

**GOVERNMENT OF INDIA  
ROAD TRANSPORT AND HIGHWAYS  
LOK SABHA**

STARRED QUESTION NO:275  
ANSWERED ON:11.12.2014  
USE OF CEMENT FOR ROAD PROJECTS  
Chandumajra Shri Prem Singh

**Will the Minister of ROAD TRANSPORT AND HIGHWAYS be pleased to state:**

- (a) whether the Government proposes to use cement in place of coal tar for construction of roads in the country;
- (b) if so, the details thereof along with the reasons therefor including likely benefits therefrom;
- (c) whether the Government has made any comparative study to assess the per kilometre cost of road construction by using coal tar; and
- (d) if so, the details thereof including the per kilometre construction cost of coal tar and cement?

**Answer**

THE MINISTER OF STATE IN THE MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (SHRI PON. RADHAKRISHNAN)

(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. 275 FOR ANSWER ON 11.12.2014 ASKED BY SHRI PREM SINGH CHANDUMAJRA REGARDING USE OF CEMENT FOR ROAD PROJECTS

(a) & (b) Yes, Madam. This Ministry is primarily responsible for the construction and maintenance of National Highways. It has been decided in the Ministry that the type of pavement to be adopted for National Highways projects should be determined on the basis of durability and life cycle cost. Considering the issues related to environment, longer service life, fuel consumption, resistance to extreme weather conditions, saving of natural resources and lower maintenance cost etc., the Ministry has decided that cement concrete pavement could be the default mode of construction on National Highways as against bitumen, which is currently used in construction of National Highways.

(c) & (d) No, Madam. The cost per kilometre for construction of National Highways is dependent upon several factors such as type of soil, class of roads, traffic, design life, size of project, availability of construction materials like bitumen, cement, aggregates and requisite equipment, etc. As these factors vary from site to site, the cost per kilometre of construction cannot be quantified. However, the initial cost of construction of cement concrete pavement is estimated to be about 5-20% more than the bituminous pavement depending upon the price of the constituent materials, and distance of project site from production centres.

This difference in the initial cost of construction of cement concrete pavement is expected to further reduce as the Ministry has received rates (ex-factory) of various grades of cement from the cement manufacturers in the country, which are below the current market rates. Considering these rates of cement and lower maintenance cost of cement concrete pavement, the cost per kilometre for construction of cement concrete pavement is envisaged to be almost similar to that of bituminous pavement at the time of construction and lower in terms of life cycle cost.