



Drone Survey Mandatory for All National Highways Projects

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Why in News

The **National Highways Authority of India (NHA)** has made use of drones mandatory for **video recording of the national highway projects** during different stages of development, construction, operation and maintenance.

These videos will be saved on **NHA's portal "Data Lake"** to assess the progress made on the projects.

Key Points

- **Significance:**
 - It will **enhance transparency, uniformity** and **leverage the latest technology**.
 - NHA officials can use the videos during the physical inspection of the projects to **check the discrepancies and rectifications** made on the earlier observations.
 - Since these videos will be **permanently stored on the 'Data Lake'**, they can also be used as evidence during the **dispute resolution process before Arbitral Tribunals and Courts**.
 - Also the mandatory deployment of **Network Survey Vehicle (NSV)** to **carry out road condition surveys** on the National Highways will enhance the overall quality of the highways.

NSV uses the latest survey techniques such as high-resolution digital camera for 360 degree imagery, Laser Road Profilometer and other latest technology for measurement of distress in road surface.

- **NHAI's Portal "Data Lake":**
 - NHAI has gone '**Fully Digital**' with the launch of cloud based and Artificial Intelligence powered **Big Data Analytics platform – Data Lake and Project Management Software**.
 - All project **documentation, contractual decisions and approvals** are now done through the portal only.
 - Data Lake software forecasts the delays, likely disputes and gives advance alerts.
 - **Significance:**
 - The Data Lake will bring revolutionary changes to NHAI with benefits like No delays, Quick decision making, No question of missing records, Work from anywhere/anytime.
 - It will enhance transparency, as all officers and stakeholders connected with the project can see what is going on a real time basis.
 - It will also help in carrying out audits by the senior officers and other external agencies.
- **National Highways Authority of India (NHAI):**
 - NHAI was set up under **NHAI Act, 1988**.
 - It has been entrusted with the **National Highways Development Project (NHDP)**, along with other minor projects for development, maintenance and management.
 - **NHDP** is a project to upgrade, rehabilitate and widen major highways in India to a higher standard. The project was started in 1998.
 - NHAI **maintains the National Highways network** to global standards and in a cost effective manner, thus promoting economic well being and quality of life of the people.

National Highways

- The **major roads** in India are the national and state highways. National Highways (NH) are **built, financed and maintained by the Central government** whereas State Highways (SH) are developed by the respective States' public works department.
- **Constitutional Provisions:**
 - Highways declared by or under law made by Parliament to be national highways - **Union List under Seventh Schedule**.
 - **Article 257 (2):** The executive power of the Union shall also extend to the giving of directions to a State as to the construction and maintenance of means of communication declared in the direction to be of national or military importance.
 - Provided that nothing in this clause shall be taken as restricting the power of Parliament to declare highways or waterways to be national highways or national waterways or the power of the Union with respect to the highways or waterways so declared.

- The **Ministry of Road Transport and Highways** is primarily responsible for development and maintenance of NHs.

The Ministry has taken up detailed review of NHs network with a view to develop the road connectivity to Border areas, development of Coastal roads including road connectivity for Non-Major ports, improvement in the efficiency of National Corridors, development of Economic Corridors, Inter Corridors and Feeder Routes along with integration with Sagarmala, etc., under **Bharatmala Pariyojana**.

- NHs in the country are notified under the **National Highways Act, 1956**.
- **Land for development of National Highways** and associated purposes is acquired under Section 3 of the NHs Act, 1956 and compensation is determined in accordance with the First Schedule of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (**RFCTLARR) Act, 2013**.

BhoomiRashi portal was launched in 2018, to fully digitize and automate the entire process of land acquisition.

- The aim of the **Green Highways (Plantation, Transplantation, Beautification & Maintenance) Policy, 2015** is to promote greening of Highway corridors with participation of the community, farmers, private sector, NGOs, and government institutions.

Source: PIB