GOVERNMENT OF INDIA MINISTRY OF RURAL DEVELOPMENT DEPARTMENT OF RURAL DEVELOPMENT

LOK SABHA UNSTARRED QUESTION No. 942 ANSWERED ON 08/02/2022

USE OF SURFACE DRESSING TECHNOLOGY UNDER PMGSY

942. ADV. A.M. ARIFF:

Will the Minister of RURAL DEVELOPMENT be pleased to state:

- (a) whether the Government has taken any decision to use surface dressing technology instead of chipping carpet technology for construction of roads belonging to T4/T5 category under Pradhan Mantri Gram Sadak Yojana (PMGSY), if so, the rationale behind it:
- (b) whether the Government is aware that such a change will seriously deteriorate the condition of PMGSY roads especially in State like Kerala, where road traffic is more compared to other parts of the country;
- (c) whether the Government has received any requests from State Governments including Kerala for using chipping carpet technology for T4/T5 category PMGSY roads;
- (d) if so, whether the Government intends to change its decision in this regard; and
- (e) the details of roads sanctioned for construction under PMGSY in Alappzuha Parliament Constituency in State of Kerala?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF RURAL DEVELOPMENT (SHRI FAGGAN SINGH KULASTE)

(a) & (b) Rural roads under Pradhan Mantri Gram Sadak Yojana (PMGSY) are constructed and maintained as per the technical specifications and geometric design standards given in the Ministry of Rural Development Specifications for Rural Roads, Rural Roads Manual of the Indian Roads Congress (IRC) (IRC-SP:20) and also, where required, the Hill Road Manual (IRC:SP:48) and other relevant IRC Codes & Manuals. As per IRC: SP:72-2015, which is meant for design of low volume rural roads, Surface Dressing (SD) is recommended as surface course for rural roads designed for cumulative Equivalent Single-Axle Load (ESAL) repetition up to 3,00,000 (T5) categories. Surface dressing can also be adopted for traffic category up to T9 as per Para 7.3.3 of IRC: SP:72-2015. Surface dressing is suitable for all climatic/ rainfall conditions as per IRC: SP:72-2015.

The surface dressing is an established methodology, which was used by engineers/contractors all across India before premix carpet was introduced. During that time, surface dressing was carried out manually. Now, with mechanization, it is much easier and superior to pre-mix carpet. Surface dressing is also more impervious to water seepage in comparison to Open Graded Premix Carpeting (OGPC). Surface dressing has added advantages over OGPC in terms of durability, skid resistance, cost-effectiveness, etc. Many research papers published by academia have brought out that the permeability of OGPC and seal coat is much higher than that of surface dressing. Also, the IRC had published code IRC: 110-2005 on surface dressing 'Standard Specifications and Code of Practice for Design and Construction

of Surface Dressing'. Detailed Specification is also available in Ministry of Rural Development Specifications for Rural roads published by IRC in 2014. The choice of surface dressing for rural roads in Kerala has been made as per the traffic category of the roads, as specified in IRC code.

- (c) & (d) The Ministry has received requests from different states against adopting surface dressing. All the State Governments including Kerala have accordingly been advised to follow the IRC code as the IRC SP 72:2015, which clearly indicates that the surface dressing shall be followed for the roads having traffic T5 and below and even up to T9 category. The decision of the government is as per codes and guidelines.
- (e) The details of roads sanctioned for construction in Alappuzha District of Kerala under PMGSY-I, II and III are given below:-

Name of intervention	Sanctioned (Road length in		Completed (Road length in Km)	
	Km)			
	No. of roads	Road length	No. of roads	Road length
PMGSY-I	70	97.51	67	92.92
PMGSY-II	11	25.12	09	20.10
PMGSY-III	15	66.45	00	00
