

10th Oct 2001

**A brief report about the proceeding of  
Panel discussion on  
“ Augmentation in connectivity between Bharuch & Ankleshwar”  
Strengthening of Golden Bridge or a New Bridge**

**Organised by Bharuch Civil Engineers Forum (BCEF)  
At Rotary Club Hall, Bharuch,  
On 30-9-2001**

An interesting & important Panel Discussion on “ **Augmentation in connectivity between Bharuch & Ankleshwar - Strengthening of Golden Bridge or a New Bridge**” by eminent bridge experts of the country was organized by BCEF on 30-9-2001 at Rotary Club Hall, Bharuch.

The program was presided over by the CEO of GIDB Shri Ravi Saxena, IAS while the District Collector of Bharuch Mrs. Anju Sharma, IAS was the Guest of Honor. The discussion Panel consisted of following four eminent Civil Engineers & experts of Bridge Construction Technology.

- 1      **Shri G.N.Tambe B.E.(civil)M.I.E.: Partner of M/s K.B.Mehta, Ahmedabad**
- 2      **Shri TSB Singh B.E.(civil)M.I.E. : Chief Engineer, Bridges, W.Rly , Mumbai.**
- 3      **Shri A.D.Bhobe B.E.(civil) : Joint Secretary, IIBE,Mumbai.**
- 4      **Shri Mohammad Majabadi M.Sc,p.Eng : Sr. Project Manager, M/s LEA International Ltd, Canada.**

Shri JD Shah, Executive Engineer ( R& B) acted as an Anchor & handled the panel discussion. The whole program was coordinated by Shri CK Baxi, Member of Bharuch Civil Engineers Forum who rendered his services as master of ceremony. In all about 160 delegates comprising of members of BCEF,Civil engineers & builders, Industrialist and distinguished citizens of Bharuch attended this three hour long discussion. The galaxy of dignitaries included Shri.J.K.shah, MD of M/s NCPL and Shri. Vakharia, the Chief Design Engineer of R& B deptt.

In beginning, while welcoming the dignitaries, the president of newly established BCEF, Shri. G.G.Nankani gave brief introduction about the forum and narrated it's objectives & activities.

After the floral welcome and lamp lighting by chief guest, one of the active members of the forum Shri Mahesh Barot gave the back ground and the need of the subject under discussion.

In his introductory speech, besides the technical & engineering details of Golden Bridge, Shri Barot revealed some historical facts attached to the Bridge. Presenting the facts & figures of population growth & rapid industrial development of Bharuch region followed by substantial increase in traffic density of surface transportation, he touched upon the burning issue from multifaceted angles and justified the need of "Augmentation to the connectivity between Bharuch & Ankleshwar".

In his inaugural speech, the chief guest and CEO of GIDB Shri Ravi Saxena recalled his memories as vice chairman of GIDC & his close association with Bharuch region justified the needs of surface transportation in Bharuch in view of socioeconomic development of the district. Giving the details about various projects taken up by GIDB, he advised the experts to keep in mind the availability of financial resources also along with the technical viability of any project. He congratulated the forum and appreciated for organizing such discussion & appealed to carry on such activities for the welfare of people.

The guest of honor and District collector Mrs. Anju Sharma also congratulated the forum and suggested that in the title of the topic, instead of "OR" there should be "AND" & the experts should think in that direction. The reason for this, she gave was, though during a very short span of seven - eight months of her association with Bharuch district, she could experience the emotional attachment of the people with Golden Bridge. Hence, instead of modifying the bridge it should be preserved as a National Heritage as a mark of sentiments of people. We should think of possibility of new bridge towards Augmentation to the connectivity between Bharuch & Ankleshwar. In this connection she expressed her feeling to get maximum help, especially the funds, from GIDB. Moreover she advised the panelist not to keep the discussion academic only but to see from social aspect also.

After the address by the dignitaries, Shri.J.D.Shah took over the session and invited the panelist to share their experiences especially there views about today's topic.

**Shri. Tambe :**

Slightly diverting the topic, he raised an important issue that the question is not only to solve the problem of surface transportation but to think of Development of total area. Elaborating his concept of “River Front Development” he suggested that development of river banks should be done to create facilities of public interest thereby opening an avenue for revenue generation and in turn such funds can be utilized for other developmental projects. To supplement this he gave an example of Sabarmati development project at Ahmedabad and similar Bridge in China.

Secondly he suggested to shift the structure from one side to the Center of the bridge and to create one additional lane on either side supported on central portion.

He also said that it is necessary that the strength of the bottom parts of bridge should be examined and its balance life should be checked for which, now technology is available.

He emphasized that such a historic structure should be preserved as national heritage. While concluding he advised to keep rational approach that government may not be able to provide the fund for such project but it can act as a facilitator & hence we should think of managing financial resources ourselves. At the same time he strongly opposed to levy burden of toll tax on public.

**Shi. T.SB.Singh :**

Sharing his rich experience, he was of the opinion that inspite of 120 years of long life the bridge is in healthy condition but its regular maintenance must be carried out regularly especially the expansion joints & bearings should be checked at regular intervals. Secondly, he strongly rejected the need of epoxy painting as it is not going to be helpful, instead, he suggested to give more attention to flooring & bottom parts to strengthen them. He recommended that though the piers are strong enough, its NDT testing and load test for at least 2-3 spans should be carried out. While concluding, he also recommended the river training along with augmentation needs.

**Shri. Mohammad Majdabadi :**

Expressing his agreement with previous speakers and with help of recent photographs of Bridge structure, bearings & expansion joints, he said that no international code favors epoxy painting and particularly in case of Golden Bridge alloy steel is used & hence epoxy painting is not required at all. But we should concentrate on bearings & expansion joints. Another recommendation he made that if at all it is necessary to go for a new bridge, then it should not be constructed adjacent to this bridge otherwise, it will lose its historical importance.

**Shri Bhobe :**

Supplementing Mr. Mahjabadi, he also strongly said that all international codes including IRC do not favour painting of bridge as it is wastage of money. On other hand it hides the weaknesses and possible damage occurring to the inside parts of the structural members. While sharing his experience of Mumbai project, he strongly advocated adopting simple design instead of IRC design because the IRC design concepts are very conservative & demanding very high standards of specifications & safety factors. He cited an example wherein, Rs. 800 Crores of Maharashtra Government were saved by adopting simple design. He personally advised to chief Design Engineer of the state not to go for IRC design wherever possible.

The present 36 fly over Bridges under construction in Greater Mumbai are the examples where some of the provisions of IRC code have been deviated.

As an alternative measures he suggested to start hovercraft services & low level bridges conventionally known as “BANDHARS” which are not as high as weir & as low as causeway.

**Open Forum :**

- 1) The delegates also participated in the discussion in which the idea of “Bandharas” was well received and viewed from another angle in checking the salinity of river water.
- 2) It was also suggested that when govt. Of Maharashtra has taken the bold step of following the IRC code judiciously i.e. where ever it is required, Why Govt. Of Gujarat can not follow the same precedent.

### **Concluding remarks of Chief Guest & Chairman of the session:**

While concluding the deliberations made by experts, the chief guest Shri. Ravi Saxena supplemented Mr. Tambe's concept of river training & mentioned the involvement of GIDB in that project of Sabarmati river at Ahmedabad.

He expressed very frankly that the topic is very crucial, sensitive & time consuming; hence we should not expect its solution overnight. This is just a beginning and after many discussions & brain storming we can reach to any conclusion. However, this is a good indication & I hope such exercises should be continued.

He suggests the possible line of action in following points.

- 1) Apparently the bridge looks very safe & healthy and also there is an emotional attachment of people of Bharuch & Ankleshwar and hence it should be preserved as national heritage.
- 2) At the same time, checking of bridge strength & its balance life is extremely necessary. BCEF & concerned department of government should jointly act upon this. Similarly documentation is equally important. He assured on behalf of GIDB to extend all possible help for this work.
- 3) Based on technical viability and road traffic assessment, conclusion should be drawn for either expanding the bridge or making some alternative arrangement along with cost estimation.
- 4) We should also think of raising alternative financial resources to become self sufficient instead of fully depending on government, which has to finance other projects also. However, government can provide all other help & support.

He personally felt the need of **Another Bridge** in the years to come.

At the end, he declared today's discussion a very successful exercise & expressed his satisfaction and thanked all concerned involved in today's program.

Mr. Nitesh Patel, secretary of BCEF proposed vote of thanks.