

(a) whether the bedrolls supplied to passengers in trains are generally very old, worn out, dirty and of inferior quality;

(b) if so, whether any steps are being taken or contemplated to ensure that good and clean bedrolls are made available to the passengers;

(c) if so, the time by which it is likely to be done? ✓

THE DEPUTY MINISTER IN THE MINISTRY OF RAILWAYS (SHRI MAHABIR PRASAD): (a) to (c). Some complaints of this nature have been received. However, in majority of the cases the quality of bed rolls have been found to be good. Specific cases of supply of old, dirty or worn out bed rolls are examined and remedial steps taken.

Findings of the Commission on Collapse of Nehru Bridge in Goa

9801. SHRI RAM DHAN:
SHRI BALWANT SINGH
RAMOOWALIA:
SHRI CHINTAMANI JENA:

Will the Minister of SURFACE TRANSPORT be pleased to state:

(a) whether Government have since received the report of the Commission constituted to inquire into the sudden collapse of Nehru Bridge on river Mandovi in Goa;

(b) if so, the details of the findings thereof; and

(c) the action taken against the persons held responsible for acts of commission and omission right from the acceptance, design, supervision work, maintenance and repairs of the bridge?

THE MINISTER OF STATE OF THE MINISTRY OF SURFACE TRANSPORT (SHRI RAJESH PILOT): (a) Yes, Sir.

(b) Details of the findings of the Commission are given in the statement below.

(c) Examination of the report is yet to be completed.

STATEMENT

Findings of the Commission with respect to its Terms of Reference:

1. Whether there was any irregularity in awarding the contract?

From the record it appears that Ministry of Transport officers late Shri B.P. Sinha the then Consulting Engineer (B), Shri Kartik Prasad the then Addl. Consulting Engineer (B) and Shri Balwantrao the then Dy. Bridges Officer had decided to accept the tender of M/s. Pioneer Engineering Syndicate without studying and or knowing for themselves the nature of the superstructure involving structural method being used for the 1st time in India and without enquiring about the expertise, experiences and resources of the Contractors M/s Pioneer Engineering Syndicate to execute the work when their 1st tender was rejected about 2 months earlier only on the ground of want of expertise, experience and resources. On the other hand it appears that they and also Shri Venkatasulu who was the Dy. Bridges Officer at the time of approving the superstructure design appear to have totally abandoned their judgement to the assurance given by Shri Raj Consulting Engineer of the Contractors to obtain the approval of M. Guyon to the design in general terms.

Irregularity if any in awarding the Contract was only to the extent mentioned above and there was no other irregularity involved.

2. Whether the design and the system of construction adopted and the arrangement made to supervise the Construction of the bridge were technically sound and whether the quality control measures enforced were adequate?

The design was defective for which the Ministry of Transport Officers Late Sri Bazaz. Addl. Director General

(B) and Shri Venkatasulu, Dy. Bridges Officer and Shri P.V. Raj Consulting Engineer of Contractors were responsible.

The system of construction was equally defective and the construction does not appear to have been carried out by the Contractors according to the design.

Though arrangement for supervision by Goa PWD could be considered to be adequate it appears that those who were entrusted with the duty of supervision viz. Shri Naique, Director PWD, Shri Borkar, Supdt Engineer and Shri Kapadi, Asstt. Engineer have failed in their duty to supervise and appear to have allowed the work of construction to be carried out by the Contractors in breach of conditions of design.

The engineer on site appointed by the Contractors late Shri V. Prasad Rao equally failed to carry out the construction in accordance with the condition of the Contract. For the said lapse of their representator the Contractors would be equally liable or responsible. So far as quality control was concerned as regards steel, H.T. wires and metal there was no complaint.

However in respect of sand brought from Calangute beach and water from Opa there was no record of any nature maintained. No records was also maintained as regards the analysis, if any, made of water and sand used. In the absence of any record, Supervising Engineers of Goa PWD could not be said to be in a position to exercise any control over the use of sand and water. Finding by CECRI in its report of high degree of chloride contents in cast-in-situ concrete raises a doubt whether the water and sand used for concrete which can carry chlorides in concrete could be said to be of proper quality.

3. Whether the construction of the

bridge by the Contractors was in accordance with the approved plans, designs and specifications?

The construction carried out by the Contractors was not in accordance with plans, design and specifications particularly as regards laying cables and their prestressing and grouting for which the Resident Engineer representing the Contractors late Shri P.V. Prasad Rao was responsible. So also P.W.D. Engineers Shri Naique, Shri Borkar and Shri Kapadi were responsible in not supervising the construction properly.

4. Whether any material used for the construction was in accordance with the approved standards?

Construction material such as Steel, Cement, H.T. wire was in accordance with the approved standards. However, there were complaints as regards the sheathing material used as being corroded being of absolute bad quality. So also about cones used not being proper. It was also on record that metal of 3/4" size did not give proper compaction, yet the same was continued to be used till May, 1969. As regards use of sand and water there was no record maintained but with the findings in CECRI Report about cast-in-situ concrete being found with high degree of chlorides raises a doubt whether sand and water used were of good quality.

5. Whether any of the persons concerned with construction and supervision were responsible for any acts of omission or commission?

Re: Construction--The Contractors Engineer on site late Shri V. Prasad Rao and in turn the Contractors whom he represented were responsible for construction carried out not being according to the design.

P.W.D. Engineers Shri Naique, Shri Borkar and Shri Kapadi were guilty of

several lapses in their duty of supervision. In fact the record discloses that they did not carry out any supervision worth the name but in fact with open eyes allowed the Contractors to carry out the construction work in flagrant breach of the condition of the Contract and failed to inform about it to Ministry of Transport or complain about it to the Contractors.

6. Whether adequate steps were taken for inspection maintenance and repairs of the bridge from time to time?

There was a total lack of inspection or maintenance of the bridge by P.W.D. Engineers Shri Albuquerque, Shri Borkar, Shri Sidhu and Shri Kapadi and the said officers completely failed in their duty to carry out periodical maintenance inspection of the bridge as laid down in the manual and Circulars and also failed to maintain registers like 'Bridge Register' or 'Inspection Register'. This conduct amounted to gross negligence on their part.

The bridge being the property of the Central Government with Goa P.W.D. acting as agents of Ministry of Transport Office, its officer such as Shri B. Balwantrao, Shri Venkatasulu, Shri Shastri and other who visited the site from time to time equally failed in their duty to ascertain from Goa PWD whether maintenance inspection of the bridge was carried out or not as per the manual and circulars or whether the requisite Registers were maintained or not and if not giving directions to the P.W.D. officers to that effect.

7. Whether there was any failure on the part of any functionary in taking any steps to rectify defects, if any, noticed and person responsible for the lapses?

Design was defective. The contractors through their Resident Engineer late Shri. V. Prasad Rao or the P.W.D.

Engineers on duty failed to bring to the notice of Ministry of transport officers the difficulties which they alleged to have felt in translating the design in construction particularly as regards placement of cables, sheathing material concrete mix etc.

There was a total lapse of supervision by the Goa P.W.D. Engineer Shri Naique, Shri Borkar and Shri Kapadi during construction as regards laying of cables, sheathing material used, alignment, prestressing and grouting of H.T. Cables, use of proper mix and they with open eyes allowed the contractors to do the said work in total breach of conditions of the design for which they were responsible.

(ii) *Hinges.*

Knowing fully well that the hinges were malfunctioning M/s F.P.C.C. who were entrusted with investigation took over 1½ years to complete the investigations and made a report without any investigations work the name and which ultimately turned out to be fruitless. Even then to get three hinges viz. being hinges Nos. 2, 3 and 4 only rectified, and not replaced as suggested by Shri Bhasin the then Addl. Director General (B) for which he had got sanctioned Rs.14.12 lakhs for replacement of two hinges being no. 3 and 10 it took a further period till May 1983. The decision taken by Shri Bhasin Addl. Director General (B) to get hinges 3 and 10 replaced at the estimated costs of Rs. 14.12 lakhs was changed by Shri Venkatasulu Addl. Director General (B) who succeeded Shri Bhasin, to rectification of three hinges being nos 2, 3 and 4 by the Present Contractors at the estimate of Rs. 50,000 each and the said hinges were rectified in May, 1983 about 3 years after the troubles with the hinges was noticed. In the meantime other hinges including the hinge on span 1 Pier 1 went on unattended to and the hinges deteriorating further

and deflections accelerating unabated till the collapse of the bridge.

The persons responsible for this inordinate delay in rectifying the hinges and that too partially would be the concerned Engineers both of Ministry of Transport and Goa P.W.D. so also the officers of M/s. PCC.

(iii) *Cracks*

Cracks to the wearing coat though described by various Ministry of Transport officers such as Shri B. Balwantrao, Shri Venkatasulu and Shri Shastri as serious, remained uninvestigated and unattended to till the collapse. Every officer of Ministry of Transport visiting the site suggesting a new remedial measure for attending to the cracks at the same time negating the remedy suggested by the earlier officers and asking Goa P.W.D. to submit fresh estimates every time resulted in a precious time of over 6 years being wasted and that too only in not being able to take a firm decision as to what measures were to be adopted. Ultimately before any remedial measures could be adopted the bridge collapsed. For all this the concerned officers in Ministry of Transport Bridges Department would be collectively responsible.

(iv) *Corrosion*

Although corrosion in cables was noticed since October 1983 still no investigation and remedy was even thought about by Ministry of Transport officers, or P.W.D. officers and even the Technical Expert Committee appointed on 1.10.85 failed to take any timely measures till the collapse of the bridge against the corrosion of cable wires and consequent loss of prestress.

For this delay the concerned Ministry of Transport officers and PWD officers mentioned above and Technical Committee was responsible.

Shri Albuquerque Chief Engineer and Shri Sidhu Supdt. Engineer were grossly guilty of the breach of their duty in not informing either Technical Expert Committee which was functioning then and of which Shri Albuquerque was a Member Secretary and Shri Sidhu as permanent invitee or to Ministry of Transport about the corrosion noticed by them on span No.1 pier No. 1 as late as 19.6.1986 i.e. about 15 days before the collapse of the bridge, and taking their own steps which were against the express directions of TEC.

(vi) *Load Testing*

Load testing which was the condition of the contract was not got done either by Ministry of Transport or Goa PWD inspite of Contractors furnishing required material. For this lapse Shri Naique of Goa PWD and Shri Balwantrao of the Ministry of Transport were responsible.

(vii) *Technical Expert Committee*

Technical Expert Committee appointed on 1.10.85 as a matter of urgency to make an interim report within one month for recommending immediate measures for arresting further deterioration and a final report within 3 months suggesting permanent measures, did not make even a preliminary report till the collapse of the bridge on 5.7.1986. The Committee appears to have lost the sense of urgency once it was appointed in the course of its proceeding, which Ministry of Transport had exhibited while constituting the Committee and went on its work in a leisurely fashion. An example was that although at the meeting of 5.10.85 a decision was taken by the Committee to approach CECRI, CECRI was approached by Goa PWD only on 23.11.85, while CRRI though no decision was taken to approach them, were approached on 11.11.1985 i.e. long time after one month had expired after its appointment.

It was a sad commentary on the

working of the Govt. institutions like CRRl and CECRI that they would not under their rules, start investigations even for Government Departments and whether emergency or otherwise before first being paid their charges with the result that CRRl could start investigation in December 1985 while CECRI only after 19.3.1986. Therefore CRRl could submit its report only in March 1986 while CECRI submitted its preliminary report only on 19.7.1986 after the bridge had collapsed. The record does not show that in between the said institutions were at anytime asked to expedite their reports as a matter of urgency. This delay of over 6 months by Technical Expert Committee in the matter of urgency in taking a decision on both immediate and permanent measures when cause of distress was known to the Chairman of the Committee Shri Bassi even on 21.9.1985 and to the other members of the Committee on 5.10.85 on the visit to the site and when at the 1st meeting on 5.10.85 scheme proposed by Shri Cokhale of M/s. FPCC was discussed and modifications accepted, appears to be a total waste of valuable period during which corrosion in H.T. cables could have progressed unabated. This behaviour of a Committee consisting of senior officer of Ministry of Transport with the existing Addl. Director General (B) presiding and the other highly experienced and senior engineers as members was highly negligent and unpardonable. This was a proverbial case of starting with a bang and ending with a whimper.

On-Going Railway Projects

9802. PROF. NARAIN CHAND PARASHAR: Will the Minister of RAILWAYS be pleased to state:

(a) the number of on-going new railway lines and conversion projects which are proposed to be completed during the Sev-

enth Five Year Plan period and the early years of the Eighth Plan;

(b) the cost of each of these projects as on 31 March, 1988;

(c) whether all on-going projects are proposed to be completed prior to the taking up of new projects in the remaining years of the Seventh Plan and in the Eighth Plan; and

(d) if not, the reasons therefor?

THE DEPUTY MINISTER IN THE MINISTRY OF RAILWAYS (SHRI MAHABIR PRASAD): (a) 7 New line and 2 Gauge Conversion projects have been/proposed to be fully completed in the 7th Plan upto 1988-89. The completion of projects in 1989-90 and early years of 8th Plan would depend on the allocation of resources by the Planning Commission in the Annual Plans for the respective years.

(b) The latest estimated costs of all on-going projects are given in the Railway Budget documents for 1988-89. The estimates for all projects have not been updated for 31.3.88.

(c) There is no such proposal.

(d) Periodic reviews are conducted to determine the priority of approved projects and the need to take up new projects to meet the transportation requirements arising from time to time. Priorities for completion of on-going projects and for taking up new projects are decided based on their relative importance and urgency.

Liquid Toilet Soap

9803. PROF. NARAIN CHAND PARASHAR: Will the the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether Government are aware that while the toilet soap is subject to the observance of the Drugs and Cosmetics Act, 1983, the liquid toilet soap is not covered by this Act or any other similar legislation;