

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

**LOK SABHA
UNSTARRED QUESTION NO. 3161
ANSWERED ON 18TH DECEMBER, 2025**

IMPLEMENTATION OF GREEN HIGHWAYS POLICY

**3161. SHRI AVIMANYU SETHI:
SHRI CHANDRA PRAKASH CHOUDHARY:**

Will the Minister of ROAD TRANSPORT AND HIGHWAYS

सड़क परिवहन और राजमार्ग मंत्री

be pleased to state:

- (a) the targets set by the Government for using recycled materials, Construction and Demolition waste and fly ash in National Highway (NH) projects in the financial year 2025-26 and the manner in which it is ensuring the structural integrity of these green highways;**
- (b) the manner in which the Government plans to speed up the implementation of the green highways policy including mandatory roadside afforestation/tree plantation;**
- (c) the details of third-party audit system that verifies tree survival rates along the NHs;**
- (d) whether the Government has finalised guidelines for using steel slag in major pavement works for the said region, if so, the details thereof; and**
- (e) the manner in which the Ministry is coordinating with the Ministry of Steel and the steel industries to ensure continuous supply of the material for the purpose?**

ANSWER

**THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS
(SHRI NITIN JAIRAM GADKARI)**

(a) The State-wise list of targets under National Highways Authority of India (NHAI) for using recycled materials, Construction & Demolition (C&D) waste, and fly ash in National Highways project attached in Annexure 1.

Based on international best practices and outcome of indigenous research including performance evaluation of pilot projects, new standards/guidelines are framed by Indian Roads Congress (IRC) and existing standards/guidelines of IRC are amended from time to time to facilitate use of waste in highway construction.

(b) As per the Green Highways (Plantation, Transplantation, Beautification & Maintenance) Policy-2015 of NHAI, plantations are carried out along available surplus median and roadside land of Right of Way (ROW). Avenue and median plantations are taken up as per Annual Plantation Action Plan following the guidelines and species matrix according to agro-climatic zone of the project area in conformity with the relevant Indian Road Congress Standard (IRC: SP:21-2009).

The Green Highways Policy 2015 mandates the inclusion of greening component in detailed project reports and Concession Agreements of all highway projects.

NHAI has planted 524.68 Lakhs plants on National Highways after promulgation of Green Highways Policy -2015. The State-wise details of plantations along NHs are attached at Annexure-II.

Further, to boost plantation activities in the field, campaign like “Ek Ped Maa Ke Naam 2.0” were organized starting from World Environment Day. So far 58.82 Lakhs saplings were planted by various agencies of the Government in the Ministry of Road Transport & Highways during the plantation year 2025-26.

(c) NHAI has empanelled Technology Service Providers (TSPs) to analyze the drone imagery of NHs including plantations through the AI/ML (Artificial Intelligence/ Machine Learning) inbuilt in their Drone Analytics Monitoring System (DAMS) for monitoring of the plantation activities including survival rates of saplings along National

Highways. This is a pilot project and is still under the process of improvement and development.

Further, NRSC (National Remote Sensing Centre), Hyderabad has undertaken a comprehensive pan-India estimation of green cover (referred as Green Cover Index (GCI)) for plantation along National Highways using high resolution satellite imagery.

In addition, regular internal monitoring is also carried out through Independent Engineers/authority engineers along with NHAI field officers.

(d) The Government has issued policy guidelines on use of processed urban solid waste, plastic waste, steel slag and other industrial waste materials in construction of National Highway, vide circular no. RW/NH-33044/27/2024/S&R (P&B) (Computer No. 243038) dated 23.09.2024.

(e) Quality and quantity of steel slag is determined on basis of availability in consultation with the steel plant.

**ANNEXURE-I REFERED TO IN REPLY TO PART (A) OF LOK SABHA
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REGARDING IMPLEMENTATION OF GREEN HIGHWAYS POLICY.**

Sr. No.	State	Construction & Demolition Waste (MT)	Recycled Materials (MT) = RAP+Plastics+Other Sutainable materials etc.	Fly Ash (MT)
1	Andhra Pradesh	0	19052.39	8188764
2	Assam	0	7008	0
3	Bihar	0	465.93	9681302.64
4	Chhattisgarh	0	12788.29	6754000
5	Delhi	400000	48784	0
6	Gujarat	9301	8065.08	118708.33
7	Haryana	315030.51	3,468.80	631720.99
8	Himachal Pradesh	0	0	16302.07
9	Jammu & Kashmir	190000	76000	2500
10	Jharkhand	0	105333.3	5187427.4
11	Karnataka	0	6762.85	1328
12	Kerala	57600	148590.71	12853.28
13	Madhya Pradesh	750	663,249	5959269.62
14	Maharashtra	8459	13788.96	371,852
15	Odisha	0	8700	12000000
16	Punjab	0	2862.47	4679632.027
17	Rajasthan	0	1192.37	0
18	Tamil Nadu	3219	56961	1822918
19	Telangana	2090	35165	2650000
20	Uttar Pradesh	10638.573	82213.64	8873105.378
21	Uttarakhand	0	2235	1683.18
22	West Bengal	2000	22514	3810000
	Total(MT)	999088.083	1325200.7905	70763366.915

**ANNEXURE-II REFERED TO IN REPLY TO PART (B) OF LOK SABHA
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Details of Plantation carried out on National Highways from 2015-16 to 2025-26 (till 04th December 2025)																										
Sl. No.	State	Cumulative Plantation of 3 Years (2015-16 to 2017-18) (No. of Plants in Avenue & Median Plantation in Lakh)	Plantation in 2018-19 (No. of Plants in Avenue & Median Plantation in Lakh)	Plantation in 2019-20 (No. of Plants in Avenue & Median Plantation in Lakh)	Plantation in 2020-21 (No. of Plants in Avenue & Median Plantation in Lakh)			Plantation in 2021-22 (No. of Plants in Avenue & Median Plantation in Lakh)			Plantation in 2022-23 (No. of Plants in Avenue & Median Plantation in Lakh)			Plantation in 2023-24 (No. of Plants in Avenue & Median Plantation in Lakh)			Plantation in 2024-25 (No. of Plants in Avenue & Median Plantation in Lakh)			Plantation in 2025-26 (till 04th December 2025) (No. of Plants in Avenue, Median & Land Parcels Plantation in Lakh)				Total Plantation Progress (2015-16 to 2025-26) (No. of Plants in Avenue & Median Plantation in Lakh)		
					Avenue	Median	Total	Avenue	Median	Total	Avenue	Median	Total	Avenue	Median	Total	Avenue	Median	Total	Avenue	Median	Total	Avenue	Median	Land Parcels	Total
1	Andhra Pradesh	6.34	1.47	4.8	1.22	1.79	3.01	0.50	1.17	1.67	0.58	1.00	1.58	0.58	0.55	1.14	0.89	1.22	2.11	1.50	2.64	0.07	4.22	26.34		
2	Assam	1.01	0.73	0.04	0.92	1.54	2.46	1.01	0.72	1.73	0.45	0.44	0.89	0.22	0.63	0.85	0.24	0.19	0.43	0.23	0.09	0.00	0.32	8.47		
3	Bihar	1.62	0.64	0.93	0.68	0.04	0.72	1.07	0.96	2.03	0.65	1.47	2.12	1.15	1.23	2.38	2.10	1.75	3.85	1.42	0.71	0.00	2.12	16.41		
4	Chhattisgarh	2.02	0.86	0.54	0.84	0.34	1.18	0.70	0.31	1.02	0.84	0.43	1.30	0.86	0.31	1.17	0.53	0.57	1.11	1.47	0.53	0.11	2.11	11.33		
5	Delhi	0.5	5.5	0.02	1.33	0.80	2.13	2.80	6.71	9.50	2.18	1.26	3.44	2.47	1.13	3.60	7.45	1.50	8.95	2.38	1.32	0.10	3.80	37.45		
6	Gujarat	4.96	0.65	1.06	1.20	1.58	2.78	0.58	1.88	2.38	2.40	2.10	4.51	1.61	2.08	3.69	2.45	3.38	5.83	1.73	2.38	0.07	4.18	30.04		
7	Haryana	6.46	4.25	0.28	0.61	1.91	2.52	1.00	0.59	1.59	0.93	1.27	2.19	1.13	1.85	2.98	1.07	4.52	5.59	2.76	1.56	0.02	4.34	30.21		
8	Himachal Pradesh	0.16	0.08	0.23	0.42	0.26	0.68	0.47	0.25	0.71	0.35	0.47	0.82	0.21	0.11	0.32	0.39	0.25	0.64	0.22	0.42	0.00	0.64	4.28		
9	Jammu & Kashmir	0.41	0.38	0.06	0.01	0.12	0.13	0.11	0.31	0.42	0.20	0.66	0.86	0.41	0.36	0.76	1.05	0.13	1.18	0.54	0.92	0.00	1.45	5.65		
10	Jharkhand	1.32	0.86	0.26	0.50	0.65	1.16	1.32	1.21	2.53	0.77	0.30	1.07	0.57	0.36	0.92	0.32	0.69	1.01	0.48	0.73	0.00	1.21	10.34		
11	Karnataka	7.51	1.75	3.73	0.81	2.70	3.51	1.47	2.26	3.74	1.02	1.82	2.80	0.56	1.63	2.23	1.39	1.49	2.79	0.65	1.32	0.06	2.03	30.13		
12	Kerala	0.9	0.24	0.15	0.08	0.25	0.33	0.04	0.20	0.24	0.02	0.13	0.16	0.01	0.18	0.18	0.00	0.02	0.03	0.00	0.06	0.00	0.06	2.29		
13	Madhya Pradesh	0.49	2.31	5.3	1.78	2.16	3.94	2.25	3.55	5.77	5.03	5.13	10.18	3.11	3.94	7.04	4.19	4.30	8.49	2.17	1.07	1.32	4.51	48.05		
14	Maharashtra	7.46	0.64	4.62	1.82	2.40	4.22	3.24	4.74	7.97	2.69	3.34	6.04	2.71	2.54	5.25	1.72	2.37	4.09	1.23	1.48	0.01	2.72	43.00		
15	Odisha	2.91	2.04	1.73	1.84	1.06	2.90	2.43	1.35	3.78	1.88	1.52	3.40	1.23	1.45	2.68	0.71	1.82	2.53	0.88	2.19	0.00	3.07	25.05		
16	Punjab	3.98	0	1.98	2.55	2.26	4.81	2.15	0.82	2.97	1.16	1.34	2.43	1.30	1.03	2.33	1.55	2.81	4.36	2.42	1.96	0.12	4.51	27.39		
17	Rajasthan	8.1	1.52	2.07	3.16	1.63	4.79	4.17	5.28	9.45	7.29	5.16	12.46	2.81	5.29	8.10	2.13	2.31	4.45	2.46	0.74	0.79	3.99	54.91		
18	Tamil Nadu	6.44	1.82	2.92	1.19	1.67	2.86	0.93	1.54	2.47	1.03	1.52	2.57	1.23	1.53	2.62	2.92	1.27	4.20	1.40	1.48	0.00	2.87	28.74		
19	Telangana	3.09	0.18	0.59	1.76	1.51	3.27	0.64	1.54	2.18	0.65	2.09	2.74	0.36	0.34	0.70	0.31	0.47	0.78	0.74	1.01	0.21	1.96	15.54		
20	Uttar Pradesh	6.74	3.8	3.56	1.76	4.55	6.31	1.67	3.75	5.41	3.21	3.02	6.27	2.80	2.02	4.81	2.03	1.50	3.53	1.05	2.18	0.59	3.82	44.26		
21	Uttarakhand	0	0.52	0.15	0.64	1.46	2.10	1.40	0.73	2.12	0.73	0.53	1.23	0.38	0.18	0.56	0.28	0.10	0.39	0.11	0.14	0.00	0.31	7.40		
22	West Bengal	3.85	1.03	1.2	1.46	1.59	3.04	1.64	0.74	2.38	1.87	0.51	2.37	1.20	0.53	1.72	0.58	0.56	1.14	0.38	0.28	0.00	0.66	17.39		
	Grand Total	76.27	31.27	36.22	26.58	32.29	58.87	31.58	40.47	72.05	35.99	35.53	71.52	26.96	29.12	56.08	34.23	33.24	67.47	26.24	25.22	3.47	54.93	524.68		
