NHAI signs MoU with NRSC for Development and Reporting of "Green Cover Index" for National Highways of India

The National Highways Authority of India (NHAI) has entered into a Memorandum of Understanding with the National Remote Sensing Centre (NRSC) under the Indian Space Research Organization (ISRO) for a period of three years to develop and report a "Green Cover Index" for the extensive network of National Highways in India.



Since the initiation of the Green Highways Policy in 2015, the prioritization of greening Highway Corridors has been a focal point for the Ministry of Road Transport and Highways (MoRTH) and NHAI. Presently, the monitoring of plantations relies on site visits by field personnel.



Using the capabilities of emerging technologies to enhance in-situ data collection and supplement plantation

management and monitoring, including performance audits conducted by NHAI, the NRSC will undertake a comprehensive pan-India estimation of green cover, referred to as the "Green Cover Index" for National Highways using high-resolution satellite imagery. This innovative approach promises to be a robust and reliable mechanism, providing a time-saving and cost-effective solution to generate a macro-level estimate of the degree of greenness along National Highways. It will also facilitate targeted interventions in regions that are reported to lack adequate green cover.

NRSC, headquartered in Hyderabad, has the mandate for establishment of ground stations for receiving satellite data, generation of data products, and development of techniques for remote sensing applications including geospatial services for good governance among other things. As a proof of concept, NRSC has already conducted successful pilot projects for estimation of green cover along National Highways.

The overarching endeavour of the project is to capture the Green Cover Index region-wise for National Highways in the first assessment cycle. Subsequent annual cycles will focus on estimating the growth patterns of green cover for National Highways using scientific techniques. The findings of the index will facilitate comparison and ranking of various National Highways for timely and periodic intervention. As green cover would be estimated for every 1 km length of the National Highways, it would be possible to generate granular metrics for individual projects/packages as well. This initiative underscores a sincere commitment to evaluate NHAI's pivotal role in fostering the green transformation of highways, thereby, contributing to the nation's overall environmental well-being.
