

BEFORE THE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

Original Application No. 239/2024

News Item titled "*What challenges are Kashmiri Wetlands Facing?*"
appearing in Kashmir Life dated 02.02.2024.

INDEX

S.No.	Particulars	Page Nos.
1.	Additional Short Affidavit in compliance of Hon'ble Tribunal's Order dated 23.12.2024	1-3
2.	Annexure/R5/1- order dated 11.12.2024 passed by Hon'ble Supreme Court in the matter of Anand Arya vs. Union of India; WP(C) No. 304/2018.	4-20
3.	Annexure/R5/2- Affidavit dated 24.03.2025 filed before the Hon'ble Supreme Court in compliance of order dated 11.12.2024.	21-68
4.	Annexure/R5/3- Decadal wetland inventory and change analysis of Jammu & Kashmir	69

DATE: 17/04/2025

PLACE: New Delhi

Charu Singhal

Charu Singhal

Advocate

Counsel for Respondent No.5.

MOEF&CC

Chamber No.228, Setalvad Block

Supreme Court of India

New Delhi-110001

Mob. 9810720565

Email: charu_kaki@yahoo.com

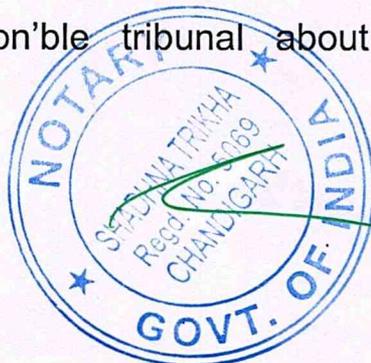
BEFORE THE NATIONAL GREEN TRIBUNAL**PRINCIPAL BENCH, NEW DELHI****Original Application No. 239/2024**

News Item titled "*What challenges are Kashmiri Wetlands Facing?*" appearing in Kashmir Life dated 02.02.2024.

**Additional Affidavit on behalf of Ministry of Environment, Forest &
Climate Change, Regional Office- Chandigarh**

I, Dr. K.M. Selvan S/o Muthu Kanaga Raj, aged about 42 years, presently working as Scientist 'E' at the Ministry of Environment, Forest & Climate Change (MoEF&CC), Integrated Regional Office, Bays No. 24-25, Sector 31 A, Dakshin Marg, Chandigarh – 160030, do hereby solemnly affirm and declare on oath as under : -

1. That, I am, the above-named Deponent, authorized and well conversant with the facts and circumstances of the present case and thus competent to swear the present affidavit.
2. It is humbly submitted that the answering respondent has filed an affidavit in the present matter in September, 2024, inter-alia, apprising the Hon'ble tribunal about the steps taken by the

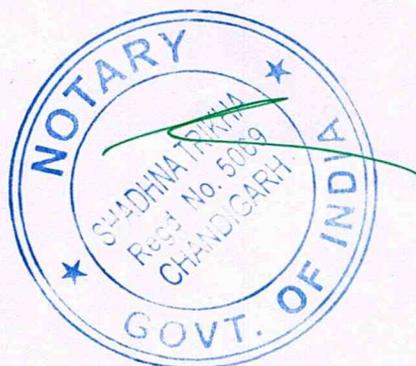


Signature

respondent Ministry in conservation and management of five Ramsar Sites in the Union Territory of Jammu & Kashmir.

3. That, vide order dated 23.12.2024, the Hon'ble Tribunal directed the respondent Ministry to submit the complete details of the wetlands in respect of the Jammu & Kashmir.
4. That, it is pertinent to mention that the Hon'ble Supreme Court of India vide order dated 11.12.2024, in the matter of Anand Arya vs. Union of India; WP(C) No. 304/2018, observed that ***"Prior to 2017, the figures given by ISRO regarding the number of wetlands in India having an area more than 2.25 Hectares was 2,01,503. The latest ISRO data, which is of the year 2021, shows that this figure has now increased to 2,31,195"***, and further, inter-alia, directed that *each of the State/UT Wetland Authorities shall complete ground truthing as well as the demarcation of wetland boundaries of each of the Wetland which have been identified for their State by Space Application Centre Atlas (SAC Atlas), 2021 as expeditiously as possible, but definitely within a period of three months from 11.12.2024. In compliance of the same, an Additional Affidavit has been filed on 24.03.2025 before the Hon'ble Supreme Court of India.*

Signature



The order dated 11.12.2024 and additional Affidavit dated 24.03.2025 are annexed as **Annexure/R5/1** and **Annexure/R5/2**, respectively.

5. That, as on 22.03.2025, based on the data provided by the Jammu & Kashmir in reference to the aforementioned Hon'ble Supreme Court matter and information available with the Ministry, a total of 404 wetlands are located in the Union Territory of Jammu & Kashmir. Of these, ground truthing for 227 wetlands and boundary demarcation for 82 Wetlands have been reported to be completed. The decadal wetland inventory and change analysis of Jammu & Kashmir is annexed as **Annexure/R5/3**.

6. In view of the aforesaid, the Hon'ble Tribunal may pass any order(s) as it deems appropriate.

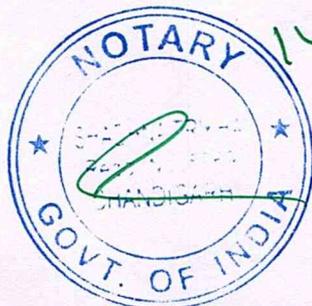
[Signature]
DEPONENT

VERIFICATION

Verified at Chandigarh on the 16th April, 2025 that the contents of

डॉ. के. मुथमिज सेल्वन/Dr. K. Muthamizh Selvan
वैज्ञानिक 'ई'/Scientist 'E'
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest and Climate Change
क्षेत्रीय कार्यालय, चंडीगढ़/Regional Office, Chandigarh

Paragraphs of the aforesaid affidavit are true and correct to the best of my knowledge and belief and nothing material has been suppressed or concealed therein.



14738
~~ATTESTED AS IDENTIFIED~~
SHADHNA TRIKHA
NOTARY, Chandigarh
16/4/25

[Signature]
DEPONENT

डॉ. के. मुथमिज सेल्वन/Dr. K. Muthamizh Selvan
वैज्ञानिक 'ई'/Scientist 'E'
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest and Climate Change
क्षेत्रीय कार्यालय, चंडीगढ़/Regional Office, Chandigarh

ITEM NO.6

COURT NO.13

SECTION PIL-W

S U P R E M E C O U R T O F I N D I A
R E C O R D O F P R O C E E D I N G S

Writ Petition(s)(Civil) No(s). 304/2018

ANAND ARYA

Petitioner(s)

VERSUS

UNION OF INDIA

Respondent(s)

(IA No. 131361/2018 - INTERVENTION APPLICATION)

WITH

W.P.(C) No. 230/2001 (PIL-W)
(I.A.NO.203606/2022 IN W.P.(C)NO.230/2001
IA No. 203606/2022 - INTERVENTION APPLICATION)W.P.(C) No. 302/2020 (PIL-W)
(FOR impleading party ON IA 172736/2024
FOR INTERVENTION/IMPLEADMENT ON IA 172736/2024
FOR APPROPRIATE ORDERS/DIRECTIONS ON IA 172737/2024
IA No. 172737/2024 - APPROPRIATE ORDERS/DIRECTIONS
IA No. 172736/2024 - INTERVENTION/IMPLEADMENT)

Date : 11-12-2024 These matters were called on for hearing today.

CORAM : HON'BLE MR. JUSTICE SUDHANSHU DHULIA
HON'BLE MR. JUSTICE AHSANUDDIN AMANULLAHFor Petitioner(s) Mr. Gopal Sankaranarayan, Sr. Adv.
Ms. Trisha Chandran, Adv.
Mr. Naresh Kumar, AORMr. Jayant Bhushan, Sr. Adv.
Ms. Reena George, Adv.
Mr. Rohit Kumar Singh, AOR
Mr. Amartya Bhushan, Adv.
Mr. Yojit Mehra, Adv.Ms. Anitha Shenoy, Sr. Adv.
Ms. Shibani Ghosh, AOR
Ms. Ayushma Awasthi, Adv.
Ms. Himanshi Gupta, Adv.For Respondent(s) Ms. Aishwarya Bhati, A.S.G.
Ms. Swarupma Chaturvedi, Sr. Adv.
Ms. Manisha Chava, Adv.
Mr. Gurmeet Singh Makker, AOR

Mr. Bhuvan Mishra, Adv.
Mr. Aman Sharma, Adv.
Ms. Sunita Sharma, Adv.
Mr. Rohan Gupta, Adv.

Mr. P. V. Yogeswaran, AOR

Mr. Manish Kumar, AOR
Mr. Ravi Shanker Jha, Adv.

Mr. Kunal Verma, AOR

Ms. Sumita Hazarika, AOR
Mr. Shiv Sagar Tiwari, AOR

Mr. Shiv Mangal Sharma, A.A.G.
Mr. Manish Chaubey, Adv.
Mr. Milind Kumar, AOR

Mr. Anil Shrivastav, AOR
Mr. Ashok Kumar Singh, AOR

Mr. Guntur Pramod Kumar, AOR
Ms. Prerna Singh, Adv.
Mr. Samarth Krishan Luthra, Adv.
Mr. Dhruv Yadav, Adv.

Mr. Shuvodeep Roy, AOR
Mr. Deepayan Dutta, Adv.
Mr. Saurabh Tripathi, Adv.

Mr. Abhimanyu Tewari, AOR
Ms. Eliza Bar, Adv.

Mrs. Aishwarya Bhati, A.S.G.
Mrs. Swarupama Chaturvedi, Sr. Adv.
Mr. A K Panda, Adv.
Mr. Wasim Qadri, Sr. Adv.
Mrs. Ruchi Kohli, Sr. Adv.
Mr. Mukesh Kumar Maroria, AOR
Mr. Sunita Sharma, Adv.
Mr. Rohit Pandey, Adv.

Ms. Swati Ghildiyal, AOR
Mr. Prashant Bhagwati, Adv.
Ms. Devyani Bhatt, Adv.

Ms. Supriya Juneja, AOR

Mr. Anand Sharma, Adv.
Mr. Sandeep Jindal, AOR
Mr. Vishwanathan Iyer, Adv.

Mr. Arman Sharma, Adv.
Mrs. Shimpy Sharma, Adv.
Ms. Pooja Sharma, Adv.
Mr. Yeshasvi Shrivastava, Adv.

Mr. Parth Awasthi, Adv.
Mr. Pashupathi Nath Razdan, AOR

Mr. V. N. Raghupathy, AOR

Mr. Nishe Rajen Shonker, AOR
Mrs. Anu K Joy, Adv.
Mr. Alim Anvar, Adv.

Mr. Sunny Choudhary, AOR
Mr. Abhimanyu Singh Ga, Adv.
Mr. Sarad Kumar Singhania Aor, Adv.
Ms. Rashmi Singhania, Adv.

Mr. Bharat Bagla, Adv.
Mr. Siddharth Dharmadhikari, Adv.
Mr. Aaditya Aniruddha Pande, AOR

Mr. Pukhrambam Ramesh Kumar, AOR
Mr. Karun Sharma, Adv.
Ms. Rajkumari Divyasana, Adv.

Mr. Avijit Mani Tripathi, AOR
Mr. Upendra Mishra, Adv.
Mr. P. S. Negi, Adv.
Mr. T.k. Nayak, Adv.

Mr. Anando Mukherjee, AOR
Mr. Shwetank Singh, Adv.

Ms. K. Enatoli Sema, AOR
Ms. Limayinla Jamir, Adv.
Mr. Amit Kumar Singh, Adv.
Ms. Chubalemla Chang, Adv.
Mr. Prang Newmai, Adv.

Mr. Gaurav Khanna, AOR
Ms. Natasha Sahrawat, Adv.
Mr. Rudraksh Pandey, Adv.
Mr. Gautam Barnwal, Adv.
Ms. Deepali Bhanot, Adv.
Ms. Alisha Roy, Adv.

Ms. Baani Khanna, AOR
Mr. Robin Singh, Adv.
Mr. Rohit Kumar, Adv.
Mr. Siddharth Mishra, Adv.

Mr. Sameer Abhyankar, AOR
Mr. Rahul Kumar, Adv.
Mr. Aakash Thakur, Adv.
Mr. Aryan Srivastava, Adv.
Ms. Ayushi Bansal, Adv.
Mr. Sarthak Dora, Adv.

Ms. Purnima Krishna, AOR
Mr. M.f. Philip, Adv.
Mr. Karamveer Singh Yadav, Adv.

Mr. R. Ayyam Perumal, AOR

Ms. Garima Prashad, A.A.G.
Mr. Sudeep Kumar, AOR
Mr. Abhishek Saket, Adv.
Ms. Manisha, Adv.
Ms. Rupali, Adv.

Mr. Srisatya Mohanty, Adv.
Ms. Astha Sharma, AOR
Ms. Ripul Swati Kumari, Adv.

Ms. Aishwarya Bhati, A.S.G.
Ms. Swarupama Chaturvedi, Sr. Adv.
Mr. S.wasim A. Qadri, Sr. Adv.
Mr. Ashok Kumar Panda, Sr. Adv.
Ms. Ruchi Kohli, Sr. Adv.
Mr. Varun Chugh, Adv.
Mr. Krishna Kant Dubey, Adv.
Mr. Bhuvan Kapoor, Adv.
Mr. Neeraj Kumar Sharma, Adv.
Ms. Indira Bhakar, Adv.
Ms. Sunita Sharma, Adv.
Mr. Gautam Kumar, Adv.
Mr. N Visakamurthy, aor, Adv.
Mr. Shreekant Neelappa Terdal, AOR

Mr. Aravindh S., AOR
Mr. Abbas B, Adv.
Mr. Aman Gautam, Adv.

Ms. Suveni Bhagat, AOR

Mr. Gopal Prasad, AOR

Ms. Srishti Agnihotri, AOR
Ms. Sanjana Grace Thomas, Adv.
Mr. D.p.singh, Adv.
Ms. Tara Elizabeth Kurien, Adv.

Mr. Shishir Pinaki, AOR
Mr. Dhanaeswar Gudapalli, Adv.
Ms. Mallika Das, Adv.
Mr. Nandi Kiran Kumar, Adv.

Mr. Akash Vashista, Adv.
Mr. Rishi Sehgal, AOR
Mr. Midhun Aggarwal, Adv.
Ms. Vaishnavi, Adv.

**UPON hearing the counsel the Court made the following
O R D E R**

Prior to 2017, the figures given by ISRO regarding the number of wetlands in India having an area more than 2.25 Hectares was 2,01,503. The latest ISRO data, which is of the year 2021, shows that this figure has now increased to 2,31,195.

Now these figures have to be checked on ground. The Wetlands (Conservation and Management) Rules, 2017 (in short, "the Rules") and the guidelines issued thereunder prescribe that the next step after identification of such wetlands is what is called Ground truthing, which is the term given to the actual inspection of these wetlands by a team constituted by the State for that purpose. This step has, however, been neglected by almost all the States, except the State of Punjab to some extent. As regards demarcation of these wetlands all States have done almost nothing up till now.

We have been informed at the Bar that each State presently has a Wetland Authority. In fact, reading of Rule 5 suggests that the State Wetlands Authority has already been constituted. Rule 5, by which the State Wetland Authority as well as such Authorities in the Union Territories have been

constituted and the powers to these Authorities have been given, reads as under :-

“Wetland Authorities – (1) *The Central Government hereby constitutes the State Wetlands Authority in each State with the following members, namely ; -*

XXXXX

(2) *The Central Government hereby constitutes the Union Territory Wetlands Authority for each Union Territory with the following members, namely -*

XXXX

(3) *The State Wetlands Authority or Union Territory Wetlands Authority may co-opt other members, not exceeding three in number, if required.*

(4) *The State Wetlands Authority or Union Territory Wetlands Authority shall exercise the following powers and perform the following functions, namely :-*

a) Prepare a list of all wetlands of the State or UT within three months from the date of publication of these rules;

b) Prepare a list of wetlands to be notified, within six months from the date of publication of these Rules, taking into cognizance any existing list of wetlands prepared/notified under other relevant State

Acts;

c) Recommend identified wetlands, based on their Brief Documents, for regulation under these rules;

d) Prepare a comprehensive digital inventory of all wetlands within one year from the date of publication of these rules and upload the same on a dedicated web portal, to be developed by the Central Government for the said purpose; the inventory ought to be updated every ten years;

e) Develop a comprehensive list of activities, to be regulated and permitted within the notified wetlands and their zone of influence;

f) Recommend additions, if any, to the list of prohibited activities for specific wetlands;

g) Define strategies for conservation and wise use of wetlands within their jurisdiction; wise use being a principle for managing these ecosystems which incorporates sustainable uses (such as capture fisheries at subsistence level or harvest of aquatic plants) as being compatible with conservation, if ecosystem functions (such as water storage, ground water recharge, flood buffering) and values (such as recreation and cultural) are maintained or enhanced ;

- h) Review Integrated Management Plan for each of the notified wetlands (including trans-boundary wetlands in coordination with Central Government), and within these plans to consider continuation and support to traditional uses of wetlands that are harmonized with ecological character;*
- l) Recommend mechanisms for maintenance of ecological character through promotional activities for land within the boundary of notified wetlands or wetlands complex have private tenancy rights,;*
- j) Identify mechanisms for convergence of implementation of the management plan with the existing State/UT level development plans and programmes;*
- k) Ensure enforcement of these rules and other relevant Acts, rules and regulations and on a half-yearly basis (June and December of each calendar year) inform the concerned State Government or UT Administration or Central Government on the status of such notified wetlands through a reporting mechanism;*
- l) Coordinate implementation of Integrated Management Plans based on wiseuse principle through various line departments and other concerned agencies;*

m) Function as a nodal authority for all wetland - specific authorities within the State or UT Administration;

n) Issue necessary directions for the conservation and sustainable management of wetlands to the respective implementing agencies.

o) Undertake measures for enhancing awareness within stakeholders and local communities on values and functions of wetlands; and

p) Advise on any other matter suo-motu, or as referred by the State Government/UT Administration.

(5) The concerned Department of the State Government or Union Territory shall provide all necessary support and act as nodal Department and Secretariat to the Authority.

(6) The Authority shall, within ninety days of publication of these rules, shall constitute -

(a) a technical committee to review brief documents, management plans and advise on any technical matter referred by the Wetland Authority and

(b) a grievance committee consisting of four members to provide a mechanism for hearing

and forwarding the grievances raised by public to the Authority;

(7) The Committees referred to in sub-rule (6) shall meet at least once in every quarter to perform their functions.

(8) The Authority shall meet at least thrice in a year.

(9) The term of non-official members of the Authority nominated by State Government or Union Territory Administration, shall be for a period not exceeding three years.”

It is clear now that the ground truthing and the demarcation of wetland boundary is the next step, which is to be undertaken by each of the State/UT Wetland Authorities in coordination with concerned nodal Department as provided under the Rules. It is a Statutory function which has been assigned to them under the Rules. We, therefore, direct each of the State/UT Wetland Authorities to complete ground truthing as well as the demarcation of wetland boundaries of each of the Wetland which have been identified for their State by Space Application Center Atlas (SAC Atlas), 2021.

For easy accessibility of this, each of the State/UT Wetland Authorities shall complete this work as expeditiously as possible, but definitely within a period of three months from today. Ms. Aishwarya Bhati, learned Additional Solicitor General, has assured this Court that they shall be doing the monitoring with each of the State and shall file a detailed affidavit before the

next date of listing.

Vide our order dated 03.04.2017 (in Writ Petition (C) No. 230 of 2001), this Court has passed certain directions regarding protection of Ramsar Convention Sites (of wetlands) to be monitored by each of the High Court concerned and 15 High Courts were given such a direction. The relevant portion of order dated 03.04.2017 is reproduced as under :-

“We have put it to learned counsel for the petitioner that insofar as the Ramsar Convention sites are concerned, since they are matters of international heritage, it might be more appropriate if the concerned High Courts monitor the management of these sites at least till there is some visible improvement. Learned counsel for the petitioner says that he has no objection to this.

Under the circumstances, we direct the Registry of this Court to make photocopies of the affidavit filed by the Union of India by Dr. A. Duraisamy, Scientist 'F' and Member Secretary, Central Wetland Regulatory Authority and send it to the following High Courts: High Court of Judicature at Hyderabad for the States of Telangana and Andhra Pradesh, Gauhati High Court, Gujarat High Court, Himachal Pradesh High Court, J&K High Court, Kerala High Court, Madhya Pradesh High

Court, Manipur High Court, Orissa High Court, Punjab and Haryana High Court, Rajasthan High Court, Madras High Court, Tripura High Court, Allahabad High Court and High Court at Calcutta. The affidavit be sent to the Registrar General of all the aforementioned High Courts within two weeks from today. A copy of all the orders passed by this Court from 10th September, 2014 till today shall also be sent to the concerned High Courts along with the affidavit. We request Hon'ble the Chief Justice of the concerned High Court to treat the affidavit as a suo motu public interest petition and, if necessary, appoint an amicus to assist the court so as to ensure that the Ramsar Convention sites within their jurisdiction are properly maintained. The affidavit by the Union of India should be filed within six weeks. List the matter on 12th July, 2017"

Now, the latest figure shows that these Ramsar sites have increased from 26 to 85, including 59 additional sites (cited below) falling under 5 other additional High Courts i.e. Patna, Bombay, Karnataka, Gauhati (Aizawl Bench as well) and Uttarakhand. The list of updated RAMSAR sites has been given to this Court, which is reproduced as under:-

“List of 85 Ramsar Sites

	State/UT		Wetland	Date of Designation	Area (hectares)
1.	Andhra Pradesh (1)	1.	Kolleru Lake	19-08-2002	90100
2.	Assam (1)	2.	Deepor Beel	19-08-2002	4000
3.	Bihar (3)	3.	Kabartal Wetland	21-07-2020	2620
		4.	Nagi Bird Sanctuary	11-10-2023	206
		5.	Nakti Bird Sanctuary	11-10-2023	333
4.	Gujarat (4)	6.	Nalsarovar	24-09-2012	12000
		7.	Wadhvana Wetland	05-04-2021	630
		8.	Thol Lake Wildlife Sanctuary	05-04-2021	699
		9.	Khijadia Wildlife Sanctuary	13-04-2021	512
8.	Goa (1)	10.	Nanda Lake	08-06-2022	42
9.	Haryana (2)	11.	Sultanpur National Park	25-05-2021	143
		12.	Bhindawas Wildlife Sanctuary	25-05-2021	412
11.	Himachal Pradesh (3)	13.	Pong Dam Lake	19-08-2002	15662
		14.	Chandertal Wetland	08-11-2005	49
		15.	Renuka Wetland	08-11-2005	20
14.	Jammu and Kashmir (5)	16.	Wular Lake	23-03-1990	18900
		17.	Surinsar-Mansar Lakes	08-11-2005	350
		18.	Hokera Wetland	08-11-2005	1375
		19.	Hygam Wetland	08-06-	802

			Conservation Reserve	2022	
		20.	Shallbugh Wetland Conservation Reserve	08-06-2022	1675
19.	Karnataka (4)	21.	Ranganathittu Bird Sanctuary	15-02-2022	518
		22.	Ankasamudra Bird Conservation Reserve	10-03-2023	98.76
		23.	Aghanashini Estuary	14-02-2023	4801
		24.	Magadi Kere Conservation Reserve	14-02-2023	54.38
20.	Kerala (3)	25.	Asthamudi Wetland	19-08-2002	6140
		26.	Sasthamkotta Lake	19-08-2002	373
		27.	VembanadKol Wetland	19-08-2002	151250
23.	Ladakh (2)	28.	Tso Kar Wetland Complex	17-11-2020	9577
		29.	Tsomoriri Lake	19-08-2002	12000
25.	Madhya Pradesh (5)	30.	Bhoj Wetlands	19-08-2002	3201
		31.	Sirpur Wetland	07-01-2022	161
		32.	Sakhya Sagar	07-01-2022	248
		33.	Yashwant Sagar	07-01-2022	823
		34.	Tawa Reservoir	08-01-2024	20050
29.	Maharashtra (3)	35.	Nandur Madhameshwar	21-06-2019	1437
		36.	Lonar Lake	22-07-2020	427
		37.	Thane Creek	13-04-2022	6521
32.	Manipur (1)	38.	Loktak Lake	23-03-1990	26600
33.	Mizoram (1)	39.	Pala Wetland	31-08-2021	1850
34.	Odisha (6)	40.	Chilka Lake	01-10-1981	116500
		41.	Bhitarkanika Mangroves	19-08-2002	65000
		42.	Satkosia Gorge	12-10-2021	98197

		43.	Tampara Lake	12-10-2021	300
		44.	Hirakud Reservoir	12-10-2021	65400
		45.	Ansupa Lake	12-10-2021	231
40.	Punjab (6)	46.	Harike Lake	23-03-1990	4100
		47.	Kanjli Lake	22-01-2002	183
		48.	Ropar Lake	22-01-2002	1365
		49.	Beas Conservation Reserve	26-09-2019	6429
		50.	Keshopur - Miani Community Reserve	26-09-2019	344
		51.	Nangal Wildlife Sanctuary	26-09-2019	116
46.	Rajasthan (2)	52.	Keoladeo Ghana National Park	1-10-1981	2873
		53.	Sambhar Lake	23-03-1990	24000
48.	Tamil Nadu (18)	54.	Point Calimere Wildlife and Bird Sanctuary	19-08-2002	38500
		55.	Koonthankulam Bird Sanctuary	08-11-2021	72
		56.	Chitrangudi Bird Sanctuary	08-11-2021	260
		57.	Karikili Bird Sanctuary	08-04-2022	58
		58.	Pichavaram Mangrove	08/04/2022	1479
		59.	Pallikaranai Marsh Reserve Forest	08-04-2022	1248
		60.	Gulf of Mannar Marine Biosphere Reserve	08-04-2022	52672
		61.	Vembannur Wetland Complex	08-04-2022	20
		62.	Vellode Bird Sanctuary	08-04-2022	77
		63.	Udhayamarthandapuram Bird Sanctuary	08-04-2022	44
		64.	Vedanthangal Bird Sanctuary	08-04-2022	40
		65.	Suchindram Theroor Wetland Complex	08-04-2022	94
		66.	Vaduvur Bird Sanctuary	08-04-	113

				2022	
		67.	Kanjirankulam Bird Sanctuary	08-04-2022	97
		68.	Karaivetti Bird Sanctuary	24-05-2023	453.72
		69.	Longwood Shola Reserve Forest	24-05-2023	116.007
		70.	Nanjarayan Bird Sanctuary	16-01-2024	125.865
		71.	Kazhuvveli Bird Sanctuary	16-01-2024	5151.6
62.	Tripura (1)	72.	Rudrasagar Lake	08-11-2005	240
63.	Uttar Pradesh (10)	73.	Upper Ganga River	08-11-2005	26590
		74.	Nawabganj Bird Sanctuary	19-09-2019	225
		75.	Parvati Arga Bird Sanctuary	02-12-2019	722
		76.	Saman Bird Sanctuary	02-12-2019	526
		77.	Samaspur Bird Sanctuary	03-10-2019	799
		78.	Sandi Bird Sanctuary	26-09-2019	309
		79.	Sarsai Nawarjheel	19-09-2019	161
		80.	Sur Sarovar	21-08-2020	431
		81.	Haiderpur Wetland	13-04-2021	6908
		82.	Bakhira Wildlife Sanctuary	29-06-2021	2894
73.	Uttarakhand (1)	83.	Asan Conservation Reserve	21-07-2020	444
74.	West Bengal (2)	84.	East Calcutta Wetlands	19-08-2002	12500
		85.	Sunderbans Wetland	30-01-2019	423000
23 States & UTs		85 Ramsar Sites			13,58,068.335

The Registrar General of this Court is directed to send the complete list to all the High Courts, including the 5 High Courts which are mentioned above,

and the High Courts are requested to treat the affidavit as a Suo Moto Public Interest Litigation where an Amicus be appointed, if necessary, to assist the Court and ensure that the RAMSAR Sites within their jurisdiction are properly maintained. We say this only as a continuation of our order dated 03.04.2017.

List the matter again on 25.03.2025.

(JAYANT KUMAR ARORA)
ASST. REGISTRAR-CUM-PS

(RENU BALA GAMBHIR)
COURT MASTER

Annexure R-5/2**IN THE SUPREME COURT OF INDIA****CIVIL ORIGINAL JURISDICTION****WRIT PETITION (CIVIL) NO. 304/2018****IN THE MATTER OF:**

Anand Arya

...Petitioner

Versus

Union of India

... Respondent

INDEX

S.No.	Particulars	Page No.
1.	Additional Affidavit cum Status Report on behalf of Ministry of Environment, Forest & Climate Change in compliance of Order dated 11.12.2024.	1-5
2.	Annexure 1: Copy of Office Memorandum dated 20.12.2024.	6-30
3.	Annexure 2: Copy of Minutes of Meeting dated 27.12.2024.	31-40
4.	Annexure 3: Consolidated Status (States/UT wise) Report, as on 22.03.2025.	41-47

Place: New Delhi**Date: 24.03.2025****Advocate for the Respondent****G.S. MAKKAR**

IN THE SUPREME COURT OF INDIA

CIVIL ORIGINAL JURISDICTION

WRIT PETITION (CIVIL) NO. 304/2018

IN THE MATTER OF:

Anand Arya

... Petitioner

Versus

Union of India

... Respondent

**AFFIDAVIT-CUM-STATUS REPORT ON BEHALF OF MINISTRY OF
ENVIRONMENT, FOREST & CLIMATE CHANGE**

I, Dr. Motipalli Ramesh, S/o Shri M.G.K. Murthy, presently working as Scientist-'F', at the Ministry of Environment, Forest & Climate Change (MoEF&CC), Indira Paryavaran Bhawan, Jor-Bagh Road, New Delhi-110003, do hereby solemnly affirm and declare on oath as under: -

1. That, I am the above-named Deponent, authorized and well conversant with the facts and circumstances of the present case and thus, competent to swear the present affidavit.
2. It is humbly submitted that the answering respondent had filed a status report in the present matter on 11.11.2024, in compliance of order dated 01.10.2024, inter-alia, apprising the Hon'ble Supreme Court with respect to the steps taken by each State and Union Territory for conservation and management of wetlands in their jurisdiction.

Ramesh



3. That, vide order dated 11.12.2024, the Hon'ble Court observed that *"Prior to 2017, the figures given by ISRO regarding the number of wetlands in India having an area more than 2.25 Hectares was 2,01,503. The latest ISRO data, which is of the year 2021, shows that this figure has now increased to 2,31,195."* and further, inter-alia, directed that *"each of the State/UT Wetland Authorities shall complete ground truthing as well as the demarcation of wetland boundaries of each of the Wetland which have been identified for their State by Space Application Centre Atlas (SAC Atlas), 2021 as expeditiously as possible, but definitely within a period of three months from 11.12.2024."*
4. That, in compliance with the aforementioned order dated 11.12.2024, the Ministry has issued an Office Memorandum (O.M.) dated 20.12.2024 to all the Chief Secretaries/Administrators of all States/UTs and the Member Secretaries of State Wetlands Authorities/UT Wetlands Authorities (SWAs/UTWAs), requesting the states/UTs:
- To furnish the time-bound action plans with respect to ground-truthing and demarcation of wetlands boundaries, by 31.12.2024.
 - To provide progress report on a fortnightly basis with regard to the same.

The O.M. dated 20.12.2024 is annexed as **Annexure/R1**.

5. That, a meeting of National Wetlands Committee (NWC) was convened on 27.12.2024, wherein the agenda with respect to compliance of aforementioned Hon'ble Supreme Court's order dated 11.12.2024 was also discussed and the

Following decisions were taken:

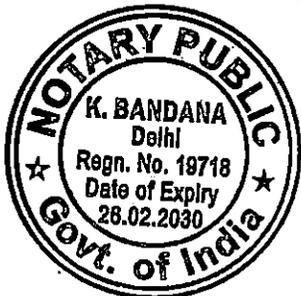


Ramesh

- *All the States/UTs should accord 'TOP PRIORITY ' to the task and ensure meticulous and time bound compliance of the directions of the Hon'ble Court. All the Participants should sensitize their respective Administrative Secretaries/ HoDs of the directions and ensure regular follow up and progress in the matter.*
- *MoEF&&CC to share a Google Sheet with the States/UTs for updating the status on a day-to-day basis.*
- *MoEF&CC, with the support of SAC, National Centre for Sustainable Coastal Management (NCSCM) and Knowledge Partners (KPs) to accord all possible help to the States/UTs in the subject matter.*
- *A coordination exercise on a daily basis through VC be carried from 4 to 5 PM.*

The Minutes of Meeting (M.O.M.) dated 27.12.2024 is annexed as **Annexure/R2**.

6. That, in furtherance of the above, two Google-sheets were shared with all the States/UTs, i.e., one to update the contact details of Member Secretaries and nodal officers of each SWA/UTWA and another to update their progress on a day-to-day basis with respect to ground-truthing and demarcation of wetland boundaries.
7. That, a coordination meeting, supported by SAC and NCSCM, is being held daily from 4 to 5 PM to facilitate and monitor the progress made by States/UTs in the ground-truthing and boundary demarcation of wetlands within their respective jurisdictions.
8. That, reminders have been issued to the Member Secretaries of SWAs/UTWAs and Chief Secretaries/Administrators of States/UTs to accelerate the ground-truthing and boundary demarcation process for wetlands within their jurisdictions. The States and

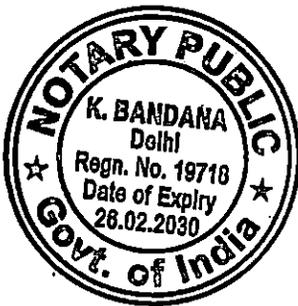


Ramesh

Union Territories were requested to update their present status on the ground-truthing and demarcation of wetland boundaries in the designated Google sheet and upload the data in the Save Wetlands Campaign Portal (<http://www.savewetlandscampaign.in>). They were also requested to furnish the progress report, along with time-bound action plan for completion of remaining ground-truthing and boundary demarcation on immediate priority.

9. That, based on the information uploaded on the Portal and/or concerned Google-sheet by the States/UTs, of the 2,31,195 wetlands inventoried in SAC Atlas 2021, ground-truthing of 1,58,475 wetlands and boundary demarcation of 74,644 wetlands has been completed as on 22.03.2025. Chandigarh has completed the ground-truthing process, with Madhya Pradesh at 97%, Chhattisgarh, Punjab and Tripura at 96%. In terms of boundary demarcation, Chandigarh has marked the boundaries of all wetlands, followed by Tripura (96%), Maharashtra (90%), Chhattisgarh (88%) and Bihar (86%). The consolidated status (State/UT wise) is annexed as **Annexure/R3**.

10. It is most respectfully prayed that this Hon'ble Court may pass order(s) as may deem fit and necessary in the interest of justice.



Ramesh
DEPONENT

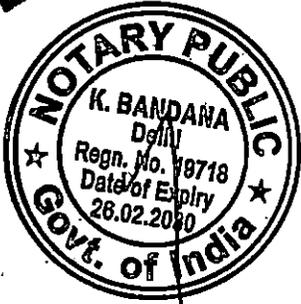
(डॉ. एम. रमेश/Dr. M. RAMESH)
वैज्ञानिक 'एफ'/Scientist 'F'
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Min. of Environment, Forest and Climate Change
भारत सरकार, नई दिल्ली
Govt. of India, New Delhi

VERIFICATION

Verified at New Delhi on this 24th day of March, 2025 that the contents of above affidavit are true and correct to my knowledge on the basis of information derived from the record and that no part of it is false and nothing has been concealed there from.

Sumit
24/03/2025
IDENTIFIED

24 MAR 2025



Ramesh
DEPONENT

(डॉ एम. रमेश/Dr. M. RAMESH)
वैज्ञानिक 'एफ'/Scientist 'F'
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Min. of Environment, Forest and Climate Change
भारत सरकार, नई दिल्ली
Govt. of India, New Delhi

ATTESTED
NOTARY PUBLIC DELHI
Govt. of India
Mob.: 9654768498

**Supreme Court Matter – Most Immediate
(by e-mail)**

File No. W/30/2024-WTL
Government of India
Ministry of Environment, Forest & Climate Change
(Wetlands Division)

Indira Paryavaran Bhawan
Jor Bagh Road
New Delhi-110003

Date: 20.12.2024

OFFICE MEMORANDUM

Subject: W.P. (C) No.304/2018 – Anand Arya vs. Union of India along with W.P. (C) No.230/2001 and W.P. (C) No.302/2020 before the Hon'ble Supreme Court – **Demarcation of wetland boundary supported by accurate digital maps with coordinates and validated by ground truthing.**

This is in continuation to Ministry's O.M. No. J-22012/17/2020-CS (W) dated 11.10.2024 regarding detailed compliance of the Wetlands (Conservation & Management) Rules, 2017 and all other steps taken by the States/UTs for wetlands conservation with reference to the Hon'ble Supreme Court's order dated 01.10.2024 in the above captioned matters.

2. Vide order dated 11.12.2024, the Hon'ble Supreme Court inter-alia directed that, ***each of the State/UT Wetland Authorities shall complete ground truthing as well as the demarcation of wetland boundaries of each of the Wetland which have been identified for their State by Space Application Center Atlas (SAC Atlas), 2021 as expeditiously as possible, but definitely within a period of three months from 11.12.2024 (copy attached).***
3. The Ministry has assigned Knowledge Partners (KPs) of wetlands to each State/UT to assist them in various aspects of wetlands conservation. The States/UTs may enter into a formal agreement with them (**list of KPs attached**).
4. Since the directions of the Hon'ble Supreme Court are to be complied within a maximum period of three months (from 11.12.2024), it is requested that action in this regard may be taken up at the earliest. Regular progress and compliance may also be monitored through Additional Chief Secretary/Principal Secretary of Environment/Forest Department of the State/UT for ensuring time bound compliance of the directions.
5. Since, the Ministry is required to do monitoring with each State/UT and file a detailed affidavit, it is requested to provide a **time-bound action plan latest by 31.12.2024 on top priority. Subsequently, a progress report may also be sent to the Ministry on a fortnightly basis.**

Ramesh

(Dr. Ramesh M.)
Scientist 'F'

Tel.: 011-20819338

Email: ramesh.motipalli@nic.in

To

1. The Chief Secretaries/Administrators of States/UTs
2. The Member Secretaries of State & UT Wetlands Authorities

Copy to:

1. PSO to Secretary(EF&CC)
2. Sr. PPS to SS (TK)
3. PPS to JS(RA)
4. All officers of Wetlands Division

ITEM NO.6

COURT NO.13

SECTION PIL-W

S U P R E M E C O U R T O F I N D I A
R E C O R D O F P R O C E E D I N G S

Writ Petition(s)(Civil) No(s). 304/2018

ANAND ARYA

Petitioner(s)

VERSUS

UNION OF INDIA

Respondent(s)

(IA No. 131361/2018 - INTERVENTION APPLICATION)

WITH

W.P.(C) No. 230/2001 (PIL-W)
(I.A.NO.203606/2022 IN W.P.(C)NO.230/2001
IA No. 203606/2022 - INTERVENTION APPLICATION)

W.P.(C) No. 302/2020 (PIL-W)
(FOR impleading party ON IA 172736/2024
FOR INTERVENTION/IMPLEADMENT ON IA 172736/2024
FOR APPROPRIATE ORDERS/DIRECTIONS ON IA 172737/2024
IA No. 172737/2024 - APPROPRIATE ORDERS/DIRECTIONS
IA No. 172736/2024 - INTERVENTION/IMPLEADMENT)

Date : 11-12-2024 These matters were called on for hearing today.

CORAM : HON'BLE MR. JUSTICE SUDHANSHU DHULIA
HON'BLE MR. JUSTICE AHSANUDDIN AMANULLAH

For Petitioner(s) Mr. Gopal Sankaranarayan, Sr. Adv.
Ms. Trisha Chandran, Adv.
Mr. Naresh Kumar, AOR

Mr. Jayant Bhushan, Sr. Adv.
Ms. Reena George, Adv.
Mr. Rohit Kumar Singh, AOR
Mr. Amartya Bhushan, Adv.
Mr. Yojit Mehra, Adv.

Ms. Anitha Shenoy, Sr. Adv.
Ms. Shibani Ghosh, AOR
Ms. Ayushma Awasthi, Adv.
Ms. Himanshi Gupta, Adv.

Signature Not Verified
Digitally signed by
Jayant Kumar Arora
Date: 2024.12.17
17:21:41 IST
Reason: I am the Respondent(s)

For Respondent(s) Ms. Aishwarya Bhati, A.S.G.
Ms. Swarupma Chaturvedi, Sr. Adv.
Ms. Manisha Chava, Adv.
Mr. Gurmeet Singh Makker, AOR

Mr. Bhuvan Mishra, Adv.
Mr. Aman Sharma, Adv.
Ms. Sunita Sharma, Adv.
Mr. Rohan Gupta, Adv.

Mr. P. V. Yogeswaran, AOR

Mr. Manish Kumar, AOR
Mr. Ravi Shanker Jha, Adv.

Mr. Kunal Verma, AOR

Ms. Sumita Hazarika, AOR
Mr. Shiv Sagar Tiwari, AOR

Mr. Shiv Mangal Sharma, A.A.G.
Mr. Manish Chaubey, Adv.
Mr. Milind Kumar, AOR

Mr. Anil Shrivastav, AOR
Mr. Ashok Kumar Singh, AOR

Mr. Guntur Pramod Kumar, AOR
Ms. Prerna Singh, Adv.
Mr. Samarth Krishan Luthra, Adv.
Mr. Dhruv Yadav, Adv.

Mr. Shuvodeep Roy, AOR
Mr. Deepayan Dutta, Adv.
Mr. Saurabh Tripathi, Adv.

Mr. Abhimanyu Tewari, AOR
Ms. Eliza Bar, Adv.

Mrs. Aishwarya Bhati, A.S.G.
Mrs. Swarupama Chaturvedi, Sr. Adv.
Mr. A K Panda, Adv.
Mr. Wasim Qadri, Sr. Adv.
Mrs. Ruchi Kohli, Sr. Adv.
Mr. Mukesh Kumar Maroria, AOR
Mr. Sunita Sharma, Adv.
Mr. Rohit Pandey, Adv.

Ms. Swati Ghildiyal, AOR
Mr. Prashant Bhagwati, Adv.
Ms. Devyani Bhatt, Adv.

Ms. Supriya Juneja, AOR

Mr. Anand Sharma, Adv.
Mr. Sandeep Jindal, AOR
Mr. Vishwanathan Iyer, Adv.

Mr. Arman Sharma, Adv.
Mrs. Shimpy Sharma, Adv.
Ms. Pooja Sharma, Adv.
Mr. Yeshasvi Shrivastava, Adv.

Mr. Parth Awasthi, Adv.
Mr. Pashupathi Nath Razdan, AOR

Mr. V. N. Raghupathy, AOR

Mr. Nishe Rajen Shonker, AOR
Mrs. Anu K Joy, Adv.
Mr. Alim Anvar, Adv.

Mr. Sunny Choudhary, AOR
Mr. Abhimanyu Singh Ga, Adv.
Mr. Sarad Kumar Singhania Aor, Adv.
Ms. Rashmi Singhania, Adv.

Mr. Bharat Bagla, Adv.
Mr. Siddharth Dharmadhikari, Adv.
Mr. Aaditya Aniruddha Pande, AOR

Mr. Pukhrambam Ramesh Kumar, AOR
Mr. Karun Sharma, Adv.
Ms. Rajkumari Divyasana, Adv.

Mr. Avijit Mani Tripathi, AOR
Mr. Upendra Mishra, Adv.
Mr. P. S. Negi, Adv.
Mr. T.k. Nayak, Adv.

Mr. Anando Mukherjee, AOR
Mr. Shwetank Singh, Adv.

Ms. K. Enatoli Sema, AOR
Ms. Limayinla Jamir, Adv.
Mr. Amit Kumar Singh, Adv.
Ms. Chubalemla Chang, Adv.
Mr. Prang Newmai, Adv.

Mr. Gaurav Khanna, AOR
Ms. Natasha Sahrawat, Adv.
Mr. Rudraksh Pandey, Adv.
Mr. Gautam Barnwal, Adv.
Ms. Deepali Bhanot, Adv.
Ms. Alisha Roy, Adv.

Ms. Baani Khanna, AOR
Mr. Robin Singh, Adv.
Mr. Rohit Kumar, Adv.
Mr. Siddharth Mishra, Adv.

Mr. Sameer Abhyankar, AOR
Mr. Rahul Kumar, Adv.
Mr. Aakash Thakur, Adv.
Mr. Aryan Srivastava, Adv.
Ms. Ayushi Bansal, Adv.
Mr. Sarthak Dora, Adv.

Ms. Purnima Krishna, AOR
Mr. M.f. Philip, Adv.
Mr. Karamveer Singh Yadav, Adv.

Mr. R. Ayyam Perumal, AOR

Ms. Garima Prashad, A.A.G.
Mr. Sudeep Kumar, AOR
Mr. Abhishek Saket, Adv.
Ms. Manisha, Adv.
Ms. Rupali, Adv.

Mr. Srisatya Mohanty, Adv.
Ms. Astha Sharma, AOR
Ms. Ripul Swati Kumari, Adv.

Ms. Aishwarya Bhati, A.S.G.
Ms. Swarupama Chaturvedi, Sr. Adv.
Mr. S.wasim A. Qadri, Sr. Adv.
Mr. Ashok Kumar Panda, Sr. Adv.
Ms. Ruchi Kohli, Sr. Adv.
Mr. Varun Chugh, Adv.
Mr. Krishna Kant Dubey, Adv.
Mr. Bhuvan Kapoor, Adv.
Mr. Neeraj Kumar Sharma, Adv.
Ms. Indira Bhakar, Adv.
Ms. Sunita Sharma, Adv.
Mr. Gautam Kumar, Adv.
Mr. N Visakamurthy, aor, Adv.
Mr. Shreekant Neelappa Terdal, AOR

Mr. Aravindh S., AOR
Mr. Abbas B, Adv.
Mr. Aman Gautam, Adv.

Ms. Suveni Bhagat, AOR

Mr. Gopal Prasad, AOR

Ms. Srishti Agnihotri, AOR
Ms. Sanjana Grace Thomas, Adv.
Mr. D.p.singh, Adv.
Ms. Tara Elizabeth Kurien, Adv.

Mr. Shishir Pinaki, AOR
Mr. Dhanaeswar Gudapalli, Adv.
Ms. Mallika Das, Adv.
Mr. Nandi Kiran Kumar, Adv.

Mr. Akash Vashistha, Adv.
Mr. Rishi Sehgal, AOR
Mr. Midhun Aggarwal, Adv.
Ms. Vaishnavi, Adv.

**UPON hearing the counsel the Court made the following
O R D E R**

Prior to 2017, the figures given by ISRO regarding the number of wetlands in India having an area more than 2.25 Hectares was 2,01,503. The latest ISRO data, which is of the year 2021, shows that this figure has now increased to 2,31,195.

Now these figures have to be checked on ground. The Wetlands (Conservation and Management) Rules, 2017 (in short, "the Rules") and the guidelines issued thereunder prescribe that the next step after identification of such wetlands is what is called Ground truthing, which is the term given to the actual inspection of these wetlands by a team constituted by the State for that purpose. This step has, however, been neglected by almost all the States, except the State of Punjab to some extent. As regards demarcation of these wetlands all States have done almost nothing up till now.

We have been informed at the Bar that each State presently has a Wetland Authority. In fact, reading of Rule 5 suggests that the State Wetlands Authority has already been constituted. Rule 5, by which the State Wetland Authority as well as such Authorities in the Union Territories have been

constituted and the powers to these Authorities have been given, reads as under :-

“Wetland Authorities – (1) The Central Government hereby constitutes the State Wetlands Authority in each State with the following members, namely ; -

XXXXX

(2) The Central Government hereby constitutes the Union Territory Wetlands Authority for each Union Territory with the following members, namely -

XXXX

(3) The State Wetlands Authority or Union Territory Wetlands Authority may co-opt other members, not exceeding three in number, if required.

(4) The State Wetlands Authority or Union Territory Wetlands Authority shall exercise the following powers and perform the following functions, namely :-

a) Prepare a list of all wetlands of the State or UT within three months from the date of publication of these rules;

b) Prepare a list of wetlands to be notified, within six months from the date of publication of these Rules, taking into cognizance any existing list of wetlands prepared/notified under other relevant State

Acts;

c) Recommend identified wetlands, based on their Brief Documents, for regulation under these rules;

d) Prepare a comprehensive digital inventory of all wetlands within one year from the date of publication of these rules and upload the same on a dedicated web portal, to be developed by the Central Government for the said purpose; the inventory ought to be updated every ten years;

e) Develop a comprehensive list of activities, to be regulated and permitted within the notified wetlands and their zone of influence;

f) Recommend additions, if any, to the list of prohibited activities for specific wetlands;

g) Define strategies for conservation and wise use of wetlands within their jurisdiction; wise use being a principle for managing these ecosystems which incorporates sustainable uses (such as capture fisheries at subsistence level or harvest of aquatic plants) as being compatible with conservation, if ecosystem functions (such as water storage, ground water recharge, flood buffering) and values (such as recreation and cultural) are maintained or enhanced ;

- h) Review Integrated Management Plan for each of the notified wetlands (including trans-boundary wetlands in coordination with Central Government), and within these plans to consider continuation and support to traditional uses of wetlands that are harmonized with ecological character;*
- l) Recommend mechanisms for maintenance of ecological character through promotional activities for land within the boundary of notified wetlands or wetlands complex have private tenancy rights,;*
- j) Identify mechanisms for convergence of implementation of the management plan with the existing State/UT level development plans and programmes;*
- k) Ensure enforcement of these rules and other relevant Acts, rules and regulations and on a half-yearly basis (June and December of each calendar year) inform the concerned State Government or UT Administration or Central Government on the status of such notified wetlands through a reporting mechanism;*
- l) Coordinate implementation of Integrated Management Plans based on wiseuse principle through various line departments and other concerned agencies;*

m) Function as a nodal authority for all wetland - specific authorities within the State or UT Administration;

n) Issue necessary directions for the conservation and sustainable management of wetlands to the respective implementing agencies.

o) Undertake measures for enhancing awareness within stakeholders and local communities on values and functions of wetlands; and

p) Advise on any other matter suo-motu, or as referred by the State Government/UT Administration.

(5) The concerned Department of the State Government or Union Territory shall provide all necessary support and act as nodal Department and Secretariat to the Authority.

(6) The Authority shall, within ninety days of publication of these rules, shall constitute -

(a) a technical committee to review brief documents, management plans and advise on any technical matter referred by the Wetland Authority and

(b) a grievance committee consisting of four members to provide a mechanism for hearing

and forwarding the grievances raised by public to the Authority;

(7) The Committees referred to in sub-rule (6) shall meet at least once in every quarter to perform their functions.

(8) The Authority shall meet at least thrice in a year.

(9) The term of non-official members of the Authority nominated by State Government or Union Territory Administration, shall be for a period not exceeding three years."

It is clear now that the ground truthing and the demarcation of wetland boundary is the next step, which is to be undertaken by each of the State/UT Wetland Authorities in coordination with concerned nodal Department as provided under the Rules. It is a Statutory function which has been assigned to them under the Rules. We, therefore, direct each of the State/UT Wetland Authorities to complete ground truthing as well as the demarcation of wetland boundaries of each of the Wetland which have been identified for their State by Space Application Center Atlas (SAC Atlas), 2021.

For easy accessibility of this, each of the State/UT Wetland Authorities shall complete this work as expeditiously as possible, but definitely within a period of three months from today. Ms. Aishwarya Bhati, learned Additional Solicitor General, has assured this Court that they shall be doing the monitoring with each of the State and shall file a detailed affidavit before the

 next date of listing.

Vide our order dated 03.04.2017 (in Writ Petition (C) No. 230 of 2001), this Court has passed certain directions regarding protection of Ramsar Convention Sites (of wetlands) to be monitored by each of the High Court concerned and 15 High Courts were given such a direction. The relevant portion of order dated 03.04.2017 is reproduced as under :-

"We have put it to learned counsel for the petitioner that insofar as the Ramsar Convention sites are concerned, since they are matters of international heritage, it might be more appropriate if the concerned High Courts monitor the management of these sites at least till there is some visible improvement. Learned counsel for the petitioner says that he has no objection to this.

Under the circumstances, we direct the Registry of this Court to make photocopies of the affidavit filed by the Union of India by Dr. A. Duraisamy, Scientist 'F' and Member Secretary, Central Wetland Regulatory Authority and send it to the following High Courts: High Court of Judicature at Hyderabad for the States of Telangana and Andhra Pradesh, Gauhati High Court, Gujarat High Court, Himachal Pradesh High Court, J&K High Court, Kerala High Court, Madhya Pradesh High

Court, Manipur High Court, Orissa High Court, Punjab and Haryana High Court, Rajasthan High Court, Madras High Court, Tripura High Court, Allahabad High Court and High Court at Calcutta. The affidavit be sent to the Registrar General of all the aforementioned High Courts within two weeks from today. A copy of all the orders passed by this Court from 10th September, 2014 till today shall also be sent to the concerned High Courts along with the affidavit. We request Hon'ble the Chief Justice of the concerned High Court to treat the affidavit as a suo motu public interest petition and, if necessary, appoint an amicus to assist the court so as to ensure that the Ramsar Convention sites within their jurisdiction are properly maintained. The affidavit by the Union of India should be filed within six weeks. List the matter on 12th July, 2017"

Now, the latest figure shows that these Ramsar sites have increased from 26 to 85, including 59 additional sites (cited below) falling under 5 other additional High Courts i.e. Patna, Bombay, Karnataka, Gauhati (Aizawl Bench as well) and Uttarakhand. The list of updated RAMSAR sites has been given to this Court, which is reproduced as under:-

"List of 85 Ramsar Sites

	State/UT		Wetland	Date of Designation	Area (hectares)
1.	Andhra Pradesh (1)	1.	Kolleru Lake	19-08-2002	90100
2.	Assam (1)	2.	Deepor Beel	19-08-2002	4000
3.	Bihar (3)	3.	Kabartal Wetland	21-07-2020	2620
		4.	Nagi Bird Sanctuary	11-10-2023	206
		5.	Nakti Bird Sanctuary	11-10-2023	333
4.	Gujarat (4)	6.	Nalsarovar	24-09-2012	12000
		7.	Wadhvana Wetland	05-04-2021	630
		8.	Thol Lake Wildlife Sanctuary	05-04-2021	699
		9.	Khijadia Wildlife Sanctuary	13-04-2021	512
8.	Goa (1)	10.	Nanda Lake	08-06-2022	42
9.	Haryana (2)	11.	Sultanpur National Park	25-05-2021	143
		12.	Bhindawas Wildlife Sanctuary	25-05-2021	412
11.	Himachal Pradesh (3)	13.	Pong Dam Lake	19-08-2002	15662
		14.	Chandertal Wetland	08-11-2005	49
		15.	Renuka Wetland	08-11-2005	20
14.	Jammu and Kashmir (5)	16.	Wular Lake	23-03-1990	18900
		17.	Surinsar-Mansar Lakes	08-11-2005	350
		18.	Hokera Wetland	08-11-2005	1375
		19.	Hygam Wetland	08-06-	802

			Conservation Reserve	2022	
		20.	Shallbugh Wetland Conservation Reserve	08-06- 2022	1675
19.	Karnataka (4)	21.	Ranganathittu Bird Sanctuary	15-02- 2022	518
		22.	Ankasamudra Bird Conservation Reserve	10-03- 2023	98.76
		23.	Aghanashini Estuary	14-02- 2023	4801
		24.	Magadi Kere Conservation Reserve	14-02- 2023	54.38
20.	Kerala (3)	25.	Asthamudi Wetland	19-08- 2002	6140
		26.	Sasthamkotta Lake	19-08- 2002	373
		27.	VembanadKol Wetland	19-08- 2002	151250
23.	Ladakh (2)	28.	Tso Kar Wetland Complex	17-11- 2020	9577
		29.	Tsomoriri Lake	19-08- 2002	12000
25.	Madhya Pradesh (5)	30.	Bhoj Wetlands	19-08- 2002	3201
		31.	Sirpur Wetland	07-01- 2022	161
		32.	Sakhya Sagar	07-01- 2022	248
		33.	Yashwant Sagar	07-01- 2022	823
		34.	Tawa Reservoir	08-01- 2024	20050
29.	Maharashtr a (3)	35.	Nandur Madhameshwar	21-06- 2019	1437
		36.	Lonar Lake	22-07- 2020	427
		37.	Thane Creek	13-04- 2022	6521
32.	Manipur (1)	38.	Loktak Lake	23-03- 1990	26600
33.	Mizoram (1)	39.	Pala Wetland	31-08- 2021	1850
34.	Odisha (6)	40.	Chilka Lake	01-10- 1981	116500
		41.	Bhitarkanika Mangroves	19-08- 2002	65000
		42.	Satkosia Gorge	12-10- 2021	98197

		43.	Tampara Lake	12-10-2021	300
		44.	Hirakud Reservoir	12-10-2021	65400
		45.	Ansupa Lake	12-10-2021	231
40.	Punjab (6)	46.	Harike Lake	23-03-1990	4100
		47.	Kanjli Lake	22-01-2002	183
		48.	Ropar Lake	22-01-2002	1365
		49.	Beas Conservation Reserve	26-09-2019	6429
		50.	Keshopur - Miani Community Reserve	26-09-2019	344
		51.	Nangal Wildlife Sanctuary	26-09-2019	116
46.	Rajasthan (2)	52.	Keoladeo Ghana National Park	1-10-1981	2873
		53.	Sambhar Lake	23-03-1990	24000
48.	Tamil Nadu (18)	54.	Point Calimere Wildlife and Bird Sanctuary	19-08-2002	38500
		55.	Koonthankulam Bird Sanctuary	08-11-2021	72
		56.	Chitrangudi Bird Sanctuary	08-11-2021	260
		57.	Karikili Bird Sanctuary	08-04-2022	58
		58.	Pichavaram Mangrove	08/04/2022	1479
		59.	Pallikaranai Marsh Reserve Forest	08-04-2022	1248
		60.	Gulf of Mannar Marine Biosphere Reserve	08-04-2022	52672
		61.	Vembannur Wetland Complex	08-04-2022	20
		62.	Vellode Bird Sanctuary	08-04-2022	77
		63.	Udhayamarthandapuram Bird Sanctuary	08-04-2022	44
		64.	Vedanthangal Bird Sanctuary	08-04-2022	40
		65.	Suchindram Theroor Wetland Complex	08-04-2022	94
		66.	Vaduvur Bird Sanctuary	08-04-	113

				2022	
		67.	Kanjirankulam Bird Sanctuary	08-04-2022	97
		68.	Karaivetti Bird Sanctuary	24-05-2023	453.72
		69.	Longwood Shola Reserve Forest	24-05-2023	116.007
		70.	Nanjarayan Bird Sanctuary	16-01-2024	125.865
		71.	Kazhuveli Bird Sanctuary	16-01-2024	5151.6
62.	Tripura (1)	72.	Rudrasagar Lake	08-11-2005	240
63.	Uttar Pradesh (10)	73.	Upper Ganga River	08-11-2005	26590
		74.	Nawabganj Bird Sanctuary	19-09-2019	225
		75.	Parvati Arga Bird Sanctuary	02-12-2019	722
		76.	Saman Bird Sanctuary	02-12-2019	526
		77.	Samaspur Bird Sanctuary	03-10-2019	799
		78.	Sandi Bird Sanctuary	26-09-2019	309
		79.	Sarsai Nawarjheel	19-09-2019	161
		80.	Sur Sarovar	21-08-2020	431
		81.	Haiderpur Wetland	13-04-2021	6908
		82.	Bakhira Wildlife Sanctuary	29-06-2021	2894
73.	Uttarakhand (1)	83.	Asan Conservation Reserve	21-07-2020	444
74.	West Bengal (2)	84.	East Calcutta Wetlands	19-08-2002	12500
		85.	Sunderbans Wetland	30-01-2019	423000
23 States & UTs		85 Ramsar Sites			13,58,068.335

The Registrar General of this Court is directed to send the complete list to all the High Courts, including the 5 High Courts which are mentioned above,

and the High Courts are requested to treat the affidavit as a Suo Moto Public Interest Litigation where an Amicus be appointed, if necessary, to assist the Court and ensure that the RAMSAR Sites within their jurisdiction are properly maintained. We say this only as a continuation of our order dated 03.04.2017.

List the matter again on 25.03.2025.

(JAYANT KUMAR ARORA)
ASST. REGISTRAR-CUM-PS

(RENU BALA GAMBHIR)
COURT MASTER

State/UT wise Allocation of Knowledge Partners of Wetlands Division

S.No.	State/UT	Knowledge Partner									Total-KPs
		CDA-BBSR	CWRDM	EPCO	GEER	NCSCM	SACON	WISA	WWF	GIZ	
	UTs										
1	Andaman and Nicobar					P	S				2
2	Chandigarh				S				P		2
3	Dadra Nagar Haveli				P				S		2
4	Daman and Diu				P						1
5	Delhi							P			1
6	Jammu and Kashmir							S	S	P	2
7	Ladakh					S			P		2
8	Lakshadweep		S			P					2
9	Puducherry		S				P				2
	States										
1	Andhra Pradesh						P				1
2	Arunachal Pradesh	S						P			2
3	Assam				P						1
4	Bihar							P		S	2
5	Chhattisgarh			P	S				S		3
6	Goa				P		S				2
7	Gujarat				P						1
8	Haryana								P		1
9	Himachal Pradesh							S		P	2
10	Jharkhand	S						P			2
11	Karnataka		S		S		S		P		4
12	Kerala		P					S			2

13	Madhya Pradesh			P				S	S	3
14	Maharashtra				S	P	S			3
15	Manipur							P		1
16	Meghalaya		S		P					2
17	Mizoram	P				S				2
18	Nagaland					P	S			2
19	Odisha	P							S	2
20	Punjab							P		1
21	Rajasthan				P				S	2
22	Sikkim	P								1
23	Tamil Nadu		S			S	P		S	4
24	Telangana		S		P					2
25	Tripura					P	S			2
26	Uttar Pradesh							P	S	2
27	Uttarakhand							S	P	2
28	West Bengal	S				S		P		3

Abb: *P: Primary **S: Secondary

Contact Details of Knowledge Partners

Sl. No.	Name	Designation	Email ID
1	Dr. R.N Samal	Scientific Officer, CDA	rnsamal09@gmail.com
2	Dr. Manoj P. Samuel	Executive Director, CWRDM	manoj@cwrmdm.org
3	Ms Umamaheshwari R	Executive Director, EPCO	ed.epco@mp.gov.in
	Mr Lokendra Thakkar	Officer In-Charge, SWA, EPCO	thakkarlokendra@mp.gov.in
4	Dr R.K. Sugoora	Director, GEER Foundation	dir-geer@gujarat.gov.in
5	Mr Ravindra Singh	Director, IGBP, GIZ India	ravindra.singh@giz.de
	Mr Kirtiman Awasthi	Senior Advisor, GIZ India	kirtiman.awasthi@giz.de
6	Dr Purvaja Ramachandran	Director, NCSCM	purvaja.ramachandran@gmail.com purvaja@ncscm.res.in
7	Dr. Goldin Quadros	Principal Scientist, SACON	goldinq@gmail.com
8	Dr. Ritesh Kumar	Director, WISA	ritesh.kumar@wi-sa.org
9	Mr Suresh Babu	Director, River Basins, WWF-India	suresh@wwfindia.net
	Dr Amit Dubey	Head – Wetlands, WWF India	adubey@wwfindia.net
10	Mr V.R. Tiwari, IFS	Director, WII	dwii@wii.gov.in ; vrt@wii.gov.in
11	Dr Ashiho Asosii Mao	Director, Botanical Survey of India	hq@bsi.gov.in , admin@bsi.gov.in
12	Dr Dhriti Banerjee	Director, Zoological Survey of India	director@zsi.gov.in



gauri.vashist01 < gauri.vashist01@govcontractor.in >

WP(C)304/2018-Anand Arya vs. UOI & Ors along with WP(C) 230/2001 & WP(C)302/2020-Compliance of Hon'ble Supreme Court's Order dated 11.12.2024-reg.

Wetlands Division MoEFCC < wetlands-mefcc@gov.in > Fri, 20 Dec 2024 6:37:08 PM +0530

To "Naresh Kumar"<cs-arunachal@nic.in>,"CS AP"<cs@ap.gov.in>,"Jishnu IAS"<cs-assam@nic.in>,"Chief Bihar"<cs-bihar@nic.in>,"csofficecg"<csoffice.cg@gov.in>,"Chief Secretary"<cs-go@nic.in>,"csguj"<csguj@gujarat.gov.in>,"cs-haryana"<cs-haryana@nic.in>,"Anil Khachi"<cs-hp@nic.in>,"Shri Singh"<cs-jharkhand@nic.in>,"cs"<cs@karnataka.gov.in>,"V.P.Joy IAS"<chiefsecy@kerala.gov.in>,"Iqbal Bains"<cs@mp.nic.in>,"cs"<cs@maharashtra.gov.in>,"cs-manipur"<cs-manipur@nic.in>,"cso-meg"<cso-meg@nic.in>,"cs-mizoram"<cs-mizoram@nic.in>,"csngl@nic.in"<csngl@nic.in>,"Suresh Mahapatra"<csori@nic.in>,"Chief Punjab"<cs@punjab.gov.in>,"csraj"<csraj@rajasthan.gov.in>,"cs"<cs@tn.gov.in>,"Somesh IAS"<Cs@telangana.gov.in>,"cs-tripura"<Cs-tripura@nic.in>,"CHIEF GoUP"<csup@nic.in>,"Cs-uttaranchal"<Cs-uttaranchal@nic.in>,"Chiefsecy"<Chiefsecy@gmail.com>,"Westbengal"<Westbengal@nic.in>,"cs-andaman"<cs-andaman@nic.in>,"admn-chandigarh"<admn-chandigarh@nic.in>,"devcom-d"<devcom-d@nic.in>,"advisor-dnhdd"<advisor-dnhdd@daman.nic.in>,"Shri Dev"<csdelhi@nic.in>,"lk-advisor"<lk-advisor@gov.in>,"cs-jandk"<cs-jandk@nic.in>,"Advisor-lgladakh"<Advisor-lgladakh@gov.in>,"cs-pondicherry"<cs-pondicherry@nic.in>

Cc "jsia-moefcc"<js.ia-moefcc@gov.in>,"Ramesh Motipalli"<ramesh.motipalli@nic.in>,"Pankaj Verma"<pankaj.verma@nic.in>,"Chandan Singh"<c.singh@nic.in>,"Tarun Verma"<tarun.v@gov.in>,"Gauri Vashist"<gauri.vashist01@govcontractor.in>,"pramodrao1998"<pramod.rao1998@gov.in>,"umang agnihotri"<umang.agnihotri@wi-sa.org>,"suddhabrata chakraborty"<suddhabrata.chakraborty@giz.de>,"bhuyasheerajkumari"<bhuyashee.rajkumari@wi-sa.org>

Respected Sir/Madam,

Please find attached the OM dated **20.12.2024** with respect to the matter captioned above.

Best Regards,

WETLANDS DIVISION

Ministry of Environment, Forest and Climate Change (MoEF&CC)
5th Floor, Vayu Wing
Indira Paryavaran Bhawan
Jorbagh Road, New Delhi – 110003, India

Phone no./ Intercom: +91-11-20819242 / 4538
+91-11-20819338 / 4256
+91-11-20819396 / 5234

1 Attachment(s)

MoEFCC_OM_SC Directions_...
768.9 KB



gauri.vashist01 < gauri.vashist01@govcontractor.in >

WP(C)304/2018-Anand Arya vs. UOI & Ors along with WP(C) 230/2001 & WP(C)302/2020-Compliance of Hon'ble Supreme Court's Order dated 11.12.2024-reg.

Wetlands Division MoEFCC < wetlands-mefcc@gov.in > Fri, 20 Dec 2024 6:50:49 PM +0530

To "ccfrwp"<ccfrwp@gmail.com>,"wildlifeap"<wildlifeap@gmail.com>,"robindohu"<robindohu@gmail.com>,"PCCF&HoFF Assam"<hoff-assam@gov.in>,"aswauthority"<aswauthority@gmail.com>,"ccwlbihar"<ccwlbihar@bihar.gov.in>,"forestchandigarh"<forestchandigarh@gmail.com>,"cfchandigarh"<cf.chandigarh@gmail.com>,"cgstatewetland"<cgstatewetland@gmail.com>,"cgmsbdb"<cgmsbdb@gmail.com>,"ccf-dmn-dd"<ccf-dmn-dd@nic.in>,"Pradeep Daman"<dcf-dmn-dd@nic.in>,"Ashwin IFS"<dcfwl-dnh@nic.in>,"K.S. Jayachandran"<ceodpgsenv.delhi@nic.in>,"goawetland"<goawetland@gmail.com>,"scientificofficergswa"<scientificofficergswa@gmail.com>,"cwlw"<cwlw@gujarat.gov.in>,"js-wildlife-fed"<js-wildlife-fed@gujarat.gov.in>,"Environment Haryana"<environment@hry.nic.in>,"swaharyana"<swaharyana@gmail.com>,"pccfwlhry"<pccfwlhry@gmail.com>,"Member Secretary"<stc-hp@nic.in>,"DEST Pradesh"<dbt-hp@nic.in>,"s attrigohp"<s.attrigohp@gmail.com>,"sattri-env-hp"<sattri-env-hp@nic.in>,"csforestjk"<csforestjk@gmail.com>,"farukhqazikas"<farukh.qazikas@jk.gov.in>,"sstforestjk"<sstforestjk@gmail.com>,"dirjkers"<dirjkers@gmail.com>,"prsecyfdjharkhand2013"<prsecyfdjharkhand2013@rediffmail.com>,"pccfwl"<pccfwl@gmail.com>,"commissionerfee"<commissionerfee@gmail.com>,"pccfkar"<pccfkar@gmail.com>,"swak kerala"<swak.kerala@gmail.com>,"STATE KERALA"<swak.envt@kerala.gov.in>,"ccfladakh"<ccfladakh@gmail.com>,"rwlwutladakh"<rwlwutladakh@gmail.com>,"Sajjad Mufti"<ccf-ladakh@ladakh.gov.in>,"Conservator Forests"<lak-dcf@nic.in>,"myenvironment11"<myenvironment11@gmail.com>,"ED Bhopal"<ed.epco@mp.gov.in>,"mpswa gov"<mpswa.epco.gov@gmail.com>,"Narendra Toke"<dir1.mev-mh@nic.in>,"Dr Meitei"<man-env@nic.in>,"lbslda"<lbslda@gmail.com>,"pccfmegh"<pccfmegh@gmail.com>,"chiefwildmiz"<chiefwildmiz@gmail.com>,"info"<info@nagalandforest.in>,"nagalandforestdeptt"<nagalandforestdeptt@hotmail.com>,"direnvodisha"<direnvodisha@gmail.com>,"DCF Puducherry"<dcf.pon@nic.in>,"cwlwpunjab"<cwlwpunjab@gmail.com>,"ACSSSWCD"<psss@punjab.gov.in>,"ACS Punjab"<fcf@punjab.gov.in>,"env dept"<env.dept@rajasthan.gov.in>,"jdenvironmentsikkim"<jdenvironmentsikkim@gmail.com>,"tnswa18"<tnswa18@gmail.com>,"jsefstts"<js.efst.ts@gmail.com>,"Harshakumar Chikkanaragund"<dcfhq.tfd-tr@gov.in>,"pccftripura"<pccftripura@gmail.com>,"dcfpnd"<dcfpnd@gmail.com>,"sasiifs"<sasiifs@gmail.com>,"upstatewetlandauthority2018"<upstatewetlandauthority2018@gmail.com>,"ccfec0"<ccfec0@gmail.com>,"cwlwua"<cwlwua@yahoo.co.in>,"psecyenv-wb"<psecy.env-wb@gov.in>,"ctoekwma"<ctoekwma@gmail.com>

Cc "jsia-moefcc"<js.ia-moefcc@gov.in>,"Ramesh Motipalli"<ramesh.motipalli@nic.in>,"Chandan Singh"<c.singh@nic.in>,"Pankaj Verma"<pankaj.verma@nic.in>,"Tarun Verma"<tarun.v@gov.in>,"Gauri Vashist"<gauri.vashist01@govcontractor.in>,"suddhabrata chakraborty"

<suddhabrata.chakraborty@giz.de>,"umang agnihotri"<umang.agnihotri@wi-sa.org>,"bhuyasheerajkumari"<bhuyashee.rajkumari@wi-sa.org>

Respected Sir/ Madam,

Please find attached the OM dated **20.12.2024** with respect to the matter captioned above.

Best Regards,

WETLANDS DIVISION

Ministry of Environment, Forest and Climate Change (MoEF&CC)
5th Floor, Vayu Wing
Indira Paryavaran Bhawan
Jorbagh Road, New Delhi – 110003, India

Phone no./ Intercom: +91-11-20819242 / 4538
+91-11-20819338 / 4256
+91-11-20819396 / 5234

1 Attachment(s)

MoEFCC_OM_SC Directions_...
768.9 KB

TRUE COPY
g.v.

Minutes of the 4th Meeting of National Wetlands Committee (NWC) held on 27.12.2024 at 4:00 PM (hybrid mode)

The 4th meeting of the National Wetlands Committee (NWC) was held on 27.12.2024 under the chairmanship of Special Secretary, MoEF&CC and Vice-Chairperson of NWC. The list of Participants is **Annexed**.

At the outset, the Chair welcomed the participants, followed by a brief introduction of the members and other participants. Further, Joint Secretary, Wetlands Division, MoEF&CC made a brief presentation apprising the participants about the agenda items of the meeting.

Agenda Item 1: Confirmation of minutes of 3rd meeting of NWC

Since no comments were received, minutes of the third meeting of NWC were confirmed.

Agenda Item 2: Action taken report on the decisions taken during the last meeting

i. *Permission for sewage inflow in East Kolkata Wetlands (EKW)*

The proposal was deferred in the last meeting for want of additional information/studies. No further communication has been received from the State Govt. of West Bengal.

ii. *Permission for the continuation of solid waste disposal in Dhapa area for EKW without construction or filling up of any water body & Permission for construction activities in settlement areas and Permission of public works in EKW areas without net loss of water body in the area*

The proposal was recommended in the last meeting specifying that the IMP of EKW with mitigation measures for these agenda items would be cleared for sanction subject to agreement of third-party appraiser. Accordingly, the IMP of EKW received from the State Govt. was sent for third party appraisal. Based on the appraisal report, the IMP was sanctioned on 18.07.2022.

Recommendations/Decision: A mechanism may be developed to monitor the physical and financial progress of the sanctioned projects. A dedicated digital application may be developed to facilitate inspections. The 'App' should have the facility to upload geo-referenced photos and videos, providing verifiable evidence of on-ground developments. The collected data to be integrated with a centralised portal, enabling stakeholders to seamlessly access, review, and evaluate project updates. This system aims to streamline reporting, enhance transparency, and support data-driven decision-making in managing approved projects effectively. The possibility of Third-Party Audit of such projects may also be explored.

iii. *Proposal for formation of the Technical Committee of NWC to take up technical discussions intermediary to the larger NWC meetings.*

A Technical Appraisal Committee (TAC) was constituted vide O.M. dated 10.06.2024 for providing technical/scientific support to the NWC/MoEF&CC in implementation of the Wetlands Rules, 2017, formulation of national policies on wetlands conservation, notification of trans-boundary wetlands, evaluation of Framework Management Plans (FMPs); review of the Integrated Management Plans (IMPs) of Ramsar Sites etc. The first meeting of TAC is scheduled on 17.01.2025.

Further, MoEF&CC has assigned Knowledge Partners for each State and Union Territory to assist in ground-truthing of wetlands within their jurisdiction. Further, to

facilitate the States/UTs in the process of ground-truthing, an app named **ArcGIS Survey 123** has been developed by MoEF&CC.

Agenda Item 3: Initiatives taken and important developments since the last meeting

The following salient initiatives/important developments were shared with the participants:

- The No. of Ramsar Sites has increased from 26 to 85 in the last 10 years. 15 more sites are at various stages of appraisal. Currently, India stands 1st in Asia and 3rd in the world in terms of the number of Ramsar Sites. **Three nominations for Wetland City Accreditation (WCA)** under the Ramsar Convention were submitted for the first time i.e. Indore (Madhya Pradesh), Bhopal (Madhya Pradesh) and Udaipur (Rajasthan).
- '**Mission Sahbhagita**' was launched in May, 2022 for people and stakeholders' participation in the wetlands conservation and management. **Nine Regional Workshops** were organized for wetlands conservation with States/UTs, Ramsar Site Managers, Knowledge Partners and Wetland Mitras. Several other workshops on specific subject matters were also organized.
- The **India Wetland Coalition** was launched in May, 2022 to enable business partnerships for Wetlands Conservation, addressing the risk of nature loss and building resilience to climate change. A Memorandum of Cooperation has been signed between the Indian Business and Biodiversity Initiative and the MoEF&CC to foster participation of corporates in wetlands management and conservation efforts.
- Following the philosophy of *Sahbhagita*, MoEF&CC launched '**Save Wetlands Campaign**' during World Wetlands Day (WWD) 2023 for spreading mass awareness about conservation and management of wetlands in the country, with target-based outputs in collaboration with State/UT Wetlands Authorities.

Under the campaign, till date, more than 2.1 million people were sensitized, ground truthing of more than 93,000 wetlands was done, health cards for more than 6,200 wetlands were prepared and more than 8,90,000 people have taken pledge as Wetland Mitra or registered as Wetland Mitras. Moreover, carbon stock assessment was carried out for 39 Ramsar Sites under this campaign.

- Acknowledging the importance of conservation of Ramsar Sites, the Government of India has announced '**Amrit Dharohar**' initiative as part of the Budget announcement of 2023 to promote unique conservation values of Ramsar Sites. Amrit Dharohar Implementation Strategy was launched on World Environment Day, 2023 by MoEF&CC. The Implementation strategy is centred around four components i.e. *Species and Habitat Conservation, Nature Tourism, Wetlands Livelihoods, and Wetlands Carbon*. The salient achievements, component wise, are as follows:

Species and Habitat Conservation:

- a. Revised NPCA Guidelines incorporating the two-step management process i.e. Framework Management Plan (FMP) and Integrated Management Plan (IMP) issued.

- b. Floral and Faunal inventory of Ramsar Sites published by BSI and ZSI respectively.
- c. People's Biodiversity Registers (PBRs) for Ramsar Sites updated.
- d. Video on Bird call of flagship species of Ramsar sites of India released.
- e. **"Wetland Wise Use-An implementation framework"** released, which aims to clarify the term and provides an implementation framework for achieving wetland-wise use for wetlands in India.
- f. In collaboration with Central Institute of Educational Technology (CIET), NCERT, MoEF&CC has developed a **series of educational videos** focusing on different level of school students on the importance of wetlands conservation and management. These videos are being circulated through the educational channels of NCERT and the Wetlands of India portal for nation-wide dissemination and sensitisation of school students. Jal Bhoomi video has jointly won the best entry in the preparatory /middle category from government organisations in All India Children's Educational e-Content Competition (AICEeCC) (2023-24) held at NERIE Shillong on 15-16 March, 2024.
- g. **The 'Management Effectiveness Tracking Tool (METT) for Indian Wetlands', Practitioner's Guide** was released. It is a self-appraisal tool to support adaptive wetland management and assess progress over time. Workshops are also being organised to train the Ramsar Site Managers in using the tool. Till date, METT Assessments for 22 Ramsar Sites has been done.

Nature Tourism & Wetlands Livelihoods:

- a. MoEF&CC has collaborated with Ministry of Tourism for **eco-tourism/high-value nature tourism** development. Curriculum developed for training programs on nature tourism and wetlands livelihoods. Training programs on Alternate Livelihood Program (ALP) held at five Ramsar Sites and Paryavaran Naavik Certificate (PNC) at two Ramsar Sites. A total of 196 local community members were trained and certified as nature guides.
- b. Training module for Nature Guides developed under the Green Skill Development Programme (GSDP) of MoEF&CC.

Wetlands Carbon:

- a. **'Standard Operating Procedure (SOP) for Assessment of Carbon Stock in Wetlands'** issued.
 - b. Methodology being developed for climate co-benefit assessment for wetlands.
 - c. Considering the high carbon storage capacity, development of Peatland Inventory and its assessment has been initiated.
- **ANUP Newsletter** (half-yearly newsletter on wetlands), a brochure on **Wetlands Conservation: Approach and initiatives, Wetlands Word Map of India** and a Video on **India's journey towards Wetlands Conservation and Management** were also released. Further, **'Wetlands for LiFE Forum & Film Festival,'** a

comprehensive series encompassing three regional and one national media consultation, four workshops for media students and three regional film festivals were organized.

- MoEF&CC celebrated the WWD 2024 on 02.02.2024 at Sirpur Lake, Indore, a Ramsar site of Madhya Pradesh. The event was organised by the MoEF&CC in collaboration with the Department of Environment, Government of Madhya Pradesh and Indore Municipal Corporation (IMC). The event witnessed participation of 25 exhibitors and more than 2000 participants.

The Secretary General, Ramsar Convention on Wetlands visited India to attend this event on the occasion of WWD 2024, who had also lauded the initiatives of Govt. of India in conservation of wetlands.

Recommendations:

- The action on 15 proposed Ramsar sites pending with Compilers (States) may be expedited. Stage-wise pendency report should be formulated and it should be followed up on a weekly basis for early completion of all formalities and designation of Wetland as a Ramsar Site. Status be apprised to senior officers in the Ministry on a regular basis.
- Under the Save Wetlands Campaign, the State/UT wise achievements should be reflected against their targets on its portal for effective monitoring of the campaign's progress. Additionally, a structured reporting module should be developed with fixed and flexible formats to ensure consistent and comprehensive tracking of activities, milestones, and outcomes across all States/UTs.
- A comprehensive training and capacity-building module about the Amrit Dharohar Initiative may be developed and be made available on the Integrated Government Online Training (iGOT) platform. Endeavor be made to shortlist component wise projects viz. Development of Herbarium etc. and implement the same.

Agenda Item 4: Proposals seeking permission under Rule 4(2) of the Wetlands (Conservation & Management) Rules, 2017

- a. **Permission for development of tourism infrastructure at Tampara Lake, District Ganjam, Odisha by Department of Tourism, Government of Odisha - Post-facto**

The Committee was apprised of the matter pending before the Hon'ble National Green Tribunal, Eastern Bench, Kolkata, i.e. O.A. No. 88/2023, titled as Wildlife Society of Orissa vs. State of Odisha & Ors., w.r.t the permanent construction that has taken place within no development zone at Tampara Lake resulting in violation/non-compliance of the applicable Wetlands (Conservation & Management) Rules, 2017. Further, the details of designation of Tampara Lake as Ramsar Site, eco-tourism development plan recommended by the State Wetland Authority Odisha, approval of Ministry of Tourism under 'Swadesh Darshan' (central scheme) of Government of India etc. were apprised.

The committee observed that the following decisions were taken/information sought during the preliminary meeting convened by the Ministry under the Chairpersonship of Additional Secretary, MoEF&CC (Vice-Chairperson of NWC) on 12.09.2024:

- i. DFO, Brahmapur shall submit a detailed note on the construction activities undertaken on the forest land, status of the post facto Forest Clearance (FC) and the requisite procedure for such violation/post facto cases.
- ii. As sought by the Joint Committee constituted by Hon'ble NGT in its report dated 22.09.2023, an Integrated Management Plan and proposed comprehensive Environment Management Plan shall be prepared by a third party/independent agency and submitted to DC Ganjam, who shall place it before the said Joint Committee for its recommendations.
- iii. Ministry of Tourism to provide details highlighting the components of the project sanctioned by them.
- iv. Department of Tourism, Government of Odisha shall submit details of various components of the project vis-a-vis those sanctioned by Ministry of Tourism, those sanctioned in other schemes along with their sanctioned budget, the expenditure incurred and latest photographs of all the construction works undertaken.
- v. D.C Ganjam shall submit the justification for issuing the show-cause notice dated 23.09.2023 to the Addl. General Manager, M/s Engineering Projects India (Ltd.) along with its current status.

Out of the above information/documents sought, reply has been received only from the Ministry of Tourism. Regarding the post facto FC, it was informed by the Department of Tourism, Govt. of Odisha that an application was submitted on PARIVESH 2.0 portal for diversion of forest-land within Tampara development vide application no. SW No.: SW/173154/2024. Some details were sought by the Ministry and the matter is under consideration. The MS, Odisha SWA informed that an IMP of Tampara Lake is being prepared through WISA which is expected to be finalised within two-three months and shall be submitted to the Ministry duly approved by the SWA.

Decision:

- Approval for such construction activities cannot be granted in a routine manner without applying the rigour of comprehensive assessment. The IMP/EMP is a pre-requisite for considering the proposal. The said IMP/EMP of Tampara Lake should be comprehensive and shall, inter-alia, address the impact of the construction activities already undertaken and recommendations to minimize the adverse impacts on the wetland ecosystem.
- A copy of the FC shall be submitted along with the approved IMP.
- The information w.r.t S. No. (iv) and (v) above shall also be submitted, at the earliest.

The committee also recommended that the State Government may explore targeted skill development programs to enhance wetland conservation and management capabilities. These programs may focus on equipping local communities with the necessary knowledge and skills to actively contribute to the sustainable management of wetlands and protect their ecological value.

- b. **Permission for the construction of One Underground Reservoir, Two Overhead reservoirs and One Health Centre at Dhapamanpur Mouza in East Kolkata Wetlands (EKW)**

The State Wetlands Authority, West Bengal vide letter dated 21.10.2024 has apprised that East Kolkata Wetlands (EKW) is world's largest wastewater ecosystem created to sustain successive resource recovery systems in the form of vegetable farms, fishponds and paddy fields. Considering its ecological and social significance, UNESCO designated International Importance to these wetlands by adding them to the Ramsar list in 2002. It is unique as it is a livelihood-based system with more than 100 villages and approx. 1,50,000 people living within this wetland.

Considering the human habitation within EKW, proposal of Bidhannagar Municipal Corporation (BMC) for construction of one UGR (Underground Reservoir) with 1500 m³ capacity & two OHR (Over Head Reservoir) with 1200 m³ and 550 m³ capacity and one two storey Health Centre in Dhapamanpur mouza within Ward 36 of BMC to deliver potable and adequately treated surface water to the common citizens of BMC Ward No. 28, 35 & 36 was considered by the State Wetlands Authority, West Bengal in its 5th meeting held on 16.08.2024. The Authority recommended the proposal. The proposed project belongs to the surface water supply scheme under Amrut 2.0 program.

The project proponent (BMC) made a detailed presentation on the proposal.

Decision: The agenda was discussed thoroughly. The Committee noted the argument of the EKW regarding provision for drinking water and healthcare facilities. It was observed that the combined endeavour of the Committee should be to find sustainable solutions to peoples' issues which address the immediate need on one hand and try to keep the impact on the Wetland ecosystem to the minimum, on the other. It was noted that there was a water pool in the immediate vicinity of the proposed site. On being asked if any comparative study/ cost benefit analysis has been carried out for the proposed project on any other alternate site, it was learnt that such an exercise is yet to be undertaken. Since no alternate site was examined/proposed by the BMC/State Govt., it was, in the overall interest of conservation of the sensitive Wetland ecosystem, decided that they shall explore alternate sites for the aforesaid proposal. Further, a joint team comprising of officials from MoEF&CC, ZSI, BSI, NEERI, WISA and SWA shall undertake a visit to the proposed sites and submit their report to the Ministry within a month.

c. Permission for construction of VIP Road in Bhoj Wetland, Bhopal, Madhya Pradesh.

The Environment Department, Government of Madhya Pradesh vide letters dated 11.10.2023 and 04.07.2024 (*enclosures/main documents received only on 20.12.2024*) requested for the grant of NOC/Approval for the proposed extension of VIP Road in the Bhoj Wetland, Bhopal, Madhya Pradesh. The MPSWA vide email dated 25.12.2024 apprised that due to some exigencies, they are not able to attend the meeting and make a presentation before the committee and requested to defer the agenda. The agenda was accordingly deferred.

Agenda Item 5: Hon'ble Supreme Court's directions vide order dated 11.12.2024 with reference to Rule 7(1) (a) of the Wetlands (Conservation & Management) Rules, 2017

The Hon'ble Supreme Court of India, vide Order dated 11.12.2024, directed that, *each of the State/UT Wetland Authorities shall complete ground truthing as well as the demarcation of wetland boundaries of each of the Wetland which have been identified for their State by Space Application Centre Atlas (SAC Atlas), 2021 as expeditiously as possible, but definitely within a period of three months (i.e. by 10.03.2025)*. MoEF&CC vide O.M. dated 20.12.2024 has requested all the Chief Secretaries and the State/UT Wetland Authorities for compliance of the said direction.

Further, the Ministry has assigned Knowledge Partners (KPs) to each State/UT to assist them in various aspects of wetlands conservation. It was also requested that regular progress and compliance may be monitored by Additional Chief Secretary/Principal Secretary of Environment/Forest Department of the State/UT for ensuring time bound compliance of the directions. A time-bound action plan latest by 31.12.2024 and a fortnightly progress report were also sought.

Some of the SWAs have requested to provide the shape files of the Wetland Atlas 2021 to facilitate in the above process.

Decision:

- All the States/UTs should accord 'TOP PRIORITY' to the task and ensure meticulous and time bound compliance of the directions of the Hon'ble Court. All the Participants should sensitize their respective Administrative Secretaries/ HoDs of the directions and ensure regular follow up and progress in the matter.
- MoEF&CC to share a Google Sheet with the States/UTs for updating the status on a day-to-day basis.
- MoEF&CC, with the support of SAC, NCSCM and KPs to accord all possible help to the States/UTs in the subject matter.
- A coordination exercise on a daily basis through VC be carried from 4 to 5 PM.

The meeting ended with the thanks to the Chair.

List of Participants for 4th Meeting of the National Wetlands Committee (NWC)		
S No.	Name/ Designation	Organization
NWC ex-officio and/or nominated members		
1	Mr. Tanmay Kumar, Special Secretary	MoEFCC
2	Mr. Rajat Agarwal, Joint Secretary, Wetlands Division	MoEFCC
3	Dr. Ramesh Motipalli, Scientist 'F', Wetlands Division	MoEFCC
4	Mr. Pankaj Verma, Scientist 'E', Wetlands Division	MoEFCC
5	Mr. Chandan Singh, Consultant, Wetlands Division	MoEFCC
6	Ms. Gauri Vashist, Legal Associate, Wetlands Division	MoEFCC
7	Mr. Umang Agnihotri, Wetlands Specialist, Wetlands Division	WISA, MoEFCC
8	Ms. Bhuyashee Rajkumari, Program Associate, Wetlands Division	WISA, MoEFCC
9	Mr. Manish Gupta, Software Developer, Wetlands Division	MoEFCC, NCSCM
10	Mr. Pramod Rao, Research Assistant, Wetlands Division	MoEFCC
11	Director, Department of Tourism	Ministry of Tourism
12	Mr. S. K. Shrivastav, Scientist F, Department of NRCD.	Ministry of Water Resources
13	Mr. P Babu, Deputy Director, Plan Division	Ministry of Social Justice & Empowerment
14	DoLR, MoRD	Ministry of Rural Development
15	Mr. Vishal Gandhi, Scientist E, CPCB	CPCB
16	Dr. Santosh Kumar, ZSI Kolkata	ZSI

17	Ms. Priyanka Sarkar, Consultant Grade-1(Green Transition & Climate)	NITI Aayog
State Govt. representatives from current cohort		
18	Chief Technical Officer, East Kolkata Wetlands	SWA, West Bengal
19	Mr. Amit Kumar Lamba	MS SWA, Maharashtra
20	OIC, MPSWA	SWA, Kerala
21	CHIEF CONSERVATOR OF FOREST BIHAR	SWA, Bihar
22	Mr. Abhay Pimparkar-MS SWA, Maharashtra	SWA, Maharashtra
23	Collector, Ganjam	SWA, Odisha
24	Lakshadweep Environment and Forest	UTWA, Lakshadweep
25	CCF, DNH, DD	UTWA, Dadra & Nagar Haveli & Daman & Diu
26	DCF Daman & Diu	UTWA, Dadra & Nagar Haveli & Daman & Diu
27	Dr. John C. Mathew	SWA, Kerala
28	Mr. Satyendra Singh Addl PCCF Assam	SWA, Assam
29	Chief Conservator of Forest, Chandigarh	UTWA, Chandigarh
30	CE CWC	UTWA, Chandigarh
31	Mr. Naresh Kumar, Addl Secy, Member Secretary	SWA, Arunachal Pradesh
32	DIRECTOR Environment J&K	UTWA, Jammu & Kashmir
33	Director DEERS, J&K	SWA, Jammu & Kashmir
34	J&K Dr Majid	SWA, Jammu & Kashmir
35	SECCCD Uttarakhand	SWA, Uttarakhand
36	CGSWA	SWA, Chhattisgarh
37	DFO HOSHIARPUR PUNJAB	SWA, Punjab
38	Tamil Nadu State Wetland Authority	SWA, TN
39	Member Secretary,	SWA, Rajasthan
40	RS Gill PCCF & HoFF Meghalaya	SWA, Meghalaya
41	MS, Karnataka	SWA, Karnataka
42	OIC, MPSWA	SWA, MP
43	Mr. LOKENDRA THAKKAR, OIC, MPSWA	SWA, MP

44	Divisional Wildlife Officer, Rohtak	SWA, Haryana
45	CCF Wildlife Gurugram	SWA, Haryana
46	WILDLIFE, AP	SWA, AP
47	Mr. Ravi Sharma HPSWA	SWA, HP
Expert Members		
48	Dr T V Ramachandra	Expert Member (Socio-Economics)
49	Dr Vishwanath Waikhom	Expert Member (Fisheries)
50	Dr Surabhi Mehrotra	Expert Member (Landscape Planning)
51	PROF. SANJAY DESHMUKH	Expert Member (Ecology)
Special Invitees		
52	Ms. Suchita Awasthi, Wetlands International South Asia	Wetlands International South Asia
53	Director, NCSCM	National Centre for Sustainable Coastal Management

TRUE COPY
G.V

**Annexure 3- Report on Ground-Truthing and Demarcation of Wetland Boundaries, as on
22.03.2025**

S.No.	State/UT	Number of wetlands (As per SAC Atlas 2021)	Ground Truthing (GT) Completed		Boundary Demarcation Completed		Timeline for completion of task as per Action Plan	Remarks
			As on 22.03.2025	%	As on 22.03.2025	%		
1	Andaman and Nicobar Islands	2,774	0	0	0	0	Action plan not received	
2	Andhra Pradesh	24,104	22,477	93	6,615	27	3 rd week of March, 2025	
3	Arunachal Pradesh	1,182	0	0	0	0	3 rd week of March, 2025	
4	Assam	5,902	5,097	86	0	0	October, 2026	Boundary demarcation data not uploaded on the portal.
5	Bihar	4,526	4,316	95	3,911	86	3 rd week of March, 2025	
6	Chandigarh	11	11	100	11	100	Completed	Boundary demarcation data not uploaded on the portal.
7	Chhattisgarh	11,457	10,971	96	10,072	88	1 st and 2 nd week of March, 2025	
8	Dadra Nagar Haveli & Daman and Diu	71	0	0	0	0	Action plan not received	Data not uploaded as well as contact details not updated in the Google-sheet.
9	Delhi	123	49	40	31	25	3 rd week of March, 2025	Boundary demarcation data not

**Annexure 3- Report on Ground-Truthing and Demarcation of Wetland Boundaries, as on
22.03.2025**

								uploaded on the portal.
10	Goa	742	703	95	0	0	March, 2025	Boundary demarcation data not uploaded on the portal.
11	Gujarat	17,613	15,201	86	0	0	3 rd week of March, 2025	Boundary demarcation data not uploaded on the portal.
12	Haryana	1,905	566	30	0	0	Action plan not received	Boundary demarcation data not uploaded on the portal.
13	Himachal Pradesh	215	60	28	25	12	20.03.2025	Ground-truthing data not uploaded on the portal.
14	Jammu and Kashmir	404	227	56	82	20	18.03.2025	Boundary demarcation data not uploaded on the portal. (Note- 183 ground-truthed, out of which 175 were found present and 8 absent; 52 additional wetlands were found during

**Annexure 3- Report on Ground-Truthing and Demarcation of Wetland Boundaries, as on
22.03.2025**

								ground-truthing)
15	Jharkhand	2,635	61	2	0	0	Action plan not received	Boundary demarcation data not uploaded on the portal and contact details not updated in the Google sheet.
16	Karnataka	14,936	4,533	30	0	0	Action plan not received	Boundary demarcation data not uploaded on the portal.
17	Kerala	1,399	415	30	40	3	March, 2025	Boundary demarcation data not uploaded on the portal.
18	Ladakh	1,073	32	3	0	0	Action plan not received	Boundary demarcation data not uploaded on the portal.
19	Lakshadweep	50	42	84	0	0	Action plan not received	Boundary demarcation data not uploaded on the portal and contact details not updated in the Google sheet.
20	Madhya Pradesh	13,947	13,567	97	11,858	85	11.03.2025	Boundary demarcation data not

**Annexure 3- Report on Ground-Truthing and Demarcation of Wetland Boundaries, as on
22.03.2025**

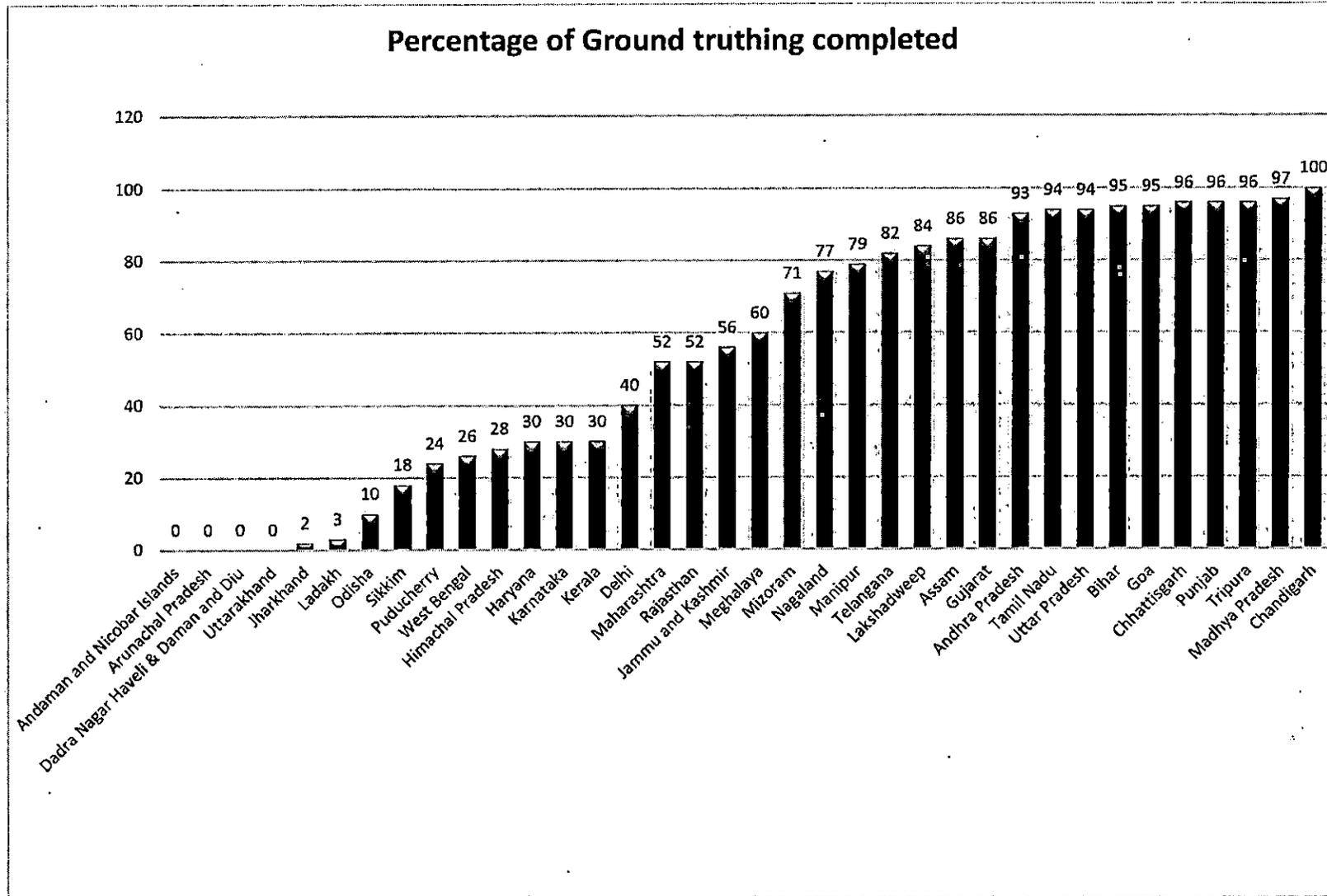
								uploaded on the portal.
21	Maharashtra	25,935	13,589	52	23,415	90	March, 2025	Boundary demarcation data not uploaded on the portal.
22	Manipur	132	104	79	71	54	07.03.2025	Boundary demarcation data not uploaded on the portal.
23	Meghalaya	225	135	60	21	9	October, 2025	Boundary demarcation data not uploaded on the portal.
24	Mizoram	127	90	71	0	0	Not provided yet	Boundary demarcation data not uploaded on the portal.
25	Nagaland	148	114	77	12	8	4 th Week of April, 2025	Boundary demarcation data not uploaded on the portal.
26	Odisha	13,331	1,319	10	0	0	3 rd week of March, 2025	Boundary demarcation data not uploaded on the portal.
27	Puducherry	139	33	24	0	0	Action plan not received	Boundary demarcation data not uploaded on the portal.

**Annexure 3- Report on Ground-Truthing and Demarcation of Wetland Boundaries, as on
22.03.2025**

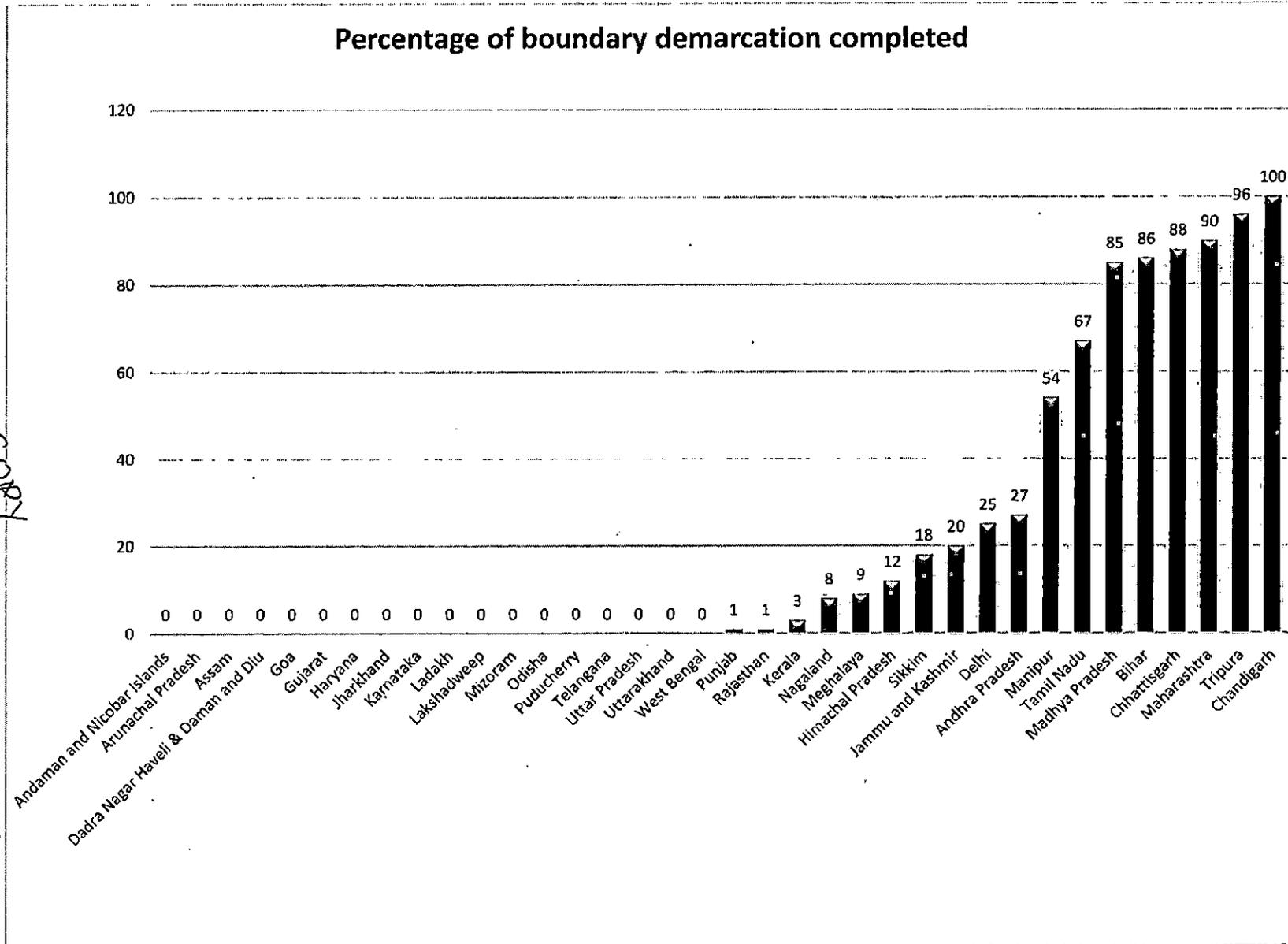
28	Punjab	1,190	1,143	96	6	1	31.03.2025	Boundary demarcation data not uploaded on the portal.
29	Rajasthan	13,321	6,889	52	75	1	3 rd week of March, 2025	Boundary demarcation data not uploaded on the portal.
30	Sikkim	259	46	18	46	18	15.05.2025	Boundary demarcation data not uploaded on the portal.
31	Tamil Nadu	26,883	25,282	94	17,940	67	3 rd week of March, 2025	
32	Telangana	12,338	10,121	82	3	0	Action plan not received	Boundary demarcation data not uploaded on the portal.
33	Tripura	416	398	96	399	96	31.03.2025	
34	Uttar Pradesh	18,555	17,528	94	11	0	Action plan not received	
35	Uttarakhand	172	0	0	0	0	Action plan not received	
36	West Bengal	12,955	3,356	26	0	0	31.03.2025	Boundary demarcation data not uploaded on the portal.
Total		2,31,195	1,58,475		74,644			

***Note- a) Ground-truthing completed- 69%; b) Boundary demarcation completed-32%**

Annexure 3- Report on Ground-Truthing and Demarcation of Wetland Boundaries, as on 22.03.2025



TRUE COPY



Sr. No.	Wetland Type				2017-18			2006-07			Decadal Change	Disappeared		New		
	Wetland code	Level -I	Level -II	Level -III	Number	Area (ha)	Area (% of wetlands)	Number	Area (ha)	Area (% of wetlands)	Area (ha)	Number	Area (ha)	Number	Area (ha)	
1	1101	Inland	Natural	Lake/Pond	20	15550	9.5	20	15570	9.5	-20	-	-	-	-	
2	1102			Ox-bow lake/cut-off meander	-	-	-	-	-	-	-	-	-	-	-	-
3	1103			High altitude lake	189	3007	1.8	189	3008	1.8	-1	-	-	-	-	-
4	1104			Riverine Wetlands	75	9344	5.7	75	9341	5.7	3	-	-	-	-	-
5	1105			Waterlogged	2	12	0.0	2	12	0.0	-	-	-	-	-	-
6	1106			River/Stream	96	111275	67.8	95	111398	67.8	-123	-	-	-	-	-
7	1201		Man-made	Reservoir/Barrage	5	24835	15.1	4	24811	15.1	24	-	-	-	-	
8	1202			Tank/Pond	17	87	0.1	18	90	0.1	-3	1	3	-	-	
9	1203			Waterlogged	-	-	-	-	-	-	-	-	-	-	-	
10	1204			Salt pan	-	-	-	-	-	-	-	-	-	-	-	
11	1205			Aquaculture Pond	-	-	-	-	-	-	-	-	-	-	-	
12	2101	Coastal	Natural	Lagoon	-	-	-	-	-	-	-	-	-	-	-	
13	2102			Creek	-	-	-	-	-	-	-	-	-	-	-	
14	2103			Sand/Beach	-	-	-	-	-	-	-	-	-	-	-	
15	2104			Intertidal mud flat	-	-	-	-	-	-	-	-	-	-	-	
16	2105			Salt Marsh	-	-	-	-	-	-	-	-	-	-	-	
17	2106			Mangrove	-	-	-	-	-	-	-	-	-	-	-	
18	2107			Coral Reef	-	-	-	-	-	-	-	-	-	-	-	
19	2201		Man-made	Salt pan	-	-	-	-	-	-	-	-	-	-	-	
20	2202	Aquaculture pond		-	-	-	-	-	-	-	-	-	-	-		
				Total	404	164110	100	403	164230	100	-120	1	3	-	-	

Note: wetlands database of 2006-07 was updated by incorporating interpretational changes