

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

Original Application No. 694/2023

In re: News item appearing in Hindustan Times dated 26.10.2023 titled
**“UN predicts groundwater level in India will reduce to ‘low’ by
2025”**

Date of hearing: 24.11.2023

**CORAM: HON’BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON’BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

Applicant: Mr. Gigi. C. George, Adv. with Mr. Shilender Diwedi for CGWA

ORDER

1. This OA is registered *suo motu* on the basis of the news item published in ‘Hindustan Times’ dated 26.10.2023 titled **“UN predicts groundwater level in India will reduce to ‘low’ by 2025”**.

2. As per the news item report, some areas in Indo-Gangetic basin in India have already passed the groundwater depletion tipping point and its entire northwestern region is predicted to experience critically low groundwater availability by 2025, according to a news report by the United Nations. It is also disclosed in the news report that India is the world's largest user of groundwater, exceeding the use of United States and China combined. The northwestern region of India serves as the bread basket for the nation's growing 1.4 billion people, with the states of Punjab and Haryana producing 50 per cent of the country's rice supply and 85 per cent of its wheat stocks. However, 78 per cent of wells in Punjab are considered overexploited and the northwestern region as a whole is predicted to experience critically low groundwater availability by 2025.

3. The news item raises a very serious concern relating to depleting the ground water level. Hence, a substantial issue relating to compliance of environmental laws is involved in the matter.

4. Accordingly, in view of the judgment of 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, this OA is registered in *suo-motu* exercise of power.

5. On the basis of advance notice, the report on behalf of the Central Ground Water Authority, New Delhi has been submitted on 22.11.2023. Stand taken in the said report is that the measures encompassing all the suggesting measures outlined in the UN University report have been taken by the Government to improve the situation of ground water in the country. The Annual Report of 2022 which has been published by the Central Ground Water Board, Department of Water Resources depicts a very different picture than the one which has been presented in the report filed before the Tribunal. Some of the disclosures made in the Annual Report are as under:

In the chapter 5

5.1.1 Fluctuation of Ground Water level:

Pre-monsoon 2022 compared to Pre-monsoon 2019 A comparison of depth to water level of Premonsoon 2022 with Premonsoon 2019 (Fig-5.3) indicates that 69.7% of the analysed wells (11744 No) show rise in water level whereas almost 29% wells show decline in water level. 1.1% wells show no change. Rise and decline in water level is primarily in the 0-2 m range. Decline of water level is quite prominent in the states/ UTs of Goa, Haryana, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Odisha, Punjab, Rajasthan, Tripura and West Bengal. Decline of more than 4 m water level is observed in small pockets in the states of Chhatisgarh, Gujarat, Haryana, Madhya Pradesh, Punjab, Rajasthan and West Bengal.

In the chapter 7, state wise ground water resource scenario indicates

- With regard to Andhra Pradesh out of 140719.5 SqKm of rechargeable area of the State, 1380.65 SqKm is over exploited, 1114.2 SqKm is critical and 4206.4 SqKm is semi critical. Further 6096.33 Sqkm is under saline category.
- In case of Bihar out of 90348.70 SqKm of the State of rechargeable area 867.8 SqKm is over exploited, 1354.24 sq.km is critical and 6200.44 Sqkm is semi critical.
- In case of Chhattisgarh out of 106078.71 SqKm rechargeable worthy area of the State 3797.89 SqKM are critical, 14832.17 Sqkm is semi critical.
- With regard to Delhi the state is critical in terms of ground water extraction out of 1487.6 SqKM recharge worthy area of the State 709.81 sqkm which is **47.71 %** falls in over exploited zone, 179.37 SqKm is critical. 396.73 SqKm is semi critical. The report also indicates that 12000 private tubewells have been registered with DJB. The total annual ground water recharge has been assessed as 0.41 bcm and annual extractable ground water resources is 0.37 bcm. The total current annual ground water extraction is 0.36 bcm and the stage of ground water extraction is **98.16 %**.
- With regard to Gujarat out of 162778.15 SqKm recharge worthy area of the State 19707.17 SqKm is overexploited, 4138.03 SqKm is critical and 10408.88 SqKm is semi critical. Further as compared to 2020 assessment total annual ground water recharge has decreased from 26.8 bcm to 26.46 bcm and annual extractable ground water resource has decreased from 24.91 to 34.58 bcm.
- With regard to Haryana, out of 40391.05 SqKm recharge worthy area of the State 24772.68 SqKm (**61.33 %**) is overexploited, 2359.3 SqKm is critical, 2398.44 SqKm is semi critical. The annual recharge has decreased.
- In case of Jharkhand out of 60646.73 sqkm recharge worthy area of the State 463.92 SqKm is over exploited 1068.48 SqKm is critical, 2169.13 SqKm is semi critical. The annual water extraction of the state has increased which is mainly due to urbanization and industrialization
- With regard to Karnataka out of 170647.10 SqKm recharge worthy area of the State 39352.66 SqKm (23.06 %) area under over exploitation, 6580.96 SqKm is critical, 26593.23 SqKm semi critical. Over all the stage of ground water extraction has increased.
- With regard to Kerala, out of 27047.54 SqKm recharge worthy area 777.38 SqKm is critical, 3817.64 SqKm semi critical (14.11 %). The overall ground water extraction has increased.

- In case of Madhya Pradesh, out of 269361 SqKm recharge worthy area of the State 22579 SqKm are under overexploited, 4249 SqKm is critical, 51807 SqKm is semi critical. There is a marginal decrease in recharge and increase in ground water extraction.
- With regard to Maharashtra, 259914.03 SqKm recharge worthy area of the State 8940 SqKm is overexploited, 9651 SqKm critical, 60673 SqKm semi critical.
- In case of Odisha, out of 121593.15 SqKm recharge worthy area of the State 2748.93 SqKm is semi critical and 2181.33 SqKm is saline.
- In case of Punjab, out of 50344.68 SqKm recharge worthy area of the State **3693.63 SqKm (73.37 %)** area are over exploited. 1742.88 SqKm critical. 4599.2 SqKm semi critical. The annual ground water recharge has decreased while the extraction had increased.
- In case of Rajasthan, out of 317058.36 SqKm recharge worthy area of the State 226126.61 SqKm (**71.32 %**) are under over exploited, 16651.50 SqKm critical, 18676.47 SqKm semi critical. The ground water extraction has increased.
- With regard to Tamil Nadu out of 108719 SqKm recharge worthy area, 32401.7 SqKm area under over exploited, 7488.67 SqKm critical, 21987.14 SqKm semi critical. In case of Tamil there has been 41 units showing deterioration. Several areas in the 34 district show over exploited or critical.
- In the case of Telangana, out of 106308.5 sqkm rechargeable worthy area, 201.14 SqKm is over exploited 1322.36 SqKm critical and 11392.5 SqKm semi critical.
- With regard to Uttar Pradesh, out of 229593.13 sqkm recharge worthy area 15263.27 Sqkm over exploited. 12743.67 SqKm critical. 51239.41 SqKm semi critical. The assessment shows increase in ground water extraction and decrease in recharge.

The report shows over extraction in several areas which is in particular Rajasthan and Gujarat where prevailing arid climate conditions results in low recharge of ground water hence stress. In peninsular area over exploited units are wide spread in the states of Karnataka, Tamil Nadu and parts of Andhra Pradesh and Telangana. The report also suggests more experimental studies to be taken up refining the norms taking into consideration irrigation, soil types, agro climatic zones, recharge from water conservation and from water bodies.

6. In view of the seriousness of the issue, we deem it proper to implead the following as respondents in this OA:

- 1) Central Ground Water Authority through its Member Secretary.
- 2) Ministry of Jal Shakti through its Secretary.
- 3) Ministry of Environment, Forest and Climate Change through its Secretary.
- 4) State of Andhra Pradesh through the Secretary, Department of Water Resources.
- 5) State of Bihar through the Secretary, Department of Water Resources.
- 6) State of Chhattisgarh through the Secretary, Department of Water Resources.
- 7) State of Delhi through the Secretary, Department of Water Resources.
- 8) State of Gujarat through the Secretary, Department of Water Resources.
- 9) State of Haryana through the Secretary, Department of Water Resources.
- 10) State of Jharkhand through the Secretary, Department of Water Resources.
- 11) State of Karnataka through the Secretary, Department of Water Resources.
- 12) State of Kerala through the Secretary, Department of Water Resources.
- 13) State of Madhya Pradesh through the Secretary, Department of Water Resources.
- 14) State of Maharashtra through the Secretary, Department of Water Resources.

- 15) State of Odisha through the Secretary, Department of Water Resources.
- 16) State of Punjab through the Secretary, Department of Water Resources.
- 17) State of Rajasthan through the Secretary, Department of Water Resources.
- 18) State of Tamil Nadu through the Secretary, Department of Water Resources.
- 19) State of Telangana through the Secretary, Department of Water Resources.
- 20) State of Uttar Pradesh through the Secretary, Department of Water Resources.
- 21) State of Himachal Pradesh through the Secretary, Department of Water Resources.
- 22) State of Jammu & Kashmir through the Secretary, Department of Water Resources.
- 23) State of Tripura through the Secretary, Department of Water Resources.
- 24) State of West Bengal through the Secretary, Department of Water Resources.

7. Notices on behalf of Respondent No. 1 and 2 are accepted by Counsel present for the Respondent No. 1 today.

8. Let notice be issued to the remaining respondents for filing their response atleast one week before the next date of hearing.

9. It will be open to the Respondent No. 1 also to file the response in view of the observations made above one week before the next date of hearing.

10. List on 09.02.2024.

Prakash Shrivastava, CP

Dr. A. Senthil Vel, EM

November 24, 2023
Original Application No. 694/2023
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