



OFFICE OF THE DISTRICT COLLECTOR, GANGTOK
DISTRICT ADMINISTRATIVE CENTRE,
SICHEY, GANGTOK-SIKKIM- 737101



GOVERNMENT OF SIKKIM

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Memo No. 329 /DC/Gtk/2023

Date: 31/03/2023

To,
The Consultant judicial- Principal bench,
The National Green tribunal
New Delhi-110001

Sub: Execution Application No. 04 of 2023 in original Application No. 147 of 2021, in the matter of Mahesh Chandra Saxena vs. the chief Secretary, Govt. Of NCT, Delhi & Ors.

Respected sir/madam

The District collector office, Gangtok is writing in response of the Hon'ble National Green tribunal's order dated 10.12.2021 in O.A. No. 147/2021 regarding submission of compliance report in the Matter of Mahesh Chandra Saxena vs. the Chief secretary, Govt. of NCT of Delhi and Ors.

The report covers various aspects such as the status of water harvesting initiatives in Gangtok District, measures taken to prevent ground water contamination and the progress made in implementing the NGT's order.

Enclosed with this letter, please find a copy of water report, which includes information on the quality and rain water harvesting situation in Gangtok district. Same is submitted for kind information and perusal please.

Thanking you.

Yours faithfully,



Tushar G. Nikhare 31/3/2023
(Tushar G. Nikhare/IAS)
District Collector cum Magistrate
Gangtok District.
District Collector
Gangtok District

Compliance report related to Water harvesting and ground water situation in Gangtok district.

In Sikkim, the management, control, development and planning of water resource comes under The Department of Public Health and Engineering Department (PHE). However, it focuses centrally on the Urban areas of the State. The rural Management and Development Department ((RMDD) is responsible for ensuring the purpose at the ground level in rural areas.

As the state's average rainfall amounts is very high, the scope of rain water harvesting for irrigation and domestic purpose is extremely high. Almost 80% of the rural population in Sikkim is dependent on springs and small streams for drinking water and irrigation.

Gangtok district is blessed with an abundance of water resources, with several rivers, streams, and springs flowing through the region. The major rivers in the district are the Teesta, Rangit, and Roro, which are fed by the glaciers and monsoon rainfall in the region. The district also has several small ponds and lakes, which are used for domestic and irrigation purposes. The capital city Gangtok is least affected with ground water contamination as compared to other areas, therefore there has not been much of initiative taken in this regard. RMDD is taking various initiatives in the rural areas for rainwater harvesting and to stop water contamination.

Contamination of water due to rain water Harvesting:

Rainwater harvesting does not only have positive outcomes, but it also has certain demerits. One of the most prevalent is the issue of water contamination due to rain water harvesting. The groundwater quality in Sikkim is generally good, with a few areas experiencing contamination due to industrial activity and improper waste disposal. The state has taken measures to promote sustainable and eco-friendly rainwater harvesting practices, which have helped to minimize the impact on groundwater. However, it is essential to ensure that rainwater harvesting systems are designed and maintained properly to prevent the accumulation of pollutants in the groundwater.

Extraction of Ground water :

The total groundwater availability in Sikkim is estimated to be around 25,000 MLY, of which around 14,000 MLY is considered to be the annual recharge.

The groundwater level in Sikkim varies from 0.5 to 5 meters below the ground surface.

The CGWB has classified the groundwater status in Sikkim as 'safe,' indicating that the rate of groundwater extraction is within the limits of sustainability. However, with the upsurge in concrete structures for strength and stability, such as buildings, drainage etc., the natural recharge system of the ground water has been disturbed. As the structures do not let the rainfall to soak into the soil directly, the recharging of the ground water has suffered significantly. Moreover, its consequences can also be seen, especially during the rainy

season, when a huge inflow of rain water at an undesired place such as roads and footpaths causes disruption in transport and communication and also risk to lives and property.

According to the survey conducted by the Central groundwater board in 2011, no area of the Gangtok District comes under the category of over exploited, critical and semi-critical zones for groundwater extraction. Also, no constituents of ground water pollutant such as salinity, fluoride, iron, nitrate, copper, arsenic, lead, cadmium or chromium were reported exceeding the limit, thereby maintaining its purity. Furthermore, the net annual ground water availability was reported to be 0.044 BCM. Thus, fortunately the issue of exploitation of ground water is negligible in the state.

Sl. No.	Particulars	Remarks
1	Rain Water harvesting system in Gangtok system	Being the hilly region, only natural surface water is used for various purposes. Though State is promoting rain water harvesting system with preventive measures to control ground water contamination.
2	Water Contamination due to rain water harvesting	The groundwater quality is generally good in gangtok but few areas experiencing contamination due to some commercial activities.
3	Awareness programmes about extraction of Ground water	P.H.E deptt and RDD are doing awareness programmes in the District for safe ground water harvesting technologies..
4	Technical efficacy of installed systems and changes ,if required	Technical efficacy can be improved if new systems like installation of pressure reducing valve, by imparting trainings to fitters for use of new mechanism etc
5	Restoration of Water bodies	The source of Gangtok water Supply located at Tamzey is being restored under AMRUT-2
6	Utilisation of treated Sewage Water	Used specially for agricultural and other household purposes.
7	Model for linking drinking water with rain water harvesting	Currently RWH is not on a large scale in gangtok. Due to this no such special model has been developed.
8	Rain water harvesting situation in large buildings.	Some Govt. and private buildings are adopting RWH system with safety measures.


 Superintending Engineer (N/E)
 Public Health Engineering Deptt.
 Govt. of Sikkim