

Water crisis: Forestry council to study 9 river basins for 18 months

Shivani.Azad@timesgroup.com

Dehradun: In the wake of several towns and cities across the country facing severe water crisis during peak summer months, the Indian Council of Forestry Research and Education (ICFRE) has launched a study of nine river basins in the country in an attempt to rejuvenate dying rivers and replenish the ground-water table.

ICFRE director general SC Gairola said that 13 major rivers spanning 11,300 km would be studied for 18 months through advanced technological methods like remote sensing and geographic information system (GIS) to address manifold issues ranging from water scarcity and habitat management to deforestation and carbon sink enhancement.

According to sources, a thorough analysis of the nine river basins - Indus, Godavari, Mahanadi, Narmada, Krishna, Ganga, Luni, Brahmaputra and Cauvery - would be conducted to determine the extent of damage caused over the years and the steps to be taken to restore them. They added that satellite data and geospatial analysis would be used to scientifically rejuvenate the 13 rivers, i.e. Ganga, Brahmaputra, Cauvery, Beas, Chenab, Jhelum, Ravi, Sutlej, Godavari, Mahanadi, Narmada, Krishna and Luni.

The DG said, "Image processing and GIS tools will be used for riverscape analysis. Also, data sets from satellites specific to the riverscape will be analysed keeping in view the pre- and post-monsoon seasons, differentiation in various land use patterns and extreme events. Forestry intervention will be determined based on the examination of geospatial data. Sub-plans will be formulated in consultation with the respective state forest departments based on the na-

BID TO REVIVE DYING RIVERS

As India is grappling with an unprecedented water shortage, Doon-based Indian Council of Forestry Research and Education has launched a study of 13 rivers spanning 11,300km across the country to rejuvenate rivers and replenish water table

AREA

RIVER BASINS: 9 (Indus, Godavari, Mahanadi, Narmada, Krishna, Ganga, Luni, Brahmaputra and Cauvery)

RIVERS: 13 (Beas, Chenab, Jhelum, Ravi, Sutlej, Godavari, Mahanadi, Narmada, Krishna and Luni)

ISSUES

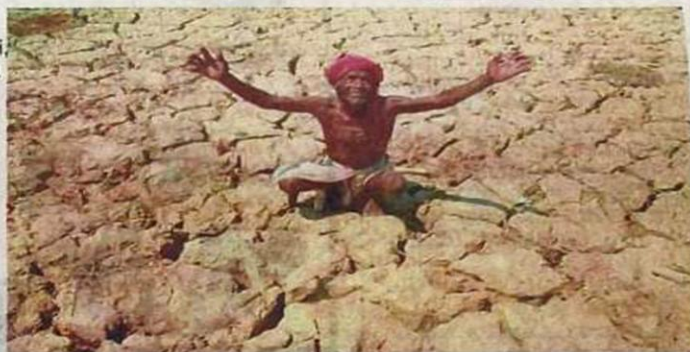
- Overpopulation
- Urbanisation
- Encroachment
- Rise in per capita water demand

STUDY METHOD

- Geospatial analysis
- Satellite data

MEASURES TO BE TAKEN

- Forestry intervention
- Water treatment



“Such an intervention is much needed due to the climate change issues we are facing. An analysis of the data available for the last 100 years shows that the overall rainfall in India has not declined. However, per capita availability of water has reduced. Also, India doesn't have the necessary infrastructure for storing rain water

—MK JAIN, HEAD OF HYDROLOGY DEPARTMENT IN IIT ROORKEE

ture of landscape." Forestry intervention would comprise water treatment, wetland management, safeguarding wildlife and managing natural habitats dependent on the rivers.

MK Jain, head of hydrology department in IIT Roorkee, said, "Such an intervention is much needed due to the climate change issues we are facing. An analysis of the data available for the last 100 years shows that the overall rainfall in India has not declined. However, per capita

availability of water has reduced due to several factors like population growth and urbanisation among others. Also, India doesn't have the necessary infrastructure for storing rain water."

Gairola said, "We need urgent and long-lasting methods to arrest rain water flowing into the seas, especially during rainy season. This will help in recharging the groundwater table."

Speaking to TOI, noted environmentalist Sunderlal Bahuguna said, "The Brit-

ishers felled several lakhs of precious Himalayan trees during their stint in India. These trees used to prevent the rain water from running away and check soil erosion. Hence, the government should now focus on planting two types of trees - those that can hold soil and retain rainwater." Anil Joshi, founder of Doon-based HESCO, said, "Making small water holes of one cubic metre size will help in recharging the groundwater table tremendously."