

No. NHVI-8 (46)/72

*Dated the 13th April, 1973*

To

All the Chief Engineers of States/Union Territories (connected with Roads)

Sub : Bridges on National Highways-Maintenance

Two cases concerning lack of attention to maintenance of bridges on the National Highways have come to the notice of this Ministry recently. These are as below :

(a) In a particular bridge, the course of the Nalla on the upstream side became skew to the bridge. In the monsoons of 1972, this skew current attacked the embankment behind the abutment and breached it. It also caused excessive concentration of flood discharge through the end span resulting in heavy scour of the bed. All this caused dislocation of the traffic on the National Highway. Obviously, this change in the flow direction was not noticed by the officers incharge of the maintenance of the bridge and, therefore, no preventive measures against the expected damage could be taken.

(b) In another bridge on National Highway, it was noticed that sand obtained from sand quarries located elsewhere used to be washed and cleaned on one of the banks immediately downstream of the bridge. Due to this the bed gradually silted up in a few years and it got raised approximately up to the level of the surrounding natural ground. Due to blocking of the channel downstream of the existing bridge, the bridge though it existed in the structural sense, was not functioning in the hydraulic sense. This was also not noticed by the maintenance staff.

2. These cases are brought to the notice of the State Chief Engineers dealing with the roads to emphasise the need of vigilance on the part of the maintenance staff by issuing suitable instructions to the officers of the State P.W.D. incharge of maintenance and inspecting officers on the following lines :

- (i) To observe such aspects, e.g. skewness of the current, of the behaviour of the river on the upstream side of the existing bridges like spilling over its bank and crossing the approaches at some distance for the bridge which may adversely affect the bridge and also to see that there is no blocking of the natural course of the stream, and
- (ii) To take immediate steps, if any of the above conditions are noticed, so that there is no damage to the Highway.

3. The State Chief Engineers may also consider issuing instructions for inspection of all bridges before and after the floods every year and for this it is for their consideration if officers at different levels can be charged with the responsibility of inspecting and bringing out reports on the specified category of bridges.