

# Success Story

**1. Title** – Construction of Major Bridge and Approaches on Sina River Connecting Undargaon Vakav (VR-71) and VR-72 (Towards Chavanwadi) at Vakav, Taluka Madha, District Solapur.

## 2. Background / Problem Statement:-

Prior to the implementation of this project, the region surrounding Vakav village faced severe infrastructure challenges due to the absence of a dependable bridge across the Sina River. The river has a large catchment area and experiences heavy discharge during the monsoon season, particularly due to water releases from the Kolegaon Dam.

The existing earthen road was frequently submerged during monsoons, resulting in disrupted vehicular movement and posing serious safety risks to the public. These conditions adversely affected daily commuting, economic activities, access to healthcare, education, and other essential services.

### Key Issues Identified

- Poor and deteriorated road infrastructure
- Difficulty in crossing the river, especially during monsoon season
- High risk to life due to flooding and unsafe crossings
- Limited access to sugar factories, healthcare facilities, and markets
- Frequent transportation disruptions affecting farmers, students, and local residents

Given these challenges, the construction of a permanent, high-level bridge became essential to ensure safe, reliable, and all-weather connectivity, thereby supporting inclusive regional development.

## 3. Project Overview :-

Project Location: Sina River near Vakav Village, Taluka Madha, District Solapur

Implementing Agency: Public Works Department (PWD)

Project Cost: ₹15.00 Crore

Project Duration: 18 Months

Funding Source: State Government with NABARD Loan Assistance

Bridge Length: 30 m (Single span of 30 m)

Carriageway Width: 7.50 m

Type of Bridge: High-Level Major Bridge

### Salient Features:

Pile foundation

Piers and abutments

Pre-stressed RCC girder and RCC deck slab bridge system

Expansion joints, railings, and protective pitching

#### **4. Challenges Faced :-**

During project execution, several challenges were encountered:

- Construction activities were significantly impacted during the monsoon season due to high river discharge
- Extensive coordination was required among multiple departments for shifting and safeguarding existing utilities
- Encroachments within the riverbed created execution-related difficulties
- Maintaining project timelines under adverse weather conditions demanded careful planning and constant monitoring

#### **5. Innovative Solutions / Action Taken:-**

- To overcome these challenges, the following measures were adopted:
- Utilization of advanced bridge construction technologies and modern execution methodologies
- Deployment of high-capacity cranes and concrete pumps to expedite construction activities
- Continuous engagement with local communities to build trust, address concerns, and ensure cooperation
- Use of high-quality and durable materials strictly as per the Standard Schedule of Rates (SSR)
- Implementation of comprehensive road safety measures, including signage, reflective boards, thermoplastic road markings, and protective pitching

#### **6. Implementation Process:-**

- Planning: Detailed site investigations, technical approvals, and systematic scheduling
- Execution: Mechanized construction with strict adherence to approved timelines
- Monitoring: Regular inspections and progress reviews to ensure efficiency and quality
- Quality Control: Rigorous testing of materials and compliance with prescribed standards

#### **7. Result & Impact :-**

The project has delivered significant and measurable benefits:

- Approximately 50% reduction in travel time
- Improved connectivity between Vakav, Undargaon, Chavannavadi, and surrounding villages
- Safe and uninterrupted access during monsoon seasons
- Better access to educational institutions, healthcare facilities, markets, and industrial areas
- Strengthening of the local economy through improved transportation and trade
- Enhanced overall riding comfort and improved road safety

## **8. Beneficiary Feedback/Human Angle:**

“The newly constructed bridge has greatly improved our daily lives. Access to nearby sugar factories and villages has become smooth and reliable. The reduction in travel distance and risk has provided immense relief to our community.”

## **9. Conclusion:**

The construction of the Major Bridge across the Sina River at Vakav stands as a commendable example of effective infrastructure development. The project has successfully addressed long-standing connectivity issues, enhanced public safety, and contributed to sustainable socio-economic growth. Its successful execution serves as a replicable model for rural and semi-urban infrastructure development across the region.



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