

Mandapam And Its Environs

SOUVENIR

Edited

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Published On the Occasion of
35th Anniversary
of this Recreation Club of CMFRI
Mandapam Camp
Tamilnadu
1986

Pamban Bridge

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It is believed that upto the first quarter of 15th century Mandapam and Pamban were connected by a strip of land. A cyclone in 15th century resulted in the submergence of that connecting strip of land between Mandapam and Pamban. After that boat service was the only mode of transport between Mandapam and Pamban.

Pamban bridge is the only connecting link between the mainland and the island of Rameswaram. The Pamban railway bridge (Bridge No. 345) popularly known as "Pamban viaduct" was constructed between August 1911 and December 1913 and it is a single line metre gauge. It was opened for traffic in February 1914 by the South Indian Railway. Prior to the construction of this viaduct, traffic between India and Sri Lanka was conducted through Tuticorin. With the completion of this bridge, a ferry service was started between Dhanushkodi and Thalaimannar in Sri Lanka.

The construction of the Pamban bridge was carried out under the direction of Mr. J.J. Lewis, an Englishman who was the Chief Engineer of Southern Railway. The bridge is 2.25 km long with 145 spans of 12.2 m girders and a two leaved, rolling lift bridge which is of 60.9 m in length. It was called as Scherzer rolling lift bridge named after the German Engineer by name Scherzer who designed it. The depth below the bridge is 12' and the navigation channel is known as the Pamban Pass.

The devastating cyclone of 22nd December 1964 washed away the bridge. Because of the importance of the bridge it was repaired within two months. The railway line to Dhanushkodi was also damaged during the cyclone.

Prior to the 1964 cyclone, an anemometer was permanently installed at about the middle of the bridge. Whenever the wind velocity exceeded 64 km it signaled danger. That too was washed away by the tidal waves and it was later replaced with a new one in 1965 which flashed danger signals when the wind velocity was 48 km and later this limit was enhanced to 58 kmph. Owing to this scheduled crossing of the trains may be affected, resulting in the cancellation of some of the train services.

The Scherzer roll and lift span are activated by using the principle of spurs and gears to gain a large amount of mechanical advantage. It is operated manually.

For the passage of the vessels the bridge is lifted. The Port-Officer informs the bridge operator the date and time of crossing of the steamer. The bridge operator informs the Station Master and the Controller before he lifts the bridge. The entire operation takes nearly 40 to 50 minutes.

The bridge is subject to South-West and North-East monsoons. The former prevails from middle of May to end of August and later from October to January.

PAMBAN ROAD BRIDGE

After the cyclone of 1964, a road bridge parallel to Railway bridge was proposed in 1965 but the proposal was dropped. In the later half of 1969 Tamil Nadu Government again brought the proposal for the separate road bridge and it was cleared by the Railway Ministry.

The Pamban road bridge connects Mandapam and Pamban (and the National High way No, 49). The road bridge across the Pamban strait is the first one across the sea in India.

The work on road bridge was commenced by the Highways Department on 17.11.74. The total length of bridge would be 2345 M. The approximate estimated cost was 537.57 lakh.

The work was entrusted to M/s. Neelakantan Brothers Engg., Contractor, Madras. After the 1978 cyclone, the work was carried out slowly by the Highways Department upto the middle of 1984. Now a sum of Rs. 16.6514 crore was sanctioned by the Central Government and the contract was given to New Gammon India Ltd. Bombay. It proposes to complete the work by 1987.

IMPORTANT FEATURES OF THE ROAD BRIDGE

The total length of the road bridge is 2345 M approximately 1.5 miles, parallel to the railway bridge. The total number of piers is 79, of which 47 are completed, the width of the bridge is 7.5 m, with a pavements of 1.5 M on either side. The maximum height of the bridge from the sea level is 17.68 M,

After the completion of the bridge, it will be reckoned as one of the finest example of human endeavours to overcome the natural barriers for the benefit of man.