GOVERNMENT OF INDIA
ROAD TRANSPORT AND HIGHWAYS
LOK SABHA

UNSTARRED QUESTION NO:3088
ANSWERED ON:16.03.2010
CONCRETE AND BITUMEN ROADS
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Will the Minister of ROAD TRANSPORT AND HIGHWAYS be pleased to state:

(a) the per kilometre cost being incurred by the National Highways Authority of India (NHAI) on the construction of concrete and bitumen roads, separately;

(b) whether concrete roads have a life cycle of 50 years and also help to save fuel consumption.;

(c) if so, the details thereof alongwith the present ratio of construction of concrete and bitumen roads by the NHAI;

(d) the details of the problems being faced by NHAI in construction of concrete roads; and

(e) the strategy chalked out by NHAI for construction of such roads, State-wise?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (SHRI R.P.N SINGH)

(a): The cost per km for construction of National Highways is dependent upon several factors such as design period, sources of construction materials like aggregate, bitumen, cement, labour, construction technique and machinery used, terrain and traffic conditions etc. As these conditions vary from site to site, it is difficult to indicate per km cost of construction.

(b) & (c): As per manual of specifications and standards for 4 laning of National Highways through PPP (IRC:SP 84-2009) flexible pavement are designed for a minimum design period of 15 years or operation period whichever is more and rigid pavement are designed for a minimum period of 30 years. No specific ratio has been prescribed by NHAI for construction of cement concrete and bitumen roads. However, NHAI has constructed concrete and bituminous roads at an approximate ratio of 1:5.

(d): NHAI has faced difficulties like availability of good experienced Contractors in sufficient number having the required sophisticated machinery for construction of concrete roads, limitations with regard to working hours for construction as construction is not possible under high ambient temperature and inadequate supply of cement at times. High initial cost of construction and difficulties in repair and maintenance where any defect occurs during construction are other difficulties faced by NHAI.

(e): NHAI follows a site specific strategy for construction of concrete roads.