

## Study soon on water yield of forests

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Kochi: In a first, government has initiated steps to study the 'hydrological services' provided by the forests of Kerala. The three-year study, which will cover five types of forests in Kerala, will be conducted by Centre for Water Resources Development and Management (CWRDM). The study is a part of Rebuild Kerala initiative.

The study will look into water yield, water retention and consistent water supply by evergreen, moist-deciduous, dry-deciduous, semi-evergreen and shola grassland forests. Contribution of each type of forest will be studied by auditing the quantity of water forests yields during rain and how much is retained and how long can the forest supply it.

"How the deviation in the ecosystem of each forest is affecting the contribution in hydrological services is part of the study. Impact of encroachment, degradation of forest, fire and plantations will also be studied. The main drawback is that there is no data on various aspects due to the lack of previous studies in this direction," said sources

Given the lack of previous studies, scientists will have to use existing rain data available with KSEB, irrigation, IMD and forest department.

"Extra measures need to be taken to gauge rain data in deep forest where no rain gauge mechanisms are available. Stemflow, surface and groundwater flow have to be studied. Data from three years is required for analysis as prediction on disasters is not possible with the data from a year. Once study is completed, authorities can utilize it for prediction of flood depending on the intensity of rain in each area," said sources.

Forest department officials stressed on the need for water conservation. "Depletion in groundwater level and recent disasters the state witnessed raised a concern and the study is a concrete measure in the direction of water conservation. It is a novel step. There is no precedent in the country regarding a study on water yield of forests," said a forest department official.

Meanwhile, environmentalists feel no concrete steps were taken for the protection of ecology despite recurring disasters due to human intervention and climate change.

"Rivers originate in forests and the main problem Western Ghats are facing is fragmentation of reserve forest. Degradation and fragmentation in catchment areas pose threat to rivers. Forest streams are drying fast. All these problems are due to forests losing their riches. We need to bring back natural vegetation in reserve forests. We lost it due to industrial plantation policy, construction of reservoirs and drawing high-tension power lines. Kerala needs a river policy," said director of River research Centre S Unnikrishnan.

Source: <a href="https://timesofindia.indiatimes.com/city/kochi/study-soon-on-water-yield-of-forests/articleshow/83933595.cms">https://timesofindia.indiatimes.com/city/kochi/study-soon-on-water-yield-of-forests/articleshow/83933595.cms</a>