

2226

BELOW THE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH, NEW DELHI

O.A. NO. 694 OF 2023

(SUO MOTO)

NGT

Petitioner

VERSUS

PUNJAB GOVT

Respondent

INDEX

Sr. NO	Particulars	Dated	Pages
1.	Additional reply by way of short affidavit of Krishan Kumar, Principal Secretary to Government of Punjab, Department of Water Resources, Chandigarh for and on behalf of Respondent No. 16		
2.	Vakalatnama		1
3.	Reply		2-18

Submitted by:

10.09.24

^{h7}
Krishan Kumar
Principal Secretary to Government of Punjab,
Department of Water Resources,
Chandigarh.



Principal Secretary to Government of Punjab,
Department of Water Resources,
Chandigarh.
No. E-11/2023
Date: 10/09/2024

2227

VAKALATNAMA
BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 694/2023

NGT


VERSUS

Petitioners

State of Punjab

Respondent

I, Krishan Kumar, Principal Secretary to Govt. of Punjab, Department of Water Resources, Punjab on behalf of Government of Punjab the Respondent in above case do hereby appoint and retain Asst. Adv. Mr. Premraj Singh advocate on record for the State of Punjab in the NGT, Principal bench, New Delhi to act and appear for respondents on behalf respondent to conduct and deemed the same and all proceeding that may be taken in respect of an application connected with the same of any decree or orders passed there in including proceedings and application to file and obtain/return of documents and to deposit and receive money on behalf of respondents in the said case and to take all necessary steps on behalf of the respondents in the above matters. The Governor of Punjab agree to rectify all the facts done by the Advocate in pursuance of this authority dated this the 10th September Day of 2024.


Principal Secretary to Govt. of Punjab,
Department of Water Resources,
Respondent.

Principal Secretary
Department of Water Resources

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL PRINCIPAL
BENCH, NEW DELHI**

Original Application No.694 of 2023

In the matter of:

In Re: News item appearing in Hindustan Times dated 26-10-2023 titled as UN Predicts groundwater level in India will reduce to low by 2025 addressed to State of Punjab through the Principal Secretary department of Water Resources, Punjab Chandigarh and to the other states.

Additional reply of Application No.694 of 2023 by The Principal Secretary, Water Resource Department, Punjab, Chandigarh on behalf of respondent No.16.

Respectfully Showeth:

1. That the present original application is pending before this Hon'ble Tribunal and is now listed for hearing on 12-09-2024.
2. That the Hon'ble National Green Tribunal was pleased to take suo moto cognization of news item published in the Hindustan Times dated 26-10-2023, titled as, "UN predicts groundwater level in India will reduce to low by 2025", whereas this Hon'ble Tribunal issued notice to the answering respondent i.e. Principal Secretary, Punjab, Chandigarh vide order dated 24.1.2023.
3. As per order [assed by Hon'ble National Green Tribunal (NGT) dated 26.07.2024 in the above noted case
".... 19. All Respondents shall also explain by filing reply/ additional reply, as the case may be, placing on record as to what considerations are taken into account while granting permission for extraction of Groundwater particularly for commercial or industrial purposes in OCS areas, i.e. Over-Exploited areas, Critical and Semi-Critical. "

LN

4. That in response to these observations it is submitted that the department had earlier filed reply in the present case on 05/02/2024. Now as per the direction of the Hon'ble Tribunal dated 26.07.2024 the additional reply is hereby filed. The Government of Punjab has framed an Act namely Punjab Water Resources (Management and Regulation) Act 2020, vide which management and regulation of Water Resources of the State for ensuring the judicious , equitable, sustainable utilization has been considered and Punjab Water Regulation & Development Authority was constituted. The Authority issued Punjab Ground Water extraction and conservation directions in the year 2023. The said authority has submitted as under:

1. The Hon'ble Supreme Court had issued directions vide its order dated 10.12.1996 passed in Civil writ Petition No. 4677 of 1985, "MC Mehta Vs Union of India" and based on these the Government of India constituted a Central Ground Water Authority (hereinafter referred to as CGWA) vide notification dated the 14.01.1997. The Authority so constituted exercised powers under Section 5 of the Environment (Protection) Act, 1986 for the purposes of Regulation and Control of Ground Water Management and Development and exercised certain powers and performed certain functions relating thereto. CGWA was regulating groundwater development and management by way of issuing 'No Objection Certificates for groundwater extraction to industries or infrastructure projects or Mining Projects etc.. and had framed guidelines in this connection from time to time in twenty-two States and two Union territories, where ground water development is not being regulated by the respective State Government or Union Territory concerned. In the meanwhile, the National Green Tribunal, New Delhi (hereinafter referred to as Hon'ble Tribunal) vide order dated 15.04.2015 in OA Nos. 204/205/206 of 2014 had issued directions to CGWA to ensure that any person operating tube-well or any means to extract groundwater shall obtain permission from CGWA and shall



5. There are total 153 Assessment Areas (Blocks) in Punjab which are categorized into Orange, Yellow, and Green. As per Paragraph 4.1 C of the Directions, 2023:

"The status (Green, Yellow, Orange) of Assessment Areas (Blocks) has been defined keeping in view the status of groundwater development of each Assessment Area (Block) as described in Annexure 1. Groundwater Charges have been levied at different rates for different Assessment Areas (Blocks) with a view to balance the demand for water on the one hand, and the requirements of ecological sustainability on the other hand, so as to achieve the overall objective of improving the water balance."

The relevant extract of Annexure I of the Directions, 2023 is reproduced herein below for your kind reference:

"The Government of India and Government of Punjab have been jointly assessing the groundwater status of Punjab periodically. The latest assessment of Ground Water Resources of Punjab has been published in the Report "Ground Water Resources of Punjab State (As on 31 March 2022)" December 2022 by Water Resources Department, Punjab and the Central Ground Water Board, North Western Region, Chandigarh.

As per the Report, the categorisation of assessment areas (blocks) is defined by the Stage of Ground Water Extraction as given below:

57

Table A 1: Stage of Ground Water Extraction

Stage of Ground Water Extraction (%)	Category
≤70	Safe
> 70and ≤ 90	Semi-Critical
>90 and 100	Critical
> 100%	Over-Exploited

The Stage of ground water extraction and categorisation of assessment areas (blocks) in the Report is based only on the Dynamic Ground Water Resources. In other words, the assessment in the Report does not consider the Static Ground Water Resources or water resources contained in the deeper aquifers.

The abstract of Dynamic Ground Water Assessment for the year 2022 for Punjab is given in the Report as follows:

Table 4-2 Pater om Dynamic Water Resources of Punjab. 2022

Groundwater Resource	Billion Cubic Metres	Million Acre Feet
Net Annual Groundwater Availability	17.07	13.83
Existing Groundwater Draft for Irrigation	26.69	21.62

Existing Groundwater Draft for Domestic, and Industrial Use	1.32	2233	1.08
Existing Groundwater Draft for All Uses	28.01		22.70
Net Ground Water Availability for future Irrigation Development in Safe, Semi-critical Critical and potential resource in water-logged areas	1.56		1.27
Average Stage of Groundwater Extraction of State (%)	164%		

The number of Assessment Areas (Blocks) falling in various categories in the year 2022 as per the Report is as follows:

Table A-3: Data on Number of Blocks in Various Categories

Total Blocks	153
Over-Exploited Blocks	117
Critical Blocks	04
Semi-Critical Blocks	15
Safe Blocks	17

10)

*Includes 3 Urban areas- Amritsar City, Jalandhar city & Ludhiana city- all 3 are in over-exploited category

In the Directions the categorization of Assessment Areas (Blocks) contained in the Report has been adopted. In addition, for better management and conservation of groundwater resources the Assessment Areas (Blocks) have been assigned a Status i.e.. Orange. Yellow and Green. This Status has been considered while fixing Groundwater Charges under the Directions for each Assessment Areas (Blocks). The Status is based on the stage of groundwater extraction contained in the Report.

The Over-exploited Blocks/Assessment Areas with a stage of ground water development of 200% or more have been designated as "ORANGE". These are 63 in number. These would need most immediate and urgent attention for management and conservation of ground water.

The Over-exploited Blocks/Assessment Areas numbering 53, with a stage of ground water development more than 100% and up to 199% have been designated as "YELLOW". These need appropriate management and water conservation measures on an urgent basis.

The 37 Blocks/Assessment Areas with a stage of ground water development falling in the three categories of Critical, Semi-critical and Safe as per the Report have been designated as "GREEN" and need appropriate water management measures so that ground water conditions remain sustainable in the long run.

Consequently, the number of Assessment Areas (Blocks) in each Stains is as follows

LN

Table A-4: Number of Assessment Areas (Blocks) by Starts

Category as per Report (2022)	Status	Number of Assessment Areas (Blocks)
Safe, Semi Critical, Critical	Green	37
Over-exploited (up to 199%)	Yellow	53
Over-exploited (200% and above)	Orange	63

Thus, the groundwater extraction charges have been levied at different rates for different Assessment Areas (Blocks) with a view to balance the demand for water on the one hand and the requirements of ecological sustainability on the other hand, so as to achieve the overall objective of improving the water balance. Higher charges have been levied for extraction of groundwater in orange and yellow assessment areas (Blocks).

6. The main objective of the Directions is to improve the water balance by promoting and ensuring conservation of water by the Users. In this regard, the relevant paragraphs of the Directions, 2023 are reproduced herein below for your kind reference:

57

2.1 PROMOTION OF WATER CONSERVATION

2236

A. The main objective of the Directions is to improve the water balance by promoting and ensuring conservation of water by the Users. This objective will be achieved by ensuring that all Users permitted to extract groundwater shall Groundwater Extraction Charges and such charges shall be utilized in part for pay volumetric conserving water. In addition, the Users shall have the option of conserving water themselves with the approval of the Authority, and such Users (who conserve water) shall be entitled to Water-Conservation Credits as described in the Directions.

B. User may opt to implement water conservation measures with the approval of the Authority, either within the Unit or outside, whereupon such User shall be provided Water- Conservation Credits which will entitle it for a rebate in the Groundwater Extraction charges

C. A portion of the Groundwater Extraction Charges will be utilized by the Authority for implementing Public Water Conservation Schemes through Departments or Agencies of the Government or Entities. These water conservation measures shall aim to improve the water balance by incentivizing the conservation of water by Users.

7. Further, paragraph 4.7 of the Directions. 2023 provides for Water Conservation Credits and same is reproduced herein below as under:

"A Unit that extracts a volume of groundwater exceeding three hundred cubic meters per month will be entitled for water conservation credits for the water conserved by it under a scheme approved by the Authority. Each cubic meter of water conserved will earn one Water Conservation Credit which will entitle the Unit to a rebate of Rupees 2.50. However, this rebate will be available to a Unit for each slab as depicted in Table 4.3 below. In case a Unit saves water beyond this limit then no additional rebate shall

17

accrue. The limit on the rebate will vary according to the status of the Assessment Area (Block) in which a Unit is located as described in Annexure 1. The upper limit for water conservation up to which water conservation credits can be earned by a Unit shall be as mentioned in Table 4.3 below:

Table 4.3: Water Conservation Limits for earning credits

Status of Assessment Area	Volume of Groundwater extracted (cubic metres/Year)			
	>3600-18000	> 18000-180000	> 180000-900000	900000
	% of groundwater to be conserved for maximum rebate			
Green	50%	100%	150%	200%
Yellow	100%	150%	200%	250%
Orange	150%	200%	250%	300%

8. Further, the permission for groundwater Extraction is granted as per the procedure laid down in Chapter 3 of the Directions, 2023. The relevant paragraphs are reproduced herein below:

3.1 PERMISSION AND EXEMPTIONS

No User shall extract groundwater or conduct any activity connected therewith without obtaining Permission of the Authority except for the following cases:

1. for Drinking and Domestic usage:

Explanation: A Unit shall be exempted under this clause only if the groundwater is utilized exclusively for Drinking and Domestic use.

- ii. for exclusive usage in Agriculture:
- iii. for use in a place of worship:
- iv. for a drinking and domestic Water Supply Scheme of Government:
- v. for use by an Establishment of the Military or of the Central Paramilitary Forces:
- vi. an Urban Local Body. Panchayati Raj Institution, Cantonment Board, Improvement Trust or Area Development Authority; and
- vii. a Unit extracting not more than 300 cubic metres of groundwater per month.

3.2 PROCESSING OF APPLICATIONS.

A. On receipt of an application complete in all respects seeking Permission to extract groundwater, the Authority may after examining the application and the accompanying documents, and conducting on-site inspection if required, grant Permission for extraction of groundwater subject to such conditions and restrictions as it may impose.

B. It shall be the endeavor of the Authority that Users who are found to be eligible for grant of Permission be granted the Permission within three months from the date of receipt of an application complete in all respects.

C. In case the application is found to be incomplete, or in case any clarification, information or document is required, then the Authority shall inform the Applicant within a period of three months in complete the application or to provide such clarification, information, document etc. as may be required.

D. The procedure for processing an application for Permission shall also apply to applications for renewal, revocation, extension, amendment or modification of Permission.

The total numbers of Permissions granted by the Authority till date for the extraction of groundwater are 753. A copy of the Directions is available at the Authority's website (www.pwrda.punjab.gov.in). However, a copy of the Directions is attached herewith for your ready reference.

9. The Authority has received different public water conservation proposals through Departments/Agencies of the Government of Punjab. A gist of water conservation schemes approved by the Authority till date is given below in the table:

Sl. No.	Name of the Scheme/Project	Area	Purpose
a.	Pilot project on Conservation in Agriculture Sector Water In (Submitted by Department Agriculture and Farmers Welfare, Punjab)	In the blocks of Sunam and Dhuri, District Sangrur	Water conservation in Agriculture Sector through different crop/ Management Practices
b.	Pilot project on Water Conservation in Agriculture Sector (Submitted by Krishi Vigyan Kendra. Sangrur/ Punjab Dhuri, Agricultural University Ludhiana)	In the blocks of Sunam and Dhuri, District Sangrur	Water conservation in Agriculture Sector through different crop/ Management Practices

2.7

C.	Canal Water Recharge Schemes (Submitted by Water Resources Department, Punjab): i. 129 number Canal Water In Recharge Schemes (which are not covered under MGNREGA)	In exploited blocks Punjab	over	of	To recharge Ground water
	ii. 30 No. Ultrasonic Flow meters	In exploited blocks Punjab	over	of	To measure volume of Groundwater recharge of existing 30 No canal water recharge schemes.
	iii. 60 number Canal Water Recharge Schemes (which are not covered under MGNREGA)	In exploited blocks Punjab	over	of	To recharge Ground Water
	iv. Project Estimate for Restoration of watercourse in various districts of Punjab by laying underground RCC Pipeline (159.352 km) (Submitted by Punjab Water Resources Management and	In exploited blocks Punjab	over	of	Water conservation in Agriculture Sector through judicious use of canal water (in 23 outlets) and an area to be covered 65752 Hectares.

	Development Corporation/ Water Resources Department, Punjab)		
--	--	--	--

Further, the details of the projects in the pipeline are as follow:

"Lining of watercourse (in 364 outlets) in various districts of Punjab by PWRMDC & WRD, Punjab using U/G Pipeline & Brick Lining" for total length to be lined 1035.475 Kms and an area to be covered 68405 Hectares in over exploited blocks of Punjab.

10. Thus, the Directions under which the permission for groundwater extraction is granted, have been framed by taking a comprehensive view of the groundwater situation in the State of Punjab. Water Conservation has been given paramount importance. The Directions incentivize and simultaneously promote water conservation in the state. The Directions framed by the Authority seek to achieve sustainable management of groundwater balanced with the requirements of the livelihoods of people in the State. This objective will be achieved by ensuring that All Users permitted to extract groundwater shall pay volumetric Groundwater Extraction Charges and such charges shall be utilized in part for conserving water.

5. That it is further submitted that the answering respondent State has taken the following measures for conservation and recharge of Ground Water in the State:-

I) The conservation and preservation of water is of utmost importance. The demand of Groundwater is increasing due to committed surface water resources and further raise of demand for irrigation, drinking and for industrial use. To keep pace with its growing demand regular monitoring and periodic Assessment, utilisation and monitoring Govt of Punjab has re-structured the Water Resource Department vide its Notification no. 17/10/2023-31P3/437 dated 08.09.2023. Accordingly 20 new Ground Water Sub Divisions have been constituted in 19 Canal Divisions for this purpose in the State. This will enhance the monitoring and regulation of Ground water resources in the state. This will also help in monitoring the initiatives being taken by the department with regard to conservation and use of Ground Water.

II) The state has adopted various measures to promote River water uses as a substitute to Ground Water. These initiatives, as a result of which, utilization of surface water in the state has increased by an average of 5,000 Cusecs from 26,000 Cusecs (for the last 10 years) to 31,000 cubic feet per sec during the paddy season of 2024.

III) The state has carried out various rehabilitation works, such as identification of old abandoned canals and restoring the same. Recently, 120 abandoned distributaries and minors have been identified, out of which 355 km lengths have already been restored/made functional.

IV) The state has carried out Water courses restoration drives which are carried out during the short window, when crops are harvested, and fields are free. Till now, a total of 15,914 water courses have been restored.

V) The State has also approached the major groundwater extracting industries in the state to motivate them to use canal water wherever canal water is available. This move will help in reducing the groundwater extraction in the state.

VI) New Policy on canal water usage charges for purposes other than irrigation is implemented in the state. Under this Policy, The Canal

water charges have been reduced for commercial usage from Rs. 10 per cubic meters to Rs. 5 per cubic meters. This would also promote Canal water usage, increase the Surface water utilization of the State and ensure groundwater conservation.

VII) Special emphasis is being given to the areas where groundwater exploitation is highest in the State. To boost the efforts to increase the surface water utilization, old canals have been extended to provide irrigation water to new areas. Accordingly, 14 Canals have been extended by length of about 63.08Kms to bring additional areas under canal water irrigation. Owing to this, about 110 Villages in Punjab have got water after almost 20-25 years, as a result of which, about 30247 Acres of additional area has been brought under surface water irrigation.

VIII) The department is implementing the 189 ground water recharge schemes funded by PWRDA to enhance the recharge of the same.

IX) The department is also implementing the "Project Estimate for Restoration of watercourse in various districts of Punjab by laying underground RCC Pipeline (159.352 km)" for judicious use of canal water in 23 outlets and an area of 65752 Hectares will be covered. Also water Resources Dept. has submitted project for "Lining of watercourse (in 364 outlets) in various districts of Punjab by PWRMDC & WRD, Punjab using U/G Pipeline & Brick Lining" for total length to be lined 1035.475 Kms and an area to be covered 68405 Hectares in over exploited blocks of Punjab which is under consideration of PWRDA. Both these projects will promote the utilization of surface water and reduce dependence on Ground Water.

X) The Government of Punjab has fixed a target of planting 300 lakh trees and till date 268 lakh samplings have been planted for improvement of Ecology in the state.

LS

2244

In view of these submissions, it is clear that the State of Punjab has formulated the policies for Ground Water Extraction and Conservation in the year 2023 and are under implementation. Also sufficient measures are being taken for promotion of Surface Water usage by the State. Accordingly the present application may kindly be disposed of the by the Hon'ble tribunal please.

Dated:

10.09.24

Submitted by:



Krishan Kumar
Principal Secretary to Govt. Of Punjab,
Department of Water Resources,
Chandigarh.

Verification:

Verified that the contents of this reply from Para No. 1 to 5 and its Sub Paras (I) to (X) are true and correct as per the information derived from the official record. No part of it, is wrong and concealed therein.

Dated:

10.09.24



Krishan Kumar
Principal Secretary to Govt. Of Punjab,
Department of Water Resources,
Chandigarh.