



# NABARD Success Story

An exemplary rural infrastructure project connecting two districts and transforming the lives of thousands of citizens through modern engineering and sustainable development

PUBLIC WORKS REGION, AMRAVATI

PUBLIC WORKS CIRCLE AKOLA

WORLD BANK PROJECT DIVISION, AKOT PUBLIC WORKS SUB-DIVISION, TELHARA

# Paturda Ukali Panchagavan Ner Nanakhed Road Bridge Construction

State Highway No. 278, KM 41/400 – Modern small bridge construction marking a historic infrastructure development milestone in Akola District

## Funding Source

**NABARD (RIDF)**

Rural Infrastructure Development  
Fund providing critical financial  
support for regional connectivity

## Administrative Approval

**Government Letter No.** N.B.D-  
2023/C.R.-8453/Niyo-3

**Sanctioned Amount:** ₹ 243.40 Lakh

**Date:** 21/11/2023

## Technical Approval

**Reference No.** A.A. Akola 2023-  
24/Pra.Sha.-1/9402

**Approved Amount:** ₹ 202.33 Lakh

Ensuring compliance with  
engineering standards and safety  
regulations

# Project Need and Challenges

During monsoon seasons, connectivity between two districts was completely severed. The old pipe culvert's inadequate capacity disrupted the daily lives of thousands of citizens, creating urgent need for modern infrastructure.

01

## Previous Condition

At this location, there was previously a 'Pipe Culvert' with extremely limited water discharge capacity, unable to handle seasonal water flow effectively.

02

## Serious Monsoon Obstacle

During the rainy season, water would overflow from above the culvert, causing the road to become completely submerged and impassable for vehicles.

03

## Traffic Disruption

With the road underwater, traffic on this critical route was completely halted during monsoons, affecting commerce and emergency services.

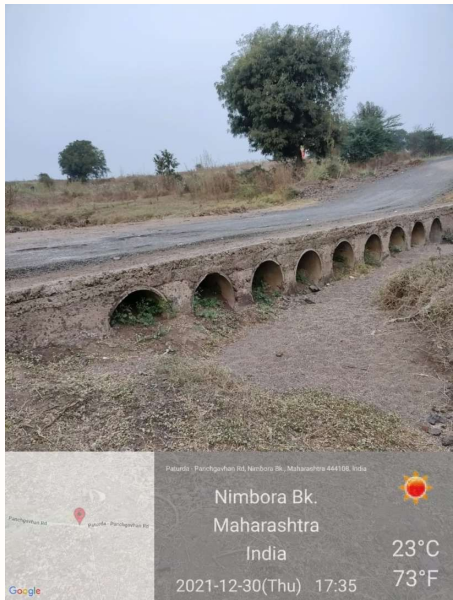
04

## Inter-District Disconnection

The severed link between Akola and Buldhana districts caused immense hardship for local citizens, farmers, and emergency services for months each year.

# Old Pipe Culvert Documentation

Visual evidence of deteriorated infrastructure demonstrating the urgent need for this project – showing the inadequate water handling capacity and seasonal flooding issues



## Limited Capacity

The old pipe culvert could not handle monsoon water flow, causing regular overflow and road submersion



## Road Closure

During monsoons, the road would go underwater and traffic would come to a complete halt for extended periods

**Critical Impact:** This old structure caused direct connectivity between two districts to be severed for months during every monsoon season, affecting thousands of residents

# Technical Specifications

Engineering excellence through modern design and sustainable construction – showcasing IRC compliant infrastructure built to international standards

## RCC Box-Cell Bridge

Robust bridge constructed using state-of-the-art RCC Box-Cell technology, ensuring structural integrity and longevity under heavy traffic loads

## 4 Span Structure

Total four spans of 6.00 metres each, designed for optimal water flow and minimal turbulence, reducing erosion risks

## 20 Degree Skew Angle

Aligned with natural water flow to prevent scouring and maximize hydraulic efficiency during high discharge periods

### IRC Standards

Designed according to all Indian Roads Congress standards, ensuring safety, durability, and regulatory compliance

### Heavy Traffic Capacity

Capable of handling all vehicle types on State Highway SH-279, including heavy commercial vehicles and agricultural transport

### High Water Discharge

Discharge capacity many times greater than the previous pipe culvert, preventing overflow even during extreme monsoon conditions

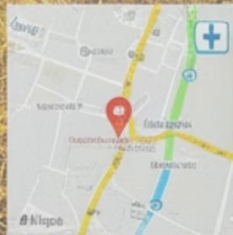


तहान पुलाचे बांधकाम करणो रा. म. 278 पातुर्ता उकळी पंवाव्हाण नेर नांदबेड रोड कि. मी ४१/४०० रा. तेव्हारा वि. अकोला

# Construction Progress

Modern bridge construction showcasing technical excellence in action – documenting the transformation from planning to reality

"Quality and timely completion – the guiding principles of this project"



**Akola, Maharashtra, India**

Shegaon Road, Telhara, Akola, Maharashtra 444108,  
India

Lat 20.944078, Long 76.855830

04/02/2025 12:42 PM GMT+05:30



GPS Map Camera



# Completed Bridge

Successful implementation – a new lifeline connecting two districts with modern engineering and year-round reliability

4

Box-Cell Spans

For optimal water flow and structural strength

20°

Skew Angle

Aligned with natural flow patterns

365

Days Open

Uninterrupted traffic throughout the year

Made with GAMMA



# Bridge Connecting Two Districts

Akola ↔ Buldhana Connectivity

1

## Akola District

Villages in Telhara sub-division received direct connectivity to markets, enabling better prices and timely sales for agricultural produce

2

## Sustainable Route

Road open 365 days a year – in any weather condition. Direct route available for trade and travel

3

## Buldhana District

Direct access for business, education, healthcare, and emergency services without seasonal interruptions



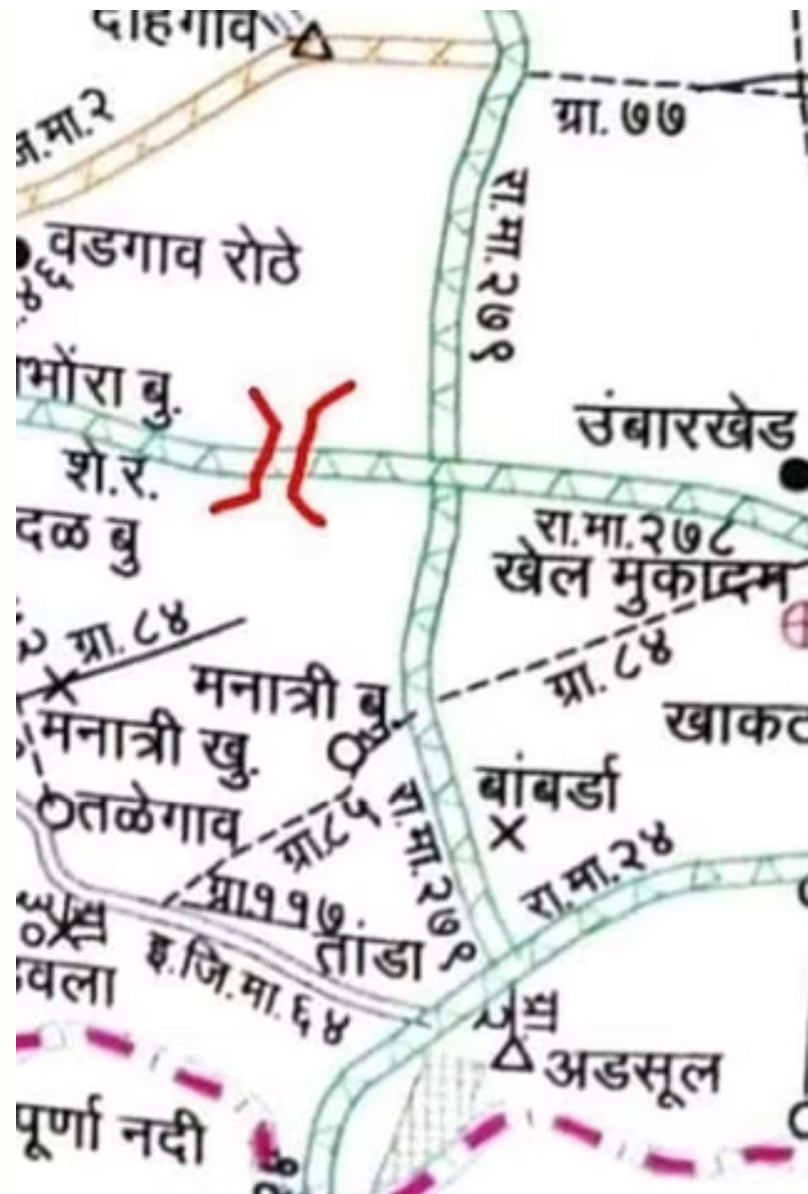
## Time Savings

Reduced travel time due to elimination of detours and waiting periods during monsoons



## Fuel Savings

Direct route means reduced vehicle operating costs and environmental benefits





# Challenge Resolution

Dialogue and trust – the key mantras of success in overcoming stakeholder concerns and building community support



## Primary Challenge

Intense opposition from adjacent farmers regarding land required for the bridge approach road. Attempts to halt work over land acquisition concerns.



## Dialogue and Mediation

On-site visits and in-depth discussions with farmers. Clear explanation of the bridge's importance and widespread benefits for the entire region.




## Building Trust

Using administrative skills to address farmers' doubts. Providing information about benefits for the entire surrounding area and compensatory measures.



## Successful Outcome

With farmers' cooperation, approach road work completed without obstacles. Bridge successfully opened for traffic with community support.

 **Lesson Learned:** Resolution of sensitive issues happens through dialogue, transparency, and trust-building with all stakeholders

# Social and Economic Impact

Wide-ranging benefits of successful implementation – transforming lives through improved connectivity and access to essential services



## Farmer Prosperity

Cotton and other agricultural produce can now be easily transported to market committees in Akola or Buldhana. Better prices and timely sales achieved year-round.



## Life-Saving Healthcare

Ambulances and emergency medical services now face no obstacles even during monsoons. Life-saving services significantly improved with 24/7 access.



## Educational Opportunities

Students from border areas of both districts can now attend schools and colleges safely and regularly without seasonal disruptions.



## Economic Development

Improved connectivity has given a major boost to small businesses, shops, and local employment in the surrounding region.

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**NABARD Success Story:** A unique combination of technical excellence, administrative skill, and public participation