

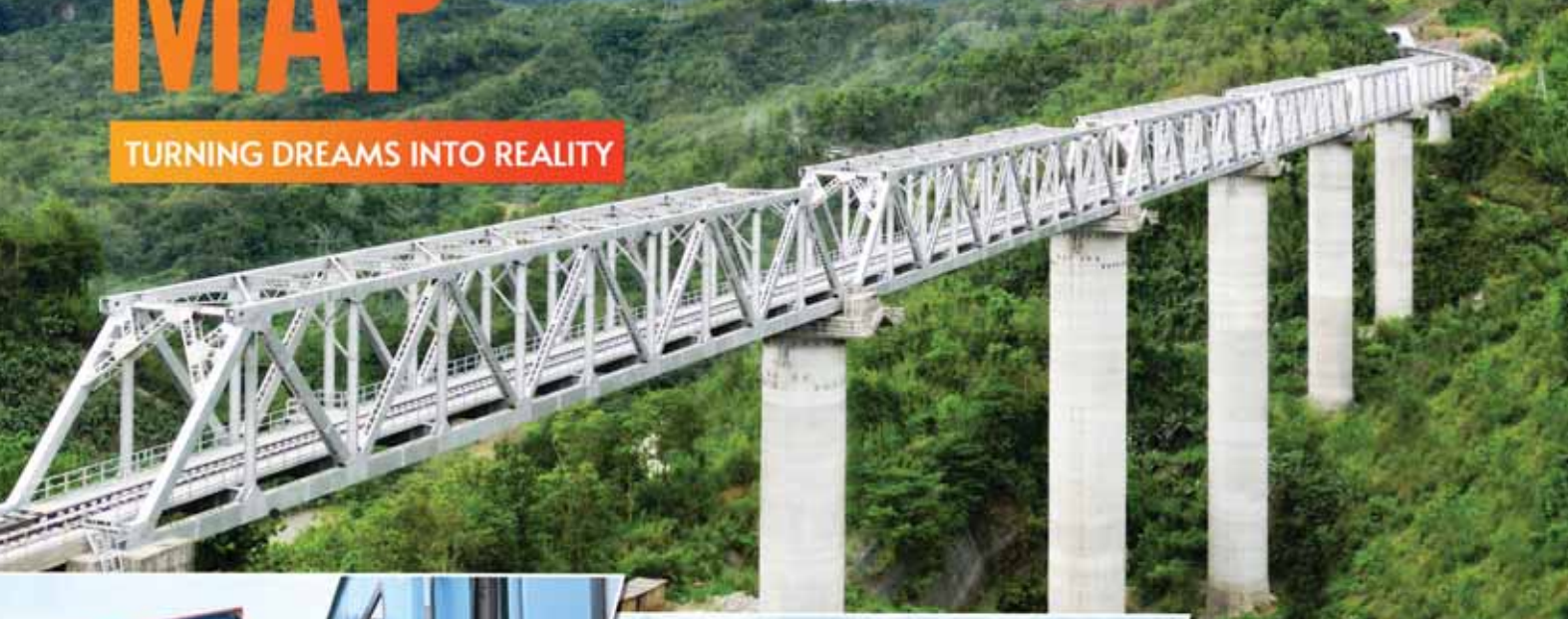


# INDIAN RAILWAYS

SPECIAL ISSUE | SEPTEMBER 2025

## AIZAWL ON THE RAIL MAP

TURNING DREAMS INTO REALITY



हम लुक ईस्ट से आगे बढ़कर एक्ट  
ईस्ट के मंत्र पर चले।

एक समय था, जब NORTHEAST को सिर्फ  
FRONTIER REGION कहा जाता था। आज ये  
GROWTH का FRONT-RUNNER बन रहा है।

आज जब भारत विकसित होने की तरफ बढ़  
रहा है तो एक बार फिर EASTERN INDIA,  
हमारा ये NORTH EAST अपना सामर्थ्य  
दिखाने जा रहा है।

MIZORAM IS A STATE WITH BOTH NATURE  
AND CULTURE IT HAS THE POTENTIAL TO  
BECOME A GLOBAL TOURIST HUB.

"आज नॉर्थ ईस्ट में कनेक्टिविटी का नया  
इतिहास लिखा जा रहा है। ये कनेक्टिविटी दिलों  
की भी है और इंफ्रास्ट्रक्चर की भी है। बहुत जल्द  
नॉर्थ ईस्ट के सभी राज्यों की राजधानियों को  
रेलसेवा से जोड़ने का काम पूरा होने वाला है"

2014 के बाद से मेरा जोर रहा कि मणिपुर की कनेक्टिविटी के लिए  
लगातार काम किया जाए। इसके लिए सरकार ने दो स्तर पर काम  
किया। पहला, हमने मणिपुर में रेल और रोड का बजट कई गुना बढ़ाया  
और दूसरा, शहरों के साथ ही गांवों तक भी सड़कें पहुंचाने पर जोर  
लगाया।

हमारी सरकार के दौरान ही मणिपुर में रेल कनेक्टिविटी का विस्तार हो  
रहा है। जिरिबाम-इम्फाल रेलवे लाइन बहुत जल्दी राजधानी इम्फाल  
को नेशनल रेल नेटवर्क से जोड़ देगी। इस पर सरकार 22 हजार करोड़  
रुपये खर्च कर रही है।



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Cover Photo

### Aizawl on The Rail Map Turning Dreams into Reality

Unless specifically mentioned, the articles and statements published in this journal do not necessarily reflect the views and policies of the Ministry of Railways (Railway Board).

## Editorial

### Aizawl's Historic Railway Moment

The eight states of Northeast India — Arunachal Pradesh, Assam, Meghalaya, Manipur, Nagaland, Sikkim, Tripura and Mizoram—are often called the “Ashtalakshmi” for their rich culture and natural beauty. For decades, connecting these states to the Indian Railways network was a dream. That dream has now taken a big step forward. Mizoram’s capital, Aizawl, has officially entered the railway map of India. Narendra Modi, Prime Minister dedicated the Bairabi–Sairang broad gauge project to the nation and also flagged off three new trains—the Sairang-New Delhi Rajdhani Express, the Sairang-Guwahati Express, and the Sairang-Kolkata Express.

This project is not just a railway line—it is a bridge of development for Mizoram. Sharing long borders with Myanmar and Bangladesh, the state is of great strategic importance. Surrounded by lush green hills and valleys, Mizoram is often called the “Heaven of the Northeast.” Its capital, Aizawl, means “field of wild cardamom.”

The journey to this achievement wasn't easy. The survey began in 2006 and by 2008–09 it was declared a National Project. Narendra Modi, Prime Minister laid the foundation stone in 2014. Steep slopes, deep valleys, and dense forests made construction tough. Heavy rains and landslides often halted work. Even transporting construction materials from Silchar was a tough task. Heavy bridge girders had to be dismantled into smaller pieces and reassembled at the site.

Despite all these difficulties, the hard work of engineers and workers paid off. On 1st May, 2025, a successful trial run was completed on the Bairabi–Sairang section, and now regular operations are set to begin. With this, Aizawl is finally connected to the rest of the country by rail.

The benefits will be far-reaching. Mizoram’s bamboo, horticulture products, handicrafts, and farm produce will now find markets across India. Farmers and artisans will have direct access to major cities, while better opportunities in education, healthcare and jobs will reach Aizawl.

Tourism will also see a big boost. Scenic places like Reiek, Vantawng Falls, Tamdil Lake and the Dampa Tiger Reserve will now be much easier to visit.

This special edition by the Indian Railways is about the Bairabi–Sairang line, Mizoram’s first railway and a historic step for the Northeast. It reminds everyone that Indian Railways’ motto isn’t just words—it’s action, linking people and possibilities. By bringing out special editions like this, the Railways demonstrates its ongoing commitment to the nation and its people.



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**PRIME MINISTER INAUGURATES BAIRABI-SAIRANG RAIL LINE**  
CALLS IT A LIFELINE FOR MIZORAM

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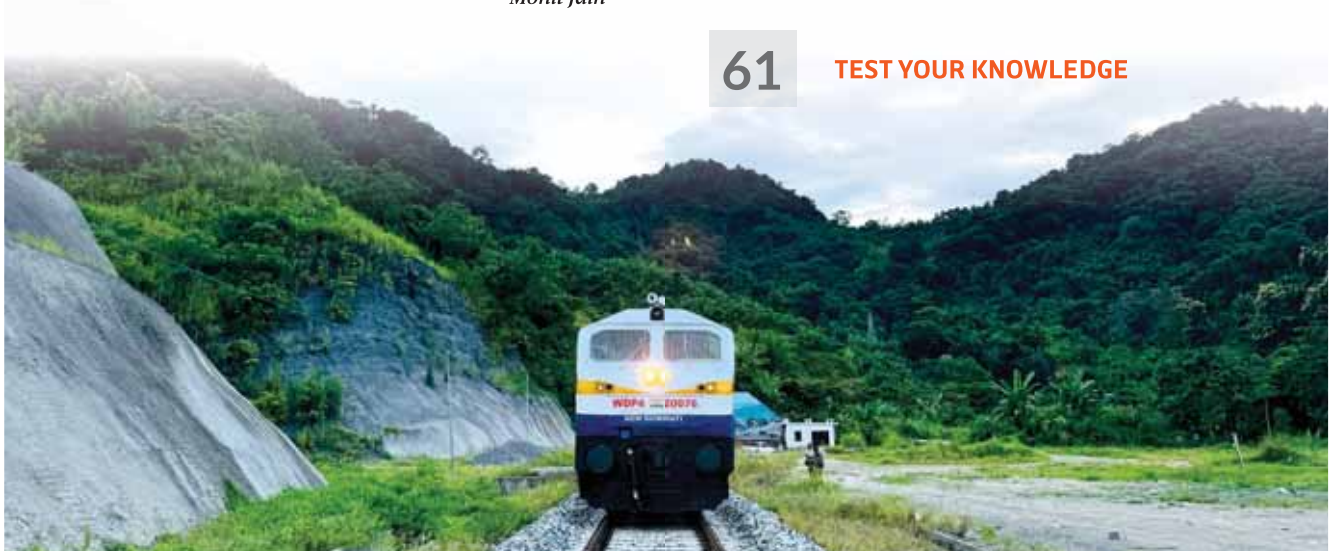


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# Prime Minister Inaugurates **Bairabi–Sairang Rail Line** Calls it A Lifeline for Mizoram

**Prime Minister also flagged off three new express trains, including Rajdhani Express**

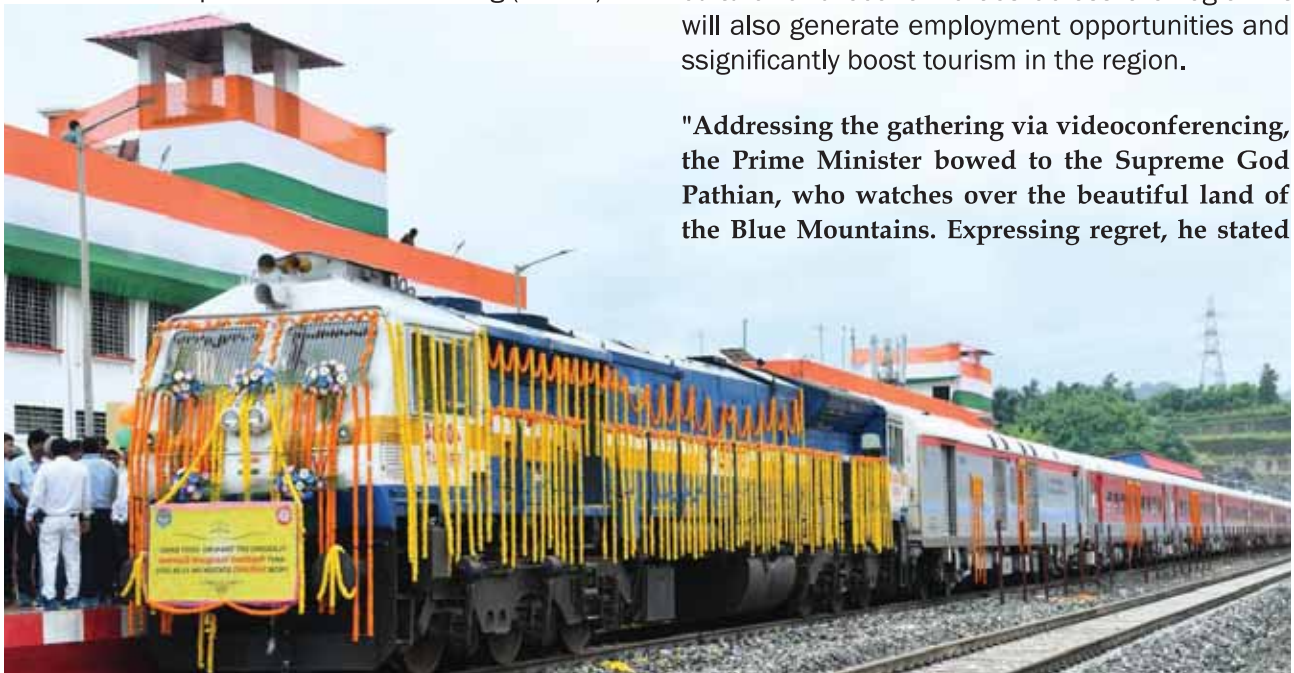
**N**arendra Modi, Prime Minister inaugurated the Bairabi Sairang new rail line, worth over ₹8070 crore, connecting the capital of Mizoram to the Indian Railways network for the first time on 13th September, 2025. The rail line project, built in a challenging hilly area, has 45 tunnels constructed under complex geological conditions. Additionally, it includes 55 major bridges and 88 minor bridges. The direct rail connectivity between Mizoram and the rest of the country will offer the people of the region safe, efficient, and cost-effective travel options. It will also ensure the timely and reliable supply of food grains, fertilizers, and other essential commodities, thereby enhancing overall logistical efficiency and regional accessibility.

On this occasion, the Prime Minister also flagged off three new Express trains—the Sairang (Aizawl)-



Dehli (Anand Vihar terminal) Rajdhani Express, the Sairang-Guwahati Express and the Sairang-Kolkata Express. Aizawl will now be directly connected with Delhi through a Rajdhani Express. The Sairang-Guwahati Express will facilitate movement between Mizoram and Assam. The Sairang-Kolkata Express will directly connect Mizoram to Kolkata. This enhanced connectivity will improve access to hospitals, universities, and markets, thereby strengthening educational, cultural and economic ties across the region. It will also generate employment opportunities and significantly boost tourism in the region.

"Addressing the gathering via videoconferencing, the Prime Minister bowed to the Supreme God Pathian, who watches over the beautiful land of the Blue Mountains. Expressing regret, he stated

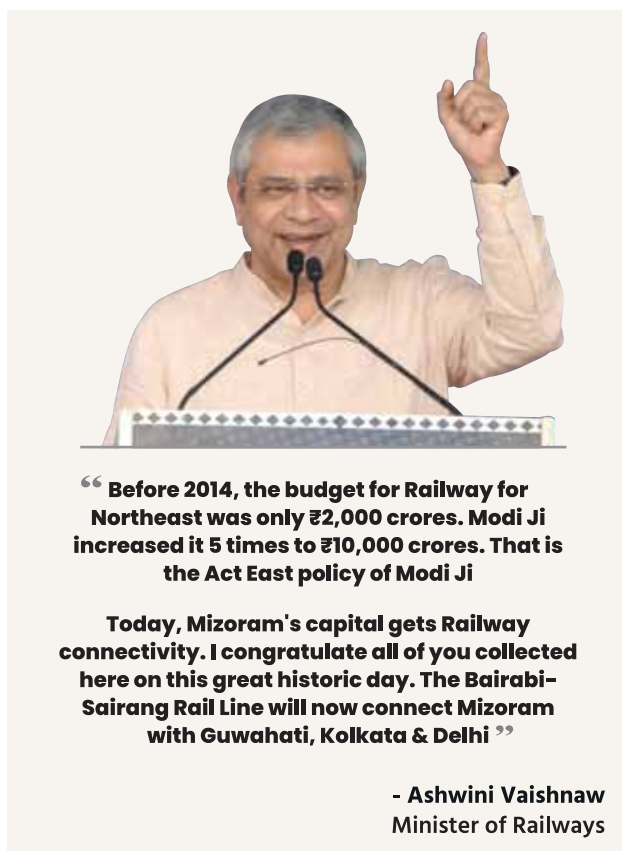


that he was present at Mizoram's Lengpui airport but was unable to join the people at Aizawl due to bad weather. Despite the circumstances, the Prime Minister remarked that he could feel the love and affection of the people even through this medium.

He said, "This is a historic day for the nation, particularly for the people of Mizoram. From today, Aizawl will be on India's railway map. A few years ago, I had the opportunity to lay the foundation stone for the Aizawl railway line, and today, we proudly dedicate it to the people of the nation. Overcoming many challenges, including difficult terrain, this Bairabi-Sairang railway line has become a reality. The skills of our engineers and the spirit of our workers made this possible."

"Our hearts have always been directly connected with each other. Now, for the first time, Sairang in Mizoram will be connected directly with Delhi by the Rajdhani Express. This is not just a railway connection; it is a lifeline of transformation. It will revolutionise the lives and livelihoods of the people of Mizoram. Farmers and businesses of Mizoram can reach more markets across the nation. People will be able to access more options for education and healthcare. This will also create employment opportunities in tourism, transport, and hospitality sectors."

Over the years, many states of the North East have been put on the rail map of India for the first time. Rural roads and highways, mobile connectivity



and internet connections, electricity, tap water, and LPG connections—the Government of India has worked hard to strengthen all kinds of connectivity. Mizoram will also benefit from the UDAN scheme for air travel. Soon, helicopter services will begin here, improving access to remote areas of Mizoram."



Governor V. K. Singh, CM Lalduhoma, Ashwini Vaishnaw, Minister of Railways along with Mizoram ministers, MPs and other elected representatives at the inauguration of the Bairabi-Sairang rail line in Mizoram

# Connecting *Mizoram*



**Ashwini Vaishnaw**  
Minister of Railways

**F**or many decades, the North East was considered a distant frontier, waiting for development. Our brothers and sisters living in North Eastern states carried aspirations of progress, but the infrastructure and opportunities they deserved remained out of reach.

All this changed when Prime Minister Shri Narendra Modi initiated the Act East Policy. From a distant frontier, North East is now recognized as a front-runner.

## **Peace, Progress and Prosperity**

This transformation has been made possible through record investments in railways, roads, airports, and digital connectivity. Peace accords are bringing stability. People are benefiting from government schemes.

For the first time since Independence, the North Eastern region is seen as central to India's development story.

Consider the investments in railways, for instance. The railway budget allocation for the region has increased fivefold compared to 2009-14. This fiscal year alone, ₹10,440 crore has been allocated.

Total budgetary allocation since 2014 to 2025 is ₹62,477 crore. Today, railway projects worth ₹77,000 crore are underway. Never before has the North East witnessed such record levels of investment.

## **Mizoram's First**

Mizoram is part of this growth story. The state is known for its rich culture, love for sports, and beautiful hills. Yet, for decades, it remained distant from the mainstream of connectivity.

Road and air connectivity were limited. Railways had not reached the capital. Aspirations remained

alive, but the arteries of growth were missing. That is no longer the case.

The inauguration of the Bairabi-Sairang railway line by Prime Minister, Narendra Modi on 13th September, 2025, marks a historic milestone for Mizoram. Built at a cost of over ₹8000 crore, this 51-kilometre project will connect Aizawl to the national railway network for the first time.

Along with this, the Prime Minister also flagged off three new train services from Sairang to Delhi (Rajdhani Express), Kolkata (Mizoram Express), and Guwahati (Aizawl Intercity).

This railway line passes through difficult terrain. Railway engineers have built 143 bridges and 45 tunnels to connect Mizoram. One of the bridges is taller than the Qutub Minar. In fact, in this terrain, as in all other Himalayan lines, the railway line is practically built as a bridge followed by a tunnel, followed by a bridge, and so on.



### **Himalayan Tunnelling Method**

The North Eastern Himalayas are young mountains, with large sections comprising soft soil and organic material. Constructing tunnels and building bridges in these conditions presented extraordinary challenges. Traditional methods fail because the loose soil cannot support the challenges of construction.

To overcome this, our engineers developed a new and ingenious approach, now known as the Himalayan Tunnelling Method. In this technique, the soil is first stabilised and then solidified to carry out tunneling and construction.

This enabled us to complete one of the most difficult projects in the region.

Another major challenge was ensuring the stability of bridges at great heights in a region prone to seismic activity. Here too, special designs and advanced techniques were deployed to make the bridges resilient and secure.

This home-grown innovation is a model for similar terrains worldwide. Thousands of engineers, workers, and local communities came together to make this possible.

When India decides to build, it builds smart!

### **Prosperity for The Region**

The Railways is considered the engine of growth. It brings new markets closer and creates trade opportunities. For the people of Mizoram, the new railway line will improve the living conditions.

With the introduction of the Rajdhani Express in Mizoram, the travel time between Aizawl and the Delhi region will be reduced by eight hours. The new Express trains will also make travel between Aizawl, Kolkata, and Guwahati faster and easier.

Farmers, especially those engaged in bamboo cultivation and horticulture, will be able to transport their produce faster and at a lower cost to wider markets.

The transport of essential commodities, such as food grains and fertilizers, will be easier. Tourism too will get a boost, as Mizoram's natural beauty becomes more accessible. This will create opportunities for local businesses and youth.

This project will also bring better access to education, healthcare, and employment for the people. For Mizoram, this connectivity promises all of that and more. From now on, Aizawl will no longer be seen as distant.

### **Development Across The Nation**

The Railways across the country is witnessing record transformation. More than 100 Amrit Bharat stations were inaugurated recently, with 1,200 more in pipeline. These stations will provide passengers with modern facilities and cities with new hubs of growth.

More than 150 high-speed Vande Bharat trains are setting new benchmarks in passenger convenience. At the same time, electrification of almost the entire network is making it greener.

Since 2014, 35,000 kilometres of tracks have been laid. This is more than what was achieved in the previous six decades combined. In the last year alone, 3,200 kilometres of new railway lines were added. This pace of development and transformation is visible in the North East too.

### **Vision For The North East**

The Prime Minister said, "For us, EAST means — Empower, Act, Strengthen, and Transform." These words capture the essence of his approach to the North East.

Decisive action on multiple fronts has ensured the transformation of the region. Large projects such as the Tata's semiconductor facility in Assam, hydel power projects like Tato in Arunachal Pradesh, and iconic infrastructure like the Bogibeel rail-cum-road bridge are reshaping the region.

Alongside these, the establishment of AIIMS at Guwahati and 10 new greenfield airports has strengthened healthcare and connectivity.

### **From Frontier to Frontrunner**

For decades, the people of Mizoram were told to wait for roads, schools, and railways. That wait is now over. These projects are a testament to our Prime Minister's vision for the North East, once considered a frontier, now hailed as the front-runner of India's growth.

# BAIRABI-SAIRANG NEW RAILWAY LINE

MAKES HISTORIC DREAM A REALITY IN MIZORAM



**Chetan Kumar Shrivastava**  
General Manager, N.F. Railway

In a landmark development for the North-eastern state of Mizoram, the long-anticipated Bairabi-Sairang New Line Railway Project has been completed, marking a significant step forward in regional connectivity and national integration.

The project, a long-standing demand of the people of Mizoram, now connects the state more effectively with the rest of the country through an extended rail network.

Before the commissioning of this new line, Mizoram had only a 5-kilometre stretch of railway that reached Bairabi, a small town near the Assam border. The limited rail connectivity created significant logistical hurdles and constrained economic development in the landlocked state.

## New Link Brings Growth and Opportunity:

The construction of 51.38 km-long Bairabi-Sairang New Railway Line is more than just an infrastructure project; it is the fulfillment of a long-cherished dream of the people of Mizoram. The project brings long-awaited progress, improved connectivity, and economic opportunities to the region. By integrating Mizoram more closely with the rest of the country, it supports the aspirations of its citizens for a better quality of life, greater access to education and healthcare, and sustainable development while preserving the state's unique cultural identity.



## **Enhanced Connectivity to the Rest of India:**

For decades, Mizoram was one of the most isolated states in India in terms of railway connectivity. With only a 5-kilometre railway line ending at Bairabi, residents and businesses were heavily dependent on road transport, which was time-consuming, expensive, and vulnerable to weather disruptions. The new Bairabi-Sairang line extends railway access deep into Mizoram, directly connecting Aizawl, the state capital via nearby Sairang. This integration into the national rail grid allows Mizoram's people to travel more easily, access resources, and connect with markets across India.

## **Boost to Economic Opportunities and Trade**

The new railway line provides a significant boost to economic opportunities and trade in Mizoram by overcoming longstanding transportation challenges. It will streamline the movement of local produce such as ginger, turmeric, oranges, and bamboo products, reducing freight costs for businesses and traders. Improved connectivity will also attract investment, making the region more accessible to industries and entrepreneurs.

This development fulfills the people's aspiration for inclusive economic growth and enhanced market access for local producers.

## **Local Growth Powered by Jobs**

The project has created thousands of jobs during construction and continues to support employment in railway services, logistics, and tourism. It is also expected to spur the growth of satellite towns, improve infrastructure and enhance public services along the route, fulfilling the people's aspiration for regional development and better livelihoods.

## **Improved Healthcare, Education and Services**

Improved rail connectivity significantly reduces travel time, enabling easier access to healthcare, education and essential government services, particularly in other states. This development addresses the core demand for equal access to opportunities and services for the people of Mizoram.





## Trade and Tourism Get a Lift

Railway connectivity is boosting tourism in Mizoram. Tunnels along the Bairabi-Sairang New Railway line have been adorned with traditional Mizo cultural motifs, attracting both local and outside tourists. By showcasing the region's rich cultural heritage, the Northeast Frontier Railway is actively promoting tourism and contributing to the region's economic growth.

## Project at a Glance

Declared a 'National Project', the Bairabi-Sairang line was sanctioned in 2008-09 with an initial estimated cost of ₹5021 crore. This was later revised to ₹8071 crore due to various geographical and infrastructural complexities. The project involved laying tracks through hilly and difficult terrain, necessitating the construction of multiple tunnels, bridges and deep cuttings, reflecting a major engineering achievement.

The foundation stone for the project was laid by Prime Minister Narendra Modi on 29th November, 2014, reinforcing the Central government's commitment to boosting infrastructure in the Northeast and bringing it closer to the national mainstream.

A successful trial run to Sairang near Aizawl was conducted on 1st May, 2025 and the final stretch from Hortoki to Sairang was officially commissioned on 10th June, 2025, connecting Mizoram's capital to the national railway network for the first time.

The 51.38 km line passes through Kolasib and Aizawl districts with four stations—Hortoki, Kawnpui, Mualkhang and Sairang. It includes six tall bridges up to 114 metres high, 45 tunnels totaling 15.88 km and ballastless track in all tunnels. About 23% of the line is on bridges, 31% in tunnels, and the rest through deep cuttings.



### Key Features

The project features 142 bridges in total, including 55 major bridges, 87 minor bridges, 5 road over bridges (ROBs), and 8 road under bridges (RUBs).

### Technological Challenges

There are 45 tunnels along the route, with a total length of 15.88 km, covering 31% of the alignment. The longest tunnel is 1.868 km. All tunnels have been constructed using ballastless track technology, ensuring durability and stability despite the challenging geological conditions. Construction faced major challenges such as short working seasons, heavy monsoons, difficult terrain, unstable geology, and lack of local labour. Materials had to be transported from other states, and specialised machinery was deployed to handle the tough conditions.

### Engineering Marvels

❖ **Bridge No. 97 (Old No. 115):** One of the 55 major bridges of the Bairabi-Sairang New Line Railway Project. Constructed in the Kawnpui-Mualkhang block section, specially designed Open Web Girders have been provided in all seven spans to ensure stability at great heights during seismic activity. Total height of this bridge is 91 m from bed level, and its length is 742 m. This is the second tallest bridge of the project. NH-06 passes underneath and through span P3 and P4 of this bridge. Pathways of 1.65 m have been provided on both sides and inside all girders to allow rescue of passengers in case of any emergency.

❖ **Bridge No. 144 (Old No. 196):** Constructed in the Mualkhang-Sairang block section near Sairang Railway Station yard. The bridge has a peculiar arrangement of spans due to the steep terrain toward Sairang-end. Specially designed girders have been provided in all the six spans to ensure the stability of girders at large height due to seismic activities. Total height of this bridge is 114 m from river bed level, which is 42 m taller than Qutub Minar. It is also the highest pier bridge in Indian Railway as of date. Pathways of 1.65 m have been provided on both sides and inside of all girders to rescue passengers in case of any emergency.



## Railways at the Forefront

**MoU with IRCTC:** In anticipation of this transformative development, the Indian Railway Catering and Tourism Corporation (IRCTC) have signed a two-year Memorandum of Understanding (MoU) with the Mizoram Government in August 2025 to promote both inbound and outbound tourism for the state.

**Media Tour:** A series of Media Tours are being organized for PIB Media, National and Regional media representatives from across the country to the Bairabi - Sairang New Railway Line Project. These tours aim to promote transparency, engage the media and highlight the transformation of rail infrastructure in the Northeast.

**Village Council Tour:** A Tour for Village Council Officials was organized along the Bairabi - Sairang Rail section engaging officials from the Village Councils of Aizawl district, Mizoram on 22nd August, 2025.

During the tour, Village Council officials from Dinthar Sairang, Sihhmui and Sairang joined the tour and shared valuable insights about the development work, the significance of the newly constructed infrastructure and its expected impact on improving connectivity and socio-economic growth in the region.

## Looking Ahead:

With the completion of the Bairabi - Sairang railway line, the capital city Aizawl, located just a few kilometres from Sairang, is now within close reach of India's railway network. This strategic connectivity is expected to catalyze economic growth, enhance trade and tourism and significantly reduce the cost and time of transportation for goods and passengers.

This transformative infrastructure project stands as a symbol of progress, integration and empowerment for Mizoram and is a critical component of India's broader vision for developing the Northeast.

## SAIRANG'S CARGO JOURNEY BEGINS!



Cargo operations kick off for Sairang with the first goods rake of 21 cement wagons, loaded at Assam, bound for Aizawl. This will lower cement costs boost Mizoram's construction industry.

# THE JOURNEY OF A RAILWAY

## FROM IDEA TO REALITY



**Arun Kumar Choudhary**  
General Manager  
*N.F. Railway (Construction)*

The Bairabi–Sairang railway line was never built in a single stroke of ambition. It unfolded like a story—slowly, carefully, with each chapter adding depth to the next. Every milestone was not just a date on the calendar, but a marker of perseverance in one of India’s most challenging landscapes. The story began in 1999–2000, when the idea of linking Mizoram more closely with the nation first took formal shape. A Preliminary Engineering-cum-Traffic (PET) Survey was sanctioned to answer a simple question: was this even possible?

By 2003, the complexities of Mizoram’s terrain demanded a closer look. A Revised Survey (RET) was launched and, after years of study, completed in 2006, providing refined technical and environmental insights. The project was no longer just a dream—it had data and direction. The alignment was ambitious. The 51.38 km line stretches from Bairabi, the state’s existing railhead, to Sairang, just 20 kilometres from Aizawl, cutting through Kolasib and Aizawl districts. It demanded a delicate balance—steep enough to climb, yet safe to operate. Engineers chose a ruling gradient of 1 in 80, with speed potential of 100 kmph, threading the line through tunnels, bridges, and cuttings that answered to the land’s sharp ridges and sudden valleys.



At its heart, the project remained people-centric. Four stations—Hortoki, Kawnpui, Mualkhang, and Sairang—were not just plotted on maps, but positioned as lifelines to connect communities and support future growth.

The turning point came in 2008–09, when the project was declared a National Project, elevating it from aspiration to strategic priority. The vision became a commitment on 29th November 2014, when the Prime Minister laid the foundation stone.

From 2016 to 2021, the mountains were truly tested. Tunnels broke through, bridges rose across valleys and earthworks carved paths into unforgiving slopes. The pandemic years brought added trials—labour shortages, health protocols, and halted supply lines. Yet the spirit of the project remained unbroken.

By 2022–2024, most of civil works were nearing completion in half of project length (upto Kawnpui). But as they say, True success becomes meaningful only when it is seasoned with challenges and Mizoram’s Bairabi–Sairang Broad Gauge Line

was no exception. There were moments when nature tested human resolve. Heavy rains and landslides turned carefully prepared ground into chaos in August 2023.

At one stage, acclaimed international tunnel experts who worked in USBRL project for long period of time were roped in, but their proposed solutions were costly, time-consuming and with lot of uncertainties. Instead, Northeast Frontier Railway engineers turned to what they knew best—trusting field experience, practical geology and the wisdom of working with nature rather than against it. Evaluation of disturbances introduced in course of plan implementation on daily basis and timely course corrections for their mitigation, keeping safety and timeline in mind became a hallmark of field team.

While eliminating the challenges of the past, the continuous rain and sudden cloudburst in the month of August, 2024 added new challenges but they were mitigated with the same resolve for more safer future. It was pleasant to note that challenges coming in their way while nearing completion, were increasing their resiliency not diminishing.

***What followed were remarkable stories of perseverance instances where setbacks were not endings but beginnings of innovation***

**Closing the Gap (Between T14 and T14A)**

When rain-induced slides buried a culvert and halted works, engineers eliminated the weak spot. A cut-and-cover tunnel replaced the exposed stretch, complete with drainage and protective roofing. A fragile notch became a continuous, controlled corridor.

**Defending the Yard**

Flooded repeatedly by debris despite an existing retaining wall, Kawnpui Yard was given a second wall of defense. Today, it admits that one line can fail, but two can endure the monsoon's fury.

**Tunnel-24: From Collapse to Control**

An ambitious open cut collapsed under fragile sandstone. Engineers pivoted to a 199.5 m top-down cut-and-cover tunnel—a-controlled system that respected geology and season, turning failure into resilience.

**Protecting Kawnpui Station**

When a young hill gave way and half the station was buried, the solution was bold yet simple—a gabion wall and reprofiled slope. The station now sits protected behind a sacrificial buffer, safe from future slides.

**Reinforcing Tunnel 15's Portal**

A valley-side weakness near Bridge 78 was resolved by extending the tunnel portal with a 10 m cut-and-cover, redirecting debris away and stabilising the slope.

**Bridge No. 196 – Tragedy to Triumph**

At Sairang, a massive steel girder collapsed during erection, claiming lives and halting work. But the team regrouped, refabricated girders, refined methods, and achieved in 29 days what once took 75. The bridge rose again this time as a monument to perseverance.

**Tunnel 12A - From Collapse to Completion**

When a tunnel in a foothill of high mountain caved in after rain and tremors, conventional methods failed. Engineers rebuilt it as a cut-and-cover tunnel, finishing in five months what global consultants thought would take two years. Topography redrawn to naturally stable pattern at this delicate location to eliminate recurrence of any problem in future.



***Progress, however, was never linear***

*Mizoram's monsoons turned ground into sludge, access roads disappeared overnight, and landslides buried months of effort. Each episode carried the same lesson: stabilise what moves, roof what must pass and always listen to the land.*

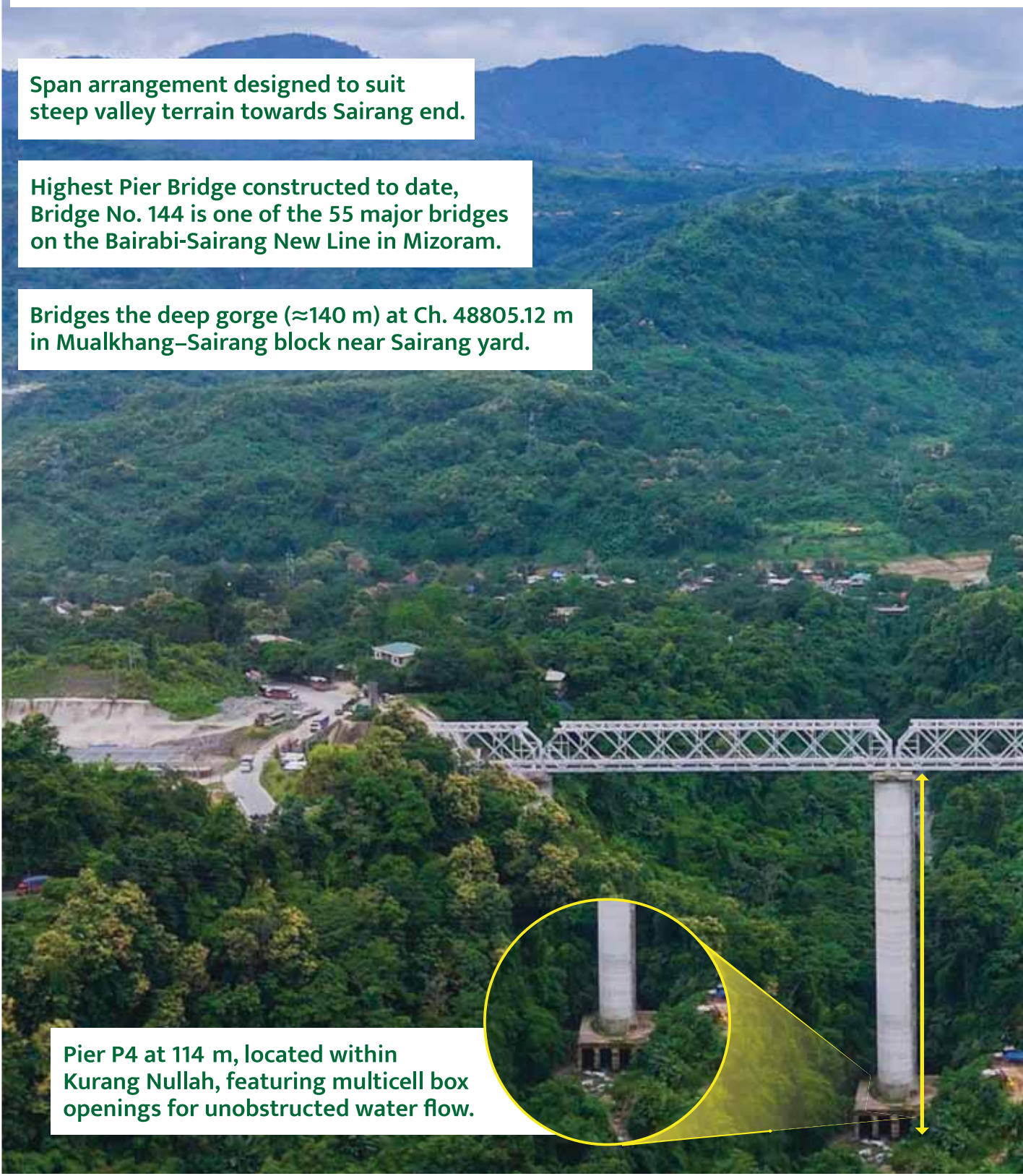
The tracks had finally come together each rail locked in place, each sleeper perfectly aligned—a dream etched in steel across unforgiving terrain. Trial run on the 1st of May 2025, surged confidence in field team and reflected what they have done is more than a technical milestone—it was proof that their work was no ordinary task but a hallmark of excellence. Yet, there was no pause for celebration. Minor balance works awaited completion, and the team plunged into them with renewed determination. Every bolt tightened, every alignment perfected carried the weight of responsibility. Finally, in June 2025, Mizoram entered the railway map with pride. The line passed the rigorous inspection of the Commissioner of Railway Safety, followed by successful speed trials. The hills had, at last, accepted steel into their folds. Behind this moment of triumph stood not only railway engineers but equally the contractors, whose seamless harmony turned a complex challenge into a symphony of coordination. Each agency, each hand at work, aligned itself to a single goal delivering the project within the decided timeline, eliminating large number of interfaces, management of which normally becomes a difficult point in management of complex project of this nature. When one site ran short of cement, another stepped in to share. When manpower was stretched thin, agencies rallied across boundaries to fill the gap. This spirit of mutual support among agencies transformed potential delays into stories of resilience. Their quiet collaboration ensured that hurdles became stepping stones, and that progress never lost momentum. The Bairabi–Sairang railway is more than an engineering achievement. It is a promise kept two decades in the making. A story that began with a question, ‘is it possible?’ has ended with an answer written in steel: not only possible, but enduring.

# 144 (NEW) OF BAIRABI - SAIRANG

Span arrangement designed to suit steep valley terrain towards Sairang end.

Highest Pier Bridge constructed to date, Bridge No. 144 is one of the 55 major bridges on the Bairabi-Sairang New Line in Mizoram.

Bridges the deep gorge ( $\approx 140$  m) at Ch. 48805.12 m in Mualkhang-Sairang block near Sairang yard.



Pier P4 at 114 m, located within Kurang Nullah, featuring multicell box openings for unobstructed water flow.

# NEW LINE RAILWAY PROJECT



Six spans supported on five hollow circular piers built on pile foundations using slipform construction for jointless concrete.

Six specially designed spans with composite and open-web girders ensuring stability at height and under seismic activity.

Girders erected using cantilever erection method; record erection of 103.5 m girder completed in 29 days instead of the usual 75 days

Constructed at a total cost of ₹160 crores.

A testament to modern engineering overcoming rugged terrain, ensuring safety and stability.

Total of 2,655 MT of steel used in all six girders; 1.65 m pathways included for emergency passenger rescue.

At 114 m tall, the bridge is 42 m higher than the Qutub Minar.

# INDIAN RAILWAYS SET RECORD

## WITH 114M-HIGH BRIDGE NO. 196 IN MIZORAM

Bridge No. 196 (Old)/ 144 (New) is one of the 55 major bridges of Bairabi-Sairang New Line Railway Project in Mizoram. The length of this bridge is 378 m, with span arrangement as 2x31.9 m (CG) + 1x103.5 m (OWG) + 1x47.24 m (OWG) + 1x103.5 m (OWG) + 1x47.24 m (OWG). This bridge has been constructed to bridge the deep gorge of about 140 m depth at Ch. 48,805.12 m in Mualkhang-Sairang block section, in the approach of Sairang railway yard. The bridge has a peculiar arrangement of spans due to topography of this terrain, with a very steep valley towards the Sairang end. The total height of this bridge is 114m from river bed level, which is 42 m taller than Qutub Minar and is the highest pier bridge in Indian Railways as of date.

**The bridge has been constructed at a total cost of ₹160 crore.**

### **Substructure**

This bridge has six spans with five piers; the height of piers varies from 24 m to 114 m, measured from the top of pile caps. All the piers of the bridge are hollow circular piers constructed on pile foundations. In order to ensure jointless concrete in piers, they have been constructed using the Slipform Construction technique.



Pier P4 is the tallest pier of the project, with a height of 114m. As per the site topography, Pier P4 was required to be constructed within the Kurang Nullah flowing through the gorge. In order to allow unobstructed water flow due to the construction of this pier, a multicell box arrangement (2 openings of 4.4 m width X 8.5 m height each and two openings of 4.25 m width X 8.5 m height each) has been provided beneath the pier.

### Superstructure

The bridge consists of a total of six spans. Specially designed girders have been provided in all the six spans to ensure the stability of girders at large height due to seismic activity. Composite girders of 31.9 m length have been provided in first two spans. The third and fifth spans are provided with Open Web girders of 103.5 m length. Similarly, Open Web girders of 47.24 m length have been provided in the fourth and sixth spans. A total of 2,655 MT of steel has been used in all six girders of this bridge. Pathways of 1.65 m have been provided on both sides and inside all girders to allow rescue of passengers in case of an emergency.

Erection of the girders has been done using the cantilever erection method. For timely completion of the project, one girder of 103.5 m was erected in record 29 days, which otherwise takes around 75 days.



Photo-Mohit Jain

# BRIDGE 115 IN MIZORAM

91 M TALL, 742 M LONG, STRENGTHENS RAIL NETWORK

Bridge No. 115 (Old) is one of the 55 major bridges of Bairabi-Sairang New Line Railway Project in Mizoram, with a span arrangement of 7x103.5 m (OWG). This bridge has been constructed to bridge the deep gorge of about 110 m depth at Ch. 34,739.80 m in the Kawnpui-Mualkhang block section. The total height of this bridge is 91 m from bed level and its length is 742 m. This is the second tallest bridge of the project. NH-06 passes underneath and through spans P3 and P4 of this bridge. The bridge has been constructed at a total cost of ₹225 crore.



## Substructure

This bridge consists of a total of seven spans with six piers; the height of piers varies from 22 m to 91 m. Pier P4 is the tallest pier of this bridge, with a height of 91 m. All the piers of the bridge are hollow circular piers constructed on pile foundations. In order to ensure jointless concrete in the piers, they have been constructed using Slipform Construction technique.

## Superstructure

The bridge consists of a total of seven spans. Specially designed Open Web Girders of 103.5 m length have been provided in all seven spans in order to ensure the stability of girders at large heights due to seismic activity. A total of 5761 MT of steel has been used in all seven girders of this bridge.

Pathways of 1.65 m have been provided on both sides and inside all girders to allow rescue of passengers in case of any emergency.

# RAILWAYS IN MIZORAM

## MARK NOT JUST A JOURNEY, BUT A VALIDATION



**Jaya Varma Sinha**  
Ex Chairman and CEO,  
Railway Board

As India's sunrise states of the Northeast wake up to the dawn of rail connectivity, the newly laid Bairabi-Sairang Rail Line prepares to fold Aizawl into the Railways' network. The line extends from Bairabi, which previously served as a railhead near the Assam-Mizoram border, to Sairang, a town just 18 kms from the state capital, Aizawl.

This 51-km new line winds its way through the lush Lushai (Mizo) Hills, traversing deep valleys, steep hills, and dense bamboo forests. The 45-tunnel, 55 – major bridges line, which boasts the second tallest pier bridge in the country (taller than the QutubMinar of height 114 meters), now links Capital of Mizoram, the land of whispering winds, to the national railway grid.

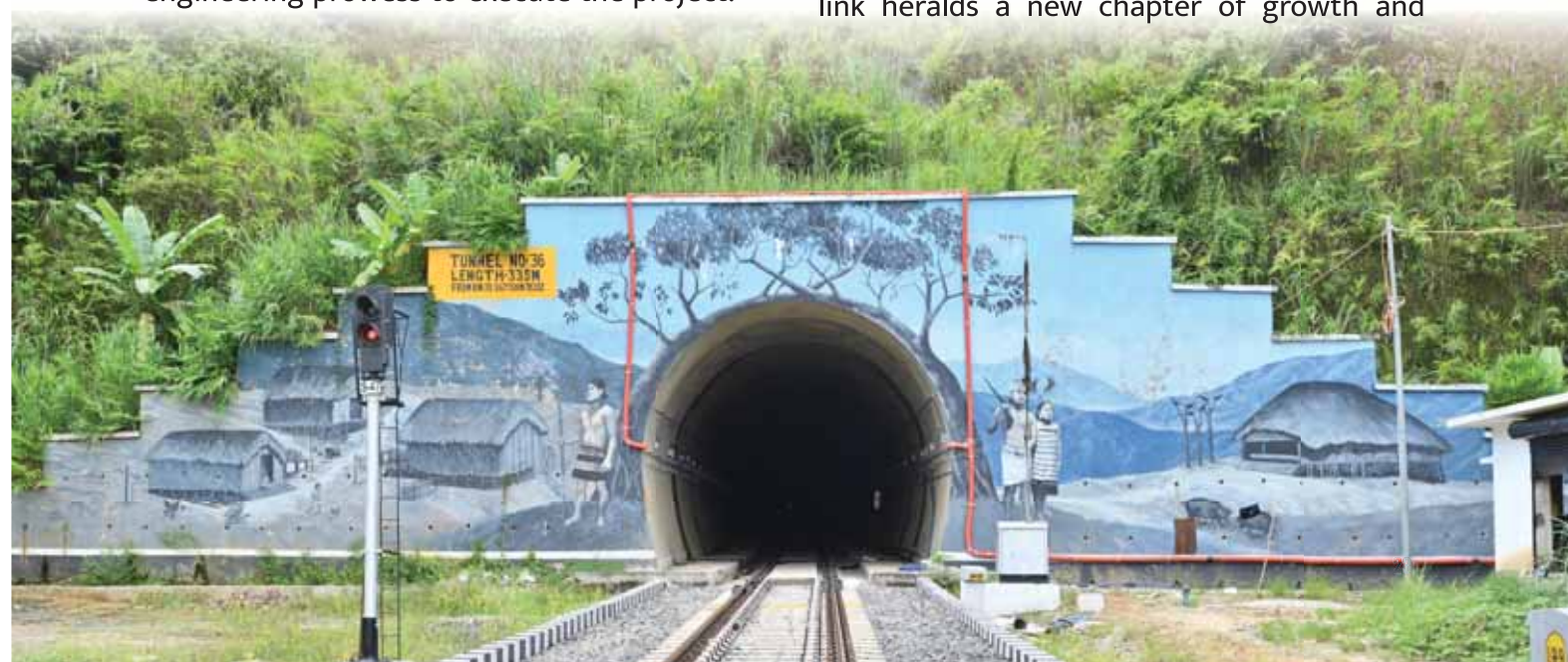
The challenging topology, landslide-prone zones, and difficult climatic conditions, defined by heavy and prolonged monsoons, required the Railways to channel its finest engineering prowess to execute the project.

The newly constructed railway link is set to change life in Mizoram. Until now, the state's hilly terrain made access slow and arduous, making goods expensive and travel time-consuming. With the completion of the 51.38-km line, travel time between Kolasib and Aizawl district will be cut by more than half. This means better access to affordable essentials, new jobs, and business opportunities, and easier movement for everyone. For entrepreneurs, it opens up bigger markets. For families, it brings the joy of staying better connected with loved ones across the country.



### A Corridor To Nature And Culture

More than just a transport corridor, this rail link heralds a new chapter of growth and



connectivity for Mizoram. Beyond facilitating trade and business, it will showcase the state's emerald valleys and lush green hills to the world, offering visitors a gateway to its rich cultural heritage, warm hospitality, and vibrant traditions.



Mizoram's beauty lies in its abundant natural landscapes, including dense forests, rolling hills, picturesque valleys, and crystal-clear streams and waterfalls, earning it the nicknames "Land of the Highlanders" and "Land of the Blue Mountains". The state is a biodiversity hotspot, home to diverse flora and fauna, alongside a rich tribal culture known for its music, dance, and handicrafts. The state is also gaining recognition as a budding adventure tourism destination.

The Mizoram government and the Indian Railway Catering and Tourism Corporation Ltd. (IRCTC), a 'Navratna' listed company under Ministry of Railways signed a two-year Memorandum of Understanding (MoU) in August 2025 to harness the tourism potential of this rail connectivity. Curated tourism packages, dovetailed with access to the state's tourism infrastructure, are central to this collaboration. IRCTC plans to run special tourist trains under its "Discover NE Beyond Guwahati" initiative, building a budget-friendly, sustainable and eco-friendly tourism model.

## Geo-strategic Bridge

Mizoram's pivotal location, bordering both Bangladesh and Myanmar, places it at the centre of India's "Look East Policy" and "Neighbourhood First Policy". Rail accessibility means that trade, domestic as well as cross-border, is poised for a leap. Planned extensions of rail and road networks could potentially position Mizoram as a transit hub between India and Southeast Asia. This is especially relevant in the current climate of geopolitical challenges.



## Whispering Winds of Change

Beyond the economic and logistical implications, the arrival of the Railways in Aizawl is deeply emotional. For the Mizo people, it is a validation of their place in the broader national narrative, a signal that they are very much at the heart of India's aspirations.

With the new rail link inaugurated by Prime Minister Narendra Modi, Mizoram celebrates not just the completion of a railway project, but the realisation of a long-cherished dream, a testament to the fact that no terrain is too tough and no vision too ambitious when pursued with dedication and steely resolve.

# Railways Bring Historic Connectivity To

## Mizoram With Bairabi–Sairang Line



**Prof. Shri Kant Tripathi**  
Department of Forestry  
Mizoram University



Mizoram's capital, Aizawl, marks a historic first with the inauguration of its rail link by Honourable Prime Minister Narendra Modi. Following the completion of one of the most daunting tasks—connecting Aizawl to the national railway network through the 51.38 km Bairabi–Sairang line from the Assam–Mizoram border to Sairang near Aizawl—the state stands on the cusp of a transformative moment. This is not just an engineering achievement, it also symbolises the integration of one of the remotest Northeastern states with the countrywide railway network, which will be a transformative journey for the state towards sustainable development.

This small network of connectivity, spanning approximately 51 km, is monumental in the sense that it has navigated through 48 tunnels and crossed 142 bridges, including some of the highest railway viaducts in the region's most challenging terrains. The project promises to reshape the economic development of Mizoram's landscape, social fabric, and environmental future because of the “Act East Policy Framework, AEPF” of the NDA government, led by PM Modi's strong determination to strengthen the infrastructure of the Northeastern states, one at a time. Now, after



Northeastern states, one at a time. Now, after years of hard work and strong commitment, Aizawl is finally ready to welcome its first train after 78 years of Independence. The “Bairabi-Sairang” railway line is not just about connecting two places on a map; rather, it symbolises years of planning, political determination, and engineering skills.

As one of the last state capitals in Northeast India to get rail connectivity, the integration of Aizawl into the national railway network has significant implications for sustainable growth in the state of Mizoram by enhancing regional unity and the broader perspective of the AEPF. This article examines the diverse possibilities of rail network connectivity in Mizoram, exploring its potential to promote sustainable development while addressing the environmental and social challenges associated with such a significant infrastructure project in the state.

### **Journey from Partition to Progress**

The historical context of the development of the railway network in Northeast India reveals a complex story of disruption during 1947's Partition and its gradual rebuilding. The railway connectivity in the region was heavily impacted by it, which left the Northeast linked to the rest of the country through a narrow corridor—the famous "Chicken's Neck" near Siliguri. In 1962, reconstruction began with the completion of the Saraighat Bridge, restoring the vital connection between Assam and the rest of India. However, linking individual state capitals in the Northeast remained a cumbersome process due to the unique geographical and logistical challenges faced by each project.

Way back in 1999 and 2006, the then Central government recognised the strategic importance of linking India's northeastern frontier states with the national rail network. Later, in 2008-09, the “National Project” was declared which marked a significant milestone, demonstrating the Central government's recognition of the strategic plan. Consequently, the Rail India Technical and Economic Service (RITES) submitted its pre-construction report in 2011, paving the way for what would become one of the most challenging railway construction projects in Northeast India's mountainous terrains. By 2014, land acquisition was completed, and on 29th November, Narendra Modi, PM laid the foundation stone, thus paving the way for the Railways to reach Aizawl.



Mizoram's status as one of the last states to gain rail connectivity was challenging due to its rugged terrain and its recent entry into the Indian Union. After becoming India's 23rd state on 20th February, 1987, the state primarily relied on road connectivity via National Highway 306 (formerly NH-54) for its external links. This dependence on a single road route, often disrupted during the monsoon season, highlighted the urgent need for an alternative transportation infrastructure. While Guwahati has long been the regional railway hub, other capitals such as Agartala received broad-gauge connectivity in 2016, and Naharlagun (serving Itanagar) was connected

in 2014. Now, the Bairabi-Sairang line in Mizoram marks the completion of a regional connectivity network that took decades to build.

### **Engineering Marvel Cuts Through Tough Terrain**

The Bairabi-Sairang railway line stands as proof of modern engineering, overcoming tough geographical odds. It includes 48 tunnels stretching 12.85 km, 55 major and 87 minor bridges, and multiple road overbridges and underbridges. One pier rises 104 m, among the tallest in the region. Owing to the state's difficult terrain, 25% of the railway had to be tunnelled, ensuring minimal damage to land and ecosystems. Therefore, the tunnelling approach, although expensive and time-consuming, proved to be a more sustainable solution that minimised surface-level environmental impact and preserved the fragile ecosystems of the region. Furthermore, monsoon rains of 2500 mm a year and the risk of quakes added complexity. Challenges were also posed by 2500 mm of annual monsoon rain, seismic tremors, and slope instability. These factors are prevalent in the Eastern Himalayas. To handle this, advanced methods like the New Austrian Tunnelling Method (NATM) were applied in several sections of the rail line. The new line will allow trains at 110 kmph, compared to 40–5 kmph by road, cutting

Guwahati–Aizawl travel from 8–10 hours to around 4–5 hours.

### **Economy to Get a Fresh Push**

The rail connectivity promises to reshape Mizoram's economy and making travelling faster. Agriculture, horticulture, and government employment, which are the backbone of the state's economy, is set to benefit from improved connectivity to national and international markets. With cheaper transport, the import and export costs would also reduce, thus boosting efficiency.

Mizoram's horticultural sector has significant potential. It is popular for its high-quality produce of oranges, bananas, pineapples, dragon fruit, and other tropical fruits. But, poor connectivity and heightened costs make it difficult to reach the markets. The arrival of railways can change that by offering the possibility of refrigerated wagons services ensuring the produce reaches markets in Delhi, Kolkata, and other major cities. This revolutionary path in market access could inspire farmers to increase production and adopt latest post-harvest practices.

The new rail link is set to develop the state's tourism sector as well. Its rich cultural heritage, pristine landscapes, and unique tribal traditions remain largely inaccessible to mainstream tourists due to connectivity constraints. The railway line could position Aizawl as a gateway to Northeast India's cultural tourism hub when linked with Assam and Meghalaya routes.



In time, railway tourism packages, heritage circuits, and eco-tourism initiatives could create jobs in the hospitality sector and help in cultural preservation.

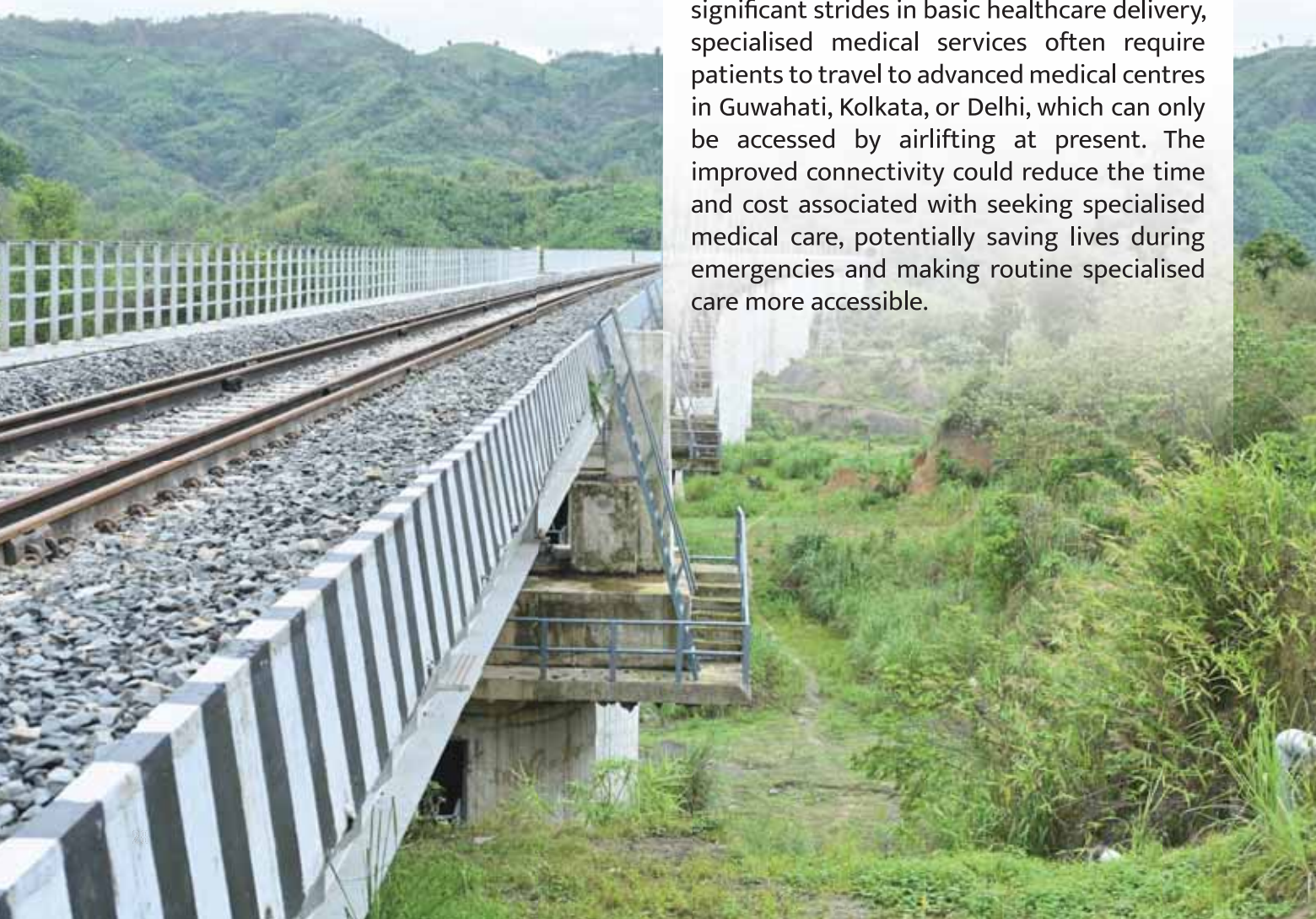
Industrial development prospects are equally promising. Low transportation costs can unlock investments in agro-processing and related industries. Mizoram's bamboo may find national buyers across construction, textiles, and food processing industries if properly processed and marketed. Rail connectivity would make it economically viable to transport both raw materials and finished products to and from the processing facilities.

The new rail link also promises to benefit the service sectors, such as banking, insurance, telecommunications, and other service industries. The project would encourage these sectors to expand operations into the state's remoter regions, thus leading to diversification.

## Human Development on Fast Track

Extending beyond economic considerations, the social implications of rail connectivity to the state encompass broader aspects of human development. In states like Mizoram, the railway connection will serve as a bridge to expand educational, healthcare, and cultural opportunities. Educational mobility will further benefit considerably through improved connectivity. Currently, students from Mizoram seeking higher education or specialised training in institutions outside the state face significant time and cost barriers. The railway connection will undoubtedly make it more feasible for economically weaker students to pursue higher education in premier institutions in Kolkata, Delhi, and other educational hubs across the country.

Healthcare access is another critical dimension of social impact that will significantly improve due to rail connectivity in Mizoram. While Mizoram has made significant strides in basic healthcare delivery, specialised medical services often require patients to travel to advanced medical centres in Guwahati, Kolkata, or Delhi, which can only be accessed by airlifting at present. The improved connectivity could reduce the time and cost associated with seeking specialised medical care, potentially saving lives during emergencies and making routine specialised care more accessible.





The railway connection also promises to strengthen social and cultural ties between Mizoram and other parts of India. The Mizo community, while maintaining a strong cultural identity, has often felt disconnected from national cultural and social movements due to geographical isolation. Thus, improved connectivity will facilitate greater participation in national cultural events, educational exchanges, and social movements. The railway connection will also alter migration patterns in the state, which are currently limited by high transportation costs and poor accessibility, potentially leading to underutilised human resources. The railway will facilitate more flexible migration, enabling skilled workers from Mizoram to access jobs in other states while remaining connected to their communities.

### **New Avenues for Education, Healthcare and Social Integration**

The Bairabi-Sairang railway line faced a set of complex challenges in striking a balance between the needs of development and conserving the state's ecosystems. Mizoram is part of the Eastern Himalayan region, which is one of the world's biodiversity



hotspots, harbouring numerous endemic species and fragile ecosystems. Therefore, the construction of railway infrastructure in such an environmentally sensitive area requires a strong commitment to save the ecosystems and endemic species of the region, not only in the present but also in the long run. Furthermore, the construction should also consider the impact of various regional challenges, including frequent heavy rains, seismic shocks, and landslides.

To overcome this, engineering experts have employed numerous ultramodern techniques, such as extensive tunnelling instead of surface construction, which would have been cheaper. However, tunnel construction presents its own environmental challenges, including groundwater disruption, the disposal of excavated materials, and managing slope stability. Ultimately, the project demonstrates a strong concern for the environment by minimising surface disruption, habitat fragmentation, noise, and maintaining critical wildlife corridors. Additionally, the project utilised advanced bridge construction techniques, including precast segmental construction at several sites, to reduce construction time and environmental impact. A total of 142 bridges were constructed to cross streams and rivers, thereby reducing the project's carbon footprint. Nevertheless, ongoing monitoring and adaptive management strategies will be necessary in the future to ensure the railway's environmental impact remains within acceptable limits.



## Sustainable Development Framework

While addressing local development priorities, the Bairabi-Sairang railway line will also have broader impacts on sustainable development frameworks by including several of the United Nations Sustainable Development Goals (SDGs). The project will potentially contribute to multiple SDGs such as SDG 9 (Industry, Innovation, and Infrastructure), SDG 1 (poverty reduction), SDG 4 (quality education), SDG 5 (gender equality), and SDG 11 (sustainable cities and communities). The railway will create youth jobs and boost entrepreneurship by driving sustainable growth in line with SDG 8.

Gender equality is crucial in Mizoram, where women play a significant role in different sectors such as trade, agriculture, and small-scale enterprises. The rail network will also support the goal of the Act East Policy Framework (AEPF) to improve India's



connectivity with Southeast Asian countries through established border trade routes, and it also aligns well with the "Make in India" initiative of the Government of India for further attracting investments from the manufacturing sector to promote the growth of local industries.

Following the successful operation of the Bairabi-Sairang line, the rail network can be further expanded to other northeastern states, boosting connectivity and economic development in the region.



### A New Beginning

The completion of the Bairabi-Sairang railway line signifies a historic milestone for the state of Mizoram and Northeast India. The engineering achievement reflects decades of planning, political dedication, and technical innovation to provide rail connectivity to one of the last unconnected state capitals. This network will promote sustainable development in the region. However, achieving these benefits will require ongoing attention to implementation challenges, ecological protection, and community engagement. As Aizawl prepares for the arrival of its first train, the railway signifies both a conclusion—the completion of India's state capital connectivity project—and a new beginning—a fresh chapter in Mizoram's development journey.



# How Indian Railways Wrote Its Story Of Grit In The Hills Of The Northeast



**Brigadier  
Ranjit Borthakur**  
Sena Medal (Retd.)

The Bairabi–Sairang project, spanning 51.38 km, embodies both the hopes of Mizoram and the broader plan of Indian Railways to unite the capitals of the Northeast, a journey that began with Prime Minister Narendra Modi laying its foundation stone and culminates with his inauguration of the line.

Besides Guwahati, Itanagar (capital of Arunachal Pradesh) and Agartala (capital of Tripura) already have train connectivity. Additionally, the process of railway connectivity to Kohima (capital of Nagaland) is in full swing and is likely to be completed by 2029, while Imphal (capital of Manipur) is likely to be connected around the same time. However, the process of connecting Shillong (capital of Meghalaya) may be delayed, as there are some issues regarding land acquisition.



Until a few years ago, no one could think of travelling directly from Agartala to Mumbai or from Itanagar to Delhi. But of late, there has been massive infrastructure development in the Northeast region. One of the unique features of the newly laid railway lines in the Northeast is that all railway tracks will have an electric system of operation besides traditional diesel engines.

With an investment of ₹8071 crore, Indian Railways has stitched a 51.38 km line through Mizoram's untamed landscapes. The line rests on 153 bridges standing like sentinels over valleys and rivers. Almost half the stretch runs through open cuttings, dug painstakingly across thick forests and stubborn hillsides. This project is not just steel and concrete—it is an audacious attempt to connect the Northeastern state's wilderness with the rhythm of the national railway grid.

Unlike in most states of India, Indian Railways faces tremendous challenges in extending railway connectivity in the Northeast regions. For almost four to five months, the construction work gets disrupted due to heavy monsoon. The alignment is through hilly terrain, deep valleys, and gorges requiring construction of tunnels and viaducts or high bridges. Moreover, the project sites are prone to frequent landslides. Hence, heavy maintenance work has to be catered for.

Besides, suitable construction materials like sand, stone, cement, iron rods, and chips etc, are not easily available, especially in some hill states like Mizoram. Similarly, labour has to be brought from other states, but there are not many volunteers due to remoteness and tough terrain.





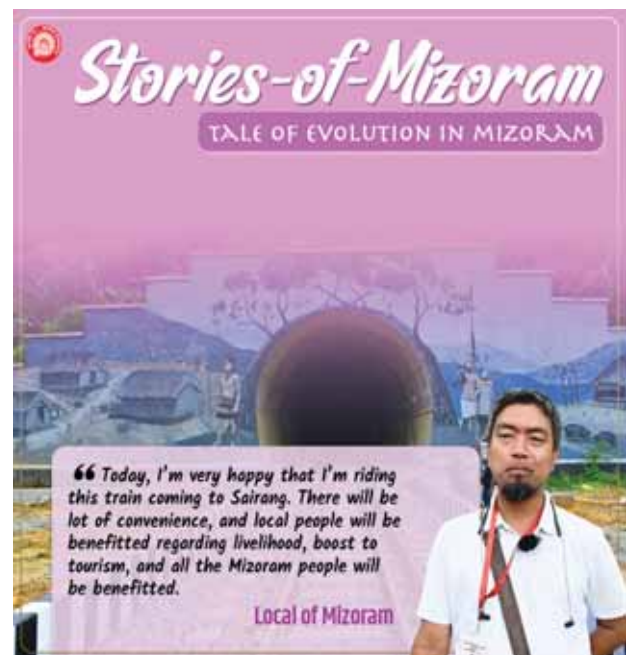
Nonetheless, by reaching Mizoram, the Indian Railways has placed yet another Northeastern state on India's railway map. This will provide better and cheaper access to residents of Mizoram to travel to other states for education and health care. Movement of freight trains, besides reducing the cost of essential items, will also boost trade in the state. This railway line will also immensely help in the movement of security forces, such as the Assam Rifles, and other paramilitary forces deployed on the Indo-Myanmar and the Indo-Bangladesh borders.

The Northeast is an excellent tourist destination; however, at present, tourism is mostly restricted to Assam, Arunachal, and Meghalaya, which have better connectivity and infrastructure. Railway connectivity to the state will attract tourists too. The depiction of cultural motifs on the tunnel faces has been done to promote the culture of the state and transform the railway journey along the train route into an immersive cultural experience. These murals depict the attire, festivals, customs, and traditions of the villages. Already, IRCTC (Indian Railways Catering and Tourism Corporation) has signed a two-year MoU with Mizoram government to promote tourism.

It is to be noted that the first railway line (meter gauge) was constructed in Assam in 1881. This 65 km line connected Dibrugarh town in Upper Assam with Margherita town. The major motive of the British rulers in constructing the railway line was to facilitate the transportation of tea from the plantations to the nearest river port on the Brahmaputra river for onward transportation to Chittagong (now Bangladesh) and finally to markets in England. Similarly, the Britishers extensively used freight trains for the carriage of coal and forest products.

Thus, the British had colonial interests in the exploitation of Assam's rich natural resources, particularly tea, coal, petroleum, and forest products. However, much water has flowed down the Brahmaputra since then. The present thrust of the government is the well-being and the economic development of the people of the region. While attempting to meet the aspirations of the people, the Railways do suffer financial losses, but this does not deter them from striving to meet their objectives.

There is no doubt that all the states of the Northeast will soon find their places on the Railway map of India.



# BAIRABI-SAIRANG RAIL LINK TO POSITION MIZORAM AS NORTHEAST'S EMERGING GATEWAY

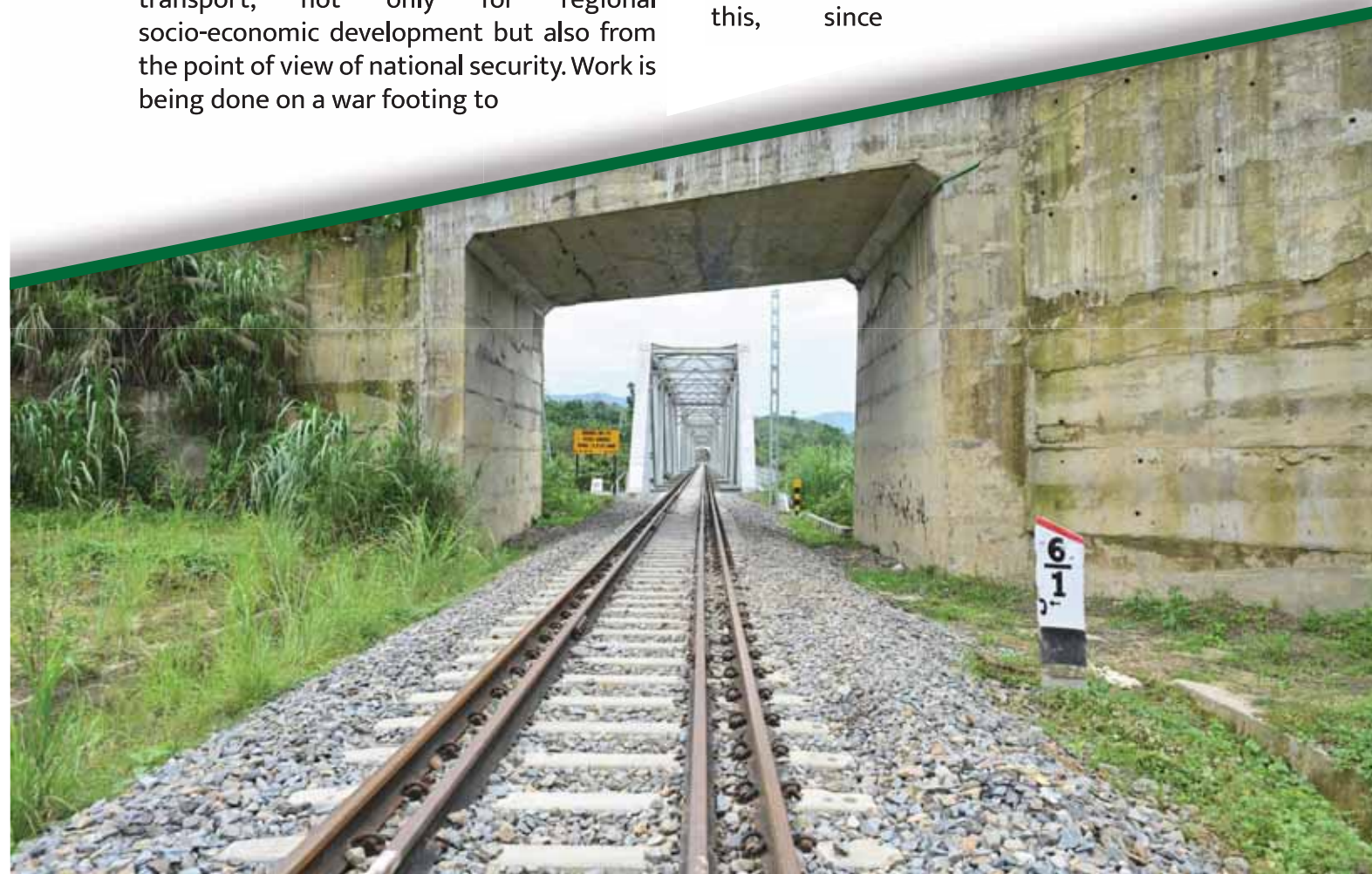


**Sachin Budhaliya**  
Senior Journalist

Indian Railways, while facing the difficult mountainous geographical challenges of the far Northeast region of India, is engaged in connecting and electrifying all the eight states with the rail network, thereby giving a fresh impetus to the socio-economic development of this remote area of the country. In the last 10 years, the pace of railway development in the Northeast region has increased two-and-a-half times. Railways are a very important means of transport, not only for regional socio-economic development but also from the point of view of national security. Work is being done on a war footing to

bring the eight states of the Northeast—Arunachal Pradesh, Assam, Meghalaya, Manipur, Nagaland, Sikkim, Tripura and Mizoram—into the railway network.

Rail connectivity in strategically important Mizoram is expected to begin soon. Railway infrastructure projects in the Northeast region are being implemented by the Northeast Frontier Railway zone of Indian Railways. If we look at the data of the progress of Railways in the 21st century, it is clear that during 2009-14, an average of ₹2122 crore was allocated annually, with 333 km of network added at a rate of 66.6 km per year. By 2025-26, the annual allocation has risen to almost five times to ₹10,440 crore, and 1840 km of new lines have been laid at a rate of 167.27 km per year. According to this, since





2014, the northeastern region has increased development more than two-and-a-half times.

Construction work on the Bairabi-Sairang Rail Project has been completed to provide seamless rail connectivity to Mizoram. The 51.38 km long new line between Bairabi and Sairang has been divided into four sections at a cost of about ₹5521 crore, which includes Bairabi-Hortoki, Hortoki-Kawnpui, Kawnpui-Mualkhang and Mualkhang-Sairang. The 16.72 km long Bairabi-Hortoki section was commissioned around June, 2024 and rail service became operational on this stretch from August 2024. The entire project, once completed, will be a major transformational project for the people of Mizoram in terms of communication and commerce. Affordable and environmentally friendly rail services will positively impact almost all sectors of development in this state.

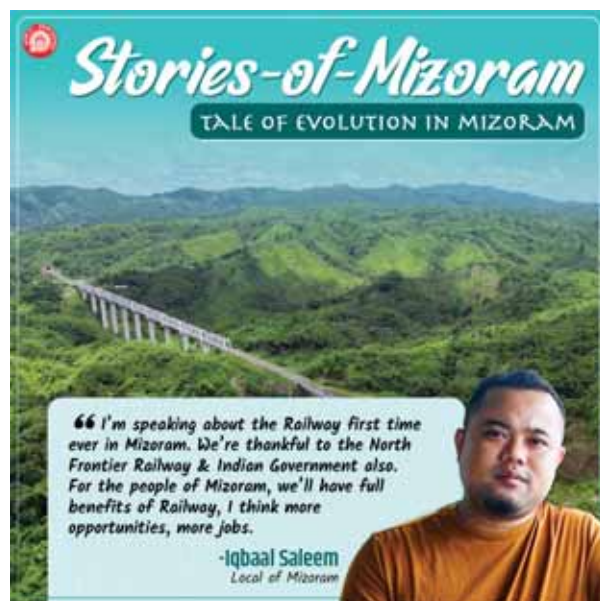
The Bairabi-Sairang Rail Project involves the construction of several tunnels and bridges in inaccessible areas. The total length of tunnels in this project is 12.853 km. There are a total of 55 major bridges and 87 minor bridges in this project. The construction of pillar P-4 of Bridge Number 196 on the approach to Sairang station is an attraction, as it is the tallest pillar of the project. Its height is 104 meters, which is 42 meters higher than the Qutub Minar. The project also includes five road over-bridges and six under-bridges, and four stations—Hortoki, Kawnpui, Mualkhang, and Sairang.

To increase the line capacity of the rail network in the Northeast region, 12 railway projects (eight new lines, four doubling projects) of 777 km length have been approved. The cost of these projects in the

Northeast region, fully and partially, is ₹69,342 crore. As of March 2025, 278 km of these lines have been commissioned, and ₹41,676 crore has been spent.

Like Manipur, Mizoram is also a strategically sensitive and important state for India. It serves as an important route for connectivity to Southeast Asia as well as Kolkata in India, running through the southern part of the state. There is a national highway connectivity with Myanmar's Chin province till Zorinpui or Lal Tual, which is connected to the Kaladan project between India and Myanmar. Under this project, which is being developed with the financial assistance of India, a system has been developed to transport goods by large ships from Kolkata to Sittwe port in Myanmar, about 1328 km away, and then after Sittwe, to transport goods through the Kaladan river to Paletwa Jetty. Work is underway to extend it further to Lal Tual on the Myanmar-India border. However, at present, goods can be transported only by road from Paletwa to Zorenpui, which is in a very poor condition. India is supporting the Myanmar government to build this road.

Since India and Bangladesh were working together on an alternative route through Tripura using Bangladesh's Chittagong and Mongla ports for cargo transportation, the Kaladan project had slowed down to some extent. But the events that took place after the political coup in Bangladesh a year ago have put all Bangladesh-India connectivity projects in jeopardy. Therefore, the Kaladan



project has now become relevant again. Zorinpui is about 250 km from Hortoki. According to experts, once the Kaladan project is properly implemented, plans are being made to extend the railway line till here. In this way, Mizoram will become another gateway for transportation to the Northeast via Sittwe and Kaladan. Connectivity to ASEAN will also become easier from here. At present, the Moreh-Tamu border in Manipur and the India-Myanmar-Thailand trilateral highway passing through there are also being seen as gateways. There is a proposal to connect this highway to Cambodia, Vietnam, and Laos as well. Along with this, there is a talk of laying a railway line as well. If the Myanmar government agrees to take the initiative, India is ready to extend its railway line across the border.



# AIZAWL RAILWAYS

MARK A NEW DAWN WITH BRIDGES TALLER THAN QUTUB MINAR



**Arun Kumar Das**  
Senior Journalist

**Aizawl:** With the establishment of a direct rail link between the national capital and Mizoram's capital, the people of the tiny hill state are likely to get the Rajdhani Express, the premier service of Indian Railways, in near future.

Braving tough challenges, Indian Railways has successfully constructed the much awaited rail line connecting New Delhi with Aizawl, the first such connectivity since Independence.

With 48 tunnels and 55 major bridges, including the one with a 104-metre pier height, which is taller than the Qutub Minar, the 51.38 km-long Sairang-Bairabi rail link project has come up in the hilly region at a total cost of ₹8,071 crore.

The Northeast project assumes strategic importance as it borders Myanmar and Bangladesh. The construction of the rail route from Sairang to Bairabi was not an easy task, as the track was laid over the hills and rivers.





Known as the “Land of the Hill People,” Mizoram is characterized by rolling hills, dense forests, and remarkable biodiversity. Indian Railways’ engineers have successfully established the much awaited rail link connecting the national capital with Mizoram’s capital in the Northeast under challenging conditions.

Since Mizoram is a land-locked state, rail connectivity is crucial for the development and economic prosperity of the region. After the commissioning of the rail link, there will be a regular train service between Bairabi to Sairang, and passengers can enjoy lush green

valleys, waterfalls, tunnels, bridges, and many more sights along the 51 km route in the train equipped with Vistadome coaches. One can enjoy the spectacular view of waterfalls while travelling through the hilly terrain in a Vistadome coach, specifically designed for tourists. The regular train and freight services are likely to be operational in the section shortly, as the route has received safety clearances from the concerned authorities.

The all-weather rail link brings direct benefit to the people of Mizoram, as it reduces the dependence on road transportation in the hilly terrain, with the transportation of goods and passengers becoming easier now, said a local shopkeeper.





Bairabi in Kolasib district, near the border with Assam, has so far been the only railhead in Mizoram. Sairang is a satellite town of Aizawl, around 20 km from the city. The construction work began in 2019 and the project was completed in four phases. “It was a challenging task as we had to overcome several logistical issues,” said the Project Chief Engineer Vinod Kumar.

Talking about the tall bridge with 104 metre pier height, Kumar said, “Special care was taken to allow unhindered water flow in the river below. We made multiple openings in the pier so that water flow is not obstructed.”

A senior official of the Ministry of Railways said that the final 33.86 km stretch from Hortoki to Sairang was thoroughly inspected by Sumeet Singhal, Commissioner of Railway Safety (CRS), Northeast Frontier Circle, between June 6 to June 10. The 51.38-km Bairabi-Sairang New Line Railway Project also consists of 87 minor bridges and the total length of tunnels in this project is 12,853 metres.



Depicting rich regional cultural motifs, the railway tunnels along this new rail route have been adorned with striking murals that transform these functional structures into powerful visual narratives, celebrating the rich cultural heritage and identity of the Mizo people. These artistic embellishments turn the railway journey into a cultural experience, blending modern connectivity with timeless tradition.

The project also includes five road over bridges and six road under bridges. This new line project is divided into four sections: Bairabi-Hortoki, Hortoki-Kawnpui, Kawnpui -Mualkhang and Mualkhang-Sairang.

Mizoram is a scenic and culturally vibrant state located in Northeastern India. It shares its borders with Myanmar, Bangladesh, and the Indian states of Tripura, Assam, and Manipur. Known as the “Land of the Hill People,” the state is characterised by rolling hills, dense forests, and remarkable biodiversity.

Mizoram is home to several ethnic groups, making it a culturally diverse state. With its natural beauty, cultural richness and warm hospitality, Mizoram holds immense potential as a sustainable and serene tourist destination. With its breath-taking natural landscapes, vibrant culture, and warm hospitality, Mizoram offers great potential as a sustainable and peaceful tourist destination.



# MIZORAM RAILS FUEL THE DREAMS OF TOMORROW



**Manohar Kesari**  
Senior Journalist

On my maiden trip to Mizoram, a land that awaited for its first railway connection since 78 years of freedom, I found myself lost in its breathtaking valleys and serene landscapes. While halting at Aizawl, I interacted with young workers and bike-rental providers. When I shared news of the soon-to-arrive train, I saw a spark of happiness in their eyes, as though years of silent hope were at last finding wings, giving their aspirations a chance to rise higher.

I couldn't help but ask, "Wow, what a thing! You all look so delighted about the news of the first train." They answered, "Sir, now we too will be able to reach the country's capital Delhi with ease by train. The hotel staff added that such a change would open up new career opportunities for them. One of them said, "More job avenues would open up. We will get chances to work in five to seven star-rated hotels." Many in the state have until now worked in the hotel industry by doing short-term diploma courses locally. People who cannot afford flight fares will finally have the chance to pursue higher education in other states. Moi, a youth from Mizoram, told us, "This will be very beneficial, as it will be



easier to travel from one place to another. A sick person can be taken to the hospital on time.”

A young woman named Mali said, “The new rail connectivity will no doubt bring more employment opportunities for us. We will be able to travel easily to other parts of the country, which will be good for the youths.”



Notably, according to the Periodic Labour Force Survey (PLSF) report of the Central government, the unemployment rate among youth aged between 15 and 29 years in India was 12.4% in 2021-22, which decreased by 2.4% to 10% in 2022-23. In Mizoram, the youth

unemployment rate stood slightly higher than the national average. Moreover, the unemployment rate was higher among women than men, where the male unemployment rate was 8.9% and female unemployment rate stood at 16.4% in 2023.

The distance from Aizawl to Sairang railway station is about 22 kilometres, and locals rely upon two-wheelers and four-wheelers on rent. Once the train begins, they will see more passengers, which will raise their earnings too. This means the railway could prove to be a lifeline that contributes strongly to economic growth.



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# INDIAN RAILWAYS CONNECTS

## Mizoram to Nation Under Act East Policy



**Mohit Jain**  
(Digital Head, Marudhara Today), Ajmer, Rajasthan

Mizoram's 78-year wait finally comes to an end with the inauguration of the Bairabi-Sairang Railway Line by Prime Minister Narendra Modi—a project literally carved through the state's rugged hills. First estimated at ₹2384 crore, revised to ₹5021.45 crore and eventually reaching the final cost of ₹8071 crore, the rail line stands as a reminder that perseverance always comes at a price. In Mizoram's steep folds, where every tunnel and bridge pushed human endurance to its edge, this price was not only financial but also the triumph of connection itself. With this project, Indian Railways has brought

Aizawl onto the national railway map, placing it alongside Guwahati, Naharlagun, and Agartala as the fourth Northeastern capital to be linked by rail.

Constructing the line was no easy task. Engineers had to cut through treacherous hills, navigate landslide-prone areas, and brave difficult weather conditions. Extra safety steps were taken to ensure the durability of tracks, tunnels and bridges. In short, this is not just a railway project but an engineering triumph.

For the time being, trains on the new line will run on diesel engines at a maximum speed of 110 kmph, though electrification work is already underway. The project forms a vital part of the government's Act East Policy, which focuses on strengthening connectivity across the Northeast.



Beyond mere connectivity, the railway is set to transform everyday life in Mizoram. It will make transporting essential goods cheaper, ease travel for students, and unlock fresh opportunities for trade and tourism. Aizawl is now just 22 km from Sairang by rail, turning a journey that once tested patience and endurance into a smooth, reliable ride. For decades, traveling from Lengpui Airport, about 32 kilometres west of the city, meant winding through steep hills and narrow roads—a constant reminder of the state’s rugged terrain. With the new rail line, that same route becomes faster, more affordable and far more comfortable, bringing people and possibilities closer than ever before.

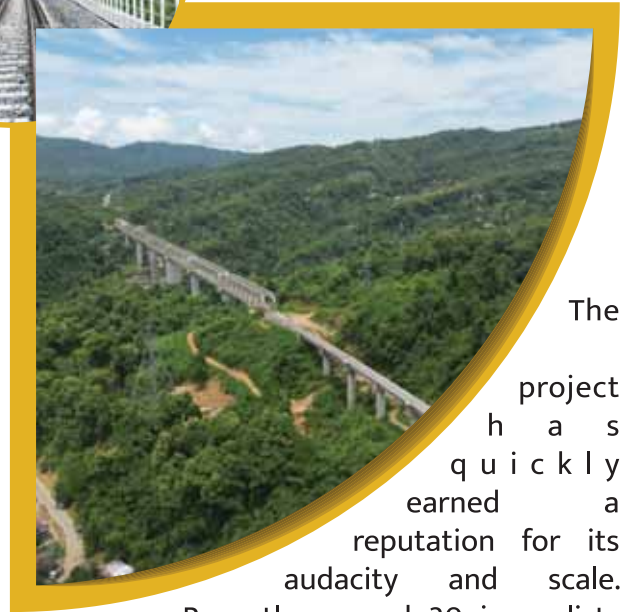
Tourism, too, is expected to flourish. For passengers, the journey to Mizoram will be treated to mountains, lush valleys, cascading waterfalls, and long tunnels. Railway officials describe this scenic experience.



and draw visitors in the state. For will be an unforgettable one. breathtaking views of misty waterfalls, and long tunnels. route as a “once-in-a-lifetime”

Sairang railway station is set to be turned into a world-class hub—complete with air-conditioned lounges, restaurants, hotels, retiring rooms, shopping centres, and even recreational facilities like spas. It will also feature lifts, escalators, and ramps for the specially abled, ensuring a comfortable travel experience for all passengers.

This new line will directly connect Mizoram with Assam’s Silchar and further link the state to entire country’s rail network. There are also plans to extend the track up to India–Myanmar border at Zochachhuah village, potentially opening doors for international trade with Southeast Asia.



The project has quickly earned a reputation for its audacity and scale.

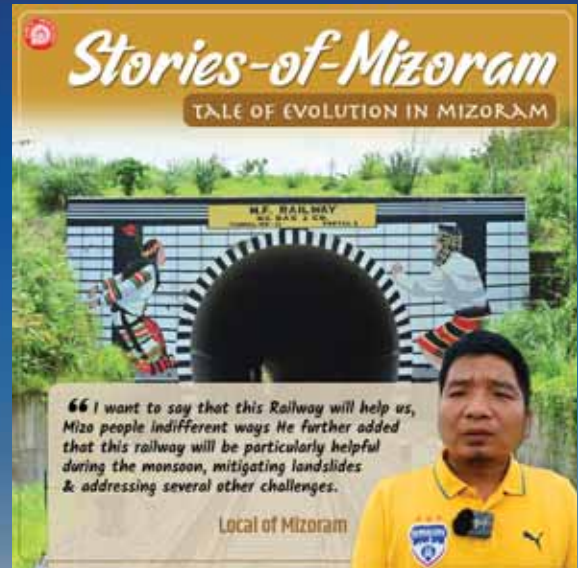
Recently, around 30 journalists were taken on a tour of the new line, where they saw the tunnels, bridges, and stations first-hand. Many of them called the project nothing short of a miracle—an extraordinary accomplishment by Indian Railways in one of the country’s most challenging landscapes.

The first trains on the Bairabi–Sairang route will mark a new era for Mizoram, connecting it more closely with the rest of India. This railway line is not just tracks and bridges; it is a lifeline for progress and opportunity. Nestled in the scenic Northeast, the state has long been a hidden gem, its beauty and tourism potential largely untapped. Millions of travellers bypass it each year due to limited access. But that is about to change!



With the Bairabi–Sairang rail project, Mizoram will open up to easier travel, flourishing trade, and a tourism boost, letting more people experience its valleys, hills and culture.

For decades, reaching Aizawl from Lengpui Airport, located about 32 kilometres west of the city, meant winding through steep hills and narrow roads, turning a short journey into an hour-long challenge—a daily reminder of how Mizoram’s beauty came with its own barriers. Travellers and locals alike faced long, costly trips, making even simple journeys feel burdensome. Now, with the new Aizawl–Sairang railway, that distance has been transformed into just 22 kilometres of smooth, reliable travel. The rails have not only shortened the journey but also brought the people of Mizoram closer to the rest of the



country, turning what was once a hurdle into a bridge of connection, convenience and hope.



# Modern Ballastless

The construction of 51.38 km long Bairabi - Sairang New Railway Line is more than just an infrastructure project; it is the fulfilment of a long-cherished dream of the people of Mizoram.

There are 45 tunnels along the route, with a total length of 15.88 km, covering 31% of the alignment. The longest tunnel is 1.868 km, i.e. T3. All tunnels have been constructed using ballast less track technology, ensuring durability and stability despite the challenging geological conditions. Construction faced major challenges such as short working seasons, heavy monsoons, difficult terrain, unstable geology and lack of local labour. Materials had to be transported from other states and specialized machinery was deployed to handle the tough conditions.

Tunnels along the Bairabi - Sairang New Railway line have been adorned with traditional Mizo cultural motifs, attracting both local and outside

outside tourists. By showcasing the region's rich cultural heritage, the Northeast Frontier Railway is actively promoting tourism and contributing to the region's economic growth.

## Closing the Gap (Between T14 and T14A)

When rain-induced slides buried a culvert and halted works, engineers eliminated the weak spot. A cut-and-cover tunnel replaced the exposed stretch, complete with drainage and protective roofing. A fragile notch became a continuous, controlled corridor.

## Reinforcing Tunnel 15's Portal

A valley-side weakness near Bridge 78 was resolved by extending the tunnel portal with a 10 m cut-and-cover, redirecting debris away and stabilising the slope.



# Rail Technology

## Tunnel-24

**From Collapse to Control:** An ambitious open cut collapsed under fragile sandstone. Engineers pivoted to a 199.5 m top-down cut-and-cover tunnel—a controlled system that respected geology and season, turning failure into resilience.

## Tunnel 12A – From Collapse to Completion

When a tunnel in a foothill of high mountain caved in after rain and tremors, conventional methods failed. Engineers rebuilt it as a cut-and-cover tunnel, finishing in five months what global consultants thought would take two years. Topography redrawn to naturally stable pattern at this delicate location to eliminate recurrence of any problem in future.



## MIZORAM'S FIRST TRAIN CONNECTS 4 STATE CAPITALS, OFFERS TOURISTS VISTADOME JOURNEYS



**Akash Dwivedi**  
Senior Journalist

A glance through the map of India will show one part that stands out for its nature, special culture, and geographical setbacks—the Northeast. And among the region's treasures is Mizoram, locally known as the "Heaven of the Northeast." Today, 75 years post-Independence, this heavenly state has added yet another landmark milestone to its name: for the first time ever, a railway track has extended to the capital city of Aizawl. It is not only a railway line! It's a train of hope, of connectivity, of development, and of jobs—one that will anchor this border state more deeply into the Indian mainstream.

For the people of Mizoram, trains existed only in books, photographs, or films for generations. The train whistle was unheard of here. Laying railroad tracks across its hilly and inaccessible area once seemed a far dream. But soon, when a train whistle blows at the Aizawl railway station for the very first time, it will be more than the shriek of an engine—it will mark the beginning of a new era.

The ground for this project was broken by Prime Minister Narendra Modi on November 29, 2014, though the preparations had already been underway. The work actually started in 1999 with the first survey, but low visibility, dense forests, and a mountainous landscape presented immense challenges. When the first PET survey could not be carried out, it was subsequently sanctioned as a reconnaissance survey in 2003. Later, in 2006, the Railway Engineering-cum-Traffic Survey (RET) was conducted by the Northeast Frontier Railway (NFR). By 2008, the geotechnical survey was carried out by Rail India Technical and Economic Service (RITES). In 2008-09, the project was



declared a National Project. And after 11 years of tireless effort, the dream has finally materialised in 2025.

The 51.38 km-long Bairabi-Sairang railway line is nothing less than an engineering wonder. It has 48 tunnels, 55 major bridges, and 87 minor bridges, in addition to five road over bridges and six under bridges. The whole system has been constructed to last for a minimum of 100 years. Most impressive is Bridge Number 196 between Mualkhang and Sairang, which is 104 metres high, 42 metres higher than the Qutub Minar. Building a bridge so tall and sturdy in a seismically active, mountainous area is no mean feat for Indian engineers.

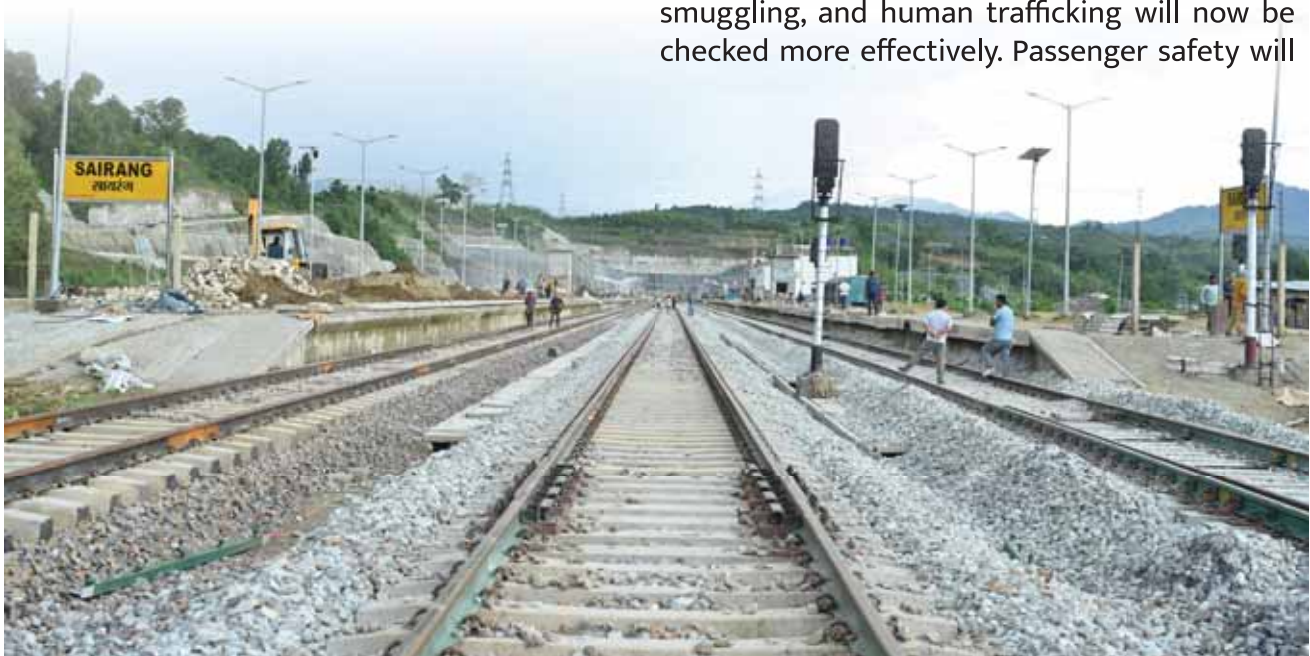
With this railway line, Mizoram's geography will change. Travel by train from Bairabi to Aizawl, which previously took five to six hours via road, will now take only 1.5 hours by train. This will also make travel very easy and provide direct access for farmers, traders, students, and the public at large to the rest of India. Earlier, the Silchar to Aizawl journey was eight to 10 hours by road, but now it can be accomplished in mere three hours by train. Plans are also to operate direct trains to Delhi, Kolkata and Agartala.

This new rail line is not only important for its



connectivity but also holds immense strategic value. Mizoram shares its borders with Myanmar and Bangladesh. The new railway will give swifter access for the army and security forces to these border regions. It will also enable faster movement of supplies, medicines, weapons and equipment. The Siliguri Corridor, or "Chicken's Neck," has always remained a vulnerable point for India's defence. This railway will serve as a lifeline for the military forces.

The security agencies and the railway will maintain a high level of alertness on this route. Illegal operations such as drug trafficking, arms smuggling, and human trafficking will now be checked more effectively. Passenger safety will



be ensured by increased surveillance through CCTV cameras and drones. In the past few months, the Railway Protection Force (RPF) in the Northeastern region has made arrests in several cases of explosive and drug smuggling. The new railway system will also ensure monitoring of militant groups such as NSCN, ULFA and PLA, which operate in the border areas.

Rail connectivity has never been more crucial to the growth of the Northeast. With the partition of India in 1947, all railway links to this region were cut off as the routes passed through East Pakistan (now Bangladesh). Since then, only the Siliguri corridor remained as a connection. While road and air links developed over time, the lack of railway connectivity was always felt. That gap is now being bridged, and for the people of Mizoram, this train will serve as a vital artery.



The farmers will now deliver their produce throughout the country at reduced costs.



Products made of bamboo, horticulture products, and handicrafts will find broader markets. The young generation will have new employment and education opportunities. People will have improved access to medical care, tertiary education, and employment with direct trains to metropolitan cities such as Delhi and Kolkata.

With this railway project in place, the capitals of four out of the eight northeastern states—Agartala (Tripura), Itanagar (Arunachal Pradesh), Dispur (Assam) and Aizawl (Mizoram)—are now directly linked to the Indian rail network. The remaining state capitals are expected to be connected in the coming years.

Mizoram's natural scenery will now be within reach of greater numbers of tourists. Aizawl and the surrounding locations are famous for their scenic beauty, such as Reiek, Phawngpui



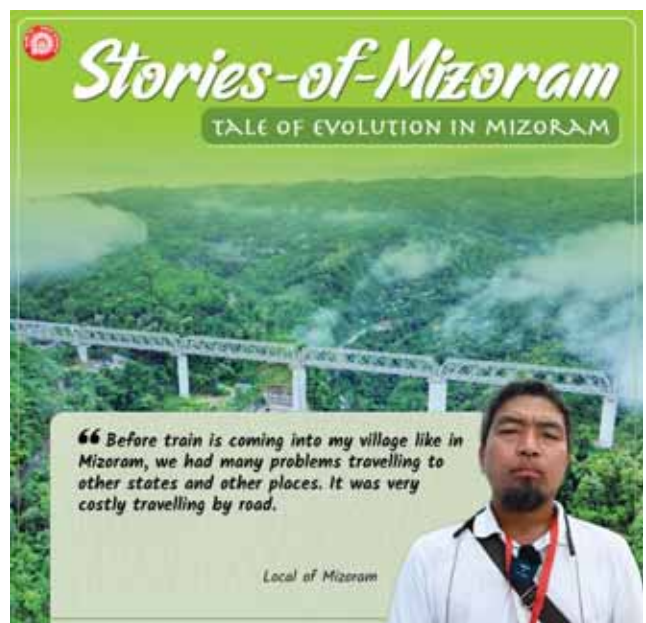


National Park, Vantawng Waterfalls, Tam Dil Lake, Dampa Tiger Reserve, and the Durtlang Hills. Railway authorities are set to launch Vistadome trains, allowing tourists to take in expansive views of mountains and valleys through large glass windows. This move is expected to boost the tourism sector, generate employment for locals, and give a fresh impetus to the state's economy.

The government also plans to extend the rail line to the Myanmar border, which is 232 km from Aizawl. This expansion will provide a big boost to India's Act East Policy. It will boost the military's logistics movement and enhance India's strategic standing against China. Mizoram's borders with Bangladesh and Myanmar are geopolitically sensitive, and establishing a strong railway network here is a necessity.

Locals did not believe they would have trains plying their lands. Today, the train whistle resonates in their villages, children run to catch a glimpse of the train at stations, and old men's eyes brim with tears as their lifetime wish materialises. It is not just any train on tracks, but the track of development. To future generations, the train won't be a ride—it'll be a train of possibilities.

When the train whistle finally echoes through the Lushai Hills, it will be more than a milestone for Mizoram—it will signal a new chapter of growth for the entire Northeast. The train is a testament to the vision of all-round connectivity, employment, tourism, security, and prosperity. Railway tracks are not just pieces of metal, they are roads of hope that bring people together. That dream has finally materialised in Mizoram, and its effects will go beyond borders, even to Myanmar. Indeed, the "Heaven of the Northeast" is now a future on rails, fast, prosperous, and full of promises.



# WINDOW SEAT TO SAIRANG

## A DELHI REPORTER'S THREE DAYS ON MIZORAM'S NEW RAIL LINE



**Poonam Gupta**  
Freelancer

The invitation fell on my newsroom desk in the form of a challenge: National Media Tour, Mizoram. A special service on the Bairabi-Sairang Railway Line. Even before my coffee had cooled, I said yes. The following morning, I was pressing my forehead against an airplane window as Delhi melted into a net of lights and then into the green of the Northeast. I was not following an itinerary—Delhi to Aizawl by air, Sairang to Bairabi and back by special train, Aizawl to Delhi—but following the feeling of a place where steel finally fulfills its promise.

Arrival, Aizawl. The plane wound about a halo of cloud, and the runway darted into sight like a bookmark in a favourite book. Aizawl showed itself in terraces and spires, a city that appears to hang by thread alone. I left my bag at Royale Lalawi, came out into the evening, and was at once delighted by the gentle ordering of the city—clean streets, market shawls folding and refolding, tea that smelled slightly of smoke, a hymn floating up a hillside church. In my room, the program card was on the desk: Leave at 08:00 for Sairang, take the special at 09:30, lunch in Bairabi at 14:30, back at 15:30, fly home the next day. So much change in such plain lines.

Morning took us down the ridges to the river. The Sairang station was painted in enamel to the last drop, with clean signs and straight edges, the Tlawng wound below in a slow brown circle. Engineers were there with the

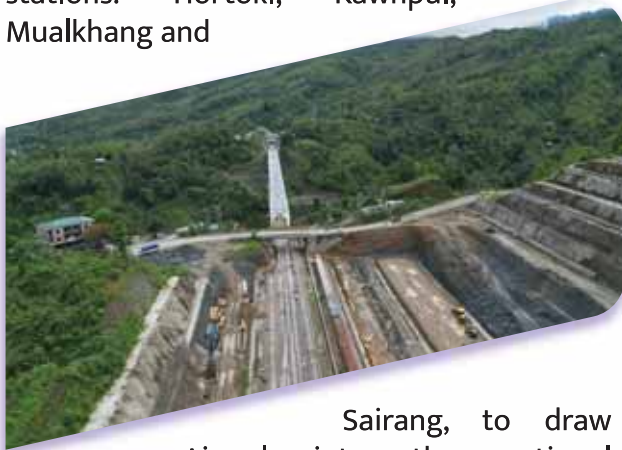
modesty of men who had wrestled against mountains and made them yield with forbearance. The employees exchanged pictures of piers on the bridge as parents exchanged school portraits. The locals waited with the sunlit alertness of first-time theatre-goers. At 9.30, a whistle tore the air and our coach heaved into action.

The line started speaking in the grammar of persistence inside the carriage. The Bairabi-Sairang railroad, a single broad gauge, 51.38 km long, had not flouted the mountains with the hope that they would yield. They were persuaded. There were 48 tunnels, almost 13 km of rock chewed us up and spat us out, making us breathe cool and spit us green. 142 bridges carried us along over water and valleys, the path going between the ridges like a seamstress at her work. Then the word I had brought with me to Delhi pushed aside the horizon: 104 meters of Bridge 196, a steel needle taller than the Qutub Minar by a flaunting 42 meters. Conversation thinned. Even the cameras paused. There are structures that do not require adjectives; they command stillness.

Stations came as new verses in a song: Hortoki, Kawnpui, Mualkhang, new fonts on new boards, platforms still reeking of cement. At Hortoki, a boy in a yellow raincoat reached up with one finger and tapped the signboard with the other, like a test to see whether the name had really been set. “First time?” he asked, shyly. “Mine too,” I said, and we both laughed at the privy rite of the hour. At Kawnpui, one of the women, who were selling oranges, pressed one into my palm and said, “When the trains begin, guests will come; our children will go farther.” The fruit was all in proportion, shrewd and sweet, like her sentence.

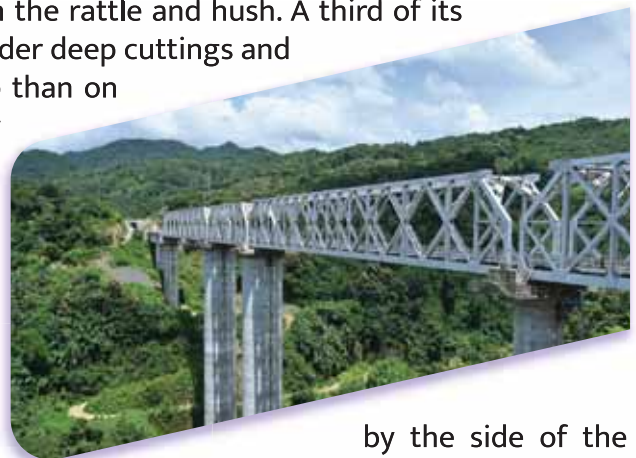
The portals between stations were flowered with painted motifs, dancers, patterns, and colours borrowed from the local textile, so that concrete mouths appeared to be celebration arches. The railway workers, half awake and half asleep, related to me the backstory of which I had read only the half-lines. A working season between November and March. The monsoons devoured the calendar and reduced the approach roads to slurry and the slope to snarling avalanches. Sand and aggregates were hauled out of Assam, Meghalaya, and West Bengal, occasionally dumped with cranes onto smaller vehicles where the road narrowed to a goat path. Girders were cut into pieces, hoisted up the mountain, and fitted once more onto platforms on the cliffs. You could hear the wheels whimpering at a ruling gradient of 1 in 80. Persuasion, one of the senior officials said, looking up at a wire-netted slope, is engineering. "You beg the hill to give you a meter more, and then another."

The heartbeat of the numbers was discovered in the rattle and hush. A third of its length is tunnel, another third bridge, the remainder deep cuttings and skilful curves, an alignment made less on a map than on gravity itself. Bairabi is joined by four new stations: Hortoki, Kawnpui, Mualkhang and



Sairang, to draw Aizawl into the national schedule with more than ink. There was a timetable somewhere out on this next turn; we could hear it already in the clatter of rail joints in our carriage.

Bairabi at 14:30 was a kind of homecoming to a town that had been waiting in the frame of a sentence. Lunch was both prodigal and simple, rice boiling like the promise, greens as green as the valley, meat all smoked to memory, and tea sweet without apology. We counted tunnels and bridges rather than bogies, and a porter who had a long enough memory to recall the first 42-wagon rice rake smiled. "Pehle gaadi ginte the; ab raaste (Back then, we counted wagons; now we count ways)," he said. Subsequently, a contractor told us how, after a night of heavy rain, he arrived to discover a week of labour in a heap



by the side of the slope. No furor, only re-setting: re-survey, re-peg, start over. The figures and margins of the line are as much dignified by that temperance as by the piers and the portals.

At 15:30, we rolled back with the theatre hush of a second act that knew where it was heading. I left the windows to do the business: tunnel shadow, flash of light, the startling discovery of a valley with the air in lazy folds. Even the Tlawng below Sairang was now made of brass in the oblique sun. The hills of Aizawl circled it with a new necklace of lights. The new concrete smelled of a chalk-clean odor; when combined with water, it smelled like a blank slate.

But a railway is not a performance, it is an operation. In a state where a Guwahati-Aizawl road journey has the chance to earn its fate in fog and landslides, the new connection will reduce that haul to less than 12 hours by train, at a fare of a few hundred rupees, the

difference between a journey deferred and a ticket purchased. Authorities were discussing trial runs in May, sectional commissioning in June 2025, and safety authorisations that transform a project into an operation. They had even discussed meaning: Aizawl bound by steel not only to Guwahati and Silchar, but further to the long spine of the country; Sairang as a transshipment centre to supply the Kaladan corridor to Sittwe Port in Myanmar; future surveys of the rails pushing on to the India-Myanmar border; the Northeast no longer an appendix, but an arrow in the Act East narrative.

The human ledger was simpler to tally out of doors. A grandmother who managed to reach Kolkata to seek treatment without struggling through 20 road hours. A student who chose a college by schedule rather than by fear. Groceries brought in fresher, cement brought in cheaper, small businesses expanding their radius of operation since freight now moves on physics and not chance. Trains carry options, said the orange-seller, who stopped a moment more just beyond Kawnpui to greet a relative. "And choices change people."

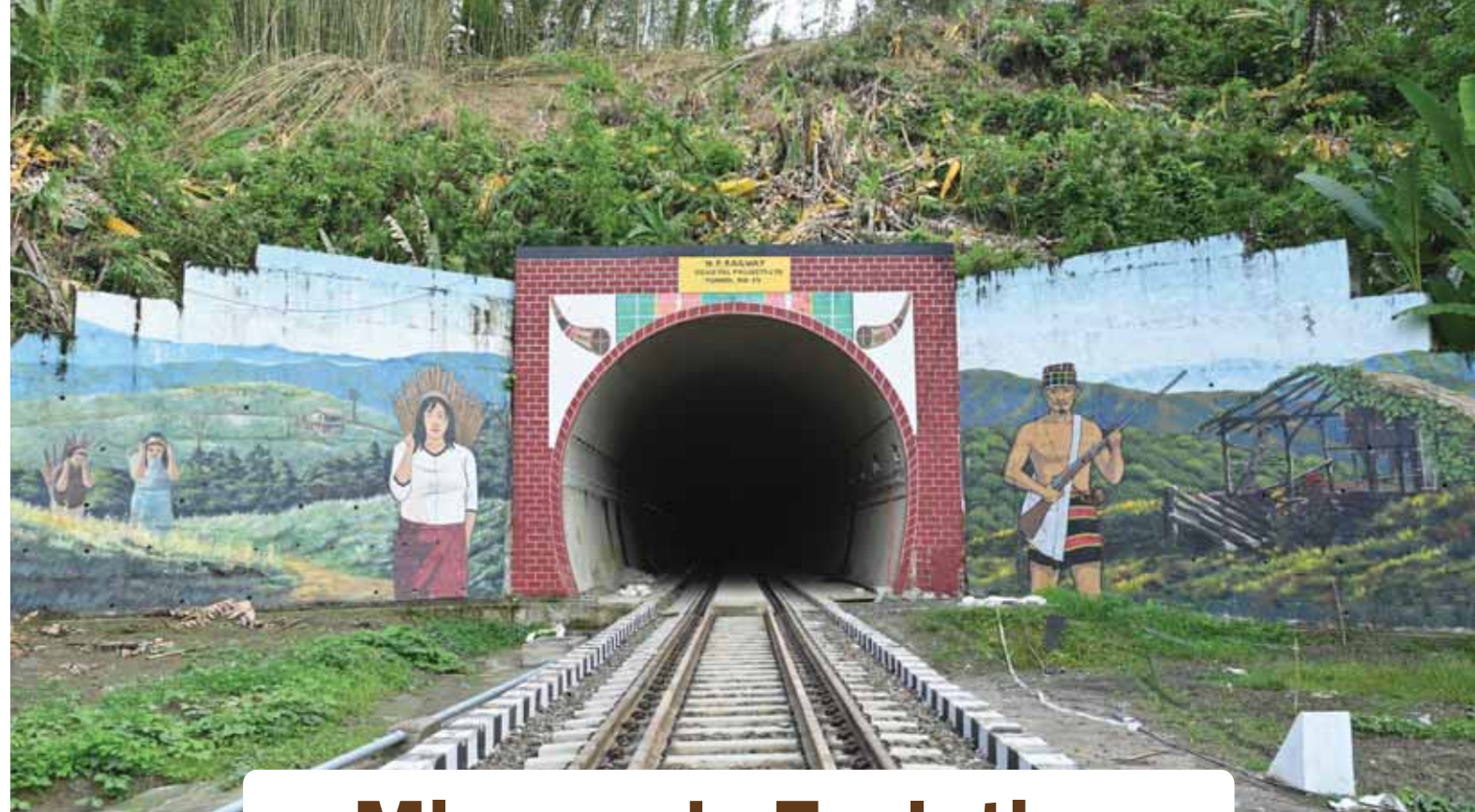
Aizawl that night retreated into the monotony of a workday: school uniforms, office bags, a motorbike with strange parcels piled on it. I went to the market, and allowed my reporter, who is used to calculation, to relax his way into the Californian ways of the wanderer. One of the shawl dealers stretched and unstretched wool till it drew the wrinkle out of the day. One girl put on a pair of shoes and stamped one foot to test the sole. One of the boys followed a paper plane up a flight of steps, and the wind blew it back into his hand. There was a choir somewhere; the notes swelled and plunged like a topographic map. The city was

prepared to receive visitors, and still more prepared to see its own young people start out and come back the same weekend.

The following morning I walked away reluctantly and to my surprise. The hills untied themselves into the plains as seen through the plane, and the grid of Delhi made its insistent claims again. But I did not come back with notes and photos only. I took another measuring rod of distance. Kilometres are one thing; choices are another. The Bairabi-Sairang line is 51.38 km on paper: a cancellation of excuses, an amendment of the national narrative in which far is reachable, someday is a date in a schedule, on the ground.

I was back at my desk and filed without romance: 31 percent tunnels, 21 percent bridges, a 104-m pier, four new stations, trials and commissioning in mid-2025, shorter journeys, stronger corridors. But this cannot be packed into a short canister: between Sairang and Bairabi, at the mouths of tunnels, flickering murals, the state turned a page, no trumpeting, just a whistle, punctually. I visited a railway; I came back imagining a girl tallying tunnels and a city tallying arrivals. The numbers explain it. The feeling says: Go.





# Mizoram's Evolution

## From Ancient Roots To Railway Routes



**Dinesh Kumar**

Deputy Director,  
Bihar Information  
Centre, New Delhi

### The Past

Mizoram is one of the seven states of Northeast India, popularly known as the “Seven Sisters”. Its identity is deeply shaped by natural beauty, rolling hills, bamboo forests, and diverse cultural traditions. The tribes of Mizoram are closely connected to the greater Mongoloid race. Their origins are generally traced to the border regions of China and Myanmar.

Several centuries ago, these communities settled permanently in the region that is now Mizoram. In earlier times, their way of life was based on shifting cultivation, community cooperation, and self-sufficiency. During British rule, the area was called the “Lushai Hills.” The Mizo chiefs often resisted colonial authority, as seen in the 1871–72 Lushai Expedition. Eventually, the British established administration here. Christian missionaries soon followed, introducing education and Christianity. Around the same time, the Roman script was adapted to the Mizo language, which gradually became a tool for literacy and modernisation.

### The Present

Today, Mizoram is the most literate state in India, with a literacy rate of about 91.58% according to the 2011 Census. This remarkable achievement reflects the contribution of missionaries and the social awareness of the people. Nearly 87% of Mizos are Christians.

Churches serve not only as places of worship but also as community and educational centers.

Politically, Mizoram has had a turbulent history. For decades, insurgency and the influence of the Mizo National Front shaped its politics. However, after the 1986 Peace Accord, the state embraced democracy and stability. Economically, Mizoram still relies heavily on agriculture. Shifting cultivation (jhum) was once dominant, but the government now promotes settled farming, horticulture, and bamboo-based industries. Crops like rice, maize, ginger, turmeric, and oilseeds provide the agricultural base. Tourism is also emerging as a new avenue of employment, thanks to the region's natural beauty and cultural diversity.

Major attractions include the scenic Blue Mountain (Phawngpui), Tamdil Lake, Vantawng Falls, Lunglei, Dampa Tiger Reserve, and Aizawl, the charming hill capital.

### Rich Cultural Tapestry

The Mizo language has its roots in the Tibeto-Burman family. Missionaries developed the Roman script for it, making education accessible. Today, Mizo literature includes folktales, songs, poetry, and modern writings.

Agriculture is not only an economic base but also central to festivals. Traditional celebrations include:



**Pawl Kut:** A harvest festival after shifting cultivation.

**Chapchar Kut:** Linked to bamboo clearing and burning.

**Mim Kut:** Associated with the maize harvest.

Mizoram's most famous dance is the Cheraw, or Bamboo dance, performed with bamboo staves clapped rhythmically while dancers step gracefully between them.

### Development on the Rise

Shifting cultivation is gradually being replaced by settled agriculture, increasing productivity.





Crops like ginger, turmeric, maize, and oilseeds have high potential for national and international markets. Bamboo covers nearly 30% of Mizoram's forest area, offering immense opportunities for industries such as handicrafts, furniture, paper, and textiles. Improved road and rail connectivity will also boost trade and tourism. Mizoram's location on Myanmar and Bangladesh borders makes it strategically important for India's "Act East Policy."

### **New Rail Line to Drive Growth**

At present, Mizoram has only one railway station at Bairabi, near the Assam border. Its capital, Aizawl, and other major towns are yet to be directly linked to the Indian Railways. This has slowed transport and industrial growth. To address this, Indian Railways has initiated the 51 km Bairabi–Sairang Railway Line Project to link Mizoram's capital, Aizawl, with the national railway network. This project involves the construction of many tunnels and bridges, some of which will rank among India's tallest. Once completed, it will not only transform Mizoram's economy but also boost agriculture, tourism, and international trade.

### **Flagbearer of Literacy and Harmony for India:**

The highest literacy rate in the country.

A strong message of peace and social harmony.

Enriching Indian culture with unique music, dance, and traditions.

Serving as a shining example of reconciliation and democratic integration after years of insurgency.

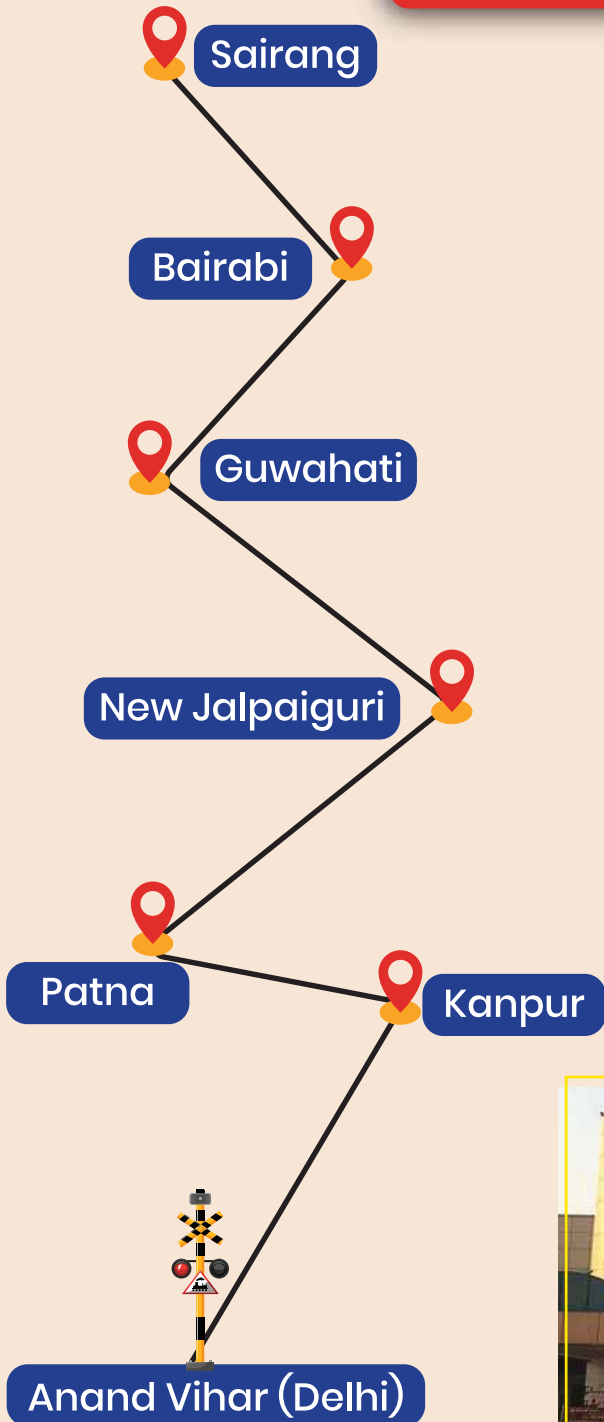
### **Future Potential**

Mizoram's past reflects its unique identity, while its present stands for literacy, peace, and development. The state has shown that with education and community spirit, any challenge can be overcome. Today, Mizoram is a model of high literacy, social harmony, and cultural pride. Its real potential, however, will be realized when it is better connected to the rest of India and the world. The Bairabi–Sairang railway line is not just a transport project; it is the bridge to Mizoram's future prosperity.

# SAIRANG ⇌ ANAND VIHAR (DELHI) RAJDHANI EXPRESS

Weekly Train Services for Mizoram People

Train No. 20507/20508



**Total Distance - 2512 km**

Total Station - 20

Weekly Train Services

From Sairang to Anand Vihar on Friday  
and Anand Vihar to Sairang on Sunday



# SAIRANG ⇌ KOLKATA EXPRESS

Train No. 13126/13125



**Total Distance -1505 km**

Total Station -26

Tri-weekly Express

(Monday, Thursday and Friday  
from Sairang to Kolkata)

(Tuesday, Wednesday and Saturday  
from Kolkata to Sairang)



# SAIRANG ⇌ GUWAHATI EXPRESS

Train No. 15610/15609

**Total Distance -494 km**

Total Station -12 (Daily)





MIZORAM'S NEW LINK TO DEVELOPMENT

# INAUGURATION OF BAIRABI-SAIRANG RAIL LINE

LENGTH: 51.38 KM



**BAIRABI**



**HORTOKI**



**KAWNPUI**



**MUALKHANG**



**SAIRANG**

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In view of the space constraints of the magazine, sometimes it becomes difficult to include longer articles. All are requested to appreciate our problem and co-operate.

 [editorindianrailways@gmail.com](mailto:editorindianrailways@gmail.com)

# Test Your Knowledge

1. Before 2014, the length of the railway line in Mizoram was:

(A) 0 km  (B) 5 km

(C) 51.38 km  (D) 42 km

2. The first broad gauge freight train arrived at Bairabi station in:

(A) 2014  (B) 2015

(C) 2016  (D) 2017

3. The first successful trial run to Sairang was conducted on:

(A) 1st May 2024  (B) 1st May 2025

(C) 10th June 2025  (D) 22nd August 2024

4. Total length of the Bairabi–Sairang Railway line is:

(A) 42 km  (B) 51.38 km

(C) 60 km  (D) 55 km

5. The longest tunnel in the project is approximately:

(A) 1.5 km  (B) 1.868 km

(C) 2 km  (D) 2.5 km

6. The number of stations on the Bairabi–Sairang line is:

(A) 3  (B) 4

(C) 5  (D) 6

7. Which of the following is NOT a station on the Bairabi–Sairang line?

(A) Hortoki  (B) Kawnpui

(C) Aizawl  (D) Mualkhang

8. Maximum speed potential of trains on this line is:

(A) 80 KMPH  (B) 100 KMPH

(C) 120 KMPH  (D) 60 KMPH

9. The total project cost of the Bairabi–Sairang line is approximately:

(A) Rs 5000 Crores  (B) Rs 8071 Crores

(C) Rs 10,000 Crores  (D) Rs 7000 Crores

10. How many tunnels are there along this railway line?

(A) 40  (B) 45

(C) 50  (D) 55

**11. Total length of bridges in the project is:**

- (A) 10 km  (B) 11.78 km   
(C) 15 km  (D) 20 km

**12. Number of major bridges in the project is:**

- (A) 50  (B) 55   
(C) 60  (D) 65

**13. Travel time between Bairabi and Sairang by train is expected to be:**

- (A) 7 hours  (B) 5 hours   
(C) 3 hours  (D) 4 hours

**14. The railway project is expected to boost which industry in Mizoram?**

- (A) Tea  (B) Bamboo   
(C) Cotton  (D) Coal

**15. The railway line traverses through which districts?**

- (A) Kolasib & Aizawl  (B) Lunglei & Champha   
(C) Serchhip & Mamit  (D) Lawngtlai & Saiha

**16. Which ongoing railway project will connect Sikkim to the national rail network?**

- (A) Dimapur–Kohima  (B) Jiribam–Imphal   
(C) Sivok–Rangpo  (D) Agartala–Sabroom

**17. The first BG passenger train between Bairabi and Silchar was flagged off in:**

- (A) 2014  (B) 2015   
(C) 2016  (D) 2017

**18. Which city is known as the “Gateway to North East India”?**

- (A) Agartala  (B) Guwahati   
(C) Imphal  (D) Aizawl

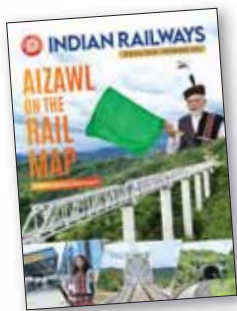
**19. Which of the following statements is true about tunnels in this project?**

- (A) There are 45 tunnels covering 31% of total length   
(B) Ballastless tracks are only on bridges   
(C) Tunnels are plain without decoration   
(D) No tunnel exceeds 1 km

**20. What is the total length of Bridge No. 144?**

- (A) 200 m  (B) 300 m   
(C) 378 m  (D) 500 m

1. (B) 2. (C) 3. (B) 4. (B) 5. (B) 6. (B) 7. (C) 8. (D)  
9. (B) 10. (B) 11. (B) 12. (B) 13. (C) 14. (B) 15. (A) 16. (C)  
17. (C) 18. (B) 19. (A) 20. (C)



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नॉर्थ ईस्ट में हर प्रोजेक्ट में अच्छी प्रोग्रेस हुई है। सिक्किम में प्रोजेक्ट सेवक से रंगपो तक पहुँच रहा है। असम में नए-नए काम किए जा रहे हैं, त्रिपुरा में आजादी के बाद पहली बार ब्रॉड गेज लाइन आई है।

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अश्विनी वैष्णव  
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