



**Hardinge Bridge** (Bengali: হার্ডিঞ্জ ব্রিজ) is a steel railway bridge over the river Padma located at Paksey in western Bangladesh. It is named after Lord Hardinge, who was the Viceroy of India from 1910 to 1916. The bridge is 1.8 kilometers (1.1 mi) long. It is named after Lord Hardinge. From 1910-1916 he was the Viceroy of India. Its construction began in 1910 and ended in 1912, though it was proposed two decades ago. There was train movement on it from 1915. There was proposal of constructing a railway bridge over Padma. Eastern Bengal Railway laid the proposal in 1889. The motive of constructing this bridge was to ease communication between Eastern part of Bengal and Kolkata.

The construction of a railway bridge over the Padma was proposed in 1889 by the Eastern Bengal Railway for easier communication between Calcutta and the then Eastern Bengal and Assam. In 1902, Sir FJE Spring prepared a report on the bridge. A technical committee reported that a bridge could be constructed at Sara crossing the lower Ganges between

the Paksey and Bheramara Upazila stations on the broad gauge railway from Khulna to Parbatipur Upazila. The construction of the bridge started in 1910 and finished two years later. The bridge comprises 15 steel trusses. The main girders are modified “Petit” type.

The most difficult task of the operation was to prevent bank erosion and to make the river flow permanently under the bridge. For this, two guide banks of the “Bell-bund” type named after J. R. Bell were built on either side, each extending 910 metres (3,000 ft) upstream and 300 metres (1,000 ft) downstream from the bridge.<sup>[2]</sup> The ends of the river banks were curved inward and heavily pitched with stone.

Hardinge Bridge was severely damaged during the Liberation War of Bangladesh of 1971. It happened on 13 December 1971, when the Indian Air Force plane bombed on the 4th guarder from the Paksey side. As the Pakistani army was on retreat towards Jessore (their last stronghold) Hardinge Bridge was strategically very important. The allied force damaged the bridge. The Japanese Government helped to reconstruct the bridge. It is the second largest railway bridge in Bangladesh. Another bridge named Lalon Shah Bridge for road transport beside the Hardinge Bridge has recently been constructed.



History:

The construction of the Hardinge Bridge was proposed and discussed for more than twenty years before it was finally sanctioned for construction in 1908. Proposals put forward by the then EASTERN BENGAL RAILWAY in 1889, were investigated by a committee and reported to be feasible. In 1902, Sir FJE Spring prepared a detailed project on the bridge. There were many discussions as to the site of the bridge and in 1907 a committee representing commercial interests recommended one of the 'Sara' sites which had been favoured by Sir Spring.

A technical committee appointed in 1908 reported that a bridge could be constructed in a site near Sara, ie present site. The construction of the bridge started in 1910 and finished in 1912.

It may be mentioned here that the British engineer Sir Robert Gales worked as the chief engineer of the construction. On the 1st of January 1915, the first trial train crossed the bridge down track and on 25 February of the same year the second trial train crossed the bridge up track. Finally on 4 March 1915 Lord Hardinge inaugurated the bridge. A total of 24,000 people were employed for constructing the bridge.



## Architecture:

The Hardinge Bridge is 1.8 km long. There are 16 piers of castion type made of concrete cubes. A portion of pier above water level is made of steel. The bridge comprises 15 steel truss through spans each of 345 feet 11/2 inches from centre to centre of bearing (308 feet 11/2 inches clear span) with 6 deck type steel girders by approach spans (3 at each end), each of 75 feet centre to centre of bearings (66 feet clear span approximately). The original steel of Hardinge Bridge is of mild steel type equivalent to grade 43 of BS 4360 having yield stress of 20.8 tons/sq inch; ultimate tensile strength of 30.6 tons/sq inch at an elongation of 23%. The original design loading for the girders was Indian Railway broad gauge B of 1903+33% with an impact allowance giving a total live load of 1927 tons on two tracks.

During the WAR OF LIBERATION the twelfth span of the Hardinge Bridge broke down into the river by mortar shelling. One end of the span was hanging dangerously with the base and a 12.2m part from the other end collapsed. A cruise guarder and two striggers of the fifteenth span and the steel tassel upon the second base were also damaged by mortar shells. After the liberation the bridge was reopened on 12 October 1972, repaired by the joint venture of Bangladesh Railway and the Eastern India Railway of India. But some part of the bridge had to be changed and updated.

The broad gauge lines are laid side by side with a separate footpath on the downstream side. A high-tension electric line is passed over upstream side of the bridge. The headroom of the bridge is rested by the structural frame up to a height of 6.71m from the floor level. Jamuna Multipurpose Bridge Authority (JMBA) has a plan to renovate the bridge so that light and heavy vehicles can also use it.



## Tour Plan:



It is approximately 219 km away from Dhaka. You can reach by using both road and rail transports. Dhaka is about five hours by road, through the Jamuna Bridge. Cities and towns of Dhaka Division, Chittagong Division and Sylhet Division are also connected through it. Kushtia District and other parts of Khulna Division and Barisal Division is connected through Lalon Shah Bridge. River crossing (ferry ghat) at Nogorbari on the Jamuna River is the old route to Dhaka and the eastern part of Bangladesh.

It requires three to four hours to cross only the Jamuna from Nogobari to Aaricha river port in Manikgonj District. Najirgonj river crossing on the Padma River connects Pabna town with neighboring Rajbari District as well as Faridpur, Madaripur, Shariatpur and Gopalganj Districts, and Barisal Division. Pabna is also well connected to all the districts and towns of Rajshahi Division by road.

Pabna town has no rail network. Nearby railway stations are situated at Iswardi and Chatmohar Upazila. Nearby airport is at Ishwardi Upazila.

Biman Bangladesh Airlines used to operate twice- weekly services to Ishwardi from Hazrat Shahjalal International Airport, Dhaka. However, no airline is operating to and from Ishwardi at the moment.