By 2050, T.N.'s evergreen forests habitat to dip significantly; thorn forests predicted to increase

While Coimbatore and the Nilgiris districts' evergreen forests will face the most significant habitat shift, the deciduous forests of Erode and Krishnagiri will be impacted severely among the Western Ghats districts

GEETHA SRIMATHI

species, and human impact.

Key to climate change mitigation, evergreen forests are known to have a higher potential for carbon sequestration, a phenomenon in which

carbon that otherwise would be emitted to the atmosphere is captured and stored.

According to the 'Climate Risk Assessment in the Forestry Sector' report presented at a capacity building programme for Forest Department officials on Monday by the Centre for Climate Change and Disaster Management, Anna University — the model (considering baseline data from 1985 to 2014) predicts that in 2050, there would be a 17% drop in habitat suitability of evergreen forest (from 1,464.72 sq.km.), 11% decrease in deciduous forest (from 6,346.21 sq.km.), and a 60% increase (from 1,618 sq.km.) in thorn forests in the Western Ghats.

Similarly, in the Eastern Ghats, the suitability of evergreen forests is projected to decrease by 29% (from 188.70 sq.km.), deciduous forests by 31% (from 2,285 sq.km.), and the suitability of thorn forests will increase by 47% (from 1,627.12 sq.km.).

While Coimbatore and the Nilgiris districts' evergreen forests will face the most significant habitat shift, the deciduous forests of Erode and Krishnagiri will be impacted severely among the Western Ghats districts.

In the Eastern Ghats, the evergreen forests of Namakkal and Salem are highly vulnerable to loss and the deciduous forests of Tiruvannamalai and Vellore are predicted to have a significant habitat shift.

Using 19 bioclimatic variables derived from monthly temperature and rainfall values, and species occurrence in each location through field surveys, the modelling concludes that it is necessary to prioritise adaptation strategies for existing forest types based on the level of vulnerability they have to face.

Emeritus Professor-Anna University A. Ramachandran; Director, CCCDM Kurian Joseph; Principal Chief Conservator of Forests (PCCF) (Head of

Forest Force) Subrat Mohapatra; PCCF and Director, Advanced Institute of Wildlife Conservation A. Udhayan; Chief Wildlife Warden Srinivas Reddy; Special Secretary to Environment, Climate Change and Forests departments Anurag Mishra were present.