of Environment, Forest & Climate Change, Through its Regional Office, Integrated Regional Office (Vijayawada), Vijayawada Green House Complex, Gopalareddy Road, Vijayawada, Andhra Pradesh 520010

- (ii) Principal Chief Conservator of Forest, Andhra Pradesh, Aranya Bhavan, P.V.S.Land Mark, Near APIIC Towers, Mangalagiri, Guntur District, Andhra Pradesh 522503
- (iii) Chief Wildlife Warden, Andhra Pradesh, Aranya Bhawan, K.M. Munshi Road, Nagarampalem, Guntur, Andhra Pradesh 522004
- (iv) National Coastal Zone Management Authority, Through its Chairperson, Indira Paryavaran Bhawan, Jorbagh Road, New Delhi – 110 003
- (v) Andhra Pradesh Coastal Zone Management Authority, Through its Chairman, D.No. 33-26-14 D/2, Near Sunrise Hospital, Chalamavari Street, Kasturibaipet, Vijayawada - 520010
- (vi) District Magistrate, Visakhapatnam, National Informatics Centre, Collectorate, Maharaniipeta, Visakhapatnam-530002

9. Let notice be issued to the above Respondents for filing their response before the appropriate bench of the Tribunal.

10. Since the matter relates to the Southern Zonal Bench, Chennai, therefore, OA is transferred to the Southern Zonal Bench for appropriate further action. Office is directed to transfer the original record of the OA to Southern Zonal Bench, Chennai.

11. List before Southern Zonal Bench at Chennai on 23.09.2024.

Prakash Shrivastava, CP

Arun Kumar Tyagi, JM

Dr. A. Senthil Vel, EM

July 23, 2024
Original Application No. 881/2024
AS.

Andhra Pradesh

Rapid urbanisation takes toll on Mangroves in Vizag

However, this proposal has seen little progress. Numerous organisations have expressed willingness to assist in protecting and replanting these mangroves, awaiting only official approval to proceed.



The mangrove patch behind Visakhapatnam International Airport is filled with construction debris. Photo | G Satyanarayana

Usha Peri

Updated on: 25 Jun 2024, 6:50 am · 3 min read



VISAKHAPATNAM: Over the past several decades, Visakhapatnam has experienced rapid urbanisation and industrialisation, leading to a significant reduction in its mangrove stretches. Once extensive, these vital ecosystems have been reduced to a few small patches and are now threatened by ongoing development. This loss is concerning given the crucial role mangroves play in protecting shorelines from erosion and providing habitat for diverse wildlife.

The Meghadri Gadda, a rain-fed drain flowing into the Bay of Bengal near Visakhapatnam harbour, once supported a vibrant mangrove ecosystem.



 THE NEW
INDIAN EXPRESS

NATION WORLD STATES OPINIONS CITIES BUSINESS SPORT GOOD

construction debris.

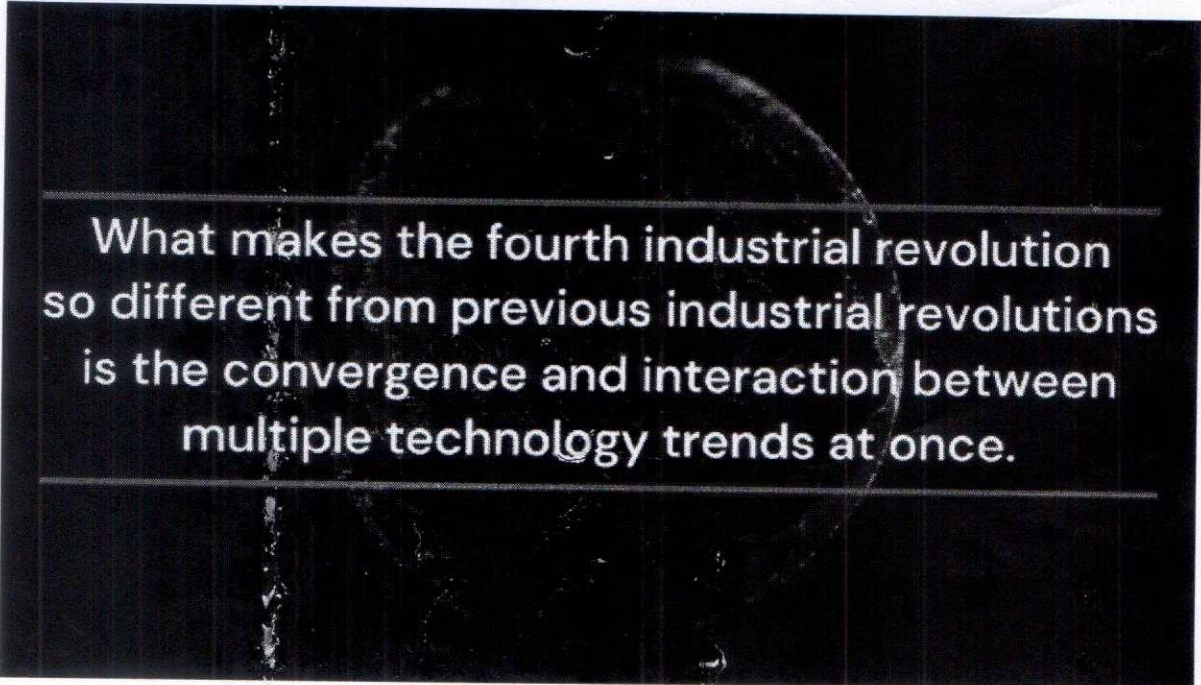
In 2016, then Visakhapatnam Port Trust (VPT) Chairperson MT Krishna Babu announced a proposal to regenerate mangroves over a 50-acre area, seeking technical expertise to support the initiative.

However, this proposal has seen little progress. Numerous organisations have expressed willingness to assist in protecting and replanting these mangroves, awaiting only official approval to proceed.

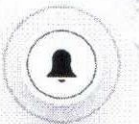
GM Narasimha Rao, a retired professor from Andhra University who has extensively studied Visakhapatnam's mangroves since the 1990s, shared his insights. "In the 1990s, mangroves stretched from the Naval Dockyard Bridge to areas like Sheela Nagar and Gnanapuram, reaching heights up to 5 metres. However, due to construction and infrastructure development, their size has drastically reduced. By 2008, their height had diminished to 3 metres, and the canopy also shrank," Rao recalled.

Rao emphasised the importance of conserving existing mangroves rather than focusing solely on new plantation efforts.

He suggested that improving water flow through dredging existing creeks could restore current mangrove habitats, creating better conditions for their growth and ensuring their survival within Visakhapatnam's ecosystem.

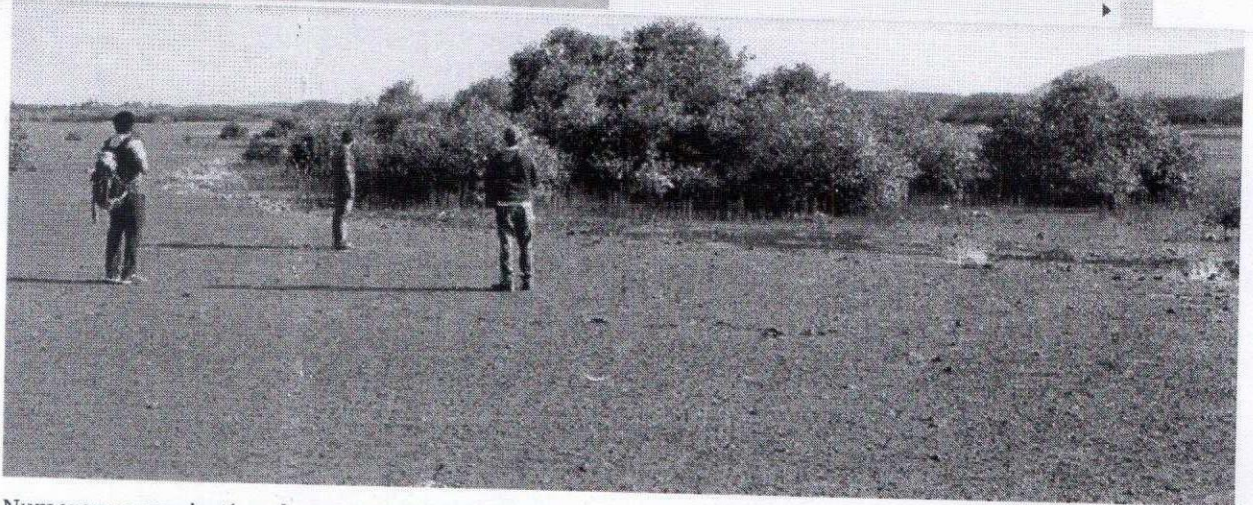


What makes the fourth industrial revolution so different from previous industrial revolutions is the convergence and interaction between multiple technology trends at once.




**THE NEW
INDIAN EXPRESS**

NATION WORLD STATES OPINIONS CITIES BUSINESS SPORT GOOD



Numerous organisations have expressed willingness to assist in protecting and replanting these mangroves, awaiting only official approval to proceed. Photo | G Satyanarayana

The mangrove patch near the Gosthani river mouth in Bheemili, now reduced to just 150 to 200 plants, is also awaiting permission for replantation efforts. A 2023 study by the Indian Council of Forestry Research and Education-Coastal Ecosystem Centre (ICFRE-CEC) revealed approximately 220 hectares of mangrove patches in Visakhapatnam district. Surprisingly, these mangroves were not mentioned in the Forest Survey of India report, which maps and monitors India's forest resources biennially.

ICFRE scientist B.Srinivas noted, "Currently, there are small patches of mangroves in Bheemili, but nearly 40 hectares can be developed for mangrove plantations. The area where the Gosthani river meets the sea already supports mangrove growth. Reintroducing mangroves here will benefit the fishing community, as fish production thrives in mangrove environments. Additionally, mangrove seeds disperse naturally through vegetation, allowing them to grow in suitable coastal areas even without active replantation efforts."



mangrove patches

Mangrove patch	No. of bird species found
Gosthani river mouth	66
Gosthani river mouth, north side	93
Meghadri Gedda downstream	159
Airport-adjacent water body	90
Vizag airport	88
Visakhapatnam Port Trust mangrove	99

No. of mangrove & halophyte species identified

Year	Mangroves	Halophytes
1989	6	7



NATION	WORLD STATES	OPINIONS	CITIES	BUSINESS	SPORT	GOOD
2023		3			7	

The decline in mangrove habitats has also impacted bird species. Vivek Rathod, founder of Wildlife Conservation Through Research and Education (WCTRE), highlighted that areas once flourishing with birdlife are now in dire need of conservation.

Near-threatened species like the Eurasian curlew, Oriental darter, and black-headed ibis have seen significant declines. To educate the public on the importance of mangroves, WCTRE is organising awareness campaigns.

Speaking to TNIE, Visakhapatnam Port Trust Secretary T Venu Gopal explained measures taken by VPA to increase green cover.

“For World Environment Day, we initiated a large plantation drive of one million

saplings within the port premises as part of our CSR initiatives. Currently, we do not plan to restore the mangrove patch behind the airport.

However, we welcome any organisation willing to plant trees near the Gosthani river in Bheemili. The survival rate of these plants must be at least 60 per cent for the effort to be meaningful,” the VPA trust secretary said.

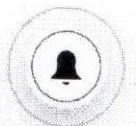
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**GOVERNMENT OF ANDHRA PRADESH
FOREST DEPARTMENT**

Rc.no.822/2024/S2
Dated: 02-08-2024

Office of the District Forest Officer,
Visakhapatnam

From:
Sri Anant Shankar, IFS
District Forest Officer,
Visakhapatnam

To:
The Collector & District Magistrate,
Visakhapatnam

Sir,

Sub: National Green Tribunal- Order passed in Original Application No. 881/2024- Suo motu news item published in New Indian Express dated 25.06.2024 titled "Rapid urbanisation takes toll on Mangroves in Vizag"- communicated to DFO Visakhapatnam-request for formation of a committee with line departments concerned to look into the matter- Reg.

- Ref: 1. Order dated 23/07/2024 passed in O.A. No. 881/2024 communicated by District Collector, Visakhapatnam dated 01-08-2024.
2. Prl.CCF, A.P. Mangalagiri Ref.no.21/92/2024/WL-1, dt.07.08.2024.

It is to bring to the kind attention of Collector and District Magistrate, Visakhapatnam vide reference 1st cited communicated the order dated 23/07/2024 of the Hon'ble National Green Tribunal (NGT) passed in O.A.No. 881/2024. This order of the Hon'ble NGT is based on the news item titled "Rapid urbanisation takes toll on Mangroves in Vizag" which appeared in the New Indian Express dated 25-06-2024.

It is to inform here that this order of the Hon'ble NGT mentions as follows:

- i. Significant reduction in the Mangrove stretches in Visakhapatnam due to rapid urbanisation and industrialisation.
- ii. The Meghadri gedda drain flowing into Bay of Bengal once supported a vibrant mangrove ecosystem has been particularly affected with construction debris posing a significant threat.
- iii. Drastic reduction in mangroves from the Naval Dockyard Bridge to areas like Sheela Nagar and Gnanapuram.

(P.T.O)

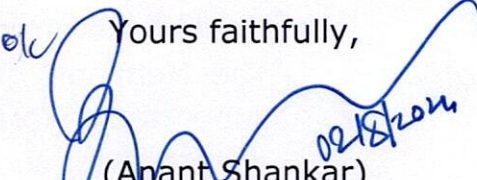
- iv. Article alleges that the mangrove patch near the Gosthani river mouth in Bheemli is also diminished and awaits replantation approval. A 2023 study by the ICFRE-CEC identified 220 hectares of mangrove patches in the Visakhapatnam district, but these were not included in the Forest Survey of India report.
- v. The above news item indicates violation of the EPA 1986, CRZ Rules 1991 and the FCA 1980 and raises substantial issue relating to compliance of the environmental norms and implementation of scheduled enactment.

It is to inform that the Hon'ble NGT has taken suo motu cognisance of this issue and issued notices to different respondents for filing their response.

I wish to bring ^{to} the kind attention of the District Collector, Visakhapatnam here that the allegations and news provided in the said article and as mentioned in order issued in the O.A.No. 881/2024 by the Hon'ble NGT are serious in nature and it would be prudent to form a committee with representatives from departments concerned like Pollution Control Board, Revenue Department, GVMC, Forest, APCZMA and others as per the Collector's discretion so as to ascertain the allegations made in the newspaper article, verify the status of lands involved as per records and report on the violations made under different acts and rules as mentioned by the Hon'ble NGT in the said order. The areas mentioned in this order of the Hon'ble NGT are not under the control of the Forest department and are restricted/limited access areas with Visakhapatnam Port Authority, Naval Dockyard, HPCL and others.

Therefore, in view of the above, it is requested to the District Collector, Visakhapatnam to issue proceedings for formation of a committee to look into the matter and submit a detailed report along with action taken to the District Collector, Visakhapatnam for filing remarks before the National Green Tribunal.

This is submitted for favour of kind information and request for necessary action.

o/c Yours faithfully,

(Anant Shankar)
District Forest Officer
Visakhapatnam

Mail sent
on 09/8/2024

File No.APPC/2/2024-EE(PCB)-PCBVSP

ANX-3

Proceedings No. Committee/OA.No.881 of 2024 dated 05.05.2023

Present: M.N.Harendhira Prasad IAS
Collector & District Magistrate, Visakhapatnam



Sub: National Green Tribunal Original No. 881/2024 Suo motu news item published in The New Indian Express dated 25.06.2024 titled "Rapid urbanisation takes toll on Mangroves in Vizag" – Committee constituted – Reg.,

Ref: 1. The Hon'ble NGT Order dated 23.07.2024 in OA No. 881/2024.
2. Rc No. 822/2024/S2 dated 02.08.2024 of the District Forest Officer, Visakhapatnam.

The National Green Tribunal, New Delhi has registered a *suo-motu* case on the basis of the news item titled "Rapid urbanization takes toll on Mangroves in Vizag" which appeared in The New Indian Express dated 25.06.2024.

The matter relates to significant reduction in the Mangrove stretches in Vishakhapatnam in Andhra Pradesh due to rapid urbanization and industrialization. As per the article, these vital ecosystems have been reduced to a few small patches and are now threatened by ongoing development. The article highlights the crucial role mangroves play in protecting shorelines from erosion and providing habitat for diverse wildlife.

The Hon'ble NGT in its Order dated 23.07.2024 in OA No. 881/2024 implead (vi) District Magistrate, Visakhapatnam, for filing response before the appropriate bench of the Tribunal in this matter.

In this regard, a Committee is hereby constituted with the following members:

1.	District Forest Officer, Forest Department, Visakhapatnam	Chairman
2.	Revenue Divisional Officer, Visakhapatnam	Member
3.	Municipal Commissioner, Greater Visakhapatnam Municipal Corporation, Visakhapatnam	Member
4.	VC & MD, Visakhapatnam Metropolitan Region Development Authority, Visakhapatnam	Member
5.	Joint Director, Fisheries Department, Visakhapatnam	Member
6.	Superintending Engineer, Department of Irrigation, Visakhapatnam.	Member
7.	Environmental Engineer, Regional Office, A.P. Pollution Control Board, Visakhapatnam	Member

The committee is directed to submit detailed report duly mentioning remedial measures/plan of action on the following so as to submit a report to the Hon'ble NGT:

- i. Assessing the impact on the Mangrove stretches in Visakhapatnam due to rapid urbanization / industrialization as alleged in the news article, especially in the following areas a) Meghadrigedda drain & b) Gosthani river mouth near Bheemili.
- ii. Suggesting remedial measures / plan of action to revive the coastal mangroves in the identified stretches.

Collector & District Magistrate,
Visakhapatnam District



ANX-4



**GOVERNMENT OF ANDHRA PRADESH
FOREST DEPARTMENT**

Rc.no.822/2024/S2,
Dated: 22.11.2024.

Office of the District Forest Officer,
Visakhapatnam.

From
Sri S.Venkatesh, I.F.S.,
District Forest Officer (FAC),
Visakhapatnam.

To
The Conservator of Forests
Visakhapatnam circle,
Visakhapatnam.

Sir,

Sub:- Andhra Pradesh Forest Department-Wildlife - order passed in Original-Application No.881/2024- Suo-Moto news item published in New Indian Express, dated.25.06.2024 titled "Rapid urbanisation takes toll on Mangroves in Vizag"- Report submitted-Regarding.

- Ref:-
1. Pri.CCF (WL) & Chief Wildlife Warden A.P (FAC) Rc.No. 21/92/2024/WL1, dated 07-08-2024.
 2. CCF, Visakhapatnam Rc. No.2745/2024/TO, dated 08-08-2024.
 3. Hon'ble NGT order in OA.No.881/2024,Dt.23.07.2024.
 4. DFO, Visakhapatnam, Rc.No.822/2024/S2.Dt.02.08.2024.
 5. Collector and District Magistrate, Visakhapatnam, Proceedings e-Office File No. APPC/2/2024-EE(PCB)-PCBVSP, dated 14-08-2024.
 6. DFO, Visakhapatnam, Rc.No.822/2024/S2, Dt.19.08.2024.
 7. DFO, Visakhapatnam, Rc.No.964/2017/TO, Dt.20.05.2023.
 8. PCCF & HoFF, A.P. Mangalagiri Ref.no.21/92/2024/WL-1, dt.01.11.2024.
 9. CF, Visakhapatnam Rc.no.2745/2024/TO, dt.13.11.2024.

#

In compliance to the references 8th& 9th cited, I submit herewith the report on the above subject matter.

Introduction:

It is submitted that in O.A.No.881/2024 was registered Suo-Moto by Hon'ble NGT Principal Bench, New Delhi based on the news item published in New Indian Express dated 25.06.2024 titled " Rapidurbanisation takes toll on Mangroves in Vizag".

The respondents in the matter are:

- i. Ministry of Environment, Forest & Climate Change, Throughits Regional Office, Integrated Regional Office (Vijayawada), Vijayawada green House Complex, Gopalareddy Road, Vijayawada, AP 520010.

- ii. Prl.Chief Conservator of Forests, A.P. Aranya Bhavan, P.V.S.Land Mark, Near APIIC Towers, Mangalagiri, Guntur District, A.P. 522503.
- iii. Chief Wildlife Warden, A.P. Aranya Bhavan, K.M. Munshi Road, Nagarampalem, Guntur, A.P. 522004.
- iv. National Coastal Zone Management Authority, through its Chairperson, Indira Paryavaran Bhawan, Jorbagh Road, New Delhi - 110 003.
- v. Andhra Pradesh Coastal Zone Management Authority, through its Chairman, D.No.33-26-14 D/2, Near Sunrise Hospital, Chalamavari Street, Kasturibaipet, Vijayawada 520010.
- vi. District Magistrate, Visakhapatnam, National Informatics Centre, Collectorate, Maharanipecta, Visakhapatnam 530002.

It is submitted as per the instructions of the District Forest Officer, Visakhapatnam, the Forest Range Officer, Visakhapatnam has issued a notice to the Executive Engineer, Visakhapatnam Port Authority, Visakhapatnam on the destruction of mangrove plantation vide notice Rc.no.137/2024, dt.01.09.2024 (Copy enclosed).

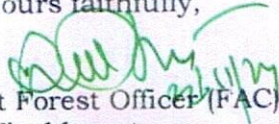
Further, it is submitted that, since, the affected areas are all located outside the forest area and as the forest department has no direct control over the mentioned areas, the issue was addressed to the Collector & District Magistrate, Visakhapatnam to constitute a committee vide reference 4th cited. Accordingly, the Collector & District Magistrate, Visakhapatnam has constituted a committee under the Chairmanship of District Forest Officer, Visakhapatnam and other members to assess the impact of rapid urbanization and industrialization on the Mangrove stretches in Visakhapatnam. The committee members along with the VPA representatives has inspected the areas on Mangrove stretches in Meghadrigedda drain and Gosthani river mouth near Bheemunipatnam on 23.08.2024 and 24.08.2024 and certain observations have been made by the committee. The committee members of other departments have submitted their report on the above subject which is enclosed herewith.


In this connection, it is submitted that since, the Gosthani River mouth, Bheemili area does not come under the direct control of forest department, the Conservator of Forests, Visakhapatnam is requested to address a letter to the Pri. Chief Conservator of Forests, Visakhapatnam to take necessary action to bring to the notice of the standing counsel for Government of Andhra Pradesh, Hon'ble National Green Tribunal, Southern Zone Bench at Chennai to issue instructions the District Administration, Visakhapatnam for taking necessary action on the above issue as the District Magistrate, Visakhapatnam is one of the respondents.

This is submitted to the Conservator of Forests, Visakhapatnam for favour of information and to the address the Pri. Chief Conservator of forests, A.P. Mangalagiri for necessary action.

Encl:- as above.

Yours faithfully,


District Forest Officer (FAC)
Visakhapatnam


22/11/24

Deputy
dt 22/11/2024

Report on the Hon'ble NGT orders dated.23.07.2024 in Original Application no. 256 of 2024 (SZ) in earlier O.A.no.881/2024 (PB) Suo-Moto news item published in New Indian Express, dated.25.06.2024 titled "Rapid urbanisation takes toll on Mangroves in Vizag"

It is submitted that in O.A.No.881/2024 was registered Suo-Moto by Hon'ble NGT Principal Bench, New Delhi based on the news item published in New Indian Express dated 25.06.2024 titled "Rapidurbanisation takes toll on Mangroves in Vizag". In this connection, the District Forest Officer has requested the Collector and District Magistrate vide Rc.no.882/2024/S2, dated. 02.08.2024 to constitute a committee to look into the order of Hon'ble NGT and submit a detailed report along with action taken for filing remarks before the Hon'ble National Green Tribunal and has been transferred to Hon'ble NGT, Southern Zone, Chennai and numbered as O.A.no.256 of 2024.

It is submitted that, a letter was also addressed to the Forest Range Officer, Visakhapatnam with instructions to issue a notice to the VPA authorities on the destruction of mangroves and which highly degraded patch in VPA area of inspect the mangrove areas in Visakhapatnam District and submit report on the measures to be taken to improve the Mangrove.

It is submitted that, since, the affected areas are all located outside the forest area and as the forest department has no direct control over the mentioned areas, the issue was addressed to the Collector & District Magistrate, Visakhapatnam to constitute a committee. Accordingly, the Collector & District Magistrate, Visakhapatnam has constituted a committee under the Chairmanship of District Forest Officer, Visakhapatnam and other members to access the impact of rapid urbanization and industrialization on the Mangrove stretches in Visakhapatnam. The committee members along with theVPA representatives has inspected the areas on Mangrove stretches in Meghadrigedda drain and Gosthani river mouth near Bheemunipatnam on 23.08.2024 and 24.08.2024 and certain observations have been made by the committee.The committee members of other departments have submitted their report on the above subject which is enclosed herewith.

Further on a detailed study, the committee has observed the following observations:

Importance of mangroves:

It is submitted that, Mangroves are listed under CRZ-1A as part of Coastal Regulatory Zone guidelines 2018 issued by the Government of India implying they are accorded highest protection status and cannot be destroyed.

It is submitted that, Mangroves are harbour for the rich biodiversity and protect against the adverse impacts of tropical cyclones and associated wave surges.

It is submitted that, Mangroves has the ability to sequester highest amount of carbon from atmosphere which is at least four to five times the amount sequestered by any other forest ecosystem.

It is submitted that, Mangroves constitute a major part of the Blue Carbon and positively impact the marine ecosystem too in a profound manner.

Assessment of Impact

1. Extent of Degradation:

It is submitted that, there has been a significant reduction in mangrove coverage near the Meghadrigedda downstream and opposite Solar Power Plant of VISAKHAPATNAM PORT AUTHORITY, one of the targeted areas, primarily attributed to road expansion and industrial expansion.

It is submitted that, the committee has observed Coal stacking within the last mangrove patch opposite the Solar Power Plant of VISAKHAPATNAM PORT AUTHORITY and filling mangrove potential areas with debris for land use in multiple locations.

It is submitted that, the Meghadrigedda drain and the Gosthani river mouth near Bheemunipatnam have been identified as critical areas where mangrove stretches are severely affected.

2. Ecological Consequences:

It is submitted that, the degradation of these mangrove ecosystems has resulted in reduced shoreline protection, leading to increased erosion and vulnerability to coastal hazards, especially near INS Dega bridge, VISAKHAPATNAM PORT AUTHORITY.

It is submitted that, there has been a notable decline in local biodiversity, impacting various species like *Ruddy shell ducks*, *Painted Storks*, *Sand pipers*, *Plovers*, *Terek Sandpiper*, *Sea gulls* and *Terns* that depend on mangroves for habitat and breeding during their winter migration. (ref: <https://ebird.org/hotspot/L6442143/bird-list>; <https://ebird.org/hotspot/L13947563/bird-list>; <https://ebird.org/hotspot/L6462785/bird-list>)

S. no	Location inspected by the committee	Potential reason of threat to mangroves at the location	Remarks/ Suggestions
1	Opposite Solar Power Plant of VPA	<ul style="list-style-type: none"> • Cutting of mangroves for road extension. • Coal stacking overlapping the existing mangrove patch. • Multiple channels of drainage running into the mangroves. 	<ul style="list-style-type: none"> • Identify potential areas of VPA to grow mangroves. • Close all diverting channels of drains and sewage and retain natural backwater channels within the mangroves which helps in regeneration of mangroves.
2	INS Dega Bridge	<ul style="list-style-type: none"> • Deposition of debris on existing mangroves. • Severe erosion of banks due to <i>Prosopis juliflora</i> growth. • Destruction of habitat due to road extension activities. 	<ul style="list-style-type: none"> • Removal of <i>Prosopis juliflora</i> and introduction of native sand binders along the edges of Meghadrigedda downstream along with restoration of mangroves.
3	Bharat Petroleum Bridge	<ul style="list-style-type: none"> • <i>Prosopis juliflora</i> outgrowing mangroves. • Industrial waste/oil spilled into the water channel. 	<ul style="list-style-type: none"> • Removal of <i>Prosopis juliflora</i>. • Block the sewage channel running into the Meghadrigedda downstream.
4	Sardar Vallbbhai Patel Bridge	<ul style="list-style-type: none"> • Sewage water entering directly into the mangrove patches at multiple locations. • Debris accumulated by industries at mangrove adjacent locations. • Threat to habitat due to extension of railway track. 	<ul style="list-style-type: none"> • Provide separate drain channel for sewage afar from the mangrove vegetation within VPA. • Removal of debris along the stream of Meghadrigedda. • VPA shall ensure that no debris is further dumped near or in the adjoining mangrove areas of VPA. • Avoid further extension of railway tracks adjoining the mangrove patches of VPA.
5	Gosthani river mouth, Bheemili	<ul style="list-style-type: none"> • Extensive outgrowth of <i>Prosopis juliflora</i> in the natural mangrove habitat. • Reduced supply of freshwater from the upstream causing slow growth of mangrove species. 	<ul style="list-style-type: none"> • Immediate removal of <i>Prosopis juliflora</i>. • Provision of channels and sub channels for necessitating extensive mangrove growth and cover.

Table 1: threats and suggestions for the inspected locations by the committee**Suggested Remedial Measures:**

It is submitted that, the District Forest officer Visakhapatnam has submitted a Detailed Project Report (copy enclosed) to VISAKHA PORT AUTHORITY for improvement of mangroves addressing the importance of mangroves and which highly degraded patch in VISAKHA PORT AUTHORITY area a proposal for collaboration with Andhra Pradesh Forest Department for restoration and improvement of mangrove cover and submitted a Detailed Project Report to VISAKHA PORT AUTHORITY for improvement of mangroves. Hence, it was requested to take forward the proposal made by the Forest Department for rejuvenating the mangroves in Visakhapatnam.

To mitigate the adverse effects and revive the coastal mangroves in Visakhapatnam, the committee proposes the following remedial measures:

i. Mangrove Restoration:

- Identify the extent of mangrove patch in entire VISAKHA PORT AUTHORITY limits (including inspected locations and other areas adjacent to the channels, drains in and around the mangrove patch) and conserve the area.
- Implement a comprehensive reforestation program focused on the affected areas, particularly around the Meghadrigedda drain, mangrove patch opposite the Solar Power Plant of VISAKHA PORT AUTHORITY and Gosthani river mouth, Bheemili.
- Identify and subdue the entry of sewage and other drains into the mangrove patches within VISAKHA PORT AUTHORITY.
- Removal of *Prosopis juliflora* to promote growth of species of mangroves and their associates.
- Collaborate with local communities and environmental NGOs to ensure the success of reforestation efforts.

ii. Strict Regulation of Urban Expansion:

- Submit an EIA report and PBR report to help developing strategies to conserve and mitigate notable threats to mangroves.
- Enforce stringent regulations on urban and industrial expansion in proximity to mangrove ecosystems to prevent further degradation.
- Develop buffer zones around existing mangrove stretches to protect them from encroachment.

iii. Awareness and Education:

- Initiate public awareness campaigns highlighting the importance of mangroves for coastal protection and biodiversity.
- Engage with local schools and educational institutions to promote environmental stewardship among younger generations.

iv. Monitoring and Reporting:

- Establish a monitoring system to regularly assess the health of mangrove ecosystems in Visakhapatnam.
- Monitor and evaluate the seasonal migration in birds and their dependency within and around the mangrove patches to further develop their habitat.
- Submit quarterly reports to the concerned authorities to ensure transparency and accountability in the implementation of remedial Measures.

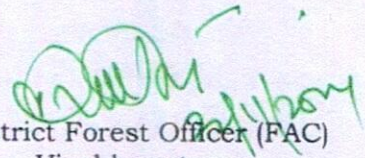
Suggestions:

- The practices above mentioned would help rejuvenate the mangroves within VISAKHA PORT AUTHORITY limits by providing protection against adverse impacts of tropical cyclones and associated wave surges.
- Will improve the quality of mangroves and enhances the greenery and biodiversity that also supports the marine ecosystem.
- Safeguard the last surviving mangrove patch of the city and provide potential habitats for winter migrants and various endangered bird species.
- Necessary actions would help display commitment of VISAKHA PORT AUTHORITY authorities towards sustainable development and strengthen fight against climate change.
- A 2023 study by the ICFRE-CEC identified 220 hectares of mangrove patches in the Visakhapatnam district, but these were not included in the Forest Survey of India report needs to be included in FSI report.

The committee strongly recommends immediate action to address the degradation of mangrove ecosystems in Visakhapatnam. The proposed measures, if implemented effectively, will not only restore the mangroves but also safeguard the region against future environmental challenges.

Action Taken:

- The Chairman, VPA, Visakhapatnam, Admiral Superintendent, Naval Dockyard, Visakhapatnam and CGM, HPCL, Visakhapatnam have been addressed to take suitable action on this issue and report compliance. Report awaited from the concerned authorities.
- The Forest Range Officer, Visakhapatnam has been addressed to issue notices to the concerned authorities and also to enquire thoroughly on the above issue by conducting site visits duly forming a committee with the staff. In turn the Forest Range Officer, Visakhapatnam has issued notices to the concerned authorities.
- A letter addressed to the Collector & District Magistrate, Visakhapatnam vide DFO, Visakhapatnam Rc.no.822/2024-S2, dt.28.08.2024 duly informing the observations and suggestions of the committee to take suitable action in this regard. Action taken report awaited from the District Administration.



District Forest Officer (FAC)
Visakhapatnam

Report on the Hon'ble NGT order dated. 23.07.2024 in Original Appeal no. 881/2024 Suo-Moto news item published in New Indian Express, dated.25.06.2024 titled "Rapid urbanisation takes toll on Mangroves in Vizag"

25 SEP 2024

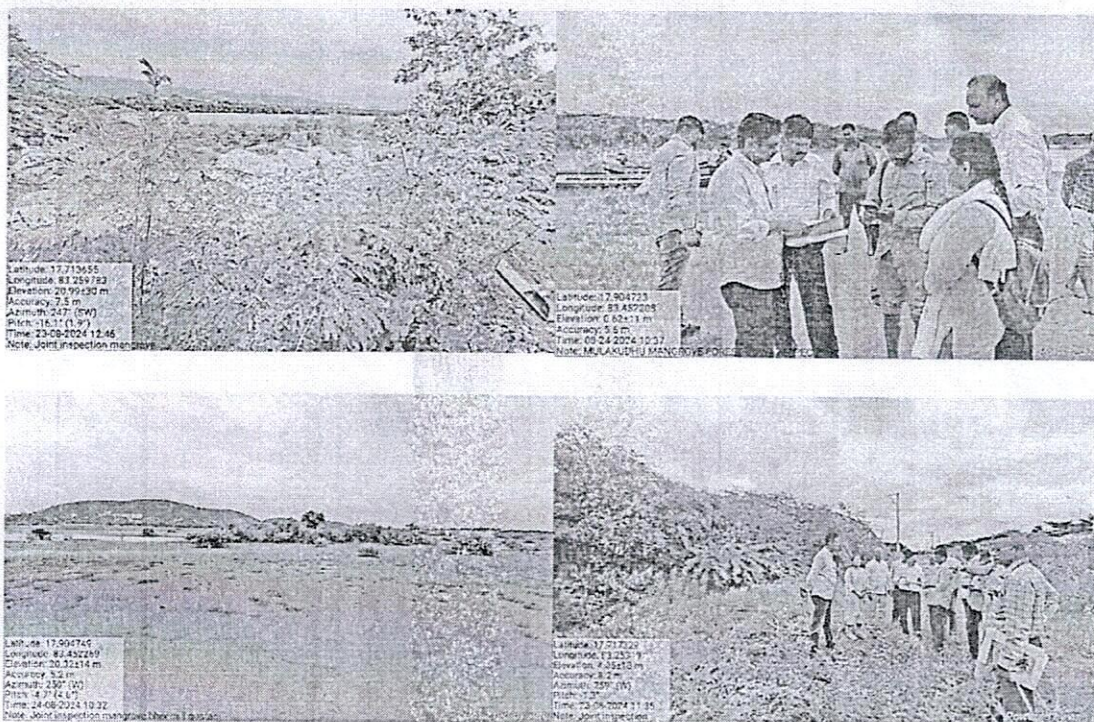
Forest Officer
VISAKHAPATNAM

It is to submit that O.A.No.881/2024 was registered Suo Motu by the Hon'ble NGT basing on the news item published in New Indian Express dated 25.06.2024 titled "**Rapid urbanisation takes toll on Mangroves in Vizag**". In this connection, The District Forest Officer has requested the Collector and District Magistrate, Visakhapatnam vide District Forest Officer, Visakhapatnam Rc.no. 882/2024/S2, dated. 02.08.2024 to constitute a committee to look into the order of Hon'ble NGT and submit a detailed report along with action taken for filing remarks before the Hon'ble National Green Tribunal.

Accordingly, a committee was constituted by the Collector and District Magistrate, Visakhapatnam under the Chairmanship of the District Forest Officer, Visakhapatnam and other members to assess the impact of rapid urbanization and industrialization on the Mangrove stretches in Visakhapatnam specifically in the areas of Meghadrigedda drain and Gosthani river mouth near Bheemunipatnam.

The District Forest Officer, Visakhapatnam has proposed a joint inspection with the committee on 23.08.2024 for assessing the impact of rapid urbanization and industrialization on the Mangrove stretches in Visakhapatnam, specifically in the areas of Meghadrigedda drain and Gosthani river mouth near Bheemunipatnam

Further, on 23.08.2024 and 24.08.2024 the committee members along with Visakha Port Authority (VPA) representatives have inspected the vulnerable stretches in Meghadrigedda drain and Gosthani river mouth near Bheemunipatnam. The committee has made the following observations:



Importance of mangroves:

Mangroves are listed under CRZ-1A as part of Coastal Regulatory Zone guidelines 2018 issued by the Government of India implying they are accorded highest protection status and cannot be destroyed.

Mangroves are harbour for the rich biodiversity and protect against the adverse impacts of tropical cyclones and associated wave surges.

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Mangroves constitute a major part of the Blue Carbon and positively impact the marine ecosystem too in a profound manner.

Assessment of Impact

1. Extent of Degradation:

There has been a significant reduction in mangrove coverage near the Meghadrigedda downstream and opposite Solar Power Plant of VISAKHA PORT AUTHORITY, one of the targeted areas, primarily attributed to road expansion and industrial expansion.

The committee has observed Coal stacking within the last mangrove patch opposite the Solar Power Plant of VISAKHA PORT AUTHORITY and filling mangrove potential areas with debris for land use in multiple locations.

The Meghadrigedda drain and the Gosthani river mouth near Bheemunipatnam have been identified as critical areas where mangrove stretches are severely affected.

2. Ecological Consequences:

The degradation of these mangrove ecosystems has resulted in reduced shoreline protection, leading to increased erosion and vulnerability to coastal hazards, especially near INS Dega bridge, VISAKHA PORT AUTHORITY.

There has been a notable decline in local biodiversity, impacting various species like Ruddy shelducks, Painted Storks, Sand pipers, Plovers, Terek Sandpiper, Sea gulls and Terns that depend on mangroves for habitat and breeding during their winter migration. (ref:

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S. no	Location inspected by the committee	Potential reason of threat to mangroves at the location	Remarks/ Suggestions
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3	Bharat Petroleum Bridge	<ul style="list-style-type: none"> • <i>Prosopis juliflora</i> outgrowing mangroves. • Industrial waste/oil spilled into the water channel ^{spillage} _{continuously} 	<ul style="list-style-type: none"> • Removal of <i>Prosopis juliflora</i>. • Block the sewage channel running into the Meghadrigedda downstream _{in coordn with Govt}
4	Sardar Vallbbhai Patel Bridge	<ul style="list-style-type: none"> • Sewage water entering directly into the mangrove patches at multiple locations. • Debris accumulated by industries at mangrove adjacent locations. • Threat to habitat due to extension of railway track. 	<ul style="list-style-type: none"> • Provide separate drain channel for sewage afar from the mangrove vegetation within VISAKHA PORT AUTHORITY. • Removal of debris along the stream of Meghadrigedda. _{within month} • VISAKHA PORT AUTHORITY shall ensure that no debris is further dumped near or in the adjoining mangrove areas of VISAKHA PORT AUTHORITY. • Avoid further extension of railway tracks adjoining the mangrove patches of VISAKHA PORT AUTHORITY.
5	Gosthani river mouth, Bheemili	<ul style="list-style-type: none"> • Extensive outgrowth of <i>Prosopis juliflora</i> in the natural mangrove habitat. • Reduced supply of freshwater from the upstream causing slow growth of mangrove species. 	<ul style="list-style-type: none"> • Immediate removal of <i>Prosopis juliflora</i>. • Provision of channels and sub channels for necessitating extensive mangrove growth and cover.

Table 1: threats and suggestions for the inspected locations by the committee

Suggested Remedial Measures:

Further it is to submit that the District Forest officer Visakhapatnam has submitted a Detailed Project Report to VISAKHA PORT AUTHORITY for improvement of mangroves addressing the importance of mangroves and which highly degraded patch in VISAKHA PORT AUTHORITY area a proposal for collaboration with Andhra Pradesh Forest Department for restoration and improvement of mangrove cover and submitted a Detailed Project Report to VISAKHA PORT AUTHORITY for improvement of mangroves. Hence, it

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To mitigate the adverse effects and revive the coastal mangroves in Visakhapatnam, the committee proposes the following remedial measures:

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- Identify the extent of mangrove patch in entire VISAKHA PORT AUTHORITY limits (including inspected locations and other areas adjacent to the channels, drains in and around the mangrove patch) and conserve the area. (*)
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- Engage with local schools and educational institutions to promote environmental stewardship among younger generations.

Suitable
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- Submit quarterly reports to the concerned authorities to ensure transparency and accountability in the implementation of remedial Measures.

Suggestions:

- The practices above mentioned would help rejuvenate the mangroves within VISAKHA PORT AUTHORITY limits by providing protection against adverse impacts of tropical cyclones and associated wave surges.
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- A 2023 study by the ICFRE-CEC identified 220 hectares of mangrove patches in the Visakhapatnam district, but these were not included in the Forest Survey of India report needs to be included in FSI report.

Conclusion:

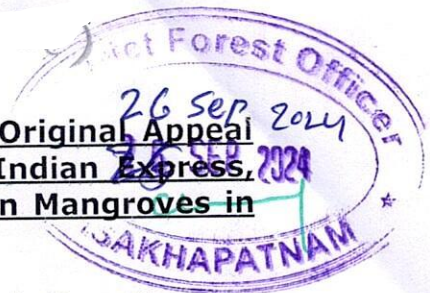
The committee strongly recommends immediate action to address the degradation of mangrove ecosystems in Visakhapatnam. The proposed measures, if implemented effectively, will not only restore the mangroves but also safeguard the region against future environmental challenges. VISAKHA PORT AUTHORITY shall ensure that there is no violation of the provisions of the Environment (Protection) Act, 1986, CRZ Rules 1991 and Forest (Conservation) Act, 1980.

This is submitted for favor of information and necessary action.



DFD VNRDA
VISAKHAPATNAM

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- Identify and subdue the entry of sewage and other drains into the mangrove patches within VISAKHA PORT AUTHORITY.
- Removal of *Prosopisjuliflora* to promote growth of species of mangroves and their associates.
- Collaborate with local communities and environmental NGOs to ensure the success of reforestation efforts.

ii. Strict Regulation of Urban Expansion:

- Submit an EIA report and PBR report to help developing strategies to conserve and mitigate notable threats to mangroves.
- Enforce stringent regulations on urban and industrial expansion in proximity to mangrove ecosystems to prevent further degradation.
- Develop buffer zones around existing mangrove stretches to protect them from encroachment.

iii. Awareness and Education:

- Initiate public awareness campaigns highlighting the importance of mangroves for coastal protection and biodiversity.
- Engage with local schools and educational institutions to promote environmental stewardship among younger generations.

iv. Monitoring and Reporting:

- Establish a monitoring system to regularly assess the health of mangrove ecosystems in Visakhapatnam.
- Monitor and evaluate the seasonal migration in birds and their dependency within and around the mangrove patches to further develop their habitat.
- Submit quarterly reports to the concerned authorities to ensure transparency and accountability in the implementation of remedial Measures.

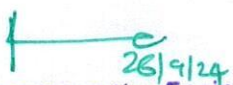
Suggestions:

- The practices above mentioned would help rejuvenate the mangroves within VISAKHA PORT AUTHORITY limits by providing protection against adverse impacts of tropical cyclones and associated wave surges.
- Will improve the quality of mangroves and enhances the greenery and biodiversity that also supports the marine ecosystem.
- Safeguard the last surviving mangrove patch of the city and provide potential habitats for winter migrants and various endangered bird species.
- Necessary actions would help display commitment of VISAKHA PORT AUTHORITY authorities towards sustainable development and strengthen fight against climate change.
- A 2023 study by the ICFRE-CEC identified 220 hectares of mangrove patches in the Visakhapatnam district, but these were not included in the Forest Survey of India report needs to be included in FSI report.

Conclusion:

The committee strongly recommends immediate action to address the degradation of mangrove ecosystems in Visakhapatnam. The proposed measures, if implemented effectively, will not only restore the mangroves but also safeguard the region against future environmental challenges. VISAKHA PORT AUTHORITY shall ensure that there is no violation of the provisions of the Environment (Protection) Act, 1986, CRZ Rules 1991 and Forest (Conservation) Act, 1980.

This is submitted for favor of information and necessary action.


 Deputy Executive Engineer
 Water Resources Department
 Head Quarters Sub Division
 Visakhapatnam

S2

Note : - Bharat Petroleum Bridge

Recommendations :-

- Zero oil spills into the channel
- Pollution Board should monitor by regular sampling of the water released from industries.

G. Vijaya

Joint Director of Fisheries (FAC),
Visakhapatnam.

Report in compliance with the Hon'ble NGT, Principal Bench, New Delhi vide Order dated 23.07.2024 in Original Application No. 881 of 2024 on the News Item titled "Rapid urbanization takes toll on Mangroves in Vizag" which appeared in The New Indian Express dated 25.06.2024.

It is to submit that the Hon'ble NGT, Principal Bench, New Delhi registered *suo-motu case* based on the News Item titled ""Rapid urbanization takes toll on Mangroves in Vizag" which appeared in The New Indian Express dated 25.06.2024.

The matter relates to significant reduction in the Mangrove stretches in Vishakhapatnam in Andhra Pradesh due to rapid urbanization and industrialization. As per the article, these vital ecosystems have been reduced to a few small patches and are now threatened by ongoing development. The article highlights the crucial role mangroves play in protecting shorelines from erosion and providing habitat for diverse wildlife.

The article alleges that historically extensive, these mangroves now exist in small, endangered patches. The Meghadri Gedda, a rain-fed drain flowing into the Bay of Bengal near Visakhapatnam harbour which once supported a vibrant mangrove ecosystem, has been particularly affected, with construction debris posing a significant threat. Furthermore, it is stated that in the 1990s, mangroves stretched from the Naval Dockyard Bridge to areas like Sheela Nagar and Gnanapuram, reaching heights up to 5 metres. However, due to construction and infrastructure development, their size has drastically reduced. By 2008, their height had diminished to 3 metres, and the canopy also shrank.

The article further alleges that the mangrove patch near the Gosthani river mouth in Bheemili is also diminished and awaits replantation approval. A 2023 study by the Indian Council of Forestry Research and Education-Coastal Ecosystem Centre (ICFRE-CEC) identified approximately 220 hectares of mangrove patches in the Visakhapatnam district, but these were not included in the Forest Survey of India report. It is stated that the decline in mangrove habitats has also impacted bird species. Near-threatened species like the Eurasian curlew, Oriental darter, and black-headed ibis have seen significant declines. The fishing community, which relies on the mangrove ecosystem for fish production is also facing economic and livelihood challenges.

The Hon'ble NGT, impleaded following respondents in this matter and requested the southern zone bench for appropriate further action and transferred the OA to southern zone bench, Chennai. Copy of the Hon'ble NGT order dated 23.07.2024 in O.A. No. 881 of 2024 (PB) is submitted as Annexure-I.

- (i) Ministry of Environment, Forest & Climate Change, Through its Regional Office, Integrated Regional Office (Vijayawada), Vijayawada Green House Complex, Gopalareddy Road, Vijayawada, Andhra Pradesh 520010
- (ii) Principal Chief Conservator of Forest, Andhra Pradesh, Aranya Bhavan, P.V.S. Land Mark, Near APIIC Towers, Mangalagiri, Guntur District, Andhra Pradesh 522503
- (iii) Chief Wildlife Warden, Andhra Pradesh, Aranya Bhawan, K.M. Munshi Road, Nagarampalem, Guntur, Andhra Pradesh 522004
- (iv) National Coastal Zone Management Authority, Through its Chairperson, Indira Paryavaran Bhawan, Jorbagh Road, New Delhi - 110 003
- (v) Andhra Pradesh Coastal Zone Management Authority, Through its Chairman, D.No. 33-26-14 D/2, Near Sunrise Hospital, Chalamavari Street, Kasturibaipet, Vijayawada -520010
- (vi) District Magistrate, Visakhapatnam, National Informatics Centre, Collectorate, Maharani-peta, Visakhapatnam-530002

Accordingly, the Collector & District Magistrate, Visakhapatnam district vide proceedings dated 14.08.2024 has constituted a committee with the following members:

1.	District Forest Officer, Forest Department, Visakhapatnam	Chairman
2.	Revenue Divisional Officer, Visakhapatnam	Member
3.	Municipal Commissioner, Greater Visakhapatnam Municipal Corporation, Visakhapatnam	Member
4.	VC & MD, Visakhapatnam Metropolitan Region Development Authority, Visakhapatnam	Member
5.	Joint Director, Fisheries Department, Visakhapatnam	Member
6.	Superintending Engineer, Department of Irrigation, Visakhapatnam.	Member
7.	Environmental Engineer, Regional Office, A.P. Pollution Control Board, Visakhapatnam	Member

Further, the committee was directed to submit detailed report duly mentioning remedial measures/plan of action on the following so as to submit the report to the Hon'ble NGT:

- i. Assessing the impact on the Mangrove stretches in Visakhapatnam due to rapid urbanization / industrialization as alleged in the news article, especially in the following areas a) Meghadrigedda drain & b) Gosthani river mouth near Bheemili.
- ii. Suggesting remedial measures / plan of action to revive the coastal mangroves in the identified stretches.

Copy of the Collector & District Magistrate, Visakhapatnam district vide proceedings dated 14.08.2024 is submitted as Annexure-II.

The District Forest officer, IFS requested the committee members vide letter Rc. No. 822/2024-S2 dated 19.08.2024, to attend the joint survey on 23.08.2024 to visit 04 locations viz., 1. Visakhapatnam Port Trust 2. Mulakuddu village, Bheemunipatnam Mandal 3. Meghadrigedda drain flowing into Bay of Bengal and 4. Naval Dockyard bridge to areas like Sheelanagar and Gnanapuram to submit detail report to the Collector & District Magistrate. Copy of the DFO letter dated 19.08.2024 submitted as Annexure-III.

As per the proceedings, the committee members along with the VPA representatives inspected the Meghadrigedda drain on 23.08.2024 and Gosthani river mouth near Bheemili on 24.08.2024.

The committee visited port flyover way followed by BPCL bridge, naval dockyard bridge, RCL On 23.08.2024 and observed the following:

1. The team has walk through the mangrove patch available and found that there is significant reduction in the area along the Meghadrigedda downstream and opposite Solar Power Plant of VPA, one of the targeted areas, primarily attributed to road expansion and industrial expansion.
2. Multiple channels of drainage running into the mangrove zones.
3. Deposits of debris on existing mangroves zones.
4. It is observed that the wild growth of prosopisjuliflora (Tuma Tree) is growing in the mangrove zones and causing damage to the ecosystems extensively. Hence, it

should be managed and allow the mangroves by introducing them in an appropriate way.

5. Oil spillages in the water channels were observed near BPCL bridge.

On the next day, the committee visited Gosthani river mouth near Bheemilion 24.08.2024 and observed the following:

1. Reduction in supply of fresh water from the upstream causing slow growth of mangrove species.
2. Extension of existing mangrove habitat.

Mangroves normally present in a esture region all along cost where rivers join the sea. They are the protectors of the hinter lands with hard wood spread over and resist the storms & cyclones. They constitute a major part of the Blue Carbon and positively impact the marine ecosystem too in a profound manner.

The committee recommended the following remedial measures to minimize the reduction of mangrove stretch in Visakhapatnam and to protect the existing mangrove patches:

1. Strict instruction shall be issued not to allow any further development in that area.
2. Preventing access to the mangrove zones.
3. Preventing cutting of mangroves for any further development activities.
4. Adopting methods for restoration of the common species of mangroves growing in that habitat.
5. Developing a bird nesting facilities & regeneration of the species which provide the nesting environment.
6. Conducting ecological study by assigning to the institute viz., Dr. M.S. Swaminathan which has vast experience in regeneration of coastal areas specially in east coast.
7. In the latter periods, it can be transformed into a tourist spots which the state Forest Department has developed into a walk through mangrove like Koringa at Kakinada.

8. Industries around the mangrove stretch has to be more responsible for ensuring the Environmental rules and regulations. They shall not discharge any residues / effluents into Meghadri gedda drain.
9. Regulatory authority shall protect & conserv them in the part of the vicinity/ premises.
10. The industry who are abutting mangroves patch should take responsibility of regenerating the mangrove forest in order to protect the hinter lands from the cyclones and heavy storms.
11. The Mangroves also known to occur in the salinities of 5-20 ppm the drains brining the sewage & treated effluents of industries if any should bot allow into the drains passing the mangrove area / Meghadri gedda.

It is submitted that, the above Suo Motu (O.A. No. 881 of 2024 (PB)) case has been transferred to Southern Zone Beach, Chennai and renumbered as O.A No. 256 of 2024 (SZ) vide order dated 24.09.2024 and the matter hearing posted on 26.11.2024. Copy of the order dated 24.09.2024 is submitted as Annexure- IV.

This Submitted for favor of information and necessary action.



Environmental Engineer & Member convenor, DLC
Regional Office, APPCB

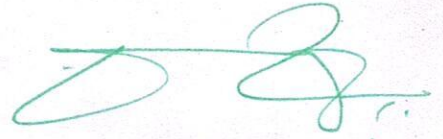
GOVERNMENT OF ANDHRA PRADESH
FOREST DEPARTMENT

Rc. No. 137/2024
Dated: 01-09 -2024


Office of the Forest Range Officer,
Visakhapatnam.

NOTICE

It is to inform that during the field inspection conducted by the undersigned it has come to the notice that large destruction of the mangrove plantation taken place existing in Port area near Gajuwaka which is the violation of APWALTA Act,2002 and Rules 2004 and Forest Conservation Act, 1980. You are well aware that the mangrove forest in the coastal area of the joint Visakhapatnam, Vizianagaram and Srikakulam districts exists only in the Port area which we have to protect and maintain where as you have taken the action by destruction of the mangrove forests under your jurisdiction. Hence you are directed to submit your explanation for the removal of the mangrove forests which is rare of the rarest in Visakhapatnam, Vizianagaram and Srikakulam Districts and for violation of the APWALTA Act,2002 and Rules 2004 and Forest Conservation Act, 1980 **within two weeks** from the date of receipt of notice failing which action shall be initiated as per the rules and norms of A.P.Forest Act, 1967 otherwise necessary action as deemed fit will be initiated against you.



Forest Range Officer,
Visakhapatnam.


01/09/2024

To
Executive Engineer ,
Visakhapatnam Port Authority
Visakhapatnam

GOVERNMENT OF ANDHRA PRADESH
FOREST DEPARTMENT

Rc.no. 822/2024/S2
Date. 11.06.2024.

Office of the District Forest Officer,
Visakhapatnam.

From

Sri Anant Shankar, IFS.,
District Forest Officer,
Visakhapatnam.

To

The Chairman,
Visakhapatnam Port Authority,
Visakhapatnam.

The Admiral Superintendent
Naval Dockyard,
Visakhapatnam.

The Chief General Manager,
Hindustan Petroleum Corporation Ltd.,
Visakhapatnam.

Sir,

Sub: Public Grievance on declining of mangrove forest cover in Visakhapatnam near Naval Dockyard: MOEFAAF/E/2023/0002692 – Forwarding of grievance for submission of report - Regarding.

Ref: 1. GoI, Ministry of EFS&T, New Delhi, F.No. 100050/02/2022-SCMD, dt. 30.11.2023.
2. PCCF & HoFF, AP, Mangalagiri Rc.no. EFS02-15041/3/2024-CA-1, dt. 22.05.2024.
3. CCF, Visakhapatnam Rc.no 2745/2024/TO, dt. 04.06.2024.
4. DFO, Visakhapatnam Rc.no. 822/2024/S2, dt. 24.05.2024.
5. PCCF (WL), AP, Mangalagiri mail, dated. 11.06.2024.

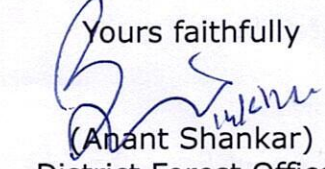
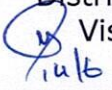
** ** *

Kind attention is solicited to the reference 1st cited, wherein the GoI, MoEF&CC, Sustainable Coastal Management Division, New Delhi has communicated the public grievance submitted by Sri A.V.Rakesh on declining of mangrove forest cover in Visakhapatnam near Naval Dockyard and instructions to go through the public grievance and submit remarks with supporting documents. A copy of the grievance is enclosed alongwith.


I wish to bring to your kind attention that the said area is not under the control of the Forest Department.

Therefore, It is to inform that the land in the question I sunder the control of Indian Navy, Visakhapatnam Port Authority (VPA) and Hindustan Petroleum Corporation Ltd. Hence, it is requested to take bestow your personal attention on

this issued and necessary action on the public grievance and furnish report to MoEF&CC, GoI.

Yours faithfully

(Anant Shankar)
District Forest Officer
Visakhapatnam


Copy to the Chief Conservator of Forests, Visakhapatnam for faovur of information.


జారీ చేయు సమస్త
జిల్లా అటవీశాఖ కార్యాలయాల
విశాఖపట్నం

**GOVERNMENT OF ANDHRA PRADESH
FOREST DEPARTMENT**

Rc.no.822/2024-S2
Dated: 28-08-2024.

Office of the District Forest Officer,
Visakhapatnam

From:
Sri Ch.Dharmarakshit,
District Forest Officer (FAC),
Visakhapatnam
Sir,

To
The Collector & District Magistrate,
Visakhapatnam.

Sub: Andhra Pradesh Forest Department-Wildlife - order passed in Original- Application No.881/2024-Suo-Moto news item published in New Indian Express, dated.25.06.2024 titled "Rapid urbanisation takes toll on Mangroves in Vizag"- Report submitted-Regarding.

- Ref: 1. Hon'ble NGT order in OA.No.881/2024,Dt.23.07.2024.
2. District Forest Officer, Visakhapatnam, Rc.No.822/2024/S2 Dt.02.08.2024.
3. Collector and District Magistrate, Visakhapatnam, Proceedings E.OfficeFile No. APPC/2/2024-EE(PCB)-PCBVSP, dated 14-08-2024.
4.District Forest Officer, Visakhapatnam, Rc.No.822/2024/S2, Dt.19.08.2024.

It is to submit that in obedience to the references cited, a report compliance is called for basing on the order passed in reference 3rd cited in O.A.No.881/2024 by Hon'ble NGT which has taken Suo Moto basing on the news item published in New Indian Express dated 25.06.2024 titled " Rapid urbanisation takes toll on Mangroves in Vizag" . In the reference 2nd cited a letter was addressed to the Collector and District Magistrate, Visakhapatnam requesting to issue proceedings for formation of a committee to look into the order of Hon'ble NGT and submit a detailed report along with action taken to the District Collector, Visakhapatnam for filing remarks before the Hon'ble National Green Tribunal.

In the reference 4th cited a committee was constituted by the Collector and District Magistrate, Visakhapatnam under the Chairmanship of the District Forest Officer, Visakhapatnam, and other members to assess the impact of rapid urbanization and industrialization on the Mangrove stretches in Visakhapatnam, specifically in the areas of Meghadrigedda drain and Gosthani

river mouth near Bheemunipatnam. These areas are not under the control of Forest department and not notified under A.P. Forest Act, 1967.

In obedience to the proceedings of Collector and District Magistrate, Visakhapatnam in reference 3rd cited, the District Forest Officer Visakhapatnam has proposed a joint inspection with the committee on 23.08.2024 for assessing the impact of rapid urbanization and industrialization on the Mangrove stretches in Visakhapatnam, specifically in the areas of. Meghadrigedda drain and Gosthani river mouth near Bheemunipatnam. Further, on 23.08.204 and 24.08.2024 the committee members along with VPA representatives has inspected the Mangrove stretches in Meghadrigedda drain and Gosthani river mouth near Bheemunipatnam. Upon a detailed study, the committee has observed the following observations:

Importance of mangroves:

Mangroves are listed under CRZ-1A as part of Coastal Regulatory Zone guidelines 2018 issued by the Government of India implying they are accorded highest protection status and cannot be destroyed.

Mangroves are harbour for the rich biodiversity and protect against the adverse impacts of tropical cyclones and associated wave surges.

Mangroves has the ability to sequester highest amount of carbon from atmosphere which is at least four to five times the amount sequestered by any other forest ecosystem.

Mangroves constitute a major part of the Blue Carbon and positively impact the marine ecosystem too in a profound manner.

Assessment of Impact

1. Extent of Degradation:

There has been a significant reduction in mangrove coverage near the Meghadrigedda downstream and opposite Solar Power Plant of VPA, one of the targeted areas, primarily attributed to road expansion and industrial expansion.

The committee has observed Coal stacking within the last mangrove patch opposite the Solar Power Plant of VPA and filling mangrove potential areas with debris for land use in multiple locations.

The Meghadrigedda drain and the Gosthani river mouth near Bheemunipatnam have been identified as critical areas where mangrove stretches are severely affected.

2. Ecological Consequences:

The degradation of these mangrove ecosystems has resulted in reduced shoreline protection, leading to increased erosion and vulnerability to coastal hazards, especially near INS Dega bridge, VPA.

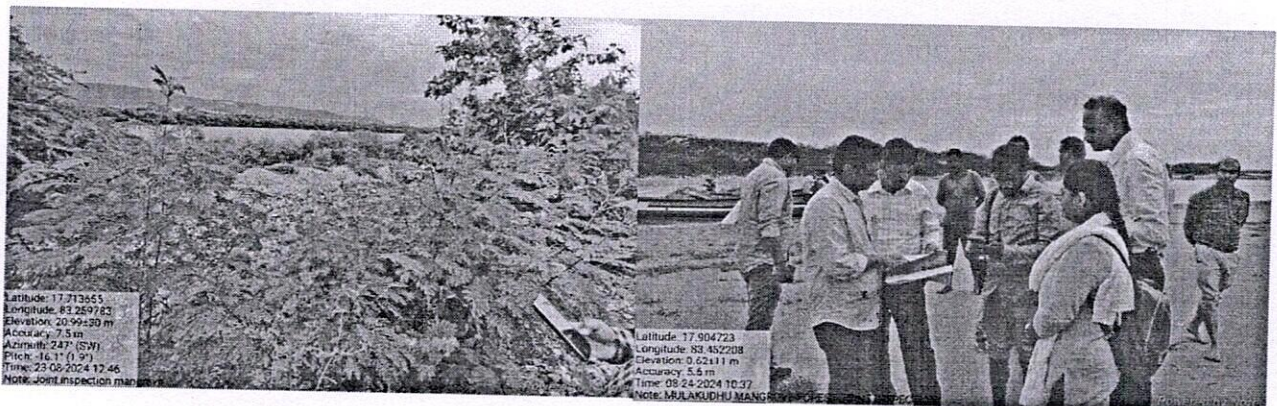
There has been a notable decline in local biodiversity, impacting various species like Ruddy shelducks, Painted Storks, Sand pipers, Plovers, Terek Sandpiper, Sea gulls and Terns that depend on mangroves for habitat and breeding during their winter migration.

(ref:<https://ebird.org/hotspot/L6442143/bird-list>;
<https://ebird.org/hotspot/L13947563/bird-list>;
<https://ebird.org/hotspot/L6462785/bird-list>)

S. n o.	Location inspected by the committee	Potential reason of threat to mangroves at the location	Remarks/ Suggestions
1	Opposite Solar Power Plant of VPA	Cutting of mangroves for road extension. Coal stacking overlapping the existing mangrove patch. Multiple channels of drainage running into the mangroves.	<ul style="list-style-type: none"> Close all diverting channels of drains and sewage and retain natural backwater channels within the mangroves which helps in regeneration of mangroves. Identify potential areas of VPA to grow mangroves in addition to protecting this patch.
2	INS Dega Bridge	Deposition of debris on existing mangroves. Severe erosion of banks due to <i>Prosopis juliflora</i> growth. Destruction of habitat due to road extension activities.	Removal of <i>Prosopis juliflora</i> and introduction of native sand binders along the edges of Meghadrigedda downstream along with restoration of mangroves.
3	Bharat Petroleum Bridge	<i>Prosopis juliflora</i> outgrowing mangroves. Industrial waste/oil	Removal of <i>Prosopis juliflora</i> . Block the sewage

		spillage into the water channel continuously.	channel running into the Meghadrigedda downstream in coordination with downstream.
4	Sardar Vallbbhai Patel Bridge	Sewage water entering directly into the mangrove patches at multiple locations. Debris accumulated by industries at mangrove adjacent locations. Threat to habitat due to extension of railway track.	Provide separate drain channel for sewage afar from the mangrove vegetation within VPA. Removal of debris along the stream of Meghadrigedda within a month. VPA shall ensure that no debris is further dumped near or in the adjoining mangrove areas of VPA. Avoid further extension of railway tracks adjoining the mangrove patches of VPA.
5	Gosthani river mouth, Bheemili	Extensive outgrowth of <i>Prosopis juliflorain</i> the natural mangrove habitat. Reduced supply of freshwater from the upstream causing slow growth of mangrove species.	Immediate removal of <i>Prosopis juliflora</i> within a stipulated time. Provision of channels and sub channels for necessitating extensive mangrove growth and cover.

Bheemunipatnam. The committee has made the following observations:



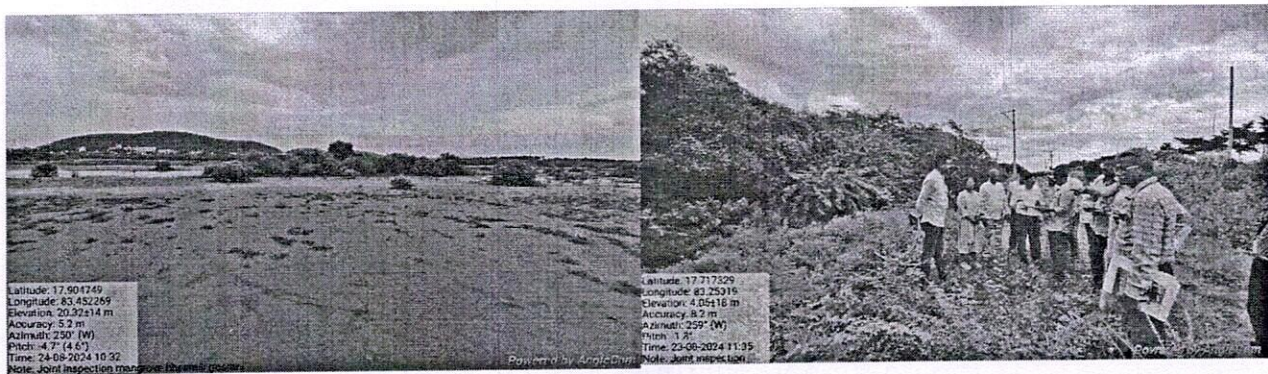


Table 1: threats and suggestions for the inspected locations by the committee

Suggested Remedial Measures:

Further it is to submit that the District Forest officer Visakhapatnam in the reference 7th cited has submitted a Detailed Project Report to VPA for improvement of mangroves addressing the importance of mangroves and which highly degraded patch in VPA area a proposal for collaboration with Andhra Pradesh Forest Department for restoration and improvement of mangrove cover and submitted a Detailed Project Report to VPA for improvement of mangroves. Hence, it is requested to take forward the proposal made by the Forest Department for rejuvenating the mangroves in Visakhapatnam a DPR is enclosed herewith.

To mitigate the adverse effects and revive the coastal mangroves in Visakhapatnam, the committee proposes the following remedial measures:

i. Mangrove Restoration:

- Identify the extent of mangrove patch in entire VPA limits (including inspected locations and other areas adjacent to the channels, drains in and around the mangrove patch) and conserve the area.
- Implement a comprehensive reforestation program focused on the affected areas, particularly around the Meghadrigedda drain, mangrove patch opposite the Solar Power Plant of VPA and Gosthani river mouth, Bheemili.
- Identify and subdue the entry of sewage and other drains into the mangrove patches within VPA.

- Removal of *Prosopis juliflora* to promote growth of species of mangroves and their associates.
- Collaborate with local communities and environmental NGOs to ensure the success of reforestation efforts.

ii. Strict Regulation of Urban Expansion:

- Submit an EIA report and PBR report to help developing strategies to conserve and mitigate notable threats to mangroves.
- Enforce stringent regulations on urban and industrial expansion in proximity to mangrove ecosystems to prevent further degradation.
- Develop buffer zones around existing mangrove stretches to protect them from encroachment.

iii. Awareness and Education:

- Initiate public awareness campaigns highlighting the importance of mangroves for coastal protection and biodiversity.
- Engage with local schools and educational institutions to promote environmental stewardship among younger generations.

iv. Monitoring and Reporting:

- Establish a monitoring system to regularly assess the health of mangrove ecosystems in Visakhapatnam.
- Monitor and evaluate the seasonal migration in birds and their dependency within and around the mangrove patches to further develop their habitat.
- Submit quarterly reports to the concerned authorities to ensure transparency and accountability in the implementation of remedial Measures.

Suggestions:

- The practices above mentioned would help rejuvenate the mangroves within VPA limits by providing protection against adverse impacts of tropical cyclones and associated wave surges.
- Will improve the quality of mangroves and enhances the greenery and biodiversity that also supports the marine ecosystem.

- Safeguard the last surviving mangrove patch of the city and provide potential habitats for winter migrants and various endangered bird species.
- Necessary actions would help display commitment of VPA authorities towards sustainable development and strengthen fight against climate change.
- A 2023 study by the ICFRE-CEC identified 220 hectares of mangrove patches in the Visakhapatnam district, but these were not included in the Forest Survey of India report needs to be included in FSI report.

Conclusion:

The committee strongly recommends immediate action to address the degradation of mangrove ecosystems in Visakhapatnam. The proposed measures, if implemented effectively, will not only restore the mangroves but also safeguard the region against future environmental challenges. VPA shall ensure that there is no violation of the provisions of the Environment (Protection) Act, 1986, CRZ Rules 1991 and Forest (Conservation) Act, 1980.

We kindly request the Hon'ble National Green Tribunal to consider the recommendations provided in this report and to direct the relevant authorities for timely implementation.

This Submitted for favor of information and necessary action.

Encl: Detailed Project Report (DPR)
For restoration of mangroves enclosed.

Yours faithfully,

Ch. Dharmarakshit 28/8/2024
(Ch. Dharmarakshit)
District Forest Officer (FAC),
Visakhapatnam.

Copy Submitted to the Chief Conservator of Forests, Visakhapatnam for favor of information and necessary action.