

**GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS**

**LOK SABHA
STARRED QUESTION NO. 212
ANSWERED ON 03RD AUGUST, 2023**

GREEN HIGHWAYS

***212. SHRI TAPIR GAO:**

Will the Minister of ROAD TRANSPORT AND HIGHWAYS

सड़क परिवहन और राजमार्ग मंत्री

be pleased to state:

- (a) the steps taken by the Ministry to ensure environmental sustainability while constructing the National Highways (NHs);**
- (b) the details of the schemes to promote Green Highways in the country;**
- (c) the total length of NHs constructed in North Eastern States between 2004-13; and**
- (d) the total length of NHs constructed from 2014 onwards?**

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

(a) to (d) A statement is laid on the table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (A) TO (D) OF LOK SABHA STARRED QUESTION NO. 212 FOR ANSWER ON 03RD AUGUST 2023 ASKED BY SHRI TAPIR GAO REGARDING GREEN HIGHWAYS.

(a) & (b) Steps taken by the Government to ensure environment sustainability while constructing the National Highways (NHs) as under:

(i) Ministry of Road Transport & Highways (MoRTH) conducted a study through The Energy and Resources Institute to estimate carbon emissions from NHs sector and to suggest interventions for making climate resilient highway infrastructure. NHAI has also published the first Sustainability Report as per Global Reporting Initiative (GRI) norms, which captures the initiatives of NHAI for protecting and conserving the environment.

(ii) MoRTH vide Circular No. RH/NH-33044/18/2020-S&R (P&B) dated 14.12.2020 has issued the guidelines on use of new / alternate materials and technology in construction of National Highways. NHAI has also issued policy circular dated 02.06.2022, mandating the use of New / Alternative Material and technology in construction of Highways.

(iii) Promotion of use of Green Technologies such as :

- Steel slag in base & sub-base layer**
- Cement treated sub base**
- Reclaimed asphalt**
- Inert material for landfill**
- Industrial Waste (Phosphor-gypsum)**
- Construction & Demolition waste**
- Alternate material like stones, gravels and municipal waste**
- Waste Plastic**

(iv) MoRTH vide Circular No. RW/NH-33044/01/2019-S&R (P&B) RSCE – Pt.1 dated 18.04.2022 has issued guidelines to use fly ash in road/flyover embankment construction on National Highways.

(v) Green Highways (Plantation, Transplantation, Beautification and Maintenance) Policy, 2015 was launched in September, 2015.

(vi) Plantation and Transplantation initiatives:

- **Total 373.20 lakh plants planted since 2016 on available RoW.**
- **Total 64,466 mature trees transplanted so far.**

(vii) Use of renewable energy for operation of Toll Plaza and some locations of Highways by way of installing the solar plate on the roof of the toll plaza and vacant place of Highways respectively.

(viii) As per MoEF&CC Study “An Assessment of Avoided CO2 Emissions During Construction, Maintenance and Operation of National Highways”, the saving of natural resources and carbon sequestration from 20 stretches/corridors is as under:

- **Overall consumption of fuel due to the operation of all these stretches over a 20-year period is expected to be 19% lower with respect to the BAU situation (a situation when the NH were either not present or were narrower than the present)**
- **Over the same period, CO2 emissions on these stretches is expected to be 25.19 million tonnes lower.**
- **Avenue plantation and compensatory afforestation done post construction of the highways can sequester 584.27 thousand tonne of CO2 in 20 years**

(ix) Amrit Sarovars:

- **Total 433 ‘Amrit Sarovars’ have been constructed along National Highways for augmenting the ground water regime of the area including micro climate of the area.**

(x) Wildlife Mitigation structure /Passage

- **Construction of wildlife friendly specified structures for the conservation of wildlife habitat for the stretches passing through any protected area under WPA 1972 or any Eco Sensitive Zone/Eco Fragile areas.**

(c) & (d) The total length of NHs constructed in North Eastern States between 2004-13 is 2794.455 km and from 2014 onward is 8819 km.
