

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

**O.A. No. 597/2019.**

**IN THE MATTER OF:**

RAJENDRA TYAGI & ANOTHER

...APPLICANT

**VERSUS**

UNION OF INDIA AND OTHERS

...RESPONDENT(S)

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Through:

**ARDHENDUMAULI KUMAR PRASAD**  
**Standing Counsel, Union of India**  
**A-52, Sector 17-A, NOIDA**  
**Uttar Pradesh-201301**  
**mail@ardhendumauli.com**  
**0120-2488800/01/02**

Place: NEW DELHI.  
Dated: 21.08.2019.

**BEFORE THE NATIONAL GREEN TRIBUNAL,  
PRINCIPAL BENCH,  
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**O.A. No. 597/2019.**

**IN THE MATTER OF:**

RAJENDRA TYAGI & ANOTHER

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**COUNTER AFFIDAVIT / REPLY FOR AND ON BEHALF OF THE  
RESPONDENT NO.1 / MINISTRY OF WATER RESOURCES, RIVER  
DEVELOPMENT & GANGA REJUVENATION.**

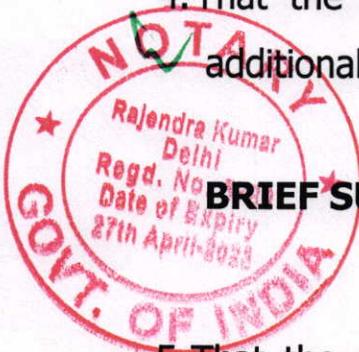
**MOST RESPECTFULLY SHOWETH:**

I, Arun Kumar Gurung, aged about 58 years, employed / appointed as Under Secretary, Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga Rejuvenation, New Delhi, functioning / officiating at New Delhi, do hereby solemnly affirm and declare as under:-

1. That I am well conversant with the facts of the case, and duly authorized and competent to swear this affidavit on behalf of Department of Water Resources, River Development & Ganga Rejuvenation in the above matter.
2. That I have read and understood the original application and filing this Counter Affidavit as reply thereto.
3. That the contents of the original application that have not been specifically admitted hereunder shall be deemed to have been denied.
4. That the deponent craves liberty to raise additional submission or file additional affidavits in case need arises during the course of arguments.

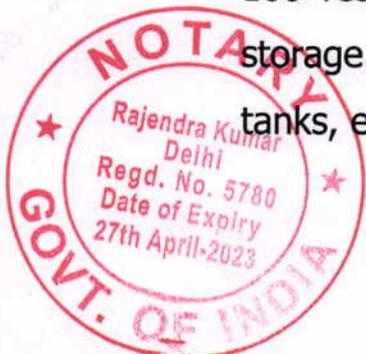
**BRIEF SUBMISSIONS**

5. That the applicant under his application is seeking the orders from this Hon'ble Tribunal to direct respondent No. 1 and 2 to take measures

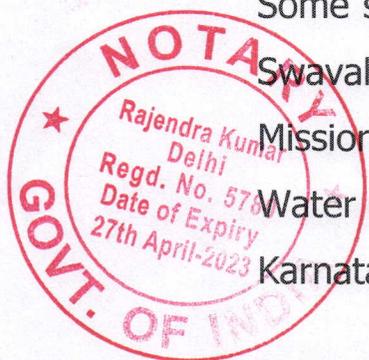


under section 3 and issue directions under section 5 of the Environment(Protection) Act, 1986 to all States/UTs; making wastage/misuse of water, through overflowing tanks, otherwise, a punishable offence.

6. That as per report of National Commission on Integrated Water Resources Development (NCIWRD), the total water availability of India received through precipitation is about 4000 billion cubic-meter (BCM) per annum. After evaporation, 1869 BCM water is available as natural runoff. Due to topographical and other factors, the utilizable water availability is limited to 1122 BCM, comprising of 690 BCM of surface water and 432 BCM of rechargeable ground water. As per NCIWRD (1999), the total water demand of the country has been estimated as 710 BCM, 843 BCM and 1180 BCM for the years 2010, 2025 and 2050 respectively. Availability of water is highly uneven in both space and time, with monsoon confined only to four months in a year. Precipitation varies from 100 millimeter (mm) in the Western parts of Rajasthan to over 10,000 mm in Meghalaya.
7. That as per Falkenmark, a Swedish expert, per capita average annual availability of less than 1700 cubic meter is considered water stressed and less than 1000 cubic meter is considered water scarce. In view of growing population, the per capita water availability in India is reducing progressively. It has been estimated that the average annual per capita water availability in the years 2001 and 2011 were 1820 and 1545 cubic meter respectively. This may likely to reduce further to 1341 and 1140 cum in the year 2025 and 2050 respectively.
8. That India has created live storage capacity of 257.8 BCM. The weekly storage status of 100 reservoirs (with live storage of 163.045 BCM which is about 63.24 % of total storage) is monitored by CWC. The total storage in 100 reservoirs on 25.07.19 was 40.836 BCM which is 25% of the live storage. Apart from above, water is also stored in lakes, village ponds, tanks, etc locally.



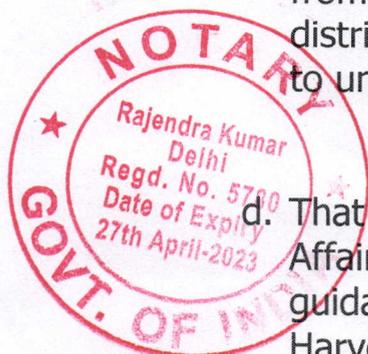
9. That as per the 2017 assessment of dynamic ground water resources, the total annual extractable ground water resource in the country is 432 BCM. Out of 6881 assessment units (Blocks/ Mandals/Talukas/Firkas) in the country, 1186 units have been categorized as 'over-exploited'. The True copy of the 2017 assessment of dynamic ground water resources is annexed herewith as **Annexure-R/1**.
10. That as per the last Resources Assessment of CGWB, the total Annual Ground Water Extraction in the entire country for the year 2017 has been estimated at 248.69 bcm. Agriculture sector is the predominant consumer of ground water resources. About 89% of total annual ground water extraction i.e. 221.46bcm is for irrigation use. Only 27.24bcm is for Domestic & Industrial use, which is about 11% of the total extraction.
11. That there is an increasing stress on water availability due to rising population, rapid urbanization, impact of change in climate, rainfall pattern, etc. In view of depleting spatial and temporal availability of per capita water resources, water conservation and recharge has become necessary for enhancing water availability.
12. That India has rich traditions of water harvesting measures, which is over two millennium years old. Evidence of this tradition has been found in ancient texts, inscriptions and archaeological remains. Since ages, people across different regions of India are managing to irrigate their agriculture fields using localized harvesting methods. Their traditional ways of conserving water are efficient and still very popular in rural areas.
13. That as Water, being a state subject, various States are also implementing schemes aimed at water conservation and artificial recharge. Some such schemes are Jalyukt Shivar in Maharashtra, Mukhya Mantri Jal Swavalamban Abhiyan in Rajasthan, NEERU CHETTU in Andhra Pradesh, Mission Kakatiya in Telangana, Sujalam Sufalam in Gujarat, Integrated Water Resource Management and Artificial Recharge Structures Scheme in Karnataka etc.



14. That the Government of India supplements States' efforts by providing financial and technical assistance through various schemes. The Ministry of Rural Development in consultation and agreement with the Ministry of Jal Shakti and the Ministry of Agriculture & Farmers' Welfare has developed an actionable framework for Natural Resources Management (NRM), titled "Mission Water Conservation" to ensure gainful utilization of funds. The Framework strives to ensure synergies in Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Pradhan Mantri KrishiSinchayee Yojana (PMKSY), Integrated Watershed Management Programme (IWMP) and Command Area Development & Water Management (CAD&WM), given their common objectives.

15. **Action taken so far** : That in order to have sustainable management of water resources in the country, following actions/initiatives have been taken by different Central Ministries:

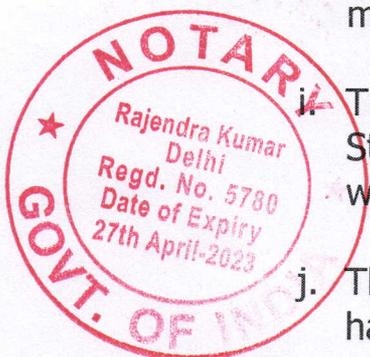
- a. That the Hon'ble Prime Minister has written a letter to all Sarpanchs on 08.06.2019 regarding the importance of water conservation and rain harvesting and exhorted them to adopt all appropriate measures to make water conservation a mass movement.
- b. That the issue of sustainable water management was also discussed with the concerned Ministers and officials of the State Governments by Minister, Jal Shakti in a meeting held on 11.6.2019. Further, Cabinet Secretary also discussed the issue of water management with the Chief Secretaries of the States through video-conference on 21.05.2019.
- c. That the Government of India has launched Jal Shakti Abhiyan which is a time bound campaign with a mission mode approach intended to improve water availability including ground water conditions in the water stressed blocks of 256 districts in India. In this regard, team of officers from Central Government along-with technical officers from Ministry of Jal Shakti have been deputed to visit water stressed districts and to work in close collaboration with district level officials to undertake suitable demand side and supply side interventions.



- d. That as per information received from Ministry of Housing & Urban Affairs, the Model Building Bye Laws, 2016, has been issued for guidance of the States/UTs which has a chapter on 'Rainwater Harvesting'. The provisions of this chapter are applicable to all the

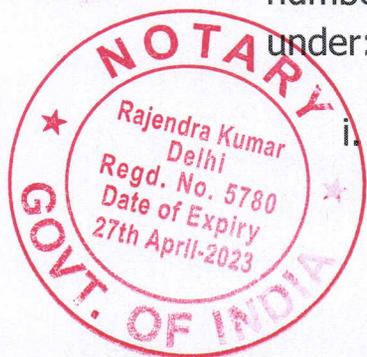
buildings. 33 States / UTs, including Rajasthan, have adopted the rainwater harvesting provisions. The implementation of the rainwater harvesting policy comes within the purview of the State Government/Urban Local Body / Urban Development Authority.

- e. That the Central Ground Water Authority (CGWA) has been constituted under Section 3(3) of the 'Environment (Protection) Act, 1986' for the purpose of regulation and control of ground water development and management in the Country. CGWA grants No Objection Certificates for ground water abstraction, in 23 States/UTs, through guidelines which are modified from time to time. Rest of the States / UTs are regulating ground water development through their own Acts, notifications or Government Orders. Further, CGWA has also appointed the District Magistrate / District Collector of each Revenue District and Regional Directors of CGWB in these States as Authorized Officers, with power to enforce compliance of NOC conditions.
- f. That the Central Ground Water Authority (CGWA) constituted under Section 3(3) of The Environment Protection Act, 1986 has issued directives to the Chief Secretaries/Administrators of all States/UTs for adopting Artificial Recharge/ Rain Water Harvesting in all the Government Buildings. A Model Bill has also been circulated to all the States/UTs which, inter-alia, has provisions for rain water harvesting to enable them to enact ground water legislation for its regulation and management.
- g. That for enhancing water use efficiency, the Central Government is promoting micro-irrigation systems, Command Area Development works, Participatory Irrigation Management, recycle and reuse of water amongst others. DAC&FW is implementing Per Drop More Crop component of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) which is operational from 2015-16 in the Country. The PMKSY-Per Drop More Crop mainly focuses on water use efficiency at farm level through precision/micro irrigation.
- h. That as announced in the Union Budget Speech 2019-20, it has been envisaged to ensure Har Ghar Jal (piped water supply) to all rural households by 2024 under the Jal Jeevan Mission. This Mission, under the Department of Drinking Water and Sanitation, will focus on integrated demand and supply side management of water at the local level, including creation of local infrastructure for source sustainability like rainwater harvesting, groundwater recharge and management of household wastewater for reuse in agriculture.
- i. That the Jal Jeevan Mission will converge with other Central and State Government Schemes to achieve its objectives of sustainable water supply management across the country.
- j. That the Central Government supports construction of water harvesting and conservation works primarily through Mahatma



Gandhi National Rural Employment Guarantee Scheme (MGNREGS). It includes the following as permissible activities:

- i. Creation of water conservation and harvesting structures to augment and improve ground water like underground dykes, earthen dams, stop dams, check dams with special focus on recharging ground water including drinking water sources.
  - ii. Renovation of traditional water bodies including desilting of irrigation tanks and other water bodies and conservation of old step wells or baolis.
- k. That the works under MGNREGS are being carried out in 34 States in 26,26,522 Gram Panchayats under 6921 Blocks of 691 rural Districts.
- l. That the Central Government supports construction of water harvesting and conservation works primarily through Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Pradhan Mantri Krishi Sinchayee Yojana – Watershed Development Component (PMKSY-WDC) and PMKSY-Per Drop More Crop. Under these Schemes, 17,56,207 water conservation and recharging structures have been constructed at an expenditure of Rs. 23,435.67 crore in the last three years.
- m. That the ongoing National Aquifer Mapping Program envisages formulation of aquifer management plans to facilitate sustainable development of ground water from important aquifer systems in the country. So far, 10.8 lakh square Kilometers out of the total 24.8 lakh Sq.kms. have been completed. CGWB will complete the mapping of Over-exploited and Critical areas of the country by March 31, 2020.
- n. That the issue of overflow of overhead tanks and other wastage of water through flushing system, running faucets, washing cars, floors etc generally happens due to lack of awareness of general public on such a vital issue and thus, there is need to sensitize the general mass through various means like newspaper advertisements, Radio Jingles, TV commercials etc. Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD &GR) has taken a number of initiatives in this regard. Some of them are highlighted as under:



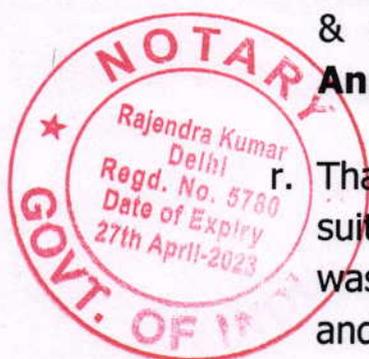
- i. The Ministry is carrying out an (Information Education Communication (IEC) campaign for awareness generation among stakeholders on the importance of water conservation and rainwater harvesting for augmenting the ground water

resources. In this direction, various TV commercials were produced involving celebrities and were telecasted on various DD channels. Radio jingles on water conservation were also broadcasted on AIR channels and Pvt. FM channels.

- ii. National Water Awards have been instituted and conferred to winners with the objectives of encouraging the stakeholders to adopt holistic approach towards water resources management and also to generate competition towards effective water conservation/harvesting in the country.
  - iii. States/UTs have been requested to use large-scale mass media communication to sensitize and encourage the general people towards water conservation during Jal Shakti Abhiyaan.
- o. That various Non-Governmental Organisations (NGOs) and individuals/Industrial establishments have also taken measures for sustainable management of ground water. These initiatives have been highlighted by the DoWR, RD & GR and are available on its website through a separate link for the benefit of all.
  - p. That to further encourage general public in management of water resources an interactive link has been activated in Ministry website where the best practices can be submitted by all concerned for benefit of others.
  - q. That the Secretary, DoWR, RD & GR has vide his DO letter No. T-39011/6/2019-GW Section dated 21.08.2019 advised all the states/UTs to work out appropriate mechanism for formulating water pricing policies including exploring the feasibility of putting water meters etc (where the supply is through govt developed sources), reduce non-revenue losses and to issue suitable directions to general mass through involvement of local municipal authorities for reducing the wastage through overflowing tanks, flushing cisterns etc. The True copy of the letter from Secretary, DoWR, RD & GR to Chief Secretary, States/UTs is annexed herewith as

**Annexure R-2.**

- r. That the CGWA has written letter to all the States/UTs to take suitable action for conservation of water resources/stoppage of wastage/misuse of water as per Environment (Protection) Act 1986 and to forward action taken report to DoWR, RD & GR vide their

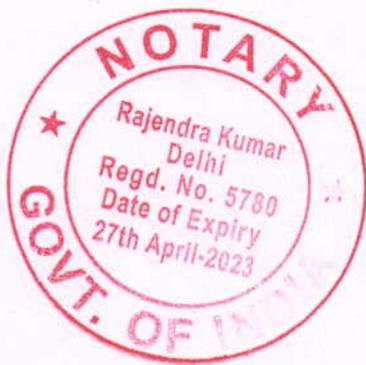


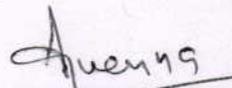
letter No 22-436/CGWA/OA-597/2019 dated 16 August 2019. The True Copy of the CGWA letter to chief Secretaries of States is annexed herewith as **Annexure R-3**.

- s. That as Water being a State subject, initiatives on water management including conservation and artificial recharge to ground water in the Country is primarily States' responsibility. The important measures taken by the Central Government for conservation, management of ground water and effective implementation of rain water harvesting in the country are at the following URL:

**<http://mowr.gov.in/sites/default/files/Steps to control water depletion Jun2019.pdf>**. The True Copy of the steps taken by Central Government to control water depletion is annexed herewith as **Annexure – R4**.

16. In light of the above submissions, it is most respectfully stated that the Govt of India is proactively working in improving the water resources in the country in collaboration with the State governments. Hence the application may kindly be disposed of on the basis of above submissions and on the basis of replies from other respondents. The answering respondent shall abide by any further orders or directions passed by this Hon'ble Tribunal.



  
**DEPONENT**

अरुण कुमार गुरुंग  
Arun Kumar Gurung  
अपर सचिव (जलसंधि)  
Under Secretary (Ground Water)

**VERIFICATION:**

Verified at New Delhi, on this the 21<sup>st</sup> day of August, 2019 that the contents of the above Affidavit are true and correct to my knowledge. No part of it is false and nothing material has been concealed there from.

*Arun*  
**DEPONENT**  
अरुण कुमार गुरुंग  
Arun Kumar Gurung  
अवर सचिव (सुप्रीम)  
Under Secretary (Supreme Court)

Through:

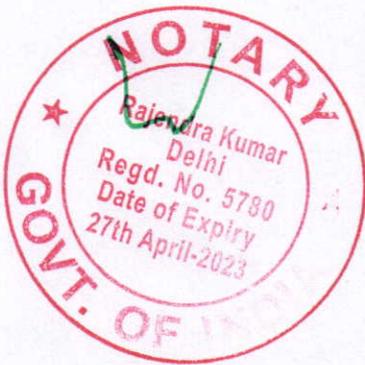
**(ARDHENDUMOULI KUMAR PRASAD)**  
Advocate,

Place: New Delhi.  
Dated: 21.08.2019

IDENTIFIED

ATTESTED

*Rajendra*  
RAJENDRA KUMAR  
NOTARY, DELHI-R-5780  
GOVERNMENT OF INDIA  
SUPREME COURT OF INDIA  
COMPOUND, NEW DELHI  
Register Pg./Sl. No. ....  
9899446209  
21 AUG 2019



CERTIFIED THAT THE CONTENTS EXPLAINED TO THE DEPONENT EXECUTIVE WHO IS SEEMED PERFECT TO UNDERSTAND & AFFIRMED DEPOSED BEFORE ME AT DELHI ON..... IDENTIFIED BY  
21 AUG 2019  
IDENTIFY THE EXECUTIVE / DEPONENT WHO HAS SIGNED IN MY PRESENCE

2  
RAJENDRA KUMAR, NOTARY, Reg. No. 5780  
F No.-5(486)  
EMPOWERED TO ADMINISTER THE OATH  
SECTION 139 OF CPC 1908  
SECTION 297 OF CRPC 1973  
DELHI HIGH COURT RULES 1967  
PART-6, CHAPTER XVIII-227  
EVIDENCE BY AFFIDAVIT BEFORE NOTARY  
SUPREME COURT RULES, 2013  
ORDER IX-7

0821782

IDENTIFIED

यू. पी. सिंह, आई. ए. एस.

U.P. SINGH, IAS

सचिव

SECRETARY

Tel. : 23710305

Fax : 23731553

E-mail : secy-mowr@nic.in



Annexure-R/2

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास  
और गंगा संरक्षण विभाग  
श्रम शक्ति भवन  
राफी मार्ग, नई दिल्ली-110 001  
GOVERNMENT OF INDIA  
MINISTRY OF JAL SHAKTI  
DEPARTMENT OF WATER RESOURCES,  
RIVER DEVELOPMENT & GANGA REJUVENATION  
SHRAM SHAKTI BHAWAN  
RAFI MARG, NEW DELHI-110 001  
<http://www.mowr.gov.in>

D.O. No. T-39011/6/2019-GW Section

August 21, 2019

**Subject: Initiation of urgent steps to improve water conservation/water use efficiency in the country - regarding**

Dear

You may be aware that as per Report of National Commission on Integrated Water Resources Development (NCIWRD), the total water availability of India received through precipitation is about 4000 billion cubic-meter (BCM) per annum. After evaporation, 1869 BCM water is available as natural runoff. Due to topographical and other factors, the utilizable water availability is limited to only 1122 BCM. It has been estimated that the average annual per capita water availability in the years 2001 and 2011 were 1820 and 1545 cubic meter respectively. This may likely to reduce further to 1341 cum and 1140 cum in the year 2025 and 2050 respectively.

Further, as per the 2017 assessment of dynamic ground water resources, the total annual extractable ground water resource in the country is 432 BCM. Out of 6881 assessment units (Blocks/ Mandals/Talukas/Firkas) in the country, 1186 units have been categorized as 'over-exploited'.

In view of the decreasing availability of water resources in the country, there is a growing need to improve the water use efficiency in all sectors including the irrigation sector, which is considered to be the biggest user of ground water resources. Further, it has been observed that there is general lack of awareness on the part of general public in using the ground water efficiently which has resulted in wastage of the precious resource through the overflowing overhead tanks, excessive use in flushing cisterns in toilets, wastage of water in bathing/hand-wash basins/kitchens etc. Apart from this there is substantial loss of water due to leakage/seepage during transmission/distribution of water from source upto the consumer end.

Further, there is a need to sensitize all concerned through mass media communication/radio jingles/TV commercials etc about judicious use of water resources. In addition to this, there is a need to work out appropriate mechanism for formulating water pricing policies including exploring the feasibility of putting water meters etc (where the supply is through Govt. developed sources), reduce non-revenue losses and to issue suitable directions to general mass through involvement of local municipal authorities for reducing the wastage through overflowing tanks, flushing cisterns etc.

....2/-

जल संरक्षण - जीवन संरक्षण  
Conserve water - Save life

I would be happy if appropriate action as brought out in above paras may kindly be initiated and action taken report may kindly be forwarded to us for record.

With regards,

Yours sincerely,

  
**(U.P.Singh)**

To

Chief Secretary (States/UTs) - As per List

Copy to:

1. Secretary, Ministry of Housing & Urban affairs
2. Secretary, Department of Drinking Water & Sanitation
3. Secretary, Ministry of Agriculture Cooperation & Farmers' Welfare
4. Chairman, Central Water Commission
5. Mission director, National Water Mission
6. Chairman, Central Ground Water Board

**CENTRAL GROUND WATER AUTHORITY**

[Constituted under section 3(3) of Environment (Protection) Act, 1986]

Gallery No. 18/11, Jamnagar House, Mansingh Road, New Delhi-110011

• Phone: 23072580; Fax: 23382051; e mail: [cgwa@nic.in](mailto:cgwa@nic.in)

No. 22-436/CGWA/OA-597/2019

Dated 16<sup>th</sup> August, 2019

To

The Chief Secretary,  
Government of Andhra Pradesh/Arunachal Pradesh/Assam/ Bihar/ Chhattisgarh/ Gujarat/ Goa/  
Haryana/Himachal Pradesh/Jammu & Kashmir/ Jharkhand/ Karnataka/Kerala/Madhya Pradesh/  
Maharashtra/ Manipur/ Meghalaya/ Mizoram/ Nagaland/Odisha/Punjab/Rajasthan/ Sikkim/  
Uttarakhand/ Tamil Nadu/ Telangana/Tripura/Uttar Pradesh/West Bengal/Delhi.

Administrator, Union Territory of Lakshadweep/Daman & Diu/Andaman & Nicobar/ Puducherry/  
Chandigarh.

Sub: OA No. 597/2019 – Rajendra Tyagi and Another Vs UOI and Others filed in Hon'ble NGT,  
New Delhi – reg.

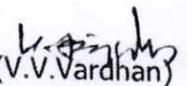
**Sir,**

Please find enclosed herewith the representations dated 30.5.2019 and 31.5.2019, received from Sh. Akash Vashistha and Sh. Rajendra Tyagi on wastage of precious fresh ground water across the country. The applicants are requesting for issuance of directions under section 3 and 5 of the Environment (Protection) Act, 1986 to control wastage and misuse of ground water. The MOEF&CC has already empowered the States/UTs to exercise powers under section 5 of the Environment (Protection) Act, 1986 to take measures to protect and improve Environment under section 3((2) of the said Act.

Accordingly you are requested to take action and arrange to send the action taken report to Secretary, D/o WR, RD&GR and Secretary, MOEF&CC in view of directions from Hon'ble NGT, New Delhi under its order dated 24.7.2019 in OA No.597/2019. The action taken report may also kindly be sent to [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) . This issues with the approval of Chairman, CGWA.

Kindly accord Priority.

Yours faithfully,

  
(V.V.Vardhan)  
Administrator

Encl: As above.

Copy to:

1. Joint Secretary (GW), D/o WR, RD&GR, Shram Shakti Bhavan, New Delhi.
2. Joint Secretary(IA), MOEF&CC, Indira Paryavaran Bhavan, Jor Bagh Road, New Delhi-110003.
3. Rajendra Tyagi, 7/17, Chiranjiv Vihar, Ghaziabad.

—  
(V.V.Vardhan)  
Administrator

**Steps taken by the Central Government to control water depletion and promote rain water harvesting / conservation.**

1. Hon'ble Prime Minister has written a letter to all sarpanchs on 08.06.2019 regarding the importance of water conservation and harvesting and exhorted them to adopt all appropriate measures to make water conservation a mass movement.
2. Creation of a new Ministry of Jal Shakti for dealing with all matters relating to water at one place in an integrated manner.
3. The National Water Policy (2012) has been formulated by Department of Water Resources, RD & GR, inter-alia, advocates rain water harvesting and conservation of water and highlights the need for augmenting the availability of water through direct use of rainfall. It also, inter-alia, advocates conservation of river, river bodies and infrastructure should be undertaken in a scientifically planned manner through community participation. Further, encroachment and diversion of water bodies and drainage channels must not be allowed and wherever, it has taken place, it should be restored to the extent feasible and maintained properly.
4. In compliance to the decision taken by the Committee of Secretaries, an 'Inter-Ministerial Committee' under the Chairmanship of Secretary(WR, RD & GR) has been constituted to take forward the subject of 'Push on Water Conservation Related Activities for Optimum Utilization of Monsoon Rainfall'.
5. DoWR, RD & GR has circulated a Model Bill to all the States/UTs to enable them to enact suitable ground water legislation for its regulation and development, which includes provision of rain water harvesting. So far, 15 States/UTs have adopted and implemented the ground water legislation on the lines of Model bill.
6. Central Ground Water Authority (CGWA) has issued directions under Section 5 of "The Environment Protection Act, 1986" for mandatory Rain Water Harvesting / Roof Top Rain Water Harvesting for all target areas in the Country including UTs. While granting 'No Objection Certificate (NOC)' for drawing ground water, CGWA insists for mandatory rain water harvesting as per the guidelines issued.
7. Central Ground Water Board (CGWB) under DoWR, RD & GR has also prepared a conceptual document entitled "Master Plan for Artificial Recharge to Ground Water in India" during the year 2013, which envisages construction of 1.11 crore rain water harvesting and artificial recharge structures in the Country at an estimated cost of Rs. 79,178 crores to harness 85 BCM (Billion Cubic Metre) of water, in an area of 9,41,541 sq.km by harnessing surplus monsoon runoff to augment ground water resources.
8. Besides, CGWB has taken up Aquifer Mapping and Management programme during XII Plan, under the scheme of Ground Water Management and Regulation. The Aquifer Mapping is aimed to delineate aquifer disposition and their characterization for preparation of aquifer/area specific ground water management plans with community participation. The management plans are shared with the respective State Governments for taking appropriate measures.

9. Department of Water Resource, RD&GR has instituted National Water Awards to incentivise good practices in water conservation and ground water recharge.
10. Mass awareness programmes (Trainings, Seminars, Workshops, Exhibitions, Trade Fares and Painting Competitions etc.) are conducted from time to time each year under the Information, Education & Communication (IEC) Scheme of DoWR, RD & GR in various parts of the Country to promote rain water harvesting and artificial recharge to ground water.
11. The Ministry of Rural Development in consultation and agreement with the Department of Water Resources, RD & GR and the Ministry of Agriculture & Farmers' Welfare has developed an actionable framework for Natural Resources Management (NRM), titled "Mission Water Conservation" to ensure gainful utilization of funds. The Framework strives to ensure synergies in Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), erstwhile Integrated Watershed Management Programme (IWMP) now PMKSY-Watershed Development Component and Command Area Development & Water Management (CAD&WM), given their common objectives. Types of common works undertaken under these programmes/schemes are water conservation and management, water harvesting, soil and moisture conservation, groundwater recharge, flood protection, land development, Command Area Development & Watershed Management
12. Department of Land Resources is currently implementing 8214 watershed development projects in 28 States covering an area of about 39.07 million ha. under the Watershed Development Component (WDC) of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) principally for development of rainfed portions of net cultivated area and culturable wastelands. The major activities taken up under the WDC-PMKSY, inter-alia, include ridge area treatment, drainage line afforestation, soil and moisture conservation, rain water harvesting, horticulture, and pasture development etc.
13. Ministry of Housing & Urban Affairs has released Model Building Bye-laws, 2016 which recommends Rainwater Harvesting for all types of Building with plot size 100 sq.m or more. Barring the States/UT of Manipur, Sikkim Mizoram and Lakshadweep, all the States have incorporated the provisions in their respective building bye laws. The plans submitted to the local bodies shall indicate the system of storm water drainage along with points of collection of rain water in surface reservoirs or in recharge wells. Further, all building having a minimum discharge of 10,000 litre and above per day shall incorporate waste water recycling system. The recycled water should be used for horticultural purposes.

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