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Former Cabinet Secretary TSR Subramanian passes

# Nethravathi river basin under severe stress: Report

#### AJ VINAYAK

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#### MANGALURU, FEBRUARY 23

Unplanned developmental path adopted by the decision-makers is threatening the Nethravathi river basin in the ecologically sensitive Western Ghat region, according to a technical report by a team of researchers from the Indian Institute of Science (IISc).

The river has a catchment area of 4409 sq km covering the districts of Chikmagaluru, Hassan, Kodagu, Dakshina Kannada and Udupi in Karnataka.

### Grave threats

The report titled 'Carrying capacity of Nethravathi river basin based on ecological sensitiveness' is prepared by Ramachandra TV, Bharath Setturu, and Vinay S of the Energy and Wetlands Research Group, under the Centre for Ecological Sciences of IISc.

It said that river diversions, hydro electric projects, coastal reservoirs, commercial plantations and unscientific tourism would cause irreplaceable loss of rich biodiversity in the river basin.

(This report assumes significance as the Karnataka government has initiated a project to divert water from the west-flowing water sources, including Yettinaholey stream, in Sakleshpur taluk of Hassan district to several districts in south eastern parts of the state. Yettinaholey is one of the tributaries of west-flowing Nethravathi River -- the lifeline of Dakshina Kannada district.)

The report said that rivers and streams in the ecologically-sensitive regions should not be diverted or manipulated as it would affect the water retention capability of the catchment and ground recharge potential.

"This would affect the sustenance of water in the streams. This would also affect the downstream users' right for adequate freshwater," it said, adding that the salinity ingression in freshwater as a result of diversion would deprive the downstream dwellers of freshwater and livelihood. Forests with innumerable streams in the Western Ghats offer tremendous potential for carbon stocking per unit area while also bettering the hydrology of these mountains that form the main watershed for the entire Indian peninsula.

## Loss of forest cover

The report said the area under forest cover stood at 51.67 per cent in the Nethravathi river basin after losing a significant patch of forests for mini-hydroelectric and infrastructure projects.

The plantations constitute 26.42 per cent of the river basin. Large tracts of forests were replaced with exotic species of mono-culture plantations, it said, adding that the market interventions in agriculture, through commercial plantations, have resulted in the encroachment of forests.

Nethravathi river basin has 433 villages in Chikmagaluru, Hassan, Kodagu. Dakshina Kannada and Udupi districts of Karnataka. These villages are classified under four ecologically sensitive regions (ESR). The report said that ESR 1 represented the zone of highest conservation where no further degradation is allowed. ESR 2 is a zone of higher conservation, and this zone forms a transition for highest conservation.

As many as 111 villages come under ESR 1 and 69 villages under ESR 2. The report said that these villages are to be strictly no-go area with respect to developments.

The report was released by Ramachandra TV at a conference on 'Sustainable management of global water resources: Need and challenges' at Alva's Education Foundation in Moodbidri of Dakshina Kannada on Friday.

Published on February 23, 2018