

SMART MANIPUR DEVELOPMENT MISSION

2035

*Infrastructure for a Prosperous,
Sustainable & Inclusive Manipur*

A VISION FOR VIKSIT MANIPUR @ 2047



Smart
Infrastructure



Inclusive
Development



Sustainable
Environment



Digital
Governance



Economic
Growth



Government of Manipur
Planning & Development Department
Building Today, Transforming Tomorrow

INFRASTRUCTURE | INNOVATION | INCLUSION | SUSTAINABILITY



NAVGYAN TRIBAL EMPOWERMENT AND RURAL TRUST

PROJECT PROPOSAL

PROJECT PROPOSAL

SMART MANIPUR DEVELOPMENT MISSION (SMDM) – 2035

**Integrated Urban, Infrastructure, Healthcare, Education, Economic & Sustainable
Development Plan**

(Proposed Investment: ₹1,00,000 Crore)

Submitted To

**Government of India
Ministry of Housing & Urban Affairs
Nirman Bhawan
Maulana Azad Road
New Delhi – 110011**

Submitted By

**NAVGYAN TRIBAL EMPOWERMENT AND RURAL TRUST
CSR Registration No.: CSR00042911
NITI Aayog NGO DARPAN Unique ID: MN/2022/0330736
Registered Office:
Chingkhram Kabui, Lilong,
Thoubal District, Manipur – 795130**



SMART MANIPUR DEVELOPMENT MISSION (SMDM) – 2035

VISION 2035
Smart Cities
Strong Economy
Sustainable Future
Better Lives

Building a Smart, Sustainable & Prosperous Manipur

Integrated Urban, Infrastructure, Healthcare, Education, Economic & Sustainable Development Plan



INVESTMENT
**₹1,00,000
CRORE**

2027 – 2035

KEY SECTORS



SMART URBAN INFRASTRUCTURE

Integrated city development, smart buildings, public spaces & urban amenities



TRANSPORTATION & MOBILITY

Smart roads, bridges, intelligent transport systems & seamless connectivity



WATER, SANITATION & WASTE MANAGEMENT

24x7 water supply, sewerage, solid waste management & clean cities



HEALTHCARE DEVELOPMENT

Modern hospitals, primary health centers, telemedicine & health infrastructure



EDUCATION & SKILL DEVELOPMENT

Smart schools, colleges, universities, digital education & skill training centers



ECONOMIC GROWTH & INDUSTRY

Industrial parks, MSME support, startup ecosystem & job creation



ENVIRONMENT & SUSTAINABILITY

Renewable energy, green infrastructure, climate resilience & eco-conservation



DIGITAL GOVERNANCE & SMART TECHNOLOGY

E-governance, data platforms, citizen services & smart city solutions



TOURISM & CULTURAL HERITAGE

Tourism development, cultural preservation, heritage sites & ecotourism

MISSION OBJECTIVES

- ✓ Holistic & integrated development of Manipur
- ✓ Strengthen infrastructure & public services
- ✓ Promote economic growth & employment
- ✓ Ensure environmental sustainability
- ✓ Improve quality of life for all citizens
- ✓ Build disaster resilient & future-ready cities

EXPECTED OUTCOMES

- Improved Quality of Life
- Enhanced Infrastructure & Connectivity
- Economic Growth & Investment
- Employment Generation & Skill Development
- Sustainable & Green Development
- Digital & Transparent Governance

IMPLEMENTATION APPROACH



INVESTMENT SNAPSHOT



MISSION TIMELINE



Sustainable Manipur



Prosperous Manipur



Smart Manipur



Stronger Manipur



Better Lives for All

TOGETHER FOR A BETTER TOMORROW



NAVGYAN TRIBAL
EMPOWERMENT AND
RURAL TRUST

CSR Registration No.
CSR000042911

NTTI Aayog NGO DARPAN
Unique ID: MN/2022/0330736

SMART MANIPUR DEVELOPMENT MISSION (SMDM) – 2035

Building a Smart, Sustainable, Prosperous & Inclusive Manipur

Integrated Urban, Infrastructure, Healthcare, Education, Economic & Sustainable Development Plan

PROPOSED INVESTMENT
**₹1,00,000
CRORE**

2027 – 2035



VISION 2035

A TRANSFORMATIVE VISION FOR A DEVELOPED, CONNECTED,
SUSTAINABLE AND EMPOWERED MANIPUR



VIKSIT MANIPUR
VIKSIT BHARAT @2047

MISSION OBJECTIVES

- Holistic & integrated development of Manipur
- Strengthen infrastructure & public services
- Promote economic growth & employment
- Ensure environmental sustainability
- Improve quality of life for all citizens
- Build disaster resilient & future-ready cities

KEY FOCUS SECTORS



IMPLEMENTATION APPROACH



INVESTMENT AT A GLANCE (₹1,00,000 CRORE)



EXPECTED OUTCOMES

- Improved Quality of Life
- World-Class Infrastructure & Connectivity
- Strong Economy & Increased Investment
- Employment Generation & Skill Development
- Sustainable & Green Environment
- Digital & Transparent Governance

WHY SMART MANIPUR?

- Strategic location – Gateway to South East Asia
- Rich cultural heritage & tourism potential
- Young population & abundant talent
- Supportive government policies
- Huge opportunities for investment & development
- Building a resilient, inclusive and future-ready Manipur



SMART INFRASTRUCTURE



STRONG ECONOMY



SUSTAINABLE ENVIRONMENT



EMPOWERED PEOPLE



BETTER LIVES FOR ALL

TOGETHER FOR A BETTER TOMORROW

President's Message

Palmei Sorjini

President

It gives me immense pleasure to present the **Smart Manipur Development Mission (SMDM) – 2035**, a transformative vision designed to build a prosperous, sustainable, inclusive, and future-ready Manipur. This mission represents our collective aspiration to create a state where every citizen has access to quality infrastructure, modern healthcare, excellent education, clean water, sustainable livelihoods, efficient governance, and equal opportunities for growth.

Manipur is blessed with extraordinary natural beauty, rich cultural heritage, resilient communities, and immense human potential. With strategic planning and collaborative efforts, these strengths can be transformed into sustainable economic growth and improved quality of life. The Smart Manipur Development Mission has therefore been conceptualized as an integrated development framework that brings together infrastructure, digital innovation, renewable energy, agriculture, tourism, entrepreneurship, environmental sustainability, disaster resilience, and social development under one comprehensive vision.

Our mission is not limited to constructing roads, buildings, or public infrastructure. It is about empowering people, creating employment opportunities, strengthening local economies, protecting our environment, preserving our cultural heritage, and ensuring that development reaches every village, town, and community across the state. Through smart planning, transparent governance, technology-driven solutions, and active public participation, we aim to establish a development model that is inclusive, resilient, and sustainable for generations to come.

This initiative emphasizes partnerships among government agencies, local communities, development institutions, private sector organizations, academic institutions, and civil society. Such collaboration will enable us to mobilize resources, share knowledge, adopt global best practices, and ensure efficient implementation of projects that truly benefit the people of Manipur.

Special attention has been given to women, youth, farmers, entrepreneurs, tribal communities, and vulnerable populations so that the benefits of development are shared equitably. By investing in education, healthcare, skill development, innovation, digital governance, renewable energy, tourism, and climate resilience, we seek to unlock the full potential of our people while safeguarding the environment and strengthening our economy.

I sincerely appreciate every stakeholder, expert, institution, and community member who has contributed ideas, guidance, and commitment toward this vision. Their dedication inspires confidence that together we can transform this mission into measurable progress and lasting prosperity.

Let us move forward with determination, innovation, and unity to build a **Smart, Sustainable, Resilient, and Prosperous Manipur**—a state that offers opportunity, dignity, and a better future for every citizen.

Together, let us shape the Manipur of tomorrow.

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Executive Summary	Smart Manipur Development Mission (SMDM) – 2035 The Smart Manipur Development Mission (SMDM) – 2035 is a comprehensive, integrated, and future-oriented development proposal envisioned to transform the State of Manipur into a model of sustainable urban development, economic prosperity, environmental resilience, and inclusive social growth. With a proposed investment of ₹1,00,000 Crore, the mission seeks to accelerate infrastructure development, strengthen public services, generate employment, and improve the quality of life for citizens through a phased implementation strategy over the period 2027–2035. Manipur occupies a strategically significant position in India's North Eastern Region and serves as an important gateway to Southeast Asia under the Government of India's Act East Policy. Despite its strategic location and rich cultural, ecological, and tourism potential, the state continues to face challenges related to urban infrastructure, healthcare accessibility, quality education, transportation, industrial growth, employment generation, digital connectivity, and disaster resilience. The proposed mission aims to address these developmental gaps through a coordinated and integrated planning framework. The Smart Manipur Development Mission is designed around fifteen strategic development sectors including smart urban infrastructure, healthcare, education, transportation, water supply, sanitation, renewable energy, affordable housing, tourism, digital governance, industrial development, agriculture and food processing, smart markets, environmental conservation, and skill development. Together, these sectors will establish a strong foundation for sustainable economic growth while ensuring equitable access to public services across urban and rural regions of the state. The proposal includes the modernization of government hospitals, establishment of super-specialty healthcare facilities, construction of new medical colleges, development of digitally enabled schools and higher educational institutions, expansion of vocational and skill development centres, and creation of innovation and research ecosystems to prepare the youth of Manipur for emerging employment opportunities. Infrastructure development forms the backbone of the proposed mission. Major investments are proposed for smart roads, bridges, intelligent traffic management systems, electric public transportation, integrated bus terminals, water supply networks, sewerage systems, solid waste management, flood mitigation infrastructure, and renewable energy projects. These interventions are expected to significantly improve urban mobility, environmental sustainability, and disaster preparedness while supporting long-term economic growth. Recognizing the economic potential of Manipur, the proposal also emphasizes the development of modern commercial markets, logistics hubs, food processing parks, bamboo and handicraft clusters, tourism circuits, startup incubation centres, and industrial infrastructure that will enhance local entrepreneurship, attract private investment, promote exports, and strengthen regional trade. Digital transformation constitutes another key pillar of the mission. The establishment of integrated command and control centres, smart governance platforms, digital public services,
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intelligent surveillance systems, public Wi-Fi infrastructure, and data-driven urban management will enhance governance efficiency, transparency, and citizen service delivery.

The Smart Manipur Development Mission is expected to create approximately **4 lakh direct employment opportunities** and over **10 lakh indirect jobs** during its implementation, contributing substantially to poverty reduction, skill enhancement, and inclusive economic development. The mission further aims to improve health outcomes, educational standards, tourism potential, environmental quality, and investment attractiveness across the state.

The implementation framework proposes a phased approach involving collaboration among the **Government of India, Government of Manipur**, urban local bodies, development agencies, financial institutions, private sector partners, academic institutions, and civil society organizations. Financing may be mobilized through Central and State Government schemes, Public-Private Partnerships (PPP), multilateral development agencies, institutional finance, and private investment, subject to applicable policies and approvals.

Smart roads & Highway's



SMART ROADS, HIGHWAYS & BRIDGES

Building Connected Manipur, Enabling Progress & Prosperity

Safe • Smart • Sustainable • Seamless Connectivity

OUR VISION

World-class roads and bridges network for a connected, modern and future-ready Manipur.

KEY FEATURES

- 4/6 Lane Highways
- Intelligent Traffic Management Systems
- Smart Street Lighting (Solar Powered)
- Strong & Safe Bridges
- Green Road Corridors
- Digital Monitoring & Maintenance





Modern Bridges for Stronger Connectivity



All Weather Connectivity



Widening & Upgradation
Smoother, faster & safer journeys



Smart Traffic Management
AI based traffic monitoring and control



Safety First
Better signage, crash barriers & road safety systems



Eco-Friendly Corridors
Green plantations, rainwater harvesting & slope protection



Quality Construction
Use of latest technologies for durable infrastructure

IMPACT

- ✓ Better connectivity
- ✓ Boost to transportation
- ✓ Reduced travel time
- ✓ Enhanced road safety
- ✓ All-weather connectivity
- ✓ Job creation

SMART ROADS TODAY, STRONGER MANIPUR TOMORROW

CONNECTED MANIPUR
 PROSPEROUS MANIPUR
 SUSTAINABLE MANIPUR
 EMPOWERED MANIPUR

Smart Healthcare Infrastructure



SMART HEALTHCARE INFRASTRUCTURE

HEALTHY MANIPUR, HEALTHY FUTURE

VISION 2035
SMARTER HEALTHCARE
STRONGER MANIPUR

Accessible • Affordable • Advanced • Sustainable • For All
A comprehensive, technology-driven healthcare ecosystem to ensure quality healthcare for every citizen of Manipur, from urban centers to the remotest villages.



World-Class Super Speciality Hospitals

Upgraded PHCs & CHCs

Telemedicine & Digital Health Network

KEY COMPONENTS



INFRASTRUCTURE HIGHLIGHTS



IMPACT & BENEFITS



KEY INITIATIVES



**SMART HEALTHCARE TODAY,
HEALTHY MANIPUR TOMORROW**

Education & Human Capital Development



EDUCATION & HUMAN CAPITAL DEVELOPMENT

EMPOWERING MINDS, BUILDING FUTURES, TRANSFORMING MANIPUR

VISION 2035
EDUCATED YOUTH
EMPOWERED MANIPUR

Quality Education • Skilled Youth • Innovative Learning • Inclusive Growth • Stronger Manipur



KEY INITIATIVES



FOCUS AREAS



EXPECTED OUTCOMES



KEY INFRASTRUCTURE & FACILITIES



**INVESTING IN EDUCATION TODAY,
BUILDING A PROSPEROUS MANIPUR TOMORROW**

EDUCATED YOUTH | SKILLED WORKFORCE | INNOVATIVE MANIPUR | PROSPEROUS FUTURE | TOGETHER FOR A SMART, EDUCATED & EMPOWERED MANIPUR

Water Supply, Sewerage & Sanitation



**SMART
MANIPUR**
DEVELOPMENT MISSION
(SMDM) – 2035

WATER SUPPLY, SEWERAGE & SANITATION

CLEAN WATER, HEALTHY MANIPUR, SUSTAINABLE FUTURE

Ensuring Safe Water • Effective Sewerage • Clean Environment • Better Quality of Life for All

SAFE DRINKING WATER FOR EVERY HOME



MODERN SEWERAGE SYSTEMS



CLEAN SURROUNDINGS, HEALTHY COMMUNITIES



TREAT, RECYCLE



KEY COMPONENTS

- WATER SUPPLY SYSTEM**
24x7 piped water supply, newer & pumping stations, smart metering.
- SEWERAGE NETWORK**
Underground diversion structures, modern pumping stations.
- WASTEWATER TREATMENT**
Sewage Treatment Plants (STPs), advanced technology, reuse of treated water.
- SOLID WASTE MANAGEMENT**
Door-to-door collection, segregation at source, waste processing & scientific disposal.
- DRAINAGE & STORMWATER MANAGEMENT**
Efficient stormwater drains, rainwater harvesting, flood prevention.
- HYGIENE & SANITATION**
Public toilets, community toilets, awareness programs, behavior change initiatives.

OUR OBJECTIVES

- Ensure 100% access to safe and clean drinking water.
- Provide robust sewerage system & 100% wastewater treatment.
- Promote cleanliness, hygiene & healthy living.
- Protect water bodies & improve environmental quality.
- Create sustainable infrastructure for future generations.

EXPECTED OUTCOMES

- Improved public health & quality of life
- Reduction in water-borne diseases
- Clean rivers, lakes & surroundings
- Efficient water use & conservation
- Sustainable & resilient urban infrastructure

KEY INFRASTRUCTURE INITIATIVES



INVESTMENT ALLOCATION



SUSTAINABLE APPROACH



EVERY DROP COUNTS, EVERY ACTION MATTERS



SAFE WATER | EFFECTIVE SEWERAGE | CLEAN SANITATION | HEALTHY ENVIRONMENT | BETTER TOMORROW | TOGETHER FOR AND SUSTAINABLE

Smart Markets & Commercial Development



**SMART
MANIPUR**
DEVELOPMENT MISSION
(SMDM) – 2035

SMART MARKETS & COMMERCIAL DEVELOPMENT

BUILDING VIBRANT ECONOMIES, EMPOWERING COMMUNITIES, GROWING MANIPUR

MODERN MARKETS • THRIVING BUSINESSES • STRONGER MANIPUR

**VISION
2035**
PROSPEROUS MARKETS
PROGRESSIVE MANIPUR

MODERN MARKET COMPLEXES



Well-planned, clean & organized markets with modern facilities

COMMERCIAL HUBS & BUSINESS CENTERS



Creating world-class business destinations & commercial spaces

WHOLESALE MARKETS & LOGISTICS HUBS



Efficient supply chains, warehousing & logistics for economic growth

STREET VENDOR ZONES



Designated, hygienic & smart zones for street vendors & local entrepreneurs

MULTI-LEVEL PARKING FACILITIES



Easier access, less congestion, better urban mobility

KEY COMPONENTS

- Modern Retail Market Complexes: Infrastructure upgradation with smart amenities
- Commercial & Business Hubs: Office spaces, co-working spaces, convention & exhibition centers
- Wholesale Markets & Logistics: Integrated logistics parks, cold storage, transport connectivity
- Street Vendor Infrastructure: Hawker zones, kiosks, basic amenities, digital support
- Digital Market Platforms: E-marketplaces, digital payments, online licensing
- Urban Design & Public Spaces: Attractive public spaces, landscaping, signage & wayfinding

KEY OBJECTIVES

- Develop modern, hygienic & sustainable market infrastructure
- Boost local businesses, trade & entrepreneurship
- Increase employment & livelihood opportunities
- Strengthen supply chain & logistics efficiency
- Promote digital payments & smart governance
- Enhance urban economy & investment climate



EXPECTED OUTCOMES

- Increased trade & business activities
- Higher investment & economic growth
- More jobs & better livelihoods
- Improved urban infrastructure & services
- Cleaner, safer & organized market environments
- Enhanced tax revenues for local bodies

KEY INFRASTRUCTURE INITIATIVES



INVESTMENT ALLOCATION



PARTNERSHIP & IMPLEMENTATION MODEL



IMPACT ON MANIPUR



SMART INFRASTRUCTURE | THRIVING BUSINESSES | EMPOWERED COMMUNITIES | SUSTAINABLE FUTURE | SMART MARKETS TODAY, PROSPEROUS MANIPUR TOMORROW

Tourism Infrastructure Development



TOURISM INFRASTRUCTURE DEVELOPMENT

PROMOTING HERITAGE, NATURE & SUSTAINABLE GROWTH

VISION 2035

TOURISM TODAY
PROSPERITY TOMORROW

STRONGER TOURISM

MORE OPPORTUNITIES

GREENER TOMORROW

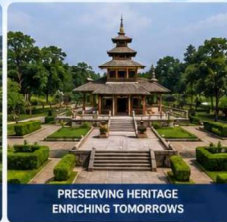
A PROSPEROUS MANIPUR



SUSTAINABLE TOURISM
STRONGER MANIPUR



WORLD-CLASS TOURISM
INFRASTRUCTURE



PRESERVING HERITAGE
ENRICHING TOMORROWS



ADVENTURE & ECO-TOURISM
NEW POSSIBILITIES



BETTER FACILITIES
GREATER EXPERIENCE

KEY INFRASTRUCTURE INITIATIVES



TOURIST CIRCUITS



Develop integrated
tourism circuits
across key destinations



TOURIST FACILITIES



Hotels, Resorts, Lodges
and Guest Houses



HERITAGE CONSERVATION



Preserve and develop
heritage sites and
cultural landmarks



ECO-TOURISM INFRASTRUCTURE



Eco-friendly infrastructure
for sustainable tourism



CONNECTIVITY & ACCESS



Better roads, airports,
signage & last-mile
connectivity



TOURISM SUPPORT SERVICES

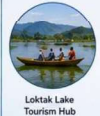


Information centers,
guides, safety &
support systems

KEY BENEFITS

- More Tourists, More Revenue
- Employment for Local Communities
- Preservation of Culture & Natural Heritage
- Boost to Local Economy
- Sustainable & Responsible Tourism Growth

MAJOR TOURISM PROJECTS



Loktak Lake
Tourism Hub



Eco-Tourism
Destinations



Heritage Site
Development



Adventure &
Recreation



Tourism Infrastructure
& Facilities

TARGETS (2035)



10 Million+
Annual Tourists



₹15,000+
Core Economic
Impact



1+ Lakh
Direct & Indirect
Jobs



Sustainable
& Responsible
Tourism

BUILDING A TOURISM-DRIVEN MANIPUR



Our Heritage. Our Pride. Our Future.



CONNECTED DESTINATIONS



STRONGER ECONOMY



PROTECTED HERITAGE



SUSTAINABLE TOMORROW

SMART TOURISM FOR
A STRONGER MANIPUR

Smart Public Transport & Electric Mobility



SMART PUBLIC TRANSPORT & ELECTRIC MOBILITY

CLEANER • SMARTER • CONNECTED MANIPUR

SUSTAINABLE TRANSPORT FOR A GREENER, HEALTHIER & PROSPEROUS MANIPUR

VISION 2035

CONNECTED MOBILITY
SUSTAINABLE FUTURE



Modern, comfortable & zero-emission
buses for smart cities



Promoting e-scooters, e-rickshaws
& shared electric mobility



Integrated, reliable & efficient public
transport network



Seamless connectivity between bus,
rail, air & shared mobility



Wide network of fast & smart
EV charging stations



AI-enabled traffic management,
real-time tracking & smart solutions

KEY COMPONENTS

- Electric Bus Fleet
Procurement of electric buses with modern amenities
- E-Mobility Promotion
E-scooters, e-rickshaws, e-taxis & shared mobility
- Transit Infrastructure
Bus terminals, depots, shelters, dedicated lanes
- Smart Ticketing System
Cashless payments, smart cards, mobile app based ticketing
- EV Charging Network
Fast charging stations at key locations, depots & highways
- ITS & Traffic Management
AI/IoT based traffic control, CCTV, real-time passenger information

OUR OBJECTIVES

- Provide affordable, reliable & accessible public transport for all
- Reduce pollution & carbon emissions through electric mobility
- Improve last-mile connectivity in urban & rural areas
- Integrate multiple modes of transport for seamless travel
- Enhance road safety & reduce traffic congestion
- Promote green jobs & support sustainable economic growth

MOVE SMART, MOVE GREEN MOVE MANIPUR FORWARD



EXPECTED OUTCOMES

- Increased public transport usage
- Reduction in vehicular emissions & air pollution
- Lower traffic congestion & travel time
- Cost savings for commuters
- Improved road safety
- Boost to green economy & investment
- Enhanced quality of life for citizens

KEY INFRASTRUCTURE INITIATIVES

- Bus Rapid Transit (BRT) Corridors
- Multi-Modal Transport Hubs
- Dedicated Bus Lanes
- Smart Bus Stops & Shelters
- EV Charging Stations
- Park & Ride Facilities
- Integrated Ticketing & Information System
- Fleet Management System
- Cycling Tracks & Walkways

INVESTMENT ALLOCATION



FUNDING PATTERN



ENVIRONMENTAL & SOCIAL BENEFITS

- Cleaner Air
Better Health
- Lower Carbon
Emissions
- Sustainable
Cities
- Inclusive
Mobility
- Job Creation
& Livelihoods

“Smart Mobility Today,
Sustainable Manipur Tomorrow.
Together, Let's Drive Towards
a Greener & Smarter Future!”



CLEANER AIR
BETTER HEALTH



ECONOMIC GROWTH
MORE JOBS



INCLUSIVE MOBILITY
FOR ALL



SAFER ROADS
SMARTER SYSTEMS

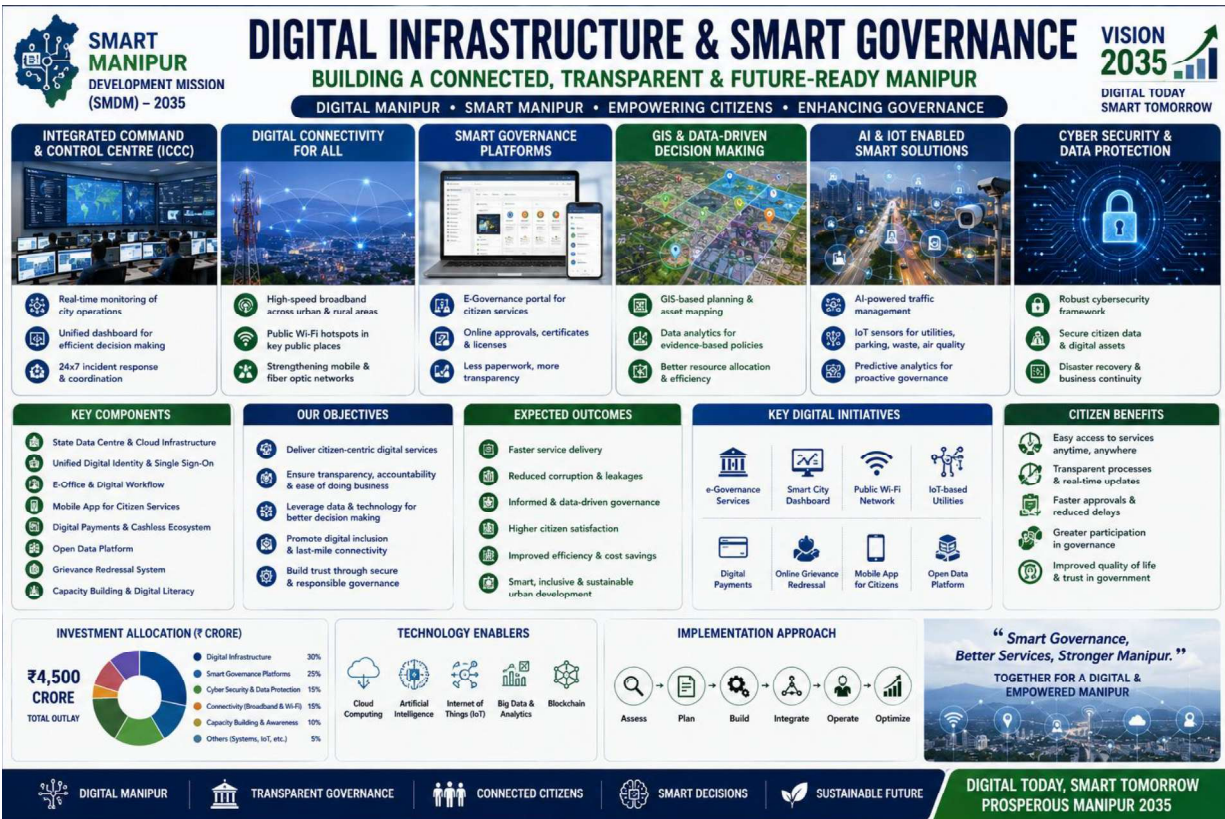


SUSTAINABLE FUTURE
STRONGER MANIPUR

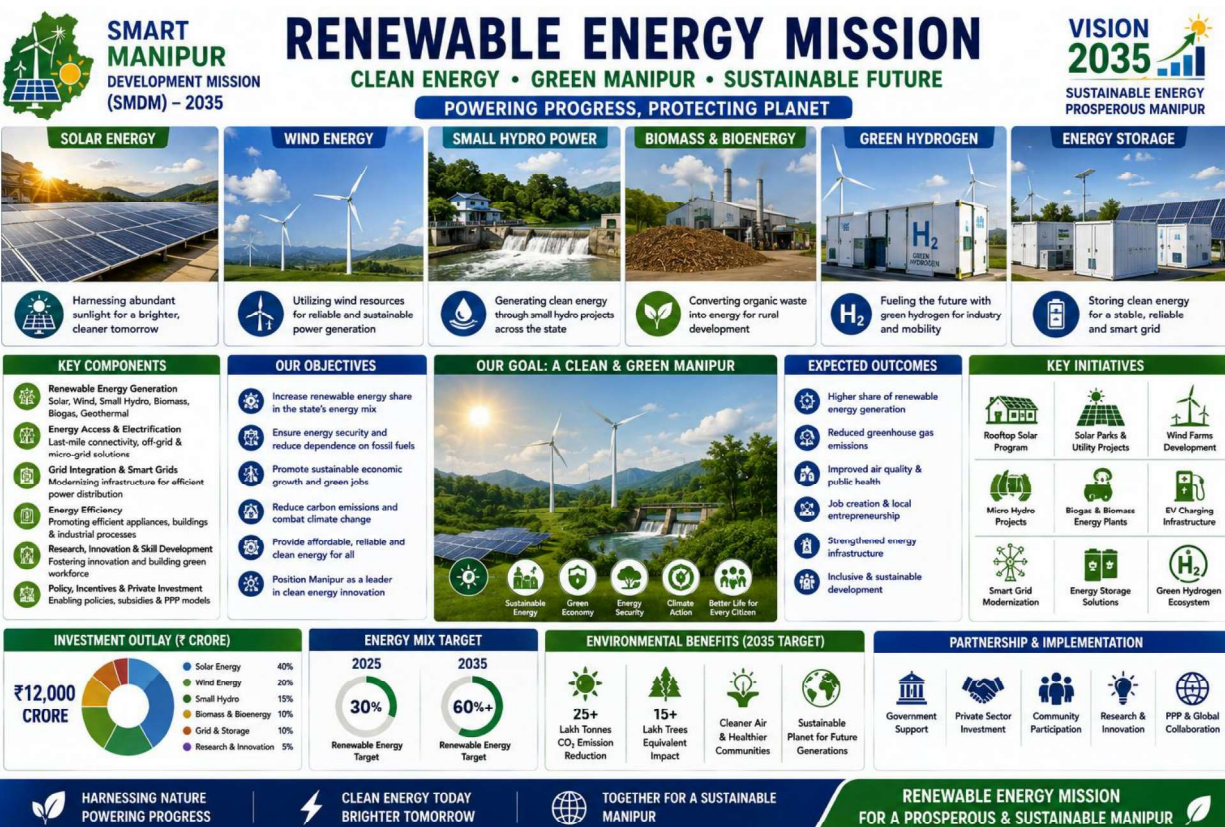
SMART TRANSPORT.
STRONGER CONNECTIONS.
PROSPEROUS MANIPUR.



Digital Infrastructure & Smart Governance



Renewable Energy Mission



Affordable Housing & Urban Development



Agriculture & Food Processing



Disaster Management & Climate Resilience



**SMART
MANIPUR**
DEVELOPMENT MISSION
(SMDM) – 2035

DISASTER MANAGEMENT & CLIMATE RESILIENCE

SAFER MANIPUR • RESILIENT COMMUNITIES • SUSTAINABLE FUTURE

**VISION
2035**
RESILIENT MANIPUR
SAFE MANIPUR

PREPARED TODAY, RESILIENT TOMORROW



Women & Youth Entrepreneurship



**SMART
MANIPUR**
DEVELOPMENT MISSION
(SMDM) – 2035

WOMEN & YOUTH ENTREPRENEURSHIP

EMPOWERING DREAMS • BUILDING ENTERPRISES • SHAPING A PROSPEROUS MANIPUR

**VISION
2035**
EMPOWERED YOUTH
STRONG WOMEN
PROGRESSIVE MANIPUR

ENTREPRENEURIAL MANIPUR – INNOVATIVE, INCLUSIVE & IMPACTFUL



Project Management, Monitoring & Capacity Building



**SMART
MANIPUR**
DEVELOPMENT MISSION
(SMDM) – 2035

PROJECT MANAGEMENT, MONITORING & CAPACITY BUILDING

EFFECTIVE PLANNING • EFFICIENT IMPLEMENTATION • MEASURABLE IMPACT

STRONG SYSTEMS. SKILLED PEOPLE. SUSTAINABLE RESULTS.

**VISION
2035**

EFFECTIVE GOVERNANCE
EMPOWERED COMMUNITIES
PROSPEROUS MANIPUR



PROJECT PLANNING & DESIGN

- Needs Assessment & Stakeholder Consultation
- Project Identification & Prioritization
- Detailed Project Reports (DPRs) & Feasibility Studies
- Resource Planning & Risk Assessment



EFFICIENT PROJECT IMPLEMENTATION

- Clear Implementation Framework
- Timely Procurement & Resource Mobilization
- Quality Assurance & Compliance
- Coordination & Convergence Across Departments



MONITORING & EVALUATION

- Real time Monitoring Using MIS & Dashboards
- Key Performance Indicators (KPIs) & Milestone Tracking
- Field Inspections & Progress Verification
- Impact Evaluation & Learning Feedback



CAPACITY BUILDING & SKILL DEVELOPMENT

- Training Needs Assessment & Custom Programs
- Technical & Functional Skill Development
- Leadership & Soft Skills Enhancement
- Exposure Visits, Workshops & Knowledge Sharing



KNOWLEDGE MANAGEMENT & INNOVATION

- Documentation of Best Practices & Lessons Learned
- Knowledge Repositories & Digital Libraries
- Innovation Challenges & Idea Platforms
- Promote Research, Evidence & Data-driven Decisions



STAKEHOLDER ENGAGEMENT & COMMUNICATION

- Community Participation & Social Inclusion
- Transparent Communication & Grievance Redressal
- Public Awareness Campaigns & Information Dissemination
- Partnerships with NGOs, Private Sector & Academia

- #### KEY COMPONENTS
- Project Management Unit (PMU)
 - Standard Operating Procedures (SOPs)
 - Project Cycle Management
 - Financial Management & Utilization Tracking
 - Risk Management & Mitigation
 - Monitoring, Evaluation & Reporting
 - Capacity Assessment & Development
 - Change Management

- #### OUR OBJECTIVES
- Strengthen institutional capacity for effective project delivery
 - Ensure transparency, accountability & timely execution
 - Build a skilled & motivated workforce
 - Improve monitoring systems for data-driven governance
 - Promote learning, innovation & continuous improvement
 - Ensure sustainable impact & community ownership



- #### EXPECTED OUTCOMES
- Improved project completion rate & quality
 - Optimal use of resources & cost efficiency
 - Enhanced transparency & accountability
 - Stronger capacities of officials, partners & communities
 - Evidence-based decision making & policy improvements
 - Greater citizen satisfaction & trust

- #### KEY INITIATIVES
- Project Management Training Academy
 - Digital Monitoring Dashboard
 - Performance Scorecards
 - E-Learning & Knowledge Portal
 - Sectoral Capacity Building Programs
 - Exposure Visits & Peer Learning
 - Innovation Lab & Best Practice Hub
 - Community Resource Persons (CRPs)
 - Annual Review & Learning Workshops



- #### MONITORING & MIS
- Real time Data Collection
 - Live Dashboards & Analytics
 - Geo-tagging & GIS Mapping
 - Mobile App for Field Monitoring

- #### CAPACITY BUILDING IMPACT (BY 2035)
- 50,000+ Officials Trained
 - 10,000+ Community Leaders Trained
 - 500+ Trainings & Workshops
 - 100+ Knowledge Partners

- #### PARTNERSHIP & COLLABORATION
- Government Departments
 - NGOs & Civil Society
 - Private Sector Partners
 - Academic & Research Institutions
 - International Organizations

PLAN SMART IMPLEMENT BETTER | **BUILD CAPACITY DRIVE CHANGE** | **MONITOR, LEARN, IMPROVE** | **TOGETHER WE DELIVER A BETTER MANIPUR** | **STRONG SYSTEMS. SKILLED PEOPLE. SUSTAINABLE RESULTS.**

State Profile of Manipur	Manipur is one of the eight states of North East India, strategically located along the international border with Myanmar. Covering an area of approximately 22,327 square kilometres, the state serves as an important gateway for India's Act East Policy, offering significant opportunities for regional trade, connectivity, tourism, and economic cooperation with Southeast Asian countries. The state capital, Imphal, functions as the administrative, commercial, educational, and cultural centre of Manipur. The state is characterized by a unique geographical landscape comprising a fertile central valley surrounded by scenic hills, dense forests, rivers, lakes, and rich biodiversity. Loktak Lake, the largest freshwater lake in Northeast India, is internationally recognized for its ecological importance and the unique floating islands known as <i>Phumdis</i>. Manipur also possesses abundant natural resources, making it suitable for eco-tourism, renewable energy, horticulture, bamboo-based industries, and sustainable agriculture. Manipur is home to a diverse population representing various ethnic communities, languages, traditions, and cultural practices. This cultural richness contributes significantly to the state's tourism potential and creative economy. Traditional handicrafts, handloom products, bamboo crafts, martial arts, music, dance, and indigenous sports form an integral part of the state's heritage and provide livelihood opportunities to thousands of artisans and entrepreneurs. The state's economy is primarily driven by agriculture, horticulture, handloom and handicrafts, small-scale industries, trade, tourism, and public services. However, Manipur continues to face developmental challenges, including inadequate urban infrastructure, limited industrialization, gaps in healthcare and educational facilities, unemployment among youth, transportation bottlenecks, and climate-related vulnerabilities. Addressing these challenges requires coordinated investments in modern infrastructure, digital connectivity, skill development, sustainable urban planning, and economic diversification. The Smart Manipur Development Mission (SMDM) – 2035 has been conceptualized to leverage the state's strategic location, natural resources, and human capital by promoting integrated infrastructure development, smart governance, healthcare modernization, quality education, sustainable transportation, tourism promotion, industrial growth, and environmental conservation. Through a balanced and inclusive development approach, the mission seeks to transform Manipur into a resilient, connected, economically vibrant, and sustainable state, contributing to the broader vision of Viksit Bharat @2047 and strengthening the socio-economic development of India's North Eastern Region.
Need Assessment	Smart Manipur Development Mission (SMDM) – 2035 1. Introduction Manipur is one of India's most strategically significant states, located in the North Eastern Region and sharing an international border with Myanmar. The state occupies a vital position in India's Act East Policy, making it an important gateway for regional trade, connectivity, tourism, and international cooperation. Despite its strategic importance, rich natural resources, vibrant cultural heritage, and immense tourism potential, Manipur continues to face

several developmental challenges that hinder its long-term economic growth and urban transformation.

Rapid urbanization, increasing population, changing economic aspirations, and growing infrastructure demands have created an urgent need for comprehensive and integrated development planning. Existing public infrastructure in many urban and semi-urban areas requires modernization to meet the expectations of a growing economy and to improve the quality of life of citizens. The **Smart Manipur Development Mission (SMDM) – 2035** has therefore been conceptualized as a long-term development framework to address these challenges through sustainable infrastructure investment, digital transformation, economic development, and inclusive urban planning.

2. Urban Infrastructure Gap

Urban centres such as Imphal and other municipal areas are experiencing increasing pressure due to population growth and expanding economic activities. In several locations, road infrastructure, drainage systems, pedestrian facilities, public transport, and urban utilities require strengthening to support future growth. Traffic congestion, limited parking infrastructure, inadequate public spaces, and aging civic infrastructure affect both economic productivity and citizen convenience.

A modern urban development strategy is required to improve road connectivity, develop intelligent transportation systems, strengthen municipal infrastructure, expand green spaces, and enhance overall urban mobility. Investment in smart city technologies can significantly improve service delivery, reduce congestion, and promote sustainable urban management.

3. Healthcare Infrastructure

Access to quality healthcare remains an important development priority. Although the state has government hospitals and primary healthcare facilities, increasing population, evolving healthcare needs, and advancements in medical technology necessitate continuous investment in healthcare infrastructure.

The proposed mission recognizes the need for modern hospitals, specialized medical services, advanced diagnostic centres, digital health systems, telemedicine facilities, emergency response infrastructure, and improved healthcare accessibility in both urban and rural areas. Strengthening healthcare infrastructure will contribute to improved public health outcomes, reduced patient referrals outside the state, and enhanced medical education and research.

4. Education and Human Capital Development

Education is fundamental to sustainable development and economic competitiveness. While Manipur has a strong tradition of education and literacy, there is a growing need to modernize educational infrastructure, integrate digital learning technologies, strengthen higher education institutions, and expand skill development opportunities aligned with emerging industries.

The proposed mission seeks to upgrade government schools with smart classrooms, digital laboratories, modern libraries, sports facilities, and improved educational resources. Expansion of universities, engineering colleges, medical colleges, nursing institutions,

vocational training centres, and innovation hubs will support workforce development and enhance employability among youth.

5. Economic Development and Employment

Employment generation remains one of the most significant developmental priorities for Manipur. A large proportion of the population depends on agriculture, horticulture, handloom, handicrafts, small businesses, and public sector employment. Diversification of the state's economy through industrial development, tourism, logistics, food processing, and entrepreneurship is essential for sustainable economic growth.

The proposed mission aims to establish industrial parks, startup incubation centres, commercial business districts, food processing clusters, bamboo-based industries, handicraft hubs, logistics parks, and modern wholesale markets. These initiatives are expected to encourage private investment, improve productivity, create employment opportunities, and strengthen local value chains while supporting micro, small, and medium enterprises (MSMEs).

6. Transportation and Regional Connectivity

Efficient transportation infrastructure is essential for economic integration and regional development. Continued improvements in road connectivity, urban transport systems, logistics infrastructure, and border trade facilities can enhance mobility, reduce travel time, and improve market access.

The mission proposes investments in smart roads, bridges, intelligent traffic management systems, electric buses, integrated transport terminals, multi-level parking facilities, and logistics hubs. Improved connectivity will facilitate tourism, trade, healthcare access, educational mobility, and industrial development while strengthening Manipur's role as a regional gateway.

7. Water Supply, Sanitation and Environmental Management

Reliable water supply, effective sanitation systems, and environmentally sustainable urban management are critical for improving public health and urban resilience. Urban expansion has increased the demand for modern water distribution networks, wastewater management, stormwater drainage, and scientific solid waste management systems.

The proposed mission focuses on strengthening drinking water infrastructure, modern sewerage networks, wastewater treatment facilities, rainwater harvesting systems, flood management measures, river conservation initiatives, and integrated solid waste management. These interventions will contribute to improved environmental quality and sustainable urban living.

8. Tourism and Cultural Heritage

Manipur possesses exceptional tourism potential owing to its natural landscapes, cultural diversity, historical heritage, festivals, wildlife, and sporting traditions. Destinations such as Loktak Lake, Keibul Lamjao National Park, historical monuments, and cultural centres

	provide opportunities for eco-tourism, heritage tourism, adventure tourism, and cultural tourism. However, tourism infrastructure requires further strengthening through improved connectivity, accommodation, visitor facilities, interpretation centres, convention infrastructure, and destination management. Strategic investment in tourism can increase visitor arrivals, generate employment, promote local businesses, and strengthen the state's economy while preserving cultural and ecological assets. 9. Digital Governance and Smart Technologies Digital transformation has become essential for improving governance, transparency, and public service delivery. Citizens increasingly expect efficient, technology-enabled government services that are accessible, reliable, and responsive. The mission proposes the adoption of smart governance platforms, integrated command and control centres, Geographic Information System (GIS)-based planning, digital citizen services, intelligent surveillance systems, public Wi-Fi infrastructure, and data-driven urban management. These initiatives will improve administrative efficiency, support evidence-based decision-making, and enhance citizen participation. 10. Climate Resilience and Disaster Preparedness Manipur is vulnerable to natural hazards such as floods, landslides, earthquakes, and extreme weather events. Climate change is expected to increase the frequency and intensity of such events, highlighting the importance of resilient infrastructure and effective disaster risk management. The proposed mission integrates climate-resilient infrastructure, sustainable construction practices, renewable energy, early warning systems, flood mitigation measures, emergency response mechanisms, and environmental conservation into all major development components. This approach will strengthen the state's capacity to manage future environmental and disaster-related risks.
Vision 2035	Smart Manipur Development Mission (SMDM) – 2035 "Building a Smart, Sustainable, Inclusive and Globally Connected Manipur" 1. Vision Statement The Smart Manipur Development Mission (SMDM) – 2035 envisions transforming Manipur into a globally connected, economically vibrant, environmentally sustainable, technologically advanced, and socially inclusive state by the year 2035. The mission seeks to establish Manipur as a model of balanced regional development by integrating modern infrastructure, digital governance, quality public services, innovation, environmental

conservation, and inclusive economic growth while preserving the state's rich cultural heritage and ecological diversity.

Vision 2035 recognizes Manipur's unique geographical position as India's gateway to Southeast Asia and aims to leverage this strategic advantage to strengthen trade, tourism, investment, logistics, education, healthcare, and sustainable urban development. The mission aspires to create resilient cities, prosperous rural communities, skilled human capital, and a diversified economy capable of meeting future challenges and opportunities.

2. Vision Framework

The Smart Manipur Development Mission is built upon **ten strategic pillars**, each contributing to the long-term transformation of the state.

Pillar I: Smart Infrastructure and Urban Transformation

By 2035, Manipur aims to develop modern, well-planned, and resilient urban infrastructure that supports economic growth and enhances the quality of life. The mission proposes integrated planning for roads, bridges, public transportation, drainage, water supply, sewerage, housing, and public utilities using smart technologies and sustainable engineering practices.

Urban centres will be designed with intelligent traffic systems, integrated command centres, digital public services, green public spaces, pedestrian-friendly streets, and accessible infrastructure. Infrastructure investments will focus on improving connectivity between districts, reducing travel time, enhancing public safety, and supporting future urban expansion.

Pillar II: Quality Healthcare for Every Citizen

Vision 2035 aims to ensure that every citizen has access to affordable, modern, and high-quality healthcare services. The mission proposes strengthening the healthcare ecosystem through the modernization of district hospitals, establishment of super-specialty medical facilities, expansion of primary healthcare centres, telemedicine services, emergency response systems, and advanced diagnostic laboratories.

Medical education and research institutions will be expanded to improve the availability of skilled healthcare professionals while reducing dependence on healthcare services outside the state. Digital health records, AI-assisted diagnostics, and integrated emergency management systems will improve healthcare efficiency and patient outcomes.

Pillar III: World-Class Education and Skill Development

The future prosperity of Manipur depends upon developing a skilled, educated, and innovative workforce. Vision 2035 seeks to transform the state's education system by modernizing government schools, strengthening higher education institutions, promoting vocational education, and expanding digital learning opportunities.

The mission proposes smart classrooms, STEM laboratories, research centres, engineering institutions, medical colleges, nursing colleges, skill universities, innovation hubs, and entrepreneurship development centres. Special emphasis will be placed on digital literacy, technical education, artificial intelligence, robotics, renewable energy technologies, and future workforce skills.

Pillar IV: Inclusive Economic Growth

The Smart Manipur Development Mission seeks to build a diversified and resilient economy that creates employment opportunities while encouraging entrepreneurship and private investment.

Economic development will focus on strengthening MSMEs, promoting startup ecosystems, developing industrial parks, establishing logistics hubs, supporting food processing industries, expanding bamboo and handicraft industries, encouraging value addition in agriculture, and improving access to domestic and international markets.

The mission envisions Manipur becoming an important trade and investment destination in the North Eastern Region while creating sustainable livelihoods for youth, women, artisans, farmers, and entrepreneurs.

Pillar V: Tourism and Cultural Heritage

Manipur possesses extraordinary natural beauty, historical significance, and cultural diversity. Vision 2035 seeks to position the state as a leading tourism destination in India by promoting eco-tourism, cultural tourism, heritage tourism, adventure tourism, sports tourism, and wellness tourism.

The mission proposes integrated tourism circuits, improved visitor infrastructure, convention centres, cultural villages, heritage conservation projects, hospitality development, and digital tourism promotion. Local communities will actively participate in tourism development to ensure inclusive growth while preserving indigenous traditions and cultural identity.

Pillar VI: Digital Governance and Innovation

Vision 2035 aims to create a digitally empowered government that delivers transparent, efficient, and citizen-centric public services.

The mission proposes integrated digital governance platforms, smart city command centres, GIS-based planning systems, intelligent surveillance networks, digital municipal services, online grievance redressal systems, public Wi-Fi infrastructure, and open-data platforms for evidence-based policymaking.

Technology will become an essential tool for improving governance, public service delivery, financial management, urban planning, disaster response, and citizen participation.

Pillar VII: Sustainable Environment and Climate Resilience

Environmental sustainability forms the foundation of Vision 2035. The mission recognizes that long-term development must balance economic growth with ecological conservation.

The proposal includes protection of forests, conservation of wetlands and rivers, restoration of lakes, expansion of urban green spaces, promotion of renewable energy, scientific waste management, wastewater recycling, rainwater harvesting, and climate-resilient infrastructure.

Special emphasis will be placed on protecting ecologically significant areas while adopting sustainable construction practices and reducing greenhouse gas emissions through clean energy and green mobility.

Pillar VIII: Modern Mobility and Regional Connectivity

Efficient transportation is essential for economic competitiveness and regional integration. Vision 2035 aims to establish a modern mobility system that connects urban centres, rural communities, industrial zones, tourism destinations, and border trade corridors.

The mission proposes smart highways, district road modernization, intelligent traffic management systems, electric public transport, integrated bus terminals, logistics parks, multimodal transport facilities, and improved connectivity to neighbouring states and international border points.

Improved transportation infrastructure will reduce logistics costs, facilitate tourism, strengthen trade, and enhance access to education and healthcare services.

Pillar IX: Social Inclusion and Community Development

Vision 2035 emphasizes equitable development that benefits every section of society. The mission seeks to ensure equal opportunities for women, youth, senior citizens, persons with disabilities, tribal communities, and economically weaker sections.

Development initiatives will focus on affordable housing, community health, digital inclusion, livelihood promotion, financial literacy, social protection, entrepreneurship support, and capacity building. Community participation will remain central to project planning, implementation, and monitoring.

Inclusive development will strengthen social cohesion while ensuring that economic progress reaches both urban and rural populations.

Pillar X: Good Governance and Institutional Excellence

The success of Vision 2035 depends upon transparent institutions, effective coordination, and accountable governance. The mission proposes strengthening institutional capacity through improved planning systems, performance monitoring, financial accountability, stakeholder participation, and technology-enabled decision-making.

Regular monitoring, independent evaluations, public dashboards, and measurable performance indicators will ensure timely implementation and efficient utilization of resources. Collaboration among the Government of India, Government of Manipur, urban local bodies, academic institutions, private sector partners, financial institutions, and civil society organizations will be essential for achieving the mission's objectives.

Expected Outcomes by 2035

The implementation of the Smart Manipur Development Mission is expected to deliver significant long-term outcomes, including:

- Modern and resilient urban infrastructure across major cities and towns.
- Improved access to quality healthcare and education.
- Enhanced digital governance and efficient public service delivery.
- Increased employment through industrial development, tourism, MSMEs, and entrepreneurship.
- Better regional connectivity and stronger trade opportunities under the Act East Policy.
- Sustainable management of natural resources and climate-resilient infrastructure.
- Greater private investment and economic diversification.
- Higher standards of living and improved quality of life for citizens.
- Preservation of Manipur's cultural heritage while promoting modern development.

	A stronger contribution to the national vision of Viksit Bharat @2047 through inclusive, sustainable, and innovation-driven growth.
Detailed Sector-wise Projects	Smart Manipur Development Mission (SMDM) – 2035 The Smart Manipur Development Mission (SMDM) – 2035 proposes an integrated investment of ₹1,00,000 Crore across fifteen priority sectors to transform Manipur into a modern, sustainable, economically vibrant, and socially inclusive state. The proposed projects are designed to complement each other, creating a comprehensive development ecosystem that improves infrastructure, strengthens public services, generates employment, enhances investment opportunities, and improves the quality of life. 6.1 Smart Roads, Highways & Bridges Proposed Budget: ₹22,000 Crore Transportation infrastructure forms the backbone of economic development. The mission proposes a comprehensive modernization of Manipur's road network to improve connectivity between districts, industrial areas, educational institutions, healthcare facilities, tourism destinations, and international trade corridors. Major Components - Four-laning of major State Highways - Construction of ring roads around Imphal - Smart traffic signal systems - Intelligent Traffic Management System (ITMS) - Flyovers at major congestion points - Multi-level parking facilities - Smart pedestrian pathways - Cycle tracks - River bridges - Hill road strengthening - Smart street lighting using LED technology - Highway emergency response centres Expected Outcomes - Reduced travel time by 40% - Lower logistics costs - Improved road safety - Enhanced regional connectivity - Increased tourism and trade

6.2 Smart Healthcare Infrastructure

Proposed Budget: ₹12,000 Crore

Healthcare infrastructure will be strengthened to provide affordable and quality healthcare services across the state.

Major Projects

- 10 Super Speciality Hospitals
- Modernization of all District Hospitals
- 250 Primary Health Centres
- 50 Community Health Centres
- Medical College expansion
- Nursing Colleges
- Digital Health Information System
- Telemedicine Network
- Trauma Care Centres
- Air Ambulance Service
- Advanced Diagnostic Laboratories
- Blood Banks
- Cancer Care Centre
- Maternal & Child Health Centres

Expected Outcomes

- Better healthcare accessibility
- Reduced medical referrals outside the state
- Improved emergency response
- Enhanced medical education

6.3 Education & Human Capital Development

Proposed Budget: ₹15,000 Crore

Education will be transformed through digital infrastructure, modern campuses, research institutions, and skill development.

Proposed Projects

- Smart classrooms in Government Schools
- Digital laboratories

- Science Innovation Centres
- Robotics Labs
- STEM Education Programme
- 5 Engineering Colleges
- 3 Medical Colleges
- 2 State Universities
- 50 Industrial Training Institutes
- Skill Development Centres
- Research & Innovation Parks
- Digital Libraries
- Sports Academies
- Scholarship Management Portal

Expected Outcomes

- Improved learning outcomes
- Higher enrolment
- Industry-ready workforce
- Increased research capacity

6.4 Water Supply, Sewerage & Sanitation

Proposed Budget: ₹7,500 Crore

The mission proposes reliable water and sanitation infrastructure to improve public health and environmental sustainability.

Projects

- 24x7 Urban Water Supply
- Smart Water Metering
- Water Treatment Plants
- Rainwater Harvesting
- Sewerage Networks
- Wastewater Treatment Plants
- Storm Water Drainage
- River Rejuvenation
- Lake Conservation
- Smart Public Toilets

Expected Outcomes

- Improved drinking water access
- Better sanitation coverage
- Reduced urban flooding
- Cleaner rivers and lakes

6.5 Smart Markets & Commercial Development

Proposed Budget: ₹5,500 Crore

Commercial infrastructure will be developed to strengthen trade, entrepreneurship, and regional commerce.

Proposed Projects

- International Trade Centre
- Wholesale Agricultural Markets
- Bamboo Trade Hub
- Handloom & Handicraft Mega Market
- Cold Storage Facilities
- Food Processing Parks
- Logistics Parks
- Warehousing Complexes
- Startup Business Centres
- Export Promotion Centre
- Digital Marketplace Platform

Expected Outcomes

- Increased business activity
- Improved farmer income
- Export promotion
- Employment generation

6.6 Tourism Infrastructure Development

Proposed Budget: ₹5,000 Crore

Tourism offers significant opportunities for economic diversification and employment generation.

Projects

- Loktak Lake Tourism Development
- Eco-Tourism Parks
- Cultural Heritage Villages
- Adventure Tourism Centres

- Convention Centre
- Sports Tourism Facilities
- Border Tourism Infrastructure
- Tourist Information Centres
- Heritage Conservation Projects
- Ropeway Systems
- Hospitality Training Institutes

Expected Outcomes

- Increased tourist arrivals
- Growth in hospitality sector
- Local employment generation
- Preservation of cultural heritage

6.7 Smart Public Transport & Electric Mobility

Proposed Budget: ₹8,000 Crore

The transportation system will be modernized with environmentally sustainable mobility solutions.

Projects

- Electric Bus Fleet
- Smart Bus Terminals
- Integrated Transport Hub
- EV Charging Stations
- GPS-enabled Public Transport
- Smart Ticketing System
- Intelligent Traffic Monitoring
- Multi-level Parking
- Bicycle Sharing System
- Public Transport Information System

Expected Outcomes

- Reduced emissions
 - Improved public transport
 - Better urban mobility
 - Lower fuel dependency
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6.8 Digital Infrastructure & Smart Governance

Proposed Budget: ₹4,500 Crore

Digital transformation will improve governance efficiency and citizen services.

Projects

- Integrated Command & Control Centre
- State Data Centre
- GIS Mapping Platform
- Digital Citizen Service Portal
- Online Municipal Services
- Public Wi-Fi
- CCTV Surveillance Network
- AI-based Traffic Management
- Emergency Response System
- Digital Grievance Redressal
- Cyber Security Centre

Expected Outcomes

- Transparent governance
- Faster public services
- Improved urban management
- Enhanced public safety

6.9 Renewable Energy Mission

Proposed Budget: ₹5,000 Crore

The mission promotes clean energy and climate-resilient development.

Projects

- Solar Parks
- Rooftop Solar Programme
- Small Hydropower Projects
- Battery Energy Storage Systems
- Smart Grid Infrastructure
- Solar Street Lighting
- Renewable Energy Training Centre

- EV Charging Infrastructure

Expected Outcomes

- Reduced carbon emissions
- Lower electricity costs
- Energy security
- Green employment

6.10 Affordable Housing & Urban Development

Proposed Budget: ₹6,500 Crore

Inclusive urban growth requires safe and affordable housing.

Projects

- Affordable Housing Townships
- Smart Residential Colonies
- Slum Redevelopment
- Rental Housing
- Green Buildings
- Community Parks
- Smart Utilities
- Senior Citizen Housing
- Women's Hostels
- Student Accommodation

Expected Outcomes

- Improved housing access
- Better living conditions
- Planned urban growth

6.11 Agriculture & Food Processing

Proposed Budget: ₹4,000 Crore

Agriculture modernization will improve productivity and value addition.

Projects

- Integrated Food Parks
- Cold Chain Network
- Organic Farming Clusters
- Agri Logistics Centres
- Seed Production Units
- Irrigation Projects
- Farmer Training Institutes
- Digital Agriculture Platform

Expected Outcomes

- Higher farmer incomes
- Reduced post-harvest losses
- Increased exports
- Rural employment

6.12 Disaster Management & Climate Resilience

Proposed Budget: ₹2,500 Crore

The mission incorporates disaster-resilient infrastructure and preparedness systems.

Projects

- Emergency Operations Centre
- Flood Mitigation Works
- Landslide Prevention
- Earthquake-resistant Public Buildings
- Disaster Early Warning Systems
- Emergency Shelters
- Rescue Equipment
- Disaster Training Academy

Expected Outcomes

- Reduced disaster risks
 - Faster emergency response
 - Improved community resilience
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6.13 Women & Youth Entrepreneurship

Proposed Budget: ₹1,500 Crore

Entrepreneurship will be promoted to generate employment and foster innovation.

Projects

- Startup Incubation Centres
- Women Business Parks
- Youth Entrepreneurship Fund
- Skill Training Centres
- Digital Marketing Support
- MSME Facilitation Centres
- Innovation Challenge Programme
- Business Mentorship Network

Expected Outcomes

- Higher startup creation
- Women's economic participation
- Increased self-employment

6.14 Project Management, Monitoring & Capacity Building

Proposed Budget: ₹1,000 Crore

Effective governance and monitoring are essential for successful implementation.

Projects

- State Project Management Unit (SPMU)
- District Project Management Units
- Independent Quality Assurance
- Third-Party Audits
- Digital Monitoring Dashboard
- Capacity Building Programmes
- Project Evaluation Framework
- Financial Management System

Expected Outcomes

	• Transparent implementation • Efficient fund utilization • Timely project completion • Improved accountability
District-wise Development Plan	Smart Manipur Development Mission (SMDM) – 2035 7.1 Introduction The District-wise Development Plan under the Smart Manipur Development Mission (SMDM) – 2035 adopts a decentralized and region-specific approach to infrastructure development. Recognizing that each district has distinct geographical characteristics, socio-economic conditions, natural resources, and development priorities, the mission proposes customized interventions rather than a one-size-fits-all strategy. The objective is to ensure balanced regional growth by improving urban infrastructure, healthcare, education, transportation, digital connectivity, tourism, agriculture, industrial development, environmental sustainability, and employment opportunities across all districts of Manipur. The proposed district plans are indicative planning concepts intended to guide future detailed feasibility studies and consultation with the Government of Manipur, local authorities, and stakeholders. 7.2 Imphal West District – Smart Administrative and Commercial Capital Vision To develop Imphal West into a world-class smart capital district serving as the administrative, commercial, healthcare, educational, and technological hub of Manipur. Major Projects • Smart City Integrated Command and Control Centre • Smart Government Secretariat Complex • Multi-level Smart Parking Facilities • Intelligent Traffic Management System • Smart Roads and Junction Improvements • Integrated Public Bus Terminal • Electric Bus Fleet • International Convention & Exhibition Centre • IT and Innovation Park • State Data Centre

- Digital Citizen Service Centre
- Smart Street Lighting
- Underground Utility Corridors
- Smart Drainage Network
- Riverfront Beautification
- Affordable Housing Projects
- Green Urban Parks

Healthcare

- 1 Super Speciality Hospital
- Advanced Trauma Centre
- Medical Research Institute
- AI-enabled Diagnostic Centre

Education

- Smart University Campus
- Digital Learning Hub
- Technology Innovation Centre

Estimated Investment

₹16,000 Crore

7.3 Imphal East District – Education, Healthcare and Knowledge Hub

Vision

To establish Imphal East as the leading education and medical services district of Manipur.

Major Projects

- Medical College Expansion
- Biotechnology Research Centre
- Skill Development University
- Smart Government Schools
- AI Research Centre
- Sports University Infrastructure
- Student Residential Campus
- Public Library Network
- Science Innovation Park
- Digital Classrooms

Healthcare

- Regional Cancer Institute
- Women's Hospital
- Children's Hospital
- Telemedicine Network

Urban Development

- Smart Water Supply
- Sewerage Network
- Smart Roads
- Smart Bus Stops

Estimated Investment

₹10,000 Crore

7.4 Thoubal District – Agro-Industrial Growth Centre

Vision

To transform Thoubal into a modern agricultural processing and industrial district.

Major Projects

- Mega Food Processing Park
- Rice Processing Cluster
- Organic Agriculture Mission
- Cold Storage Chain
- Agri Export Centre
- Modern Wholesale Market
- Logistics Hub
- Irrigation Modernization
- Farm Mechanization Centre
- Farmer Training Institute

Industrial Development

- MSME Industrial Estate
- Agro Equipment Manufacturing
- Bamboo Processing Units
- Packaging Industries

Employment Target

Over 75,000 direct and indirect jobs

Estimated Investment

₹7,500 Crore

7.5 Bishnupur District – Tourism and Environmental Conservation

Vision

To develop Bishnupur as Manipur's premier eco-tourism and cultural tourism destination.

Major Projects

- Loktak Lake Tourism Development
- Floating Eco Resort Zone
- Eco Tourism Circuit
- Heritage Tourism Centre
- Cultural Village
- Bird Watching Facilities
- Lake Conservation Programme
- Cycling Track
- Nature Interpretation Centre
- Hospitality Skill Institute

Infrastructure

- Smart Roads
- Smart Parking
- Tourist Information Centres
- Solar Street Lighting

Estimated Investment

₹8,000 Crore

7.6 Churachandpur District – Logistics and Border Trade Hub

Vision

To strengthen Churachandpur as a logistics, commercial, and border trade gateway.

Major Projects

- Integrated Logistics Park
- Truck Terminal
- Dry Port Facilities
- Industrial Warehousing
- Cold Storage Infrastructure
- Commercial Market Complex
- Border Trade Facilitation Centre
- Skill Development Institute
- Digital Customs Support Centre

Transport

- Highway Upgradation
- Smart Freight Corridors
- Road Safety Infrastructure

Estimated Investment

₹8,500 Crore

7.7 Senapati District – Eco-Tourism and Horticulture Development

Vision

To promote sustainable tourism and horticulture-based economic development.

Major Projects

- Hill Tourism Circuit
- Eco Resorts
- Adventure Tourism
- Horticulture Parks

- Organic Farming Clusters
- Fruit Processing Units
- Cold Storage Facilities
- Farmer Producer Centres
- Solar Irrigation

Education

- Tribal Skill Development Centre
- Digital Schools

Estimated Investment

₹6,000 Crore

7.8 Ukhrul District – Bamboo, Handicraft and Cultural Economy

Vision

To establish Ukhrul as a national centre for bamboo industries, handicrafts, and cultural tourism.

Major Projects

- Bamboo Industrial Park
- Handloom Cluster
- Handicraft Export Centre
- Design & Innovation Institute
- Music and Cultural Centre
- Tourism Infrastructure
- Forest Conservation Programme
- Eco Villages

Employment

Promotion of artisan cooperatives and export-oriented enterprises.

Estimated Investment

₹5,500 Crore

7.9 Tamenglong District – Eco-Tourism and Renewable Energy

Vision

To develop Tamenglong as a sustainable eco-tourism and renewable energy district.

Major Projects

- Eco Tourism Park
- Adventure Tourism
- Solar Power Park
- Mini Hydropower Projects
- Forest Conservation
- Biodiversity Research Centre
- Rural Roads
- Drinking Water Projects

Estimated Investment

₹5,000 Crore

7.10 Kangpokpi District – Industrial and Transport Corridor

Vision

To establish Kangpokpi as a transportation and industrial corridor connecting the hill and valley regions.

Major Projects

- Industrial Estate
- Logistics Park
- Skill Development Centre
- Transport Hub
- Highway Development
- Commercial Warehousing
- Modern Bus Terminal
- Business Incubation Centre

Estimated Investment

₹6,500 Crore

7.11 Kakching District – Fisheries and Food Processing Hub

Vision

To strengthen Kakching as a fisheries, food processing, and agri-business district.

Major Projects

- Fisheries Development Centre
- Integrated Fish Market
- Food Processing Units
- Cold Storage Facilities
- Farmer Training Centres
- Smart Irrigation
- Agri Export Facilities

Estimated Investment

₹4,500 Crore

7.12 Jiribam District – Gateway Logistics Hub

Vision

To develop Jiribam as the western logistics gateway connecting Manipur with mainland India.

Major Projects

- Integrated Freight Terminal
- Railway Logistics Hub
- Container Depot
- Warehousing Complex
- Highway Connectivity
- Inland Cargo Facilities
- Truck Terminal

- Commercial Centre

Estimated Investment

₹5,500 Crore

7.13 Tengnoupal District – Border Infrastructure and Trade Development

Vision

To strengthen border infrastructure and promote international trade.

Major Projects

- Border Trade Centre
- Integrated Check Post Support Infrastructure
- Logistics Facilities
- Highway Development
- Border Tourism
- Warehousing
- Security Infrastructure Support
- Commercial Market

Estimated Investment

₹4,500 Crore

7.14 Kamjong District – Sustainable Rural Development

Vision

To improve rural infrastructure while preserving ecological balance.

Major Projects

- Rural Roads
- Drinking Water Projects
- Solar Electrification
- Community Health Centres

- Smart Schools
- Internet Connectivity
- Agriculture Development
- Rural Tourism

Estimated Investment

₹3,500 Crore

7.15 Noney District – Green Infrastructure and Eco Development

Vision

To promote environmentally sustainable development through green infrastructure and eco-tourism.

Major Projects

- Eco Tourism
- Forest Conservation
- Rural Connectivity
- Solar Energy Projects
- Rainwater Harvesting
- Smart Health Centres
- Skill Development Institute
- Rural Digital Centres

Estimated Investment

₹3,000 Crore

7.16 Pherzawl District – Inclusive Tribal Development

Vision

To improve connectivity, public services, and livelihood opportunities while preserving the district's natural and cultural heritage.

Major Projects

- Rural Road Connectivity
- Tribal Livelihood Mission
- Community Health Facilities
- Residential Schools
- Digital Service Centres
- Eco-Tourism Infrastructure
- Bamboo and Forest-Based Enterprises
- Drinking Water Supply Schemes
- Renewable Energy Micro-Grids
- Community Skill Development Centres

Estimated Investment

₹4,000 Crore

7.17 Statewide Cross-District Projects

In addition to district-specific initiatives, several projects are proposed to benefit the entire state:

Healthcare

- Statewide telemedicine platform
- Integrated ambulance and emergency response network
- Digital health records

Education

- Smart classrooms in government schools
- Digital education platform
- Teacher capacity-building programmes

Transport

- Statewide intelligent traffic management
- Electric vehicle charging network
- Smart bus services connecting district headquarters

Digital Governance

- Unified citizen services portal
- GIS-based planning platform
- Integrated command and control system

	Renewable Energy • Rooftop solar programme • Smart grids • Energy-efficient public buildings Disaster Management • Flood early warning systems • Landslide monitoring • Emergency communication network Expected Statewide Outcomes The District-wise Development Plan seeks to ensure that growth is geographically balanced and responsive to local strengths. By 2035, the proposed initiatives aim to: • Improve regional connectivity across all districts. • Enhance access to quality healthcare and education. • Strengthen agriculture, tourism, logistics, and manufacturing. • Create approximately 4 lakh direct and 10 lakh indirect employment opportunities. • Promote environmentally sustainable and climate-resilient development. • Improve digital governance and public service delivery. • Increase private investment through modern infrastructure and business-friendly ecosystems. • Support inclusive development for urban, rural, and tribal communities.
Engineering Concepts	Smart Manipur Development Mission (SMDM) – 2035 8.1 Introduction The Engineering Concepts of the Smart Manipur Development Mission (SMDM) – 2035 provide the technical foundation for the planning, design, construction, operation, and maintenance of the proposed infrastructure projects across the State of Manipur. The engineering philosophy of the mission is based on sustainability, resilience, safety, efficiency, innovation, climate adaptability, digital integration, and long-term asset management. Considering Manipur's unique topography, seismic vulnerability, high rainfall, ecological sensitivity, and strategic importance, engineering solutions must go beyond conventional construction practices. The proposed projects adopt modern engineering standards, advanced construction technologies, intelligent monitoring systems, renewable energy integration, and environmentally responsible design principles to create infrastructure capable of serving future generations.

The engineering framework has been developed in accordance with relevant **Indian Standards (IS Codes)**, the **National Building Code (NBC)**, **IRC Guidelines**, **CPHEEO Manuals**, and other applicable technical standards. Detailed engineering design, however, would be prepared during subsequent feasibility and DPR stages for each individual project.

8.2 Engineering Design Philosophy

Every project under the mission shall follow six core engineering principles:

1. Safety First

Infrastructure shall prioritize public safety through earthquake-resistant structures, flood-resilient designs, fire safety systems, intelligent monitoring, and emergency response mechanisms.

2. Sustainable Construction

Construction materials and techniques shall minimize environmental impact while maximizing durability and lifecycle performance.

3. Climate Resilience

Infrastructure shall withstand floods, heavy rainfall, landslides, earthquakes, and changing climatic conditions.

4. Smart Technology Integration

Digital monitoring, automation, sensors, GIS, Building Information Modelling (BIM), Internet of Things (IoT), and Artificial Intelligence (AI) shall be integrated wherever technically and economically appropriate.

5. Lifecycle Cost Optimization

Engineering decisions shall consider not only initial construction costs but also operation, maintenance, energy efficiency, and asset longevity.

6. Universal Accessibility

All public infrastructure shall incorporate inclusive design principles to improve accessibility for persons with disabilities, senior citizens, women, and children.

8.3 Smart Road Engineering

The proposed transportation network forms the backbone of the Smart Manipur Development Mission.

Road Design Standards

The road network shall include:

- National Highway connectivity
- State Highway modernization
- Urban arterial roads
- Rural connectivity roads
- Industrial access roads
- Tourism roads
- Border connectivity roads

Engineering Features

- Flexible and rigid pavement systems
- High-performance bituminous pavement
- Concrete pavement in high-load corridors
- Geotextile reinforcement in weak soil areas
- Soil stabilization using lime and cement where required
- Mechanized road construction
- Intelligent traffic control systems
- LED smart street lighting
- Underground utility ducts
- Stormwater drainage on both sides
- Pedestrian walkways
- Dedicated bicycle lanes where feasible
- Crash barriers in hill sections
- Solar-powered traffic signals

Smart Monitoring

Road conditions shall be monitored using:

- IoT pavement sensors
- Drone inspections
- GIS asset mapping
- AI-based traffic analytics
- Digital maintenance management systems

8.4 Bridge Engineering

Manipur contains numerous rivers, valleys, and hilly terrain requiring durable bridge infrastructure.

Proposed Bridge Types

- Reinforced Cement Concrete (RCC) Bridges
- Prestressed Concrete Bridges
- Steel Composite Bridges
- Cable-Stayed Bridges (where justified)
- Pedestrian Skywalks
- Modular Steel Bridges for remote areas

Engineering Features

- Earthquake-resistant foundations
- High-strength structural steel
- Corrosion-resistant reinforcement
- Expansion joints
- Intelligent bridge health monitoring sensors
- Seismic bearings
- Flood-resistant pier protection
- Structural Health Monitoring (SHM)

Bridge inspection shall utilize drone technology and digital structural monitoring for preventive maintenance.

8.5 Smart Building Engineering

Government buildings, hospitals, schools, universities, and administrative complexes shall be designed as energy-efficient and climate-responsive structures.

Design Standards

Buildings shall incorporate:

- Earthquake-resistant structural systems
- Green Building principles
- Energy-efficient HVAC
- Natural ventilation
- Rainwater harvesting
- Solar rooftop systems
- Fire detection and suppression systems
- Barrier-free access
- Smart building automation
- High-speed internet infrastructure
- Emergency evacuation systems

Building Technologies

- Building Information Modelling (BIM)

- Prefabricated structural components
 - Modular construction
 - Digital facility management
 - Smart energy monitoring
-

8.6 Hospital Engineering

Healthcare infrastructure requires specialized engineering.

Proposed Components

- Modular operation theatres
- Negative-pressure isolation wards
- Central oxygen supply
- Medical gas pipeline systems
- Smart ICU monitoring
- Digital health records
- Smart pharmacy systems
- Automated laboratory systems
- Biomedical waste treatment
- Hospital management software

Utility Engineering

Hospitals shall include:

- Dual power supply
 - Solar backup systems
 - Diesel generator backup
 - Water treatment plants
 - Sewage Treatment Plants (STP)
 - Fire protection systems
 - Medical-grade HVAC
 - High-capacity communication networks
-

8.7 Educational Infrastructure Engineering

Schools and universities shall become smart learning environments.

Engineering Features

- Smart classrooms
- Digital laboratories
- Robotics labs

- Innovation centres
- Research laboratories
- Smart campus surveillance
- High-speed fibre connectivity
- Solar-powered campuses
- Rainwater harvesting
- Smart attendance systems
- Disaster-resistant buildings

Campus planning shall provide safe pedestrian circulation, universal accessibility, and future expansion capacity.

8.8 Water Supply Engineering

Reliable water supply is essential for sustainable development.

Proposed Infrastructure

- Intake structures
- Water Treatment Plants
- Elevated Service Reservoirs
- Underground reservoirs
- Smart pumping stations
- Distribution pipelines
- Pressure management systems
- Smart water meters

Engineering Technologies

- SCADA-controlled water systems
- Leak detection sensors
- GIS-based pipeline mapping
- Automated chlorination
- Energy-efficient pumps

8.9 Sewerage Engineering

Modern sanitation infrastructure will improve public health.

Components

- Underground sewer networks
- Sewage Pumping Stations
- Sewage Treatment Plants

- Sludge Management Facilities
- Effluent Recycling Systems

Smart Technologies

- Remote flow monitoring
- IoT manhole sensors
- SCADA operation
- Digital maintenance platform

Treated wastewater may be reused for landscaping, industrial applications, and non-potable municipal uses where technically feasible.

8.10 Stormwater Drainage Engineering

Heavy rainfall in Manipur requires scientifically designed drainage systems.

Engineering Components

- RCC drainage channels
- Box culverts
- Recharge pits
- Rainwater harvesting systems
- Flood retention ponds
- Smart flood monitoring sensors
- River embankment strengthening

Hydrological modelling and watershed analysis shall be undertaken during detailed project preparation to determine drainage capacities.

8.11 Renewable Energy Engineering

Energy sustainability is an important component.

Proposed Systems

- Solar Parks
- Rooftop Solar
- Battery Storage
- Smart Grid
- Solar Street Lighting
- Micro Hydropower
- EV Charging Infrastructure

Engineering Features

- Grid synchronization
- Smart inverters
- Remote monitoring
- Energy storage
- Predictive maintenance

8.12 Smart Transport Engineering

Modern mobility requires intelligent engineering.

Proposed Systems

- Electric Bus Depots
- Intelligent Traffic Signals
- Smart Bus Stops
- GPS Fleet Tracking
- Automatic Fare Collection
- EV Charging Network
- Integrated Transport Management Centre

Traffic operations shall be supported by adaptive signal control, CCTV surveillance, and real-time passenger information systems.

8.13 Digital Engineering

Digital infrastructure shall support governance and city operations.

Components

- Integrated Command & Control Centre
- State Data Centre
- Fibre Optic Backbone
- Public Wi-Fi
- CCTV Network
- GIS Platform
- Cyber Security Centre
- IoT Sensor Network

Digital Integration

The mission proposes a unified digital platform connecting:

- Healthcare
- Education
- Transport
- Water Supply
- Electricity
- Disaster Management
- Municipal Services

This will enable data-driven planning and faster service delivery.

8.14 Waste Management Engineering

Integrated waste management shall include:

- Waste segregation at source
- Transfer stations
- Material Recovery Facilities
- Compost Plants
- Waste-to-Energy (where viable)
- Sanitary Landfills
- Biomedical Waste Treatment
- Construction & Demolition Waste Recycling

Engineering emphasis will be placed on reducing landfill dependence and increasing recycling efficiency.

8.15 Disaster-Resilient Engineering

Manipur lies in a seismically active region and is prone to floods and landslides.

Engineering Measures

- Earthquake-resistant structural design
- Landslide stabilization
- Slope protection
- Rock bolting
- Retaining walls
- Flood protection embankments
- River training works
- Emergency shelters
- Early Warning Systems

Risk assessments shall inform project-specific designs.

8.16 Smart Construction Technologies

Modern construction technologies will improve quality and efficiency.

Proposed Technologies

- Building Information Modelling (BIM)
- Geographic Information Systems (GIS)
- Drone surveying
- LiDAR mapping
- GPS machine control
- Precast concrete construction
- Modular construction
- Digital quality management
- AI-assisted project monitoring
- Digital twin concepts for critical infrastructure (where feasible)

These technologies are expected to reduce construction time, improve accuracy, and strengthen project monitoring.

8.17 Operation and Maintenance Engineering

Infrastructure performance depends on systematic maintenance.

Asset Management

The mission proposes:

- Digital asset registry
- Preventive maintenance schedules
- IoT-based condition monitoring
- GIS asset database
- Mobile inspection applications
- Predictive maintenance analytics
- Annual safety audits
- Lifecycle asset management plans

This approach aims to extend infrastructure life while reducing long-term maintenance costs.

8.18 Engineering Quality Assurance

Quality assurance will be implemented throughout the project lifecycle.

Measures

- Third-party quality inspection
- Material testing laboratories
- Site quality audits
- Structural safety certification
- Environmental compliance monitoring
- Digital construction documentation
- Independent engineering review
- Periodic performance evaluation

Compliance with applicable Indian standards and statutory requirements will be mandatory during detailed design and execution.

Financial Model

Smart Manipur Development Mission (SMDM) – 2035

9.1 Introduction

The **Financial Model** of the **Smart Manipur Development Mission (SMDM) – 2035** has been developed to provide a structured framework for mobilizing, allocating, managing, and monitoring the proposed investment of **₹1,00,000 Crore** over a nine-year implementation period (2027–2035). The model is designed to support long-term infrastructure development while promoting fiscal sustainability, transparency, accountability, and efficient utilization of financial resources.

Given the scale of investment, it is neither practical nor expected that a single institution or level of government would finance the entire programme. Instead, the proposed model adopts a **multi-source financing strategy**, combining public investment, private participation, multilateral development assistance, institutional finance, and innovative funding mechanisms. The exact financing mix would depend on government priorities, project feasibility, statutory approvals, and funding availability.

The financial model is intended as a planning framework and does not represent an approved funding commitment by any government agency or financial institution.

9.2 Financial Objectives

The proposed financial framework has the following objectives:

- Ensure phased and sustainable funding over the project lifecycle.
- Diversify funding sources to reduce fiscal pressure.
- Maximize private sector participation where appropriate.
- Align investments with national and state development priorities.
- Improve financial transparency and accountability.
- Promote efficient allocation of public resources.
- Support long-term operation and maintenance of assets.
- Enable measurable economic and social returns.

9.3 Total Project Cost

The Smart Manipur Development Mission proposes an indicative investment of:

Category	Amount
Total Project Investment	₹1,00,000 Crore
Project Duration	9 Years
Implementation Period	2027–2035

The investment is distributed across infrastructure, healthcare, education, transportation, tourism, digital governance, renewable energy, agriculture, affordable housing, disaster management, and institutional strengthening.

9.4 Proposed Financing Structure

To improve financial resilience, the mission proposes a diversified funding model.

Source of Finance	Percentage	Amount (₹ Crore)
Government of India	35%	35,000
Government of Manipur	15%	15,000
Public Private Partnership (PPP)	20%	20,000
Multilateral Development Institutions	15%	15,000
Private Investment	10%	10,000
CSR, Philanthropic & Development Partners	5%	5,000
Total	100%	1,00,000

Government Funding

Central and State Government support may be explored through suitable schemes and budgetary allocations, subject to policy provisions and approvals. Government investment would primarily focus on:

- Healthcare
- Schools
- Water Supply

- Public Transport
- Disaster Management
- Rural Infrastructure
- Digital Governance
- Environmental Conservation

9.5 Public-Private Partnership (PPP) Model

PPP is proposed for projects capable of generating user revenue or commercial returns.

Potential PPP sectors include:

- Commercial Markets
- Logistics Parks
- Bus Terminals
- Parking Facilities
- Convention Centres
- Tourism Infrastructure
- Industrial Parks
- Renewable Energy Projects
- Affordable Housing
- Warehousing
- Smart Commercial Complexes

PPP Models

Depending on project characteristics, the following structures may be considered:

- Build-Operate-Transfer (BOT)
- Hybrid Annuity Model (HAM)
- Design-Build-Finance-Operate-Maintain (DBFOM)
- Build-Own-Operate (BOO), where appropriate
- Lease-Develop-Operate (LDO)
- Operations & Maintenance (O&M) Contracts

The selection of the PPP model would be based on project-specific feasibility, risk allocation, and applicable government guidelines.

9.6 Multilateral Development Financing

The mission may explore financing opportunities from multilateral and bilateral development institutions, where eligible.

Potential areas include:

- Climate-resilient infrastructure
- Urban water supply
- Sewerage
- Renewable energy
- Public transport
- Disaster management
- Digital governance
- Climate adaptation

Such financing would be subject to Government of India approval, lender policies, and project appraisal requirements.

9.7 Capital Investment Allocation

The proposed allocation of capital expenditure is summarized below.

Sector	Investment (₹ Crore)
Roads & Bridges	22,000
Healthcare	12,000
Education	15,000
Water & Sewerage	7,500
Markets & Commercial Infrastructure	5,500
Tourism	5,000
Public Transport	8,000
Digital Infrastructure	4,500
Renewable Energy	5,000
Housing	6,500
Agriculture	4,000
Disaster Management	2,500
Entrepreneurship	1,500
Project Management	1,000
Total	1,00,000

9.8 Phase-wise Investment Plan

To ensure efficient implementation, investment is proposed in three phases.

Phase I (2027–2030)

Investment: ₹35,000 Crore

Priority Projects:

- Roads
 - Water Supply
 - Hospitals
 - Schools
 - Digital Infrastructure
 - Drainage
 - Urban Utilities
-

Phase II (2030–2033)

Investment: ₹35,000 Crore

Priority Projects:

- Universities
 - Tourism
 - Industrial Parks
 - Public Transport
 - Smart Markets
 - Housing
-

Phase III (2033–2035)

Investment: ₹30,000 Crore

Priority Projects:

- Renewable Energy
- Advanced Digital Systems
- Logistics
- Expansion Projects
- Smart City Upgrades
- Long-term Sustainability Initiatives

9.9 Revenue Generation Model

Although many public assets are non-commercial, several projects can generate recurring revenue to support operation and maintenance.

Potential revenue streams include:

User Charges

- Water Supply
- Sewerage Services
- Bus Terminals
- Parking Facilities
- Convention Centres

Commercial Leasing

- Retail Shops
- Office Space
- Industrial Plots
- Warehouses
- Commercial Markets

Tourism Revenue

- Entry Tickets
- Eco-Tourism Facilities
- Ropeways
- Parking
- Visitor Centres

Renewable Energy

- Sale of Solar Power
- Rooftop Solar Net Metering
- Carbon Credit Opportunities (subject to applicable frameworks)

Digital Services

- Smart Utility Platforms
- GIS Services
- Public Data Services
- Smart Advertising Infrastructure

These revenue streams are illustrative and would require detailed financial viability assessments before implementation.

9.10 Economic Impact Assessment

The proposed investment is expected to create substantial multiplier effects.

Employment

Direct Employment

Approximately 4,00,000 Jobs

Indirect Employment

Approximately 10,00,000 Jobs

Business Growth

The mission is expected to stimulate:

- Construction
- Hospitality
- Manufacturing
- Tourism
- MSMEs
- Agriculture
- Digital Services
- Logistics

Tax Base

Long-term economic activity may contribute to higher GST collections, property values, business registrations, and local economic growth, although exact projections would require detailed macroeconomic modelling.

9.11 Financial Governance Framework

A robust governance framework is essential to safeguard public resources.

State Project Finance Authority

Responsibilities include:

- Budget approval
- Fund allocation
- Financial monitoring
- Compliance oversight
- Project audits
- Performance evaluation

Digital Financial Management System

A centralized digital platform is proposed for:

- Online budgeting
- Expenditure tracking
- Contract management
- E-procurement integration
- Payment monitoring
- Financial reporting

9.12 Fund Flow Mechanism

The proposed fund flow process is:

Government / Financial Institution



State Project Finance Authority



Sector Implementing Agencies



District Project Units



Project Contractors



Project Completion



Independent Audit



Performance Review

Each stage would include financial controls, documentation, and approval mechanisms to strengthen accountability.

9.13 Procurement Strategy

All procurement should follow applicable laws and government procedures.

Proposed methods include:

- Open Competitive Bidding
- E-Tendering
- Quality and Cost Based Selection (QCBS) for consultancy services
- EPC Contracts
- PPP Procurement
- Framework Agreements, where suitable

Independent technical and financial evaluations should be conducted before award of major contracts.

9.14 Risk Management Framework

Large infrastructure programmes are exposed to multiple financial risks.

Risk	Mitigation Strategy
Cost escalation	Detailed DPRs, contingency reserves, periodic cost reviews
Construction delays	Milestone-based contracts, performance guarantees
Funding shortfalls	Diversified funding sources, phased implementation
Revenue underperformance	Conservative demand estimates, periodic tariff review where applicable
Inflation	Price adjustment clauses where justified
Contractor default	Bank guarantees, performance securities, prequalification
Foreign exchange risk	Hedging where external financing is involved
Regulatory changes	Regular legal and policy review

A dedicated Project Risk Management Unit should periodically review the risk register and recommend corrective actions.

9.15 Operation and Maintenance (O&M) Financing

Infrastructure sustainability depends on adequate O&M funding.

The model proposes:

- Annual maintenance budgets
- Dedicated asset maintenance funds
- User-fee-supported maintenance where appropriate
- PPP-based O&M contracts for selected assets
- Preventive maintenance programmes
- Digital asset management systems

Typical annual O&M expenditure for large infrastructure portfolios may range from **2% to 5% of replacement value**, depending on asset type. Actual requirements should be determined through detailed engineering and financial analysis.

9.16 Monitoring and Financial Transparency

To enhance accountability, the mission proposes:

- Quarterly financial progress reports
- Annual statutory audits
- Independent third-party audits
- Social audits for community-facing projects, where appropriate
- Public disclosure of project progress
- Dashboard-based expenditure monitoring
- GIS-linked project tracking
- Outcome-based financial reviews

Key Performance Indicators (KPIs) may include expenditure efficiency, project completion rates, procurement timelines, O&M compliance, and service delivery improvements.

9.17 Financial Sustainability Strategy

Long-term sustainability requires balancing capital investment with future operating obligations. The mission therefore proposes to:

- Prioritize economically and socially viable projects.
- Sequence investments to match available funding.
- Encourage private participation in commercially viable sectors.
- Maximize energy efficiency to reduce operating costs.
- Build local capacity for asset management.
- Periodically review financial performance and revise investment priorities where necessary.

Five-Year Cash Flow

Smart Manipur Development Mission (SMDM) – 2035

10.1 Introduction

The **Five-Year Cash Flow Plan** provides an indicative financial roadmap for the initial implementation period of the **Smart Manipur Development Mission (SMDM) – 2035**. The objective of this financial plan is to ensure that adequate funds are available for project implementation while maintaining financial discipline, minimizing funding gaps, and enabling efficient execution of priority infrastructure projects.

The first five years represent the most capital-intensive phase of the mission, during which major investments will be directed toward roads, bridges, healthcare facilities, schools, universities, water supply systems, public transport, digital infrastructure, tourism, and industrial development. Cash flow planning has been designed to synchronize project expenditures with expected financing from government allocations, Public-Private Partnerships (PPP), development finance institutions, and private sector investments.

The figures presented in this chapter are **illustrative planning estimates** intended to demonstrate the proposed financing pattern. Actual annual budgets, disbursements, and funding sources would be finalized after detailed feasibility studies, annual budget approvals, and financial sanction by the competent authorities.

10.2 Cash Flow Strategy

The financial strategy is based on four key principles:

- **Front-loaded investment** in enabling infrastructure such as roads, water supply, digital systems, and healthcare.
- **Phased expenditure** aligned with project readiness and implementation schedules.
- **Diversified financing** from multiple funding sources to reduce dependence on a single source.

- **Gradual increase in internally generated revenue** through commercial infrastructure, tourism, logistics, and user-based services.

This phased approach reduces implementation risk while ensuring that completed infrastructure begins generating economic and social benefits early in the programme.

10.3 Proposed Five-Year Capital Cash Flow

Financial Year	Capital Inflow (₹ Crore)	Capital Outflow (₹ Crore)	Net Cash Position (₹ Crore)
Year 1	9,000	8,000	+1,000
Year 2	11,000	10,500	+500
Year 3	14,000	13,500	+500
Year 4	17,000	16,500	+500
Year 5	19,000	18,500	+500
Total	70,000	67,000	3,000

The cumulative positive balance provides flexibility for contingencies, project acceleration, or inflationary adjustments.

10.4 Annual Investment Priorities

Year 1 – Planning and Core Infrastructure

The first year focuses on project preparation, land development (where required), utility shifting, detailed engineering, and commencement of critical infrastructure. Investments are prioritized for smart roads, water supply, drainage, digital governance platforms, district hospitals, and smart government schools. Approximately **₹8,000 Crore** is proposed for expenditure during this year.

Year 2 – Expansion of Public Infrastructure

During the second year, construction activities accelerate across multiple sectors. Major works include district road improvements, healthcare facilities, educational institutions, sewerage systems, public transport infrastructure, and renewable energy projects. The proposed expenditure is **₹10,500 Crore**.

Year 3 – Economic and Social Infrastructure

The third year emphasizes industrial parks, logistics facilities, commercial markets, tourism infrastructure, housing projects, and higher education institutions. By this stage, several projects initiated during the first two years are expected to become operational, improving service delivery and stimulating economic activity. Estimated expenditure is **₹13,500 Crore**.

Year 4 – Statewide Expansion

The fourth year extends infrastructure development to additional districts while strengthening digital governance, environmental management, renewable energy, and climate resilience initiatives. Large-scale tourism, logistics, and commercial infrastructure projects are expected to progress significantly. Planned expenditure is **₹16,500 Crore**.

Year 5 – Consolidation and Operational Readiness

The fifth year focuses on completing major construction works, commissioning public facilities, testing digital systems, strengthening operations and maintenance arrangements, and preparing for the next implementation phase. Estimated expenditure is **₹18,500 Crore**.

10.5 Proposed Sources of Funds (First Five Years)

Funding Source	Amount (₹ Crore)	Share
Government of India	24,500	35%
Government of Manipur	10,500	15%
Public-Private Partnerships	14,000	20%
Multilateral Development Finance	10,500	15%
Private Sector Investment	7,000	10%
CSR & Development Partners	3,500	5%
Total	70,000	100%

The diversified financing approach is intended to reduce fiscal risk while ensuring continuity of project implementation.

10.6 Cash Flow Management Framework

To maintain financial stability throughout the implementation period, the mission proposes:

- Quarterly release of funds based on verified physical progress.
- Milestone-based contractor payments linked to certified work completion.
- Electronic fund transfer through an integrated financial management system.
- Independent financial audits and technical verification.
- Monthly cash forecasting to identify funding requirements.
- Dedicated contingency reserves to manage inflation, design modifications, and unforeseen events.
- Continuous monitoring of committed versus actual expenditure.

10.7 Expected Financial Outcomes

	The first five years of investment are expected to establish the core infrastructure necessary for long-term development. Anticipated outcomes include: • Completion of priority infrastructure across transport, healthcare, education, and utilities. • Improved investment climate and increased private sector participation. • Creation of substantial direct and indirect employment during construction and operation. • Better public service delivery through modern infrastructure and digital governance. • Enhanced readiness for the subsequent implementation phases of the Smart Manipur Development Mission.				
Risk Analysis	Smart Manipur Development Mission (SMDM) – 2035 11.1 Introduction The Smart Manipur Development Mission (SMDM) – 2035 is a large-scale, multi-sector infrastructure programme with a proposed investment of ₹1,00,000 Crore over nine years. Due to its scale, geographical diversity, multiple stakeholders, and phased implementation strategy, the project will be exposed to various technical, financial, environmental, operational, institutional, and socio-economic risks. Risk analysis is an essential component of project planning because it helps identify potential threats before they occur, estimate their possible impact, and establish mitigation measures that reduce delays, cost overruns, and operational disruptions. A structured risk management framework also enhances investor confidence, improves governance, and supports timely project delivery. The proposed Risk Management Framework follows the principles of risk identification, assessment, mitigation, monitoring, reporting, and periodic review throughout the project lifecycle. 11.2 Risk Management Framework The mission adopts a five-stage risk management approach: Risk Identification → Risk Assessment → Risk Mitigation → Continuous Monitoring → Corrective Action Each major project will maintain a dynamic Risk Register that is updated throughout planning, procurement, construction, commissioning, and operation. 11.3 Major Project Risks <table><tr><th>Risk Category</th><th>Probability</th><th>Impact</th><th>Risk Level</th></tr></table>	Risk Category	Probability	Impact	Risk Level
Risk Category	Probability	Impact	Risk Level		

Financial Risk	High	High	Critical
Construction Risk	High	High	Critical
Land Acquisition & Clearances	Medium	High	High
Environmental & Climate Risk	Medium	High	High
Geological & Seismic Risk	Medium	High	High
Procurement & Supply Chain Risk	Medium	Medium	Moderate
Technology & Cybersecurity Risk	Medium	Medium	Moderate
Operational & Maintenance Risk	Medium	Medium	Moderate
Governance & Institutional Risk	Low	High	Moderate
Social & Community Risk	Low	Medium	Low

11.4 Risk Distribution

11.5 Financial Risk

Financial risk represents one of the most significant challenges for a programme of this scale. It includes funding delays, inflation, escalation in construction costs, fluctuations in material prices, interest rate changes, and slower-than-expected private investment.

Potential impacts include project delays, budget revisions, reduction in project scope, and pressure on public finances.

Mitigation Measures

- Diversified financing through Government, PPP, and institutional funding.
- Phase-wise investment planning.
- Annual financial reviews.
- Contingency reserves for price escalation.
- Independent financial audits.
- Digital expenditure monitoring.
- Conservative revenue assumptions during planning.

11.6 Construction Risk

Construction risk may arise from design modifications, contractor performance issues, labour shortages, equipment failure, poor quality control, or unforeseen site conditions.

Large infrastructure projects often face schedule overruns if project management systems are weak.

Mitigation Measures

- Detailed engineering before tendering.

- Independent design review.
- EPC contracts where appropriate.
- Performance-based contractor evaluation.
- Digital project monitoring dashboards.
- Third-party quality inspections.
- Milestone-linked payments.

11.7 Land Acquisition and Statutory Approval Risk

Certain projects may require land acquisition, utility relocation, environmental clearances, forest permissions, or other statutory approvals.

Delays in obtaining approvals can postpone construction schedules and increase costs.

Mitigation Measures

- Early project planning.
- Government coordination committees.
- GIS-based land mapping.
- Public consultations.
- Phased implementation based on land availability.
- Comprehensive legal due diligence.

11.8 Environmental and Climate Risk

Manipur possesses ecologically sensitive forests, wetlands, rivers, and biodiversity-rich areas. Infrastructure development must therefore be carefully planned to minimize environmental impacts.

Climate-related events such as floods, landslides, and intense rainfall may also affect project implementation and asset performance.

Mitigation Measures

- Environmental Impact Assessments (EIA).
 - Sustainable construction practices.
 - Compensatory afforestation where required.
 - Rainwater harvesting.
 - Green infrastructure.
 - Flood-resilient design.
 - Climate-resilient engineering standards.
 - Continuous environmental monitoring.
-

11.9 Geological and Seismic Risk

Manipur lies within a seismically active region and includes extensive hilly terrain. Earthquakes, slope instability, and landslides present engineering challenges for roads, bridges, tunnels, and public buildings.

Mitigation Measures

- Detailed geotechnical investigations.
- Seismic-resistant structural design.
- Slope stabilization.
- Retaining walls.
- Rock bolting.
- Continuous structural health monitoring.
- Regular safety inspections.

11.10 Procurement and Supply Chain Risk

Delays in procurement, shortages of construction materials, transportation disruptions, and fluctuations in global commodity prices can affect project schedules.

Mitigation Measures

- E-procurement systems.
- Multiple qualified suppliers.
- Long-term framework agreements.
- Inventory management.
- Advance procurement planning.
- Contractual delivery guarantees.

11.11 Technology and Cybersecurity Risk

The Smart Manipur Development Mission proposes extensive use of digital governance, IoT, GIS, AI, cloud computing, and integrated command centres.

These systems may face cybersecurity threats, hardware failures, software obsolescence, or data privacy concerns.

Mitigation Measures

- Cybersecurity Operations Centre.
- Data encryption.
- Multi-factor authentication.

- Disaster recovery sites.
- Periodic vulnerability assessments.
- Backup data centres.
- Regular software updates.
- Cybersecurity awareness training.

11.12 Operational and Maintenance Risk

Many infrastructure projects fail to deliver long-term benefits due to inadequate maintenance.

Operational risks include poor maintenance planning, shortage of skilled personnel, equipment failure, and insufficient operating budgets.

Mitigation Measures

- Digital Asset Management System.
- Preventive maintenance schedules.
- Dedicated O&M budgets.
- Capacity-building programmes.
- Annual infrastructure audits.
- Performance monitoring through KPIs.

11.13 Governance and Institutional Risk

Implementation involves multiple government departments, local bodies, consultants, contractors, and funding agencies. Weak coordination can lead to duplication, delays, and accountability issues.

Mitigation Measures

- State Project Management Unit (SPMU).
- District Project Management Units.
- Clearly defined responsibilities.
- Digital document management.
- Independent project monitoring.
- Quarterly review meetings.
- Transparent reporting mechanisms.

11.14 Social and Community Risk

Infrastructure projects may affect local communities during construction through temporary disruptions, relocation requirements, traffic diversions, or environmental concerns.

Community acceptance is essential for successful implementation.

Mitigation Measures

- Stakeholder consultations.
- Community awareness programmes.
- Grievance redressal mechanism.
- Fair rehabilitation and compensation (where applicable).
- Local employment during construction.
- Transparent communication strategy.

11.15 Risk Monitoring Structure

The mission proposes a multi-tier monitoring system:

Monitoring Level	Responsibility
State Level	State Project Steering Committee
Programme Level	State Project Management Unit (SPMU)
Sector Level	Implementing Departments
District Level	District Project Units
Independent Level	Third-Party Technical & Financial Auditors

Risk reviews should be conducted monthly during construction and quarterly during operation.

11.16 Early Warning Indicators

To identify emerging issues before they become critical, the following indicators should be tracked:

- Cost variance exceeding approved thresholds.
- Schedule delays beyond planned milestones.
- Decline in contractor performance.
- Significant increase in material prices.
- Funding disbursement delays.
- Safety incidents at project sites.
- Environmental non-compliance.
- High number of unresolved public grievances.
- Cybersecurity incidents.
- Declining operational performance after commissioning.

Corrective action plans should be initiated immediately when predefined thresholds are exceeded.

11.17 Emergency Response Framework

The programme proposes integrated emergency preparedness measures, including:

- Disaster Management Control Centre.
- Emergency communication systems.
- Incident reporting protocols.
- Backup power and IT systems.
- Emergency response teams.
- Business continuity plans.
- Periodic mock drills.
- Coordination with state disaster management authorities.

These measures aim to minimize disruptions during natural disasters or major operational incidents.

Environmental Impact Assessment (EIA)

The **Environmental Impact Assessment (EIA)** for the **Smart Manipur Development Mission (SMDM) – 2035** has been prepared to evaluate the potential environmental implications of the proposed infrastructure investments and to recommend strategies that promote sustainable development while protecting Manipur's unique ecological resources. The mission proposes an integrated investment of **₹1,00,000 Crore** across sectors including transportation, healthcare, education, water supply, renewable energy, tourism, urban infrastructure, industrial development, and digital governance. Given the scale of the programme, environmental sustainability has been incorporated as a fundamental design principle rather than a separate component.

Manipur is one of India's ecologically significant states, characterized by dense forests, mountain ecosystems, rivers, wetlands, biodiversity-rich landscapes, and culturally significant natural resources. **Loktak Lake**, the largest freshwater lake in Northeast India, along with the **Keibul Lamjao National Park**, provides habitat for numerous plant and animal species and supports the livelihoods of local communities. The state also lies within a seismically active zone and receives substantial annual rainfall, making environmental planning an essential element of infrastructure development.

The purpose of this Environmental Impact Assessment is to identify potential environmental risks, evaluate their likely significance, propose mitigation measures, and establish an environmental management framework that promotes sustainable growth while preserving ecological integrity. This chapter presents a conceptual environmental assessment for planning purposes.

Detailed EIAs would be undertaken for individual projects where required under applicable environmental laws and regulations.

12.2 Objectives of the Environmental Impact Assessment

The Environmental Impact Assessment aims to:

- Identify potential environmental impacts associated with proposed infrastructure projects.
 - Minimize adverse environmental effects through appropriate planning and engineering.
 - Promote sustainable utilization of natural resources.
 - Protect forests, rivers, wetlands, wildlife habitats, and biodiversity.
 - Encourage renewable energy and low-carbon development.
 - Improve air quality, water quality, and waste management.
 - Strengthen climate resilience and disaster preparedness.
 - Ensure compliance with applicable environmental regulations.
 - Promote environmentally responsible construction practices.
 - Integrate environmental monitoring throughout the project lifecycle.
-

12.3 Existing Environmental Setting

Manipur possesses a highly diverse natural environment that includes forested hills, fertile valleys, rivers, lakes, wetlands, and agricultural landscapes. Approximately three-fourths of the state's geographical area consists of hilly terrain, while the central valley supports agriculture, settlements, and economic activities.

The state is rich in biodiversity and contains numerous endemic plant and animal species. Forest ecosystems contribute to watershed protection, carbon sequestration, biodiversity conservation, and livelihood generation for local communities. Wetlands and lakes provide ecological services including groundwater recharge, fisheries, flood moderation, and tourism.

At the same time, the state faces environmental pressures from increasing urbanization, population growth, solid waste generation, traffic congestion, land degradation, and climate-related events such as floods and landslides. Sustainable infrastructure planning is therefore essential to balance development with environmental conservation.

12.4 Potential Environmental Impacts

The proposed mission may generate both positive and negative environmental impacts during construction and operation.

Construction Phase Impacts

Potential impacts include:

- Temporary dust generation.
- Noise and vibration from construction equipment.
- Increased movement of construction vehicles.
- Temporary traffic disruptions.
- Excavation and earthworks.
- Construction waste generation.
- Temporary disturbance to vegetation.
- Increased demand for construction materials.
- Localized water pollution if construction runoff is not properly managed.

These impacts are generally temporary and can be significantly reduced through appropriate environmental management measures.

Operational Phase Impacts

Following project completion, long-term impacts may include:

Positive Impacts

- Improved public transportation reducing vehicle emissions.
- Increased renewable energy generation.
- Better wastewater treatment.
- Improved solid waste management.
- Enhanced urban greenery.
- Reduced flood risks through improved drainage.
- Higher energy efficiency in public buildings.
- Improved environmental monitoring.

Potential Negative Impacts

- Increased urban activity leading to higher resource consumption.
- Growth in commercial waste.
- Higher water demand due to urban expansion.

- Increased maintenance requirements for environmental infrastructure.

These impacts can be managed through sustainable planning, efficient resource management, and regular environmental monitoring.

12.5 Air Quality Assessment

Construction activities may temporarily increase particulate matter due to excavation, transportation of materials, and movement of heavy equipment. During operation, improved roads and transportation infrastructure are expected to reduce congestion and improve traffic flow, thereby lowering vehicle emissions in urban areas.

The mission proposes the following air quality improvement measures:

- Use of low-emission construction machinery.
- Water spraying for dust suppression.
- Covering of construction materials during transportation.
- Plantation of roadside green belts.
- Promotion of electric public transport.
- Installation of EV charging infrastructure.
- Adoption of renewable energy.
- Air quality monitoring stations in major urban centres.

These measures are expected to improve urban air quality over the long term.

12.6 Water Environment

Water resources are among Manipur's most valuable environmental assets. Infrastructure development must ensure that rivers, lakes, wetlands, and groundwater resources are protected.

The mission includes:

- Modern water treatment plants.
- Sewerage networks.
- Wastewater treatment facilities.
- Rainwater harvesting.
- River rejuvenation programmes.
- Stormwater drainage systems.
- Smart water metering.
- Water conservation campaigns.

Construction sites shall implement sediment control measures to prevent contamination of nearby water bodies.

12.7 Biodiversity Conservation

Protection of biodiversity is a key environmental objective. Infrastructure development shall avoid ecologically sensitive areas wherever feasible and incorporate measures to minimize habitat disturbance.

Conservation measures include:

- Protection of forests and wildlife corridors.
- Avoidance of critical habitats during project planning.
- Compensatory afforestation where legally required.
- Native tree plantation programmes.
- Wetland conservation initiatives.
- Biodiversity monitoring.
- Community-based conservation programmes.

Special attention should be given to environmentally sensitive areas associated with Loktak Lake and other protected ecosystems during detailed planning.

12.8 Solid Waste Management

Urbanization increases municipal solid waste generation. The mission therefore incorporates integrated waste management systems.

Key initiatives include:

- Source segregation.
- Material Recovery Facilities.
- Composting plants.
- Scientific sanitary landfills.
- Construction and demolition waste recycling.
- Biomedical waste treatment.
- Digital waste tracking systems.
- Public awareness programmes.

These interventions aim to reduce landfill dependency while promoting recycling and resource recovery.

12.9 Noise and Vibration

Construction equipment, heavy vehicles, and machinery may temporarily increase noise levels.

Mitigation measures include:

- Limiting construction activities during sensitive hours where appropriate.
- Proper maintenance of equipment.
- Noise barriers near sensitive locations when justified.
- Personal protective equipment for workers.
- Green buffer zones around public institutions.
- Continuous monitoring in high-impact areas.

Operational noise is expected to remain within applicable standards through modern transport planning and infrastructure design.

12.10 Climate Change and Carbon Reduction

Climate resilience is integrated throughout the Smart Manipur Development Mission.

Major initiatives include:

- Solar parks.
- Rooftop solar systems.
- Electric buses.
- Energy-efficient buildings.
- LED street lighting.
- Green public transport.
- Urban tree plantation.
- Water conservation.
- Sustainable drainage systems.
- Climate-resilient engineering.

These interventions contribute to reducing greenhouse gas emissions while improving long-term environmental sustainability.

12.11 Green Building Strategy

All major public buildings proposed under the mission should adopt sustainable design principles.

Key features include:

- Energy-efficient building envelopes.
- Natural lighting and ventilation.
- Rainwater harvesting.
- Solar rooftop systems.
- Water-efficient plumbing.
- Waste segregation facilities.
- Smart energy management systems.
- Universal accessibility.
- Environmentally responsible construction materials where technically suitable.

These measures reduce lifecycle operating costs while minimizing environmental impacts.

12.12 Environmental Management Plan (EMP)

An Environmental Management Plan should be implemented throughout the project lifecycle.

Planning Stage

- Environmental screening.
- Site selection.
- Baseline environmental studies.
- Stakeholder consultation.

Construction Stage

- Dust suppression.
- Waste management.
- Erosion control.
- Worker safety.
- Environmental supervision.
- Compliance monitoring.

Operational Stage

- Water quality monitoring.
- Air quality monitoring.
- Noise monitoring.

- Waste management.
- Green area maintenance.
- Biodiversity monitoring.
- Annual environmental audits.

The EMP should clearly define responsibilities, reporting requirements, monitoring frequency, and corrective actions.

12.13 Environmental Monitoring Framework

Environmental performance should be monitored through measurable indicators.

Environmental Indicator	Monitoring Frequency
Air Quality	Quarterly
Water Quality	Quarterly
Noise Levels	Quarterly
Waste Generation	Monthly
Tree Plantation Survival	Half-Yearly
Energy Consumption	Monthly
Renewable Energy Generation	Monthly
Carbon Emission Estimates	Annual
Environmental Compliance	Annual

Monitoring data should be reviewed by the implementing agencies and corrective actions initiated where necessary.

12.14 Expected Positive Environmental Outcomes

The implementation of the Smart Manipur Development Mission is expected to produce significant long-term environmental benefits, including:

- Improved urban environmental quality.
- Better management of water resources.
- Increased renewable energy generation.
- Reduced greenhouse gas emissions.
- Improved wastewater treatment.
- Enhanced solid waste management.
- Greater urban green cover.
- Improved resilience to floods and climate-related events.

	• Better protection of biodiversity and natural ecosystems. • Promotion of sustainable urban development practices.
Social Impact Assessment (SIA)	The Social Impact Assessment (SIA) of the Smart Manipur Development Mission (SMDM) – 2035 evaluates the potential social outcomes of the proposed ₹1,00,000 Crore integrated infrastructure and development programme. The objective of the assessment is to understand how the proposed investments in healthcare, education, transportation, housing, tourism, digital governance, water supply, renewable energy, industrial development, and public infrastructure are expected to influence the lives, livelihoods, and well-being of the people of Manipur. Unlike financial or engineering assessments, the Social Impact Assessment focuses on people. It examines how development projects can improve access to essential services, create employment opportunities, strengthen social inclusion, reduce regional disparities, empower vulnerable communities, and enhance the overall quality of life. At the same time, it recognizes that large infrastructure programmes may also create temporary disruptions during implementation, requiring careful planning, stakeholder engagement, and appropriate mitigation measures. The Smart Manipur Development Mission has been designed with the principle of "Inclusive Growth for Every Citizen." The mission seeks to ensure that development benefits reach urban and rural populations, women, youth, tribal communities, farmers, artisans, entrepreneurs, senior citizens, and persons with disabilities through equitable investment and participatory governance. 13.2 Objectives of the Social Impact Assessment The Social Impact Assessment has the following objectives: • Evaluate the expected social benefits of the proposed development programme. • Promote equitable access to infrastructure and public services. • Identify vulnerable groups that may require special support. • Strengthen employment generation and livelihood opportunities. • Encourage community participation in planning and implementation. • Improve access to education, healthcare, housing, and digital services. • Promote gender equality and youth empowerment. • Minimize adverse social impacts during project implementation. • Support inclusive and sustainable development across all districts.

13.3 Population and Community Development

The Smart Manipur Development Mission aims to improve living standards by expanding access to quality public infrastructure and essential services. Investments in roads, hospitals, schools, water supply systems, sanitation, housing, and public transport are expected to improve daily life for residents across the state.

The mission adopts a district-based development approach to ensure that infrastructure investments are distributed across different regions rather than concentrated only in major urban centres. This balanced approach is expected to reduce regional inequalities and improve development opportunities in rural and hill districts while strengthening urban service delivery.

Improved infrastructure will enhance mobility, reduce travel time, increase access to government services, and improve connectivity between communities, markets, educational institutions, and healthcare facilities.

13.4 Employment and Livelihood Generation

Employment generation represents one of the most significant social benefits of the proposed mission.

During the construction phase, large-scale investments in roads, bridges, hospitals, schools, industrial parks, housing, tourism facilities, and public utilities are expected to generate substantial demand for engineers, architects, contractors, technicians, skilled workers, machine operators, construction labourers, transport providers, and local suppliers.

Following project completion, additional employment opportunities are expected in sectors such as:

- Healthcare
- Education
- Tourism
- Hospitality
- Transportation
- Information Technology
- Renewable Energy
- Manufacturing
- Agriculture

- Food Processing
- Logistics
- Retail Trade
- Facility Management

The mission estimates the creation of approximately **4 lakh direct employment opportunities** and more than **10 lakh indirect jobs**, contributing to higher household incomes, improved economic participation, and long-term livelihood security.

13.5 Education and Human Development

Education is a key driver of social transformation. The mission proposes significant investments in modernizing government schools, universities, vocational institutions, engineering colleges, medical colleges, nursing institutions, and digital learning infrastructure.

The expected social outcomes include:

- Improved access to quality education.
- Better learning environments.
- Increased digital literacy.
- Enhanced technical and vocational skills.
- Higher student enrolment and retention.
- Improved employability of young people.
- Increased participation in higher education.

By strengthening educational infrastructure, the mission aims to prepare future generations with the knowledge and skills required for a rapidly changing economy.

13.6 Healthcare and Public Well-being

Improved healthcare infrastructure will significantly enhance public health outcomes throughout the state.

The proposed development of hospitals, primary healthcare centres, diagnostic facilities, emergency medical services, telemedicine, and specialized healthcare institutions is expected to:

- Improve access to medical services.
- Reduce travel for specialized treatment.
- Improve maternal and child healthcare.
- Strengthen disease surveillance.
- Improve emergency response.
- Increase life expectancy through better healthcare access.
- Enhance healthcare capacity in underserved regions.

Digital health systems and telemedicine will further improve accessibility, particularly in remote and difficult-to-reach areas.

13.7 Women's Empowerment

The mission recognizes women as important contributors to economic and social development.

Dedicated initiatives include:

- Women Entrepreneurship Centres.
- Skill development programmes.
- Business incubation support.
- Self-help group promotion.
- Safer public transport.
- Improved street lighting.
- Women's hostels.
- Maternal healthcare facilities.
- Financial literacy programmes.
- Digital inclusion initiatives.

Improved mobility, education, healthcare, and employment opportunities are expected to strengthen women's participation in economic activities and decision-making processes.

13.8 Youth Empowerment

Youth constitute one of Manipur's greatest developmental assets. The mission seeks to create opportunities for education, innovation, entrepreneurship, sports, and employment.

Major initiatives include:

- Startup incubation centres.
- Innovation hubs.
- Digital training centres.

- Skill universities.
- Sports infrastructure.
- Research institutions.
- Career counselling centres.
- Entrepreneurship development programmes.

These initiatives aim to equip young people with skills relevant to emerging industries while encouraging innovation and self-employment.

13.9 Tribal and Rural Development

A significant proportion of Manipur's population resides in rural and hill areas. The mission emphasizes inclusive development by improving infrastructure and public services in these regions.

Priority interventions include:

- Rural road connectivity.
- Digital service centres.
- Community health facilities.
- Residential schools.
- Renewable energy systems.
- Drinking water supply.
- Agricultural support infrastructure.
- Eco-tourism.
- Livelihood promotion.
- Skill development centres.

The mission seeks to improve access to opportunities while respecting local traditions, cultural heritage, and community participation.

13.10 Social Inclusion

Inclusive development is a core objective of the mission. Special attention will be given to ensuring that infrastructure is accessible and beneficial to all sections of society.

The mission proposes:

- Universal accessibility in public buildings.
- Barrier-free transport infrastructure.
- Accessible educational institutions.
- Inclusive digital services.
- Affordable housing.

- Community development programmes.
- Public spaces designed for all age groups.

The planning process should encourage participation from local communities, civil society organizations, and vulnerable groups to ensure that development reflects local needs and priorities.

13.11 Community Participation

Successful implementation depends on active involvement of citizens throughout the project lifecycle.

Community participation is proposed through:

- Public consultations.
- Village and municipal meetings.
- Stakeholder workshops.
- Digital feedback platforms.
- Grievance redressal systems.
- Citizen monitoring committees.
- Public awareness campaigns.

Regular communication with stakeholders can improve transparency, strengthen public trust, and help identify local issues early in the implementation process.

13.12 Potential Social Challenges

Although the overall social impact of the mission is expected to be positive, some temporary challenges may arise during implementation.

These may include:

- Temporary traffic disruptions during construction.
- Construction-related noise and dust.
- Temporary restrictions on access to certain areas.
- Increased labour movement into project locations.
- Possible land acquisition or relocation for selected projects, where applicable and subject to legal requirements.

These impacts are generally temporary and can be managed through careful planning, transparent communication, and appropriate mitigation measures.

13.13 Mitigation Measures

To reduce adverse social impacts, the mission proposes:

- Early stakeholder consultation.
- Transparent land acquisition and compensation processes where required.
- Livelihood restoration support, if displacement occurs.
- Local employment preference during construction, where feasible.
- Public information campaigns.
- Community grievance redressal mechanisms.
- Worker health and safety measures.
- Traffic management plans.
- Environmental and social monitoring.
- Periodic social audits.

These measures aim to minimize disruption while maximizing the long-term benefits of the programme.

13.14 Monitoring Social Outcomes

A structured monitoring framework is proposed to assess social performance throughout implementation.

Social Indicator	Monitoring Frequency
Employment Generated	Quarterly
School Enrolment	Annual
Healthcare Utilization	Quarterly
Women's Participation	Annual
Skill Development Beneficiaries	Quarterly
Public Satisfaction Surveys	Annual
Community Grievances	Monthly
Accessibility Compliance	Annual
Local Business Participation	Quarterly

The results should be reviewed periodically to identify areas requiring corrective action and to improve programme effectiveness.

13.15 Expected Social Benefits

The Smart Manipur Development Mission is expected to generate wide-ranging social benefits, including:

	• Improved quality of life for citizens. • Better access to education and healthcare. • Increased employment and livelihood opportunities. • Enhanced mobility and regional connectivity. • Greater participation of women and youth in economic development. • Improved access to digital public services. • Reduced regional disparities. • Stronger community participation in development. • Enhanced social inclusion and accessibility. • Improved public safety and overall human development.
Sustainable Development Goals (SDG) Mapping	The Smart Manipur Development Mission (SMDM) – 2035 has been designed in alignment with the United Nations Sustainable Development Goals (SDGs) adopted by all UN Member States under the 2030 Agenda for Sustainable Development. The SDGs provide a globally recognized framework for promoting inclusive economic growth, social equity, environmental sustainability, and institutional resilience. The proposed ₹1,00,000 Crore investment programme supports multiple SDGs through integrated investments in healthcare, education, smart infrastructure, transportation, water resources, renewable energy, affordable housing, digital governance, tourism, industrial development, and climate resilience. Rather than addressing a single objective, the mission adopts a multi-sector approach where each investment contributes simultaneously to several SDGs. The SDG Mapping demonstrates how the proposed projects can contribute to sustainable development outcomes while complementing national initiatives such as Viksit Bharat @2047, Smart Cities Mission, PM Gati Shakti, Digital India, AMRUT, National Infrastructure Pipeline (NIP), Atmanirbhar Bharat, and the Government of India's commitment to achieving the Sustainable Development Goals. 14.2 SDG Alignment Framework The Smart Manipur Development Mission contributes directly or indirectly to all 17 Sustainable Development Goals, with particular emphasis on infrastructure, health, education, economic growth, sustainable cities, climate action, and partnerships. SDG 1 – No Poverty

Objective

Reduce poverty by expanding economic opportunities and improving access to public services.

Proposed Interventions

- Employment generation through infrastructure projects
- Skill development programmes
- MSME promotion
- Tourism development
- Industrial parks
- Rural infrastructure
- Entrepreneurship support

Expected Outcomes

- Increased household income
 - Reduced unemployment
 - Improved livelihoods
 - Better access to public services
-

SDG 2 – Zero Hunger

Objective

Strengthen agriculture and food security.

Proposed Projects

- Modern irrigation
- Cold storage infrastructure
- Food processing parks
- Organic farming
- Agricultural logistics
- Farmer training centres
- Agri-export facilities

Expected Outcomes

- Increased agricultural productivity
 - Reduced post-harvest losses
 - Higher farmer income
 - Improved food supply chain
-

SDG 3 – Good Health and Well-being

Objective

Improve healthcare accessibility and public health.

Projects

- Super Speciality Hospitals
- District Hospital Modernization
- Telemedicine
- Medical Colleges
- Emergency Response System
- Maternal & Child Healthcare
- Digital Health Platform

Expected Outcomes

- Better healthcare services
 - Reduced mortality
 - Improved emergency care
 - Higher life expectancy
-

SDG 4 – Quality Education

Objective

Provide inclusive and equitable education.

Projects

- Smart Schools
- Universities
- Medical Colleges
- Engineering Colleges
- Skill Development Centres
- Digital Classrooms
- Innovation Centres

Expected Outcomes

- Higher literacy

- Improved digital learning
- Better employability
- Skilled workforce

SDG 5 – Gender Equality

Objective

Empower women socially and economically.

Projects

- Women Entrepreneurship Centres
- Women's Hostels
- Skill Development
- Maternal Healthcare
- Financial Literacy
- Digital Inclusion

Expected Outcomes

- Increased workforce participation
- Better healthcare
- Higher financial inclusion
- Safer public infrastructure

SDG 6 – Clean Water and Sanitation

Objective

Ensure sustainable management of water resources.

Projects

- Water Treatment Plants
- Sewerage Networks
- Smart Water Metering
- Rainwater Harvesting
- Wastewater Treatment
- River Rejuvenation

Expected Outcomes

- Safe drinking water
 - Improved sanitation
 - Better water conservation
 - Reduced pollution
-

SDG 7 – Affordable and Clean Energy

Objective

Promote renewable energy.

Projects

- Solar Parks
- Rooftop Solar
- EV Charging Stations
- Smart Grid
- Solar Street Lights
- Battery Storage

Expected Outcomes

- Lower carbon emissions
 - Reduced fossil fuel dependence
 - Improved energy security
-

SDG 8 – Decent Work and Economic Growth

Objective

Promote sustainable economic growth.

Projects

- Industrial Parks
- Logistics Hubs
- Tourism
- Commercial Markets
- Startup Incubators

- Skill Development

Expected Outcomes

- Approximately 4 lakh direct jobs
- More than 10 lakh indirect jobs
- Increased investment
- Higher state economic activity

SDG 9 – Industry, Innovation and Infrastructure

Objective

Develop resilient infrastructure and innovation.

Projects

- Smart Roads
- Digital Infrastructure
- Innovation Parks
- Industrial Estates
- Smart Logistics
- Data Centres

Expected Outcomes

- Improved connectivity
- Enhanced industrial growth
- Better innovation ecosystem

SDG 10 – Reduced Inequalities

Objective

Reduce regional and social disparities.

Projects

- District-wise development
- Rural connectivity
- Tribal development

- Digital inclusion
- Affordable housing
- Universal accessibility

Expected Outcomes

- Balanced regional growth
- Inclusive access to services
- Greater social equity

SDG 11 – Sustainable Cities and Communities

Objective

Develop resilient and inclusive urban centres.

Projects

- Smart Cities
- Public Transport
- Affordable Housing
- Green Parks
- Waste Management
- Smart Governance

Expected Outcomes

- Better quality of life
- Sustainable urbanization
- Reduced congestion
- Improved public safety

SDG 12 – Responsible Consumption and Production

Objective

Promote efficient resource utilization.

Projects

- Waste Segregation
- Recycling Facilities
- Green Buildings
- Water Conservation
- Energy-efficient Infrastructure

Expected Outcomes

- Lower waste generation
 - Improved recycling
 - Resource efficiency
-

SDG 13 – Climate Action

Objective

Strengthen climate resilience.

Projects

- Flood Management
- Renewable Energy
- Green Infrastructure
- Climate-resilient Roads
- Tree Plantation
- Disaster Early Warning Systems

Expected Outcomes

- Reduced climate vulnerability
 - Improved disaster preparedness
 - Lower greenhouse gas emissions
-

SDG 14 – Life Below Water

Objective

Protect freshwater ecosystems.

Projects

- Loktak Lake Conservation
- Wetland Restoration
- Wastewater Treatment
- River Protection
- Pollution Control

Expected Outcomes

- Improved water quality
- Better aquatic biodiversity
- Sustainable fisheries

SDG 15 – Life on Land

Objective

Protect terrestrial ecosystems.

Projects

- Forest Conservation
- Afforestation
- Biodiversity Protection
- Eco-tourism
- Wildlife Habitat Conservation

Expected Outcomes

- Increased green cover
- Protected biodiversity
- Sustainable land management

SDG 16 – Peace, Justice and Strong Institutions

Objective

Promote accountable governance.

Projects

- Smart Governance

- Digital Citizen Services
- Online Grievance System
- E-Procurement
- Project Monitoring Dashboard

Expected Outcomes

- Transparent governance
- Improved public trust
- Faster service delivery
- Strong institutional capacity

SDG 17 – Partnerships for the Goals

Objective

Strengthen collaboration for sustainable development.

Proposed Partnerships

- Government of India
- Government of Manipur
- Urban Local Bodies
- Development Finance Institutions
- Private Sector
- Academic Institutions
- Civil Society Organizations
- International Development Partners

Expected Outcomes

- Shared expertise
- Diversified financing
- Improved implementation capacity
- Long-term sustainability

SDG Contribution Matrix

SDG	Sector Contribution	Priority
SDG 1	Employment & Livelihood	High
SDG 2	Agriculture & Food Security	High
SDG 3	Healthcare	Very High
SDG 4	Education	Very High

SDG 5	Women Empowerment	High
SDG 6	Water & Sanitation	Very High
SDG 7	Renewable Energy	High
SDG 8	Employment & Industry	Very High
SDG 9	Infrastructure	Very High
SDG 10	Inclusive Development	High
SDG 11	Smart Cities	Very High
SDG 12	Sustainable Consumption	High
SDG 13	Climate Action	High
SDG 14	Freshwater Ecosystems	Medium
SDG 15	Biodiversity & Forests	High
SDG 16	Governance	High
SDG 17	Partnerships	Very High

Expected SDG Outcomes by 2035

The Smart Manipur Development Mission is expected to contribute to:

- Sustainable and resilient urban development.
- Improved healthcare and education infrastructure.
- Enhanced employment opportunities and economic growth.
- Greater access to clean water, sanitation, and renewable energy.
- Climate-resilient infrastructure and environmental conservation.
- Increased digital inclusion and transparent governance.
- Balanced regional development across all districts.
- Stronger partnerships between government, private sector, academia, financial institutions, and civil society.
- Better quality of life for citizens through inclusive and sustainable development.

PM Gati Shakti Integration

The **Smart Manipur Development Mission (SMDM) – 2035** has been conceptually aligned with the vision and planning principles of the **PM Gati Shakti National Master Plan**, which emphasizes integrated infrastructure development, multimodal connectivity, coordinated planning, and efficient utilization of public resources. The objective of this integration is to ensure that investments in transportation, logistics, urban development, healthcare, education, tourism, renewable energy, and digital infrastructure are planned in a coordinated manner to maximize economic and social benefits.

Rather than developing individual infrastructure projects in isolation, the mission adopts a systems-based approach in which roads, industrial parks, logistics hubs, educational institutions, healthcare facilities, commercial centres, tourism destinations, digital networks, and public utilities are interconnected. This integrated planning philosophy is consistent with the core objective of PM Gati Shakti—creating infrastructure that supports faster

economic growth, improves connectivity, reduces logistics costs, and strengthens regional development.

Given Manipur's strategic location on India's eastern frontier, the proposed development framework also recognizes the state's potential role in regional trade, border commerce, tourism, and connectivity with neighbouring regions, subject to applicable national policies and infrastructure priorities.

15.2 Objectives of PM Gati Shakti Integration

The integration of the Smart Manipur Development Mission with PM Gati Shakti aims to achieve the following objectives:

- Develop integrated and multimodal infrastructure.
- Improve connectivity between districts, urban centres, industrial zones, and tourism destinations.
- Reduce travel time and logistics costs.
- Promote coordinated planning among departments and agencies.
- Improve efficiency in infrastructure investment.
- Strengthen digital infrastructure for planning and monitoring.
- Support sustainable economic growth and employment generation.
- Enhance disaster resilience and infrastructure reliability.
- Encourage balanced regional development across Manipur.

15.3 Integrated Infrastructure Planning

Infrastructure under the Smart Manipur Development Mission is proposed to be developed through integrated planning rather than independent sectoral investments.

The programme seeks to coordinate the development of:

- Roads and bridges.
- Urban transportation systems.
- Industrial parks.
- Logistics hubs.
- Commercial markets.
- Educational institutions.
- Healthcare facilities.
- Renewable energy infrastructure.

- Water supply systems.
- Digital communication networks.
- Tourism infrastructure.

This integrated approach is intended to improve efficiency, reduce duplication of investments, and enhance the long-term performance of public infrastructure.

15.4 Multimodal Connectivity

Efficient transportation is central to economic development. The proposed mission emphasizes connectivity between various modes of transport to improve passenger movement and freight logistics.

Key initiatives include:

Road Connectivity

- Upgradation of state highways.
- Strengthening district road networks.
- Smart urban roads.
- Border connectivity improvements.
- Tourism access roads.
- Industrial access corridors.

Public Transport

- Electric bus systems.
- Integrated bus terminals.
- Smart passenger information systems.
- Intelligent traffic management.

Logistics

- Warehousing complexes.
- Freight handling facilities.
- Cold-chain infrastructure.
- Agricultural logistics centres.
- Commercial transport hubs.

Improved multimodal connectivity is expected to enhance access to healthcare, education, tourism, trade, and industrial development.

15.5 Economic Corridors

The mission proposes the development of strategic economic growth corridors connecting major production centres, markets, logistics facilities, educational institutions, tourism destinations, and urban centres.

Potential economic corridor components include:

- Agricultural value chains.
- Food processing clusters.
- Bamboo and forest-based industries.
- Handloom and handicraft clusters.
- Tourism circuits.
- Industrial estates.
- Commercial logistics hubs.

These corridors are intended to improve supply-chain efficiency, support local industries, and encourage investment.

15.6 Industrial and Logistics Integration

Industrial development requires reliable infrastructure connecting production centres with markets and transport networks.

The mission therefore proposes coordinated development of:

- Industrial parks.
- Logistics parks.
- Warehousing facilities.
- Cold storage infrastructure.
- Export facilitation centres.
- Commercial markets.
- Skill development institutions.

This integrated approach aims to reduce transportation costs, improve market access, and support manufacturing and value-added industries.

15.7 Digital Infrastructure Integration

Digital connectivity plays a vital role in modern infrastructure planning and governance.

The Smart Manipur Development Mission proposes integration of:

- GIS-based planning systems.
- State Data Centre.
- Integrated Command and Control Centre.
- Fibre-optic communication network.
- Smart utility management.
- Online citizen services.
- Intelligent traffic systems.
- Digital monitoring dashboards.

Digital platforms are expected to improve planning, coordination, project monitoring, and public service delivery.

15.8 Urban Infrastructure Integration

Urban infrastructure investments are planned as interconnected systems rather than standalone projects.

The integrated urban development framework includes:

- Smart roads.
- Water supply.
- Sewerage.
- Stormwater drainage.
- Solid waste management.
- Public transport.
- Affordable housing.
- Public parks.
- Street lighting.
- Digital governance.

Integrated planning is expected to improve urban efficiency while reducing lifecycle costs and maintenance requirements.

15.9 Tourism Connectivity

Tourism development requires seamless transportation and supporting infrastructure.

The mission proposes integrated connectivity for:

- Loktak Lake.
- Heritage sites.
- Cultural centres.
- Eco-tourism destinations.
- Adventure tourism locations.
- Hospitality infrastructure.
- Visitor information centres.
- Parking facilities.

Improved connectivity is expected to increase tourist arrivals, encourage private investment, and generate local employment.

15.10 Healthcare and Education Connectivity

The mission recognizes that hospitals and educational institutions should be supported by adequate transportation and digital infrastructure.

Integrated planning includes:

- Road access to hospitals.
- Ambulance corridors.
- Public transport connectivity.
- Digital health networks.
- University access roads.
- Student transport systems.
- Broadband connectivity.
- Smart campus infrastructure.

These interventions will improve accessibility and service delivery across the state.

15.11 Renewable Energy Integration

Energy infrastructure is integrated with transport, public buildings, and urban services.

Proposed initiatives include:

- Solar parks.
- Rooftop solar systems.
- Smart electrical grids.
- Battery energy storage.
- Solar-powered street lighting.
- Electric vehicle charging stations.
- Energy-efficient public buildings.

These projects support long-term energy security and environmental sustainability.

15.12 Disaster Resilience Integration

Infrastructure planning incorporates disaster risk reduction and climate resilience.

Key measures include:

- Flood-resilient roads.
- Seismic-resistant public buildings.
- Smart drainage systems.
- Early warning systems.
- Emergency communication networks.
- Disaster management centres.
- Climate-resilient bridges.
- Emergency logistics planning.

These measures aim to improve infrastructure reliability during natural hazards.

15.13 Institutional Coordination

Successful implementation requires close coordination among multiple agencies.

The mission proposes collaboration among:

- Government of India Ministries (as relevant to individual sectors).
- Government of Manipur Departments.

- Urban Local Bodies.
- Public Works Agencies.
- Infrastructure Utilities.
- Transport Authorities.
- Academic Institutions.
- Private Sector Partners.
- Development Finance Institutions.
- Civil Society Organizations.

A centralized project management framework is proposed to improve planning, monitoring, and decision-making.

15.14 Expected Outcomes

The integration of the Smart Manipur Development Mission with PM Gati Shakti planning principles is expected to deliver the following benefits:

- Improved district-to-district connectivity.
- Faster movement of people and goods.
- Reduced logistics and transportation costs.
- Better coordination of infrastructure investments.
- Increased industrial and commercial development.
- Higher tourism potential.
- Enhanced healthcare and educational accessibility.
- Improved digital governance and public service delivery.
- Greater private sector participation.
- Balanced regional development.
- More efficient utilization of public investment.
- Stronger long-term infrastructure sustainability.

15.15 Alignment Matrix

PM Gati Shakti Planning Area	Smart Manipur Development Mission Initiative
Multimodal Connectivity	Smart Roads, Bus Terminals, Logistics Hubs
Integrated Infrastructure	Roads, Water, Sewerage, Housing, Digital Networks
Economic Corridors	Industrial Parks, Tourism Circuits, Commercial Markets
Logistics Efficiency	Warehousing, Cold Chains, Freight Facilities
Digital Planning	GIS, Command & Control Centre, Data Centre
Social Infrastructure	Hospitals, Schools, Universities, Skill Centres
Green Infrastructure	Solar Energy, EV Charging, Green Buildings
Disaster Resilience	Flood Protection, Seismic Design, Early Warning Systems

	Governance	Digital Monitoring, Project Management, Citizen Services
Smart City Mission Alignment	The Smart Manipur Development Mission (SMDM) – 2035 has been conceptually designed in alignment with the guiding principles of the Smart Cities Mission, one of the flagship urban development initiatives of the Government of India. While this proposal is an independent conceptual development framework and is not an officially approved Smart Cities Mission project, its planning philosophy reflects many of the same objectives, including sustainable urbanization, integrated infrastructure development, technology-enabled governance, citizen-centric services, environmental sustainability, economic competitiveness, and improved quality of life. The Smart Cities Mission emphasizes the creation of cities that are livable, economically vibrant, environmentally sustainable, and technologically advanced. The Smart Manipur Development Mission extends these principles beyond a single city by proposing a state-wide integrated development framework covering all districts of Manipur. The mission recognizes that modern urban development cannot be achieved solely through infrastructure construction; instead, it requires coordinated investments in healthcare, education, transportation, digital governance, housing, renewable energy, environmental protection, public safety, and economic development. The proposed ₹1,00,000 Crore investment aims to create interconnected urban and regional infrastructure that supports long-term social and economic transformation while preserving Manipur's cultural identity and ecological heritage. 16.2 Vision Alignment The Smart Cities Mission promotes the development of urban areas that are citizen-friendly, technology-enabled, sustainable, and economically competitive. The Smart Manipur Development Mission shares this vision by proposing integrated infrastructure that combines smart governance, modern public services, resilient engineering, renewable energy, and inclusive development. The mission seeks to transform major urban centres such as Imphal while simultaneously improving district headquarters and rural growth centres through balanced investment. This approach supports regional development and reduces disparities between urban and rural areas, creating a more inclusive model of urbanization. 16.3 Integrated Urban Planning	

A core principle of the Smart Cities Mission is integrated planning rather than isolated project implementation. The Smart Manipur Development Mission follows this same planning philosophy by coordinating investments across transportation, water supply, sewerage, housing, healthcare, education, tourism, digital infrastructure, and environmental management.

Urban infrastructure has been planned as interconnected systems where roads support commercial growth, hospitals are linked with transportation networks, schools are connected through digital infrastructure, renewable energy powers public facilities, and drainage systems complement climate-resilient urban planning. This integrated approach improves operational efficiency while reducing duplication of investment and long-term maintenance costs.

16.4 Citizen-Centric Development

The Smart Cities Mission places citizens at the centre of urban development. Similarly, the Smart Manipur Development Mission has been designed with the objective of improving the quality of life for every resident.

The mission proposes investments that directly benefit citizens through improved healthcare services, modern educational institutions, affordable housing, reliable drinking water, efficient public transportation, digital government services, safer public spaces, recreational parks, and employment opportunities. Special attention has been given to women, youth, senior citizens, tribal communities, persons with disabilities, and economically weaker sections to ensure that development remains inclusive and equitable.

Digital grievance redressal systems, online citizen services, public consultation mechanisms, and transparent governance practices are also proposed to strengthen public participation in decision-making.

16.5 Smart Governance

Technology-enabled governance forms one of the strongest areas of alignment with the Smart Cities Mission.

The Smart Manipur Development Mission proposes the establishment of Integrated Command and Control Centres, State Data Centres, GIS-based planning systems, digital municipal services, online tax and utility management, smart surveillance systems, digital grievance portals, e-governance platforms, and mobile-based citizen service applications.

These systems are intended to improve administrative efficiency, enhance transparency, reduce service delivery time, strengthen disaster response, and

support evidence-based decision-making. Digital governance will also enable real-time monitoring of infrastructure projects, public utilities, traffic systems, environmental indicators, and municipal services.

16.6 Smart Mobility

Efficient transportation is a key component of both the Smart Cities Mission and the Smart Manipur Development Mission.

The proposal includes:

- Smart road infrastructure.
- Intelligent Traffic Management Systems (ITMS).
- Electric public buses.
- Integrated bus terminals.
- GPS-enabled public transport.
- Smart parking systems.
- Pedestrian pathways.
- Cycling infrastructure where feasible.
- EV charging stations.
- Digital traffic monitoring.

These investments are expected to reduce travel time, improve road safety, decrease congestion, lower fuel consumption, and encourage environmentally sustainable mobility.

16.7 Smart Utilities and Public Infrastructure

Modern cities require efficient utility systems that are reliable, sustainable, and technology-enabled.

The Smart Manipur Development Mission proposes integrated development of:

- Drinking water supply systems.
- Smart water metering.
- Sewerage networks.
- Wastewater treatment plants.
- Stormwater drainage.
- Solid waste management.
- Smart street lighting.
- Underground utility corridors.

- Smart electrical distribution.
- Public sanitation infrastructure.

The use of digital monitoring systems, automation, and preventive maintenance is expected to improve service reliability while reducing operational costs.

16.8 Sustainable Environment

Environmental sustainability is a major pillar of both the Smart Cities Mission and this proposal.

The Smart Manipur Development Mission incorporates:

- Solar energy.
- Rooftop photovoltaic systems.
- Energy-efficient public buildings.
- Green public spaces.
- Urban forestry.
- Rainwater harvesting.
- River and lake conservation.
- Waste recycling.
- Climate-resilient infrastructure.
- Electric mobility.

These initiatives aim to reduce environmental impacts while supporting long-term ecological sustainability.

Special emphasis has been placed on protecting Manipur's forests, wetlands, biodiversity, and culturally significant natural resources.

16.9 Economic Development

The Smart Cities Mission recognizes that infrastructure must support economic growth. Accordingly, the Smart Manipur Development Mission proposes integrated economic development through:

- Industrial parks.
- Commercial markets.
- Logistics hubs.
- Tourism infrastructure.
- Food processing industries.
- Bamboo and handicraft clusters.
- Startup incubation centres.

- Skill development institutions.
- Innovation parks.
- Digital business infrastructure.

These investments are expected to increase employment, encourage entrepreneurship, attract private investment, strengthen MSMEs, and improve regional competitiveness.

16.10 Social Infrastructure

Smart cities are not defined only by technology but also by the quality of social infrastructure.

The mission proposes major investments in:

- Super Speciality Hospitals.
- District Hospital modernization.
- Medical colleges.
- Engineering colleges.
- Smart government schools.
- Universities.
- Skill development centres.
- Sports infrastructure.
- Community health facilities.
- Public libraries.

Improved access to education and healthcare is expected to enhance human capital development while improving overall quality of life.

16.11 Public Safety and Disaster Management

The Smart Manipur Development Mission integrates public safety into urban planning.

Proposed measures include:

- CCTV surveillance systems.
- Integrated emergency response centres.
- Smart street lighting.
- Fire safety infrastructure.
- Flood monitoring systems.
- Earthquake-resistant public buildings.

- Emergency communication networks.
- Disaster management centres.
- Early warning systems.

These measures strengthen urban resilience while improving public confidence in civic infrastructure.

16.12 Innovation and Digital Economy

Modern urban development increasingly depends on innovation.

The mission therefore proposes:

- Innovation Centres.
- Research Parks.
- Startup Incubation Hubs.
- Technology Parks.
- AI-enabled governance.
- Digital entrepreneurship programmes.
- Smart education platforms.
- Digital healthcare systems.

These investments are intended to create a knowledge-based economy capable of supporting long-term economic growth.

16.13 Institutional Capacity Building

Successful implementation requires capable institutions.

The mission proposes:

- State Project Management Unit.
- District Project Management Units.
- Digital monitoring systems.
- Capacity-building programmes.
- Technical training.
- Independent quality assurance.
- Financial audits.
- Performance evaluation systems.

Strong institutional capacity will improve project execution, accountability, and operational sustainability.

16.14 Smart City Alignment Matrix

Smart Cities Mission Component	Smart Manipur Development Mission Initiative
Citizen-Centric Governance	Digital Citizen Services, E-Governance Portal
Smart Mobility	Electric Buses, Smart Roads, ITMS
Smart Utilities	Water Supply, Sewerage, Smart Lighting
Sustainable Environment	Solar Energy, Green Buildings, Waste Management
Economic Development	Industrial Parks, Tourism, Commercial Markets
Social Infrastructure	Hospitals, Schools, Universities
Digital Infrastructure	GIS, Command Centre, State Data Centre
Public Safety	CCTV, Disaster Management Systems
Housing	Affordable Smart Housing Projects
Innovation	Startup Incubators, Technology Parks

16.15 Expected Outcomes

The Smart City-aligned approach is expected to deliver the following long-term benefits:

- Improved quality of urban life.
- Faster and more transparent public services.
- Better healthcare and education.
- Modern transportation systems.
- Efficient municipal infrastructure.
- Increased renewable energy adoption.
- Higher employment opportunities.
- Enhanced investment climate.
- Sustainable environmental management.
- Greater citizen participation.
- Improved disaster preparedness.
- Stronger regional economic growth.

Monitoring & Evaluation Framework

The **Monitoring & Evaluation (M&E) Framework** for the **Smart Manipur Development Mission (SMDM) – 2035** has been developed to ensure that the proposed ₹1,00,000 Crore investment programme is implemented efficiently, transparently, and in accordance with its planned objectives. Given the scale and complexity of the mission, which spans multiple sectors including transportation, healthcare, education, urban development, water supply, tourism, renewable energy, housing, and digital governance, a comprehensive monitoring and evaluation system is essential for achieving timely

implementation, effective resource utilization, quality assurance, and measurable development outcomes.

The framework establishes a systematic process for tracking project progress, measuring performance, identifying implementation challenges, evaluating outcomes, and facilitating timely corrective actions. Rather than focusing only on financial expenditure, the framework measures physical progress, service delivery improvements, environmental sustainability, social benefits, institutional performance, and long-term economic impact. Continuous monitoring throughout the project lifecycle will enable decision-makers to identify risks early, improve coordination among implementing agencies, and ensure accountability at every level of governance.

The Monitoring & Evaluation Framework follows the principles of **transparency, accountability, evidence-based decision-making, continuous improvement, stakeholder participation, and outcome-oriented project management**. It also supports alignment with national development priorities such as **Viksit Bharat @2047, PM Gati Shakti, Digital India, the Smart Cities Mission**, and the **Sustainable Development Goals (SDGs)**.

17.2 Objectives of the Monitoring & Evaluation Framework

The primary objective of the Monitoring & Evaluation Framework is to ensure that all projects under the Smart Manipur Development Mission are delivered within the approved scope, budget, quality standards, and implementation timeline. The framework seeks to monitor financial progress, physical construction, service delivery improvements, environmental compliance, social outcomes, and institutional performance throughout the implementation period. It also aims to strengthen transparency, improve inter-departmental coordination, support evidence-based policy decisions, and promote efficient utilization of public resources.

17.3 Monitoring Framework

Monitoring will be undertaken continuously from project planning through construction, commissioning, operation, and maintenance. Every project will establish measurable Key Performance Indicators (KPIs), implementation milestones, financial targets, and quality benchmarks before execution begins. Project progress will be reviewed at monthly, quarterly, and annual intervals depending on the nature and scale of the activity.

The monitoring process will include verification of physical progress against approved schedules, expenditure against sanctioned budgets, quality

compliance with engineering standards, environmental safeguard implementation, social impact indicators, procurement efficiency, and operational readiness. Regular site inspections, engineering reviews, financial audits, digital reporting systems, and independent quality assessments will be used to generate reliable performance data.

17.4 Institutional Framework

A multi-tier institutional structure is proposed to ensure effective oversight and coordination. At the State level, a **State Steering Committee** will provide strategic direction and policy oversight for the mission. A dedicated **State Project Management Unit (SPMU)** will coordinate implementation, monitor progress across sectors, consolidate performance reports, and facilitate decision-making. Sector-specific implementing departments will be responsible for executing projects related to transportation, healthcare, education, water supply, housing, tourism, renewable energy, and digital infrastructure.

At the district level, **District Project Management Units (DPMUs)** will supervise field implementation, coordinate with local authorities, verify project progress, and submit periodic reports to the State Project Management Unit. Independent technical experts, financial auditors, and quality assurance agencies will conduct third-party inspections to ensure objectivity and compliance with approved standards.

17.5 Performance Indicators

The evaluation system will utilize measurable performance indicators to assess project effectiveness. Infrastructure indicators will include the length of roads completed, bridges commissioned, hospitals operational, schools modernized, households connected to water supply, renewable energy capacity installed, and public transport services introduced. Social indicators will measure employment generation, healthcare accessibility, educational outcomes, women's participation, skill development beneficiaries, and citizen satisfaction. Financial indicators will evaluate budget utilization, expenditure efficiency, procurement timelines, contract performance, and operational sustainability. Environmental indicators will include renewable energy adoption, wastewater treatment capacity, tree plantation, waste management performance, and compliance with environmental safeguards.

These indicators will enable periodic comparison between planned and actual performance, facilitating timely corrective action whenever implementation deviates from approved targets.

17.6 Digital Monitoring System

The Smart Manipur Development Mission proposes the use of a technology-enabled monitoring platform to improve transparency and efficiency. A centralized digital dashboard will integrate project data from all implementing agencies, allowing real-time monitoring of financial expenditure, physical progress, contract status, procurement activities, and performance indicators. Geographic Information System (GIS) mapping will be used to visualize project locations, while mobile-based reporting applications will enable field engineers and district officials to upload progress reports directly from project sites.

The digital platform will support data-driven decision-making by generating automated progress reports, identifying implementation bottlenecks, monitoring project timelines, and facilitating communication between implementing agencies. Integration with financial management systems and procurement platforms will further improve accountability and reduce administrative delays.

17.7 Evaluation Methodology

Evaluation will be conducted at multiple stages throughout the project lifecycle. Baseline assessments will establish existing infrastructure, service delivery levels, and socio-economic conditions before project implementation. Mid-term evaluations will assess implementation progress, identify operational challenges, and recommend corrective measures where necessary. Final evaluations will measure project completion, achievement of intended outcomes, and overall contribution to the mission's objectives.

Post-completion evaluations may also be undertaken to assess long-term operational performance, maintenance effectiveness, infrastructure utilization, and socio-economic impacts. Independent evaluation agencies may be engaged to ensure impartial assessment and objective reporting.

17.8 Financial Monitoring and Audit

Financial accountability is a central component of the Monitoring & Evaluation Framework. All project expenditures should be monitored through an integrated financial management system capable of tracking fund releases, contract payments, expenditure against budget, and financial progress. Periodic internal audits, statutory audits, and third-party financial reviews should verify compliance with applicable financial regulations and procurement procedures. Variations between planned and actual expenditure

will be analyzed regularly to improve financial planning and strengthen fiscal discipline.

17.9 Stakeholder Participation

The Monitoring & Evaluation Framework emphasizes participatory governance by encouraging involvement of citizens, local communities, civil society organizations, academic institutions, and private sector stakeholders. Public consultation meetings, digital grievance redressal systems, citizen feedback platforms, and periodic stakeholder workshops will provide valuable information regarding project performance and public satisfaction. Incorporating stakeholder feedback into project management will improve transparency, strengthen public confidence, and enhance the responsiveness of implementing agencies.

17.10 Risk-Based Monitoring

Projects identified as high-risk due to technical complexity, financial scale, environmental sensitivity, or strategic importance will receive enhanced monitoring. Additional site inspections, engineering reviews, financial audits, and management oversight will be conducted for such projects. Early warning indicators such as cost overruns, schedule delays, procurement bottlenecks, contractor performance issues, environmental non-compliance, and unresolved community grievances will trigger corrective action plans to minimize implementation risks.

17.11 Reporting Framework

Project progress reports will be prepared on a monthly, quarterly, and annual basis. Monthly reports will focus on implementation progress and operational issues, quarterly reports will review financial and physical performance against targets, and annual reports will evaluate overall programme achievements, outcomes, challenges, and lessons learned. These reports will provide decision-makers with reliable information to guide future planning, budgeting, and policy interventions.

17.12 Continuous Improvement

	The Monitoring & Evaluation Framework is intended not only to measure performance but also to support continuous institutional learning and improvement. Lessons learned from completed projects, stakeholder feedback, technological innovations, engineering advancements, and evaluation findings will be incorporated into future project planning and implementation strategies. This adaptive approach will improve programme effectiveness throughout the nine-year implementation period.
Procurement Strategy	Smart Manipur Development Mission (SMDM) – 2035 18.1 Introduction The Procurement Strategy for the Smart Manipur Development Mission (SMDM) – 2035 establishes a comprehensive framework for the acquisition of goods, works, consultancy services, technology solutions, and operational services required for the successful implementation of the proposed ₹1,00,000 Crore development programme. Given the magnitude and diversity of the proposed investments across transportation, healthcare, education, urban infrastructure, renewable energy, digital governance, housing, tourism, water supply, and industrial development, an efficient and transparent procurement system is essential to ensure timely project delivery, value for money, quality assurance, and public accountability. The procurement framework is designed to promote fair competition, transparency, efficiency, integrity, sustainability, and accountability while encouraging participation from qualified public and private sector organizations. It also seeks to optimize project costs, reduce procurement delays, strengthen contract management, and minimize implementation risks. Procurement activities shall be carried out in accordance with the applicable laws, financial rules, procurement manuals, and policies prescribed by the competent authorities at the time of implementation. This chapter provides a conceptual procurement framework for planning purposes. Detailed procurement procedures and contract conditions would be finalized during the preparation of individual Detailed Project Reports (DPRs) and implementation plans. 18.2 Procurement Objectives The Procurement Strategy has been developed with the following objectives: • Ensure transparency and fairness in procurement processes. • Achieve value for public investment through competitive procurement. • Procure high-quality goods, services, and infrastructure.

- Promote timely project implementation.
- Encourage participation of competent contractors, consultants, manufacturers, and technology providers.
- Strengthen accountability through digital procurement systems.
- Reduce procurement-related risks and disputes.
- Promote sustainable and environmentally responsible procurement practices.
- Support local industries, MSMEs, and innovation wherever feasible and consistent with applicable procurement rules.

18.3 Procurement Principles

The procurement process will be guided by internationally accepted public procurement principles:

- **Transparency:** All procurement activities should be conducted openly with clearly defined eligibility criteria, evaluation methods, and contract conditions.
- **Competition:** Procurement should encourage broad participation from eligible bidders to obtain the most advantageous outcome.
- **Fairness:** All bidders should receive equal information, equal opportunity, and impartial evaluation.
- **Value for Money:** Procurement decisions should consider quality, lifecycle costs, technical capability, maintenance requirements, and long-term sustainability rather than only the lowest initial price.
- **Accountability:** Clear institutional responsibilities and independent oversight should be established throughout the procurement lifecycle.
- **Integrity:** Ethical conduct, conflict-of-interest management, and anti-corruption measures should be integrated into all procurement activities.

18.4 Procurement Planning

Effective procurement begins with comprehensive planning. Each project under the Smart Manipur Development Mission should prepare a detailed Procurement Plan before initiating tendering activities.

The Procurement Plan should include:

- Scope of work.
- Technical specifications.
- Estimated project cost.
- Procurement method.
- Packaging strategy.
- Procurement schedule.
- Contract duration.

- Qualification requirements.
- Risk assessment.
- Implementation milestones.

Proper procurement planning minimizes delays, improves budget management, and enables better coordination among implementing agencies.

18.5 Procurement Categories

The proposed mission involves procurement across several categories.

A. Civil Works

This includes procurement for:

- Roads and highways
- Bridges
- Hospitals
- Schools and universities
- Government buildings
- Housing projects
- Water supply systems
- Sewerage infrastructure
- Tourism infrastructure
- Industrial parks
- Logistics hubs

B. Goods

Goods procurement includes:

- Medical equipment
 - Laboratory instruments
 - School furniture
 - Smart classroom equipment
 - IT hardware
 - Solar panels
 - Electric buses
 - Street lighting systems
 - Water treatment equipment
 - Emergency response equipment
-

C. Consultancy Services

Consultancy assignments may include:

- Detailed Project Reports (DPRs)
 - Architectural design
 - Engineering design
 - Environmental studies
 - Social impact assessments
 - Financial advisory services
 - Legal consultancy
 - Project management consultancy
 - Independent quality assurance
 - Third-party monitoring
-

D. Information Technology

Digital procurement may include:

- Software development
 - GIS platforms
 - Smart City Command Centres
 - Cybersecurity systems
 - Cloud infrastructure
 - Smart utility management systems
 - Digital governance platforms
 - IoT sensors
 - CCTV systems
-

18.6 Procurement Methods

The selection of procurement methods should depend upon project complexity, estimated value, technical requirements, market conditions, and applicable government regulations.

Possible procurement methods include:

Open Competitive Tendering

This should be the preferred method for major infrastructure projects where broad competition is expected. Open tendering promotes transparency and provides equal opportunity to eligible bidders.

Limited Tendering

Limited tendering may be considered for specialized works or situations permitted under applicable procurement rules where a limited number of qualified suppliers are available.

Request for Proposal (RFP)

Consultancy services such as project management, engineering design, architecture, environmental assessment, and financial advisory may be procured through a Request for Proposal process emphasizing technical competence and value.

Framework Agreements

For frequently required goods and services, framework agreements may improve procurement efficiency by reducing repetitive tendering.

Public-Private Partnership (PPP)

Commercially viable infrastructure projects such as logistics parks, commercial markets, bus terminals, tourism facilities, renewable energy projects, and parking infrastructure may be implemented through suitable PPP arrangements, subject to applicable policies and project-specific feasibility.

18.7 Bid Evaluation Process

Bid evaluation should follow clearly defined and transparent criteria established before tender publication.

Evaluation may consider:

- Technical capability.
- Experience in similar projects.
- Financial capacity.
- Project methodology.
- Quality assurance systems.
- Human resources.
- Construction schedule.
- Safety record.

- Environmental compliance.
- Commercial proposal.

For consultancy services, a **Quality and Cost Based Selection (QCBS)** approach may be appropriate where technical quality is a significant evaluation factor.

18.8 Contract Management

Effective contract management is essential to achieve successful project outcomes.

Contract administration should include:

- Pre-construction meetings.
- Detailed implementation schedules.
- Progress monitoring.
- Milestone verification.
- Variation management.
- Quality inspections.
- Safety compliance.
- Environmental compliance.
- Payment certification.
- Contract closure procedures.

Digital contract management systems may be used to improve documentation, reporting, and decision-making.

18.9 E-Procurement System

The mission recommends adoption of a fully digital procurement platform to enhance transparency and efficiency.

The proposed e-procurement system should support:

- Online tender publication.
- Digital document submission.
- Electronic bid opening.
- Bid evaluation workflow.
- Digital approvals.
- Contract management.
- Online payment tracking.
- Vendor registration.
- Audit trails.

- Public disclosure of procurement information, where appropriate.

Digital procurement reduces administrative costs, improves competition, and strengthens accountability.

18.10 Quality Assurance

Quality assurance should be integrated throughout the procurement and construction process.

Measures include:

- Pre-qualification of contractors where appropriate.
- Material testing.
- Factory inspections.
- Site quality audits.
- Third-party quality inspections.
- Laboratory testing.
- Independent engineering review.
- Compliance with applicable technical standards.

Quality should be monitored continuously from procurement through project completion.

18.11 Sustainable Procurement

The Smart Manipur Development Mission promotes environmentally responsible procurement practices.

Priority should be given, where feasible and consistent with procurement rules, to:

- Energy-efficient equipment.
- Renewable energy technologies.
- Recyclable construction materials.
- Low-emission machinery.
- Water-efficient systems.
- Environmentally certified products.
- Sustainable construction methods.
- Green building materials.

Lifecycle environmental impacts should be considered during procurement planning.

18.12 Risk Management in Procurement

Procurement risks include:

- Tender delays.
- Cost escalation.
- Limited competition.
- Contractor non-performance.
- Supply chain disruptions.
- Quality deficiencies.
- Contract disputes.
- Material shortages.
- Fraud and corruption risks.

Mitigation measures include:

- Comprehensive procurement planning.
- Independent bid evaluation.
- Performance securities.
- Bank guarantees.
- Digital procurement platforms.
- Contract performance monitoring.
- Regular audits.
- Dispute resolution mechanisms.

18.13 Local Industry Participation

Subject to applicable procurement policies and competition requirements, the mission encourages participation by:

- MSMEs.
- Local contractors.
- Startups.
- Indigenous technology providers.
- Local manufacturers.
- Skill development institutions.
- Women-led enterprises.

Encouraging local participation can strengthen the regional economy, create employment, and build institutional capacity without compromising transparency or competition.

18.14 Procurement Governance

A structured governance framework is proposed to oversee procurement activities.

State Level

The State Steering Committee will provide policy guidance and strategic oversight.

Project Management Unit

The State Project Management Unit (SPMU) will coordinate procurement planning, monitor implementation, review procurement performance, and ensure compliance with applicable procedures.

Implementing Agencies

Sector-specific departments will prepare tender documents, conduct evaluations, manage contracts, and supervise execution.

Independent Oversight

Independent auditors, technical experts, and quality assurance agencies should periodically review procurement activities to strengthen transparency and accountability.

18.15 Ethical Standards

All procurement participants should adhere to high standards of professional ethics.

The procurement framework should include:

- Conflict of interest disclosures.
- Confidentiality during evaluation.
- Equal treatment of bidders.
- Prevention of collusive practices.
- Anti-fraud measures.
- Whistleblower mechanisms, where applicable.
- Compliance with applicable anti-corruption laws and regulations.

These measures help maintain public confidence in procurement decisions.

18.16 Monitoring Procurement Performance

	Procurement performance should be reviewed using measurable indicators such as: • Average procurement cycle time. • Percentage of tenders completed within schedule. • Cost savings achieved through competition. • Number of participating bidders. • Contract completion rates. • Quality compliance. • Procurement-related disputes. • Vendor performance ratings. • Timeliness of payments. Regular monitoring enables continuous improvement and early identification of bottlenecks.																																																
Detailed Budget Estimate	Smart Manipur Development Mission (SMDM) – 2035 Total Proposed Project Cost: ₹1,00,000 Crore The following budget is an indicative planning estimate prepared for the conceptual Smart Manipur Development Mission. The allocations are intended to demonstrate the scale and distribution of investments across priority sectors and would require refinement through detailed feasibility studies, DPRs, and approvals by the competent authorities. 19.1 Sector-wise Budget Summary <table><tr><th>Sl. No.</th><th>Sector</th><th>Budget (₹ Crore)</th><th>% Share</th></tr><tr><td>1</td><td>Smart Roads, Highways & Bridges</td><td>22,000</td><td>22%</td></tr><tr><td>2</td><td>Healthcare Infrastructure</td><td>12,000</td><td>12%</td></tr><tr><td>3</td><td>Education & Skill Development</td><td>15,000</td><td>15%</td></tr><tr><td>4</td><td>Water Supply & Sewerage</td><td>7,500</td><td>7.5%</td></tr><tr><td>5</td><td>Smart Markets & Commercial Infrastructure</td><td>5,500</td><td>5.5%</td></tr><tr><td>6</td><td>Tourism Development</td><td>5,000</td><td>5%</td></tr><tr><td>7</td><td>Smart Public Transport</td><td>8,000</td><td>8%</td></tr><tr><td>8</td><td>Digital Infrastructure & Smart Governance</td><td>4,500</td><td>4.5%</td></tr><tr><td>9</td><td>Renewable Energy</td><td>5,000</td><td>5%</td></tr><tr><td>10</td><td>Affordable Housing</td><td>6,500</td><td>6.5%</td></tr><tr><td>11</td><td>Agriculture & Food Processing</td><td>4,000</td><td>4%</td></tr></table>	Sl. No.	Sector	Budget (₹ Crore)	% Share	1	Smart Roads, Highways & Bridges	22,000	22%	2	Healthcare Infrastructure	12,000	12%	3	Education & Skill Development	15,000	15%	4	Water Supply & Sewerage	7,500	7.5%	5	Smart Markets & Commercial Infrastructure	5,500	5.5%	6	Tourism Development	5,000	5%	7	Smart Public Transport	8,000	8%	8	Digital Infrastructure & Smart Governance	4,500	4.5%	9	Renewable Energy	5,000	5%	10	Affordable Housing	6,500	6.5%	11	Agriculture & Food Processing	4,000	4%
Sl. No.	Sector	Budget (₹ Crore)	% Share																																														
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11	Agriculture & Food Processing	4,000	4%																																														

12	Disaster Management	2,500	2.5%
13	Entrepreneurship & MSME Development	1,500	1.5%
14	Project Management, Monitoring & Capacity Building	1,000	1%
TOTAL		1,00,000	100%

19.2 Detailed Budget – Smart Roads, Highways & Bridges (₹22,000 Crore)

Component	Budget (₹ Crore)
Four-Lane State Highways	6,500
District Road Modernization	3,500
Smart Urban Roads	2,500
Ring Roads	2,000
Flyovers	1,800
Major Bridges	2,000
Smart Traffic Management	700
LED Smart Street Lighting	600
Cycle Tracks & Footpaths	500
Multi-Level Parking	700
Road Safety Infrastructure	500
Utility Corridors	700
Total	22,000

19.3 Healthcare Infrastructure (₹12,000 Crore)

Component	Budget (₹ Crore)
Super Speciality Hospitals	3,500
District Hospital Upgradation	2,000
Medical Colleges	1,500
Primary Health Centres	900
Community Health Centres	700
Cancer Institute	500
Trauma Centres	400
Diagnostic Laboratories	500
Telemedicine Network	300
Medical Equipment	1,200
Ambulance & Emergency Services	500
Total	12,000

19.4 Education & Skill Development (₹15,000 Crore)

Component	Budget (₹ Crore)
Smart Government Schools	3,000
Universities	2,500
Engineering Colleges	1,500
Medical Colleges	1,200
ITIs & Skill Centres	1,500
Digital Classrooms	1,000
Research Centres	1,200
Libraries	600
Sports Infrastructure	1,000
Innovation Centres	1,000
Scholarship Portal & ERP	500
Total	15,000

19.5 Water Supply & Sewerage (₹7,500 Crore)

Component	Budget (₹ Crore)
Water Treatment Plants	1,500
Distribution Network	1,600
Sewerage Network	1,500
Sewage Treatment Plants	800
Storm Water Drainage	700
Rainwater Harvesting	300
Smart Water Metering	300
River & Lake Conservation	500
Public Toilets	300
Total	7,500

19.6 Smart Markets & Commercial Infrastructure (₹5,500 Crore)

Component	Budget (₹ Crore)
Wholesale Markets	1,000
Commercial Complexes	1,000
Logistics Parks	900

Warehousing	700
Cold Storage	600
Export Facilitation Centres	400
Startup Business Centres	400
Handicraft Mega Market	300
Bamboo Trade Centre	200
Total	5,500

19.7 Tourism Development (₹5,000 Crore)

Component	Budget (₹ Crore)
Loktak Lake Development	1,200
Eco-Tourism Projects	900
Heritage Conservation	700
Convention Centre	500
Adventure Tourism	400
Ropeways	300
Tourist Amenities	300
Hotels & Hospitality Support	300
Tourism Promotion	200
Total	5,000

19.8 Smart Public Transport (₹8,000 Crore)

Component	Budget (₹ Crore)
Electric Buses	2,000
Bus Terminals	1,000
EV Charging Stations	700
Smart Bus Stops	500
Intelligent Traffic System	900
GPS Fleet Management	300
Integrated Transport Hub	1,500
Smart Parking	600
Traffic Control Centre	500
Total	8,000

19.9 Digital Infrastructure (₹4,500 Crore)

Component	Budget (₹ Crore)
Command & Control Centre	800
State Data Centre	600
GIS Platform	400
CCTV Network	700
Public Wi-Fi	300
Digital Citizen Services	400
Cyber Security Centre	500
IoT Infrastructure	500
Smart Monitoring Dashboard	300
Total	4,500

19.10 Renewable Energy (₹5,000 Crore)

Component	Budget (₹ Crore)
Solar Parks	2,000
Rooftop Solar	900
Smart Grid	700
Battery Storage	500
EV Charging Support	300
Solar Street Lights	400
Mini Hydropower	200
Total	5,000

19.11 Affordable Housing (₹6,500 Crore)

Component	Budget (₹ Crore)
Affordable Housing	3,000
Slum Redevelopment	800
Smart Residential Colonies	1,000
Student Hostels	500
Women's Hostels	400
Senior Citizen Housing	300
Community Facilities	500

Total	6,500
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19.12 Agriculture & Food Processing (₹4,000 Crore)

Component	Budget (₹ Crore)
Food Processing Parks	1,000
Cold Chain	700
Organic Farming	500
Irrigation	600
Agri Logistics	400
Seed Production	300
Farmer Training	200
Digital Agriculture	300
Total	4,000

19.13 Disaster Management (₹2,500 Crore)

Component	Budget (₹ Crore)
Disaster Management Centre	500
Flood Protection	700
Landslide Mitigation	400
Early Warning Systems	300
Emergency Shelters	300
Rescue Equipment	200
Disaster Training	100
Total	2,500

19.14 Entrepreneurship & MSME Development (₹1,500 Crore)

Component	Budget (₹ Crore)
Startup Incubators	400
Women Entrepreneurship Centres	300
MSME Facilitation Centres	250
Innovation Fund	250
Skill & Business Development	200
Women SHG Support	100

Total	1,500
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19.15 Project Management & Capacity Building (₹1,000 Crore)

Component	Budget (₹ Crore)
State Project Management Unit	200
District Project Management Units	150
Project Monitoring System	150
Third-Party Audit	100
Quality Assurance	100
Capacity Building	100
Digital Dashboard	100
Project Documentation	50
IEC & Communication	50
Total	1,000

19.16 Phase-wise Budget Allocation

Phase	Duration	Budget (₹ Crore)	Percentage
Phase-I	2027–2030	35,000	35%
Phase-II	2030–2033	35,000	35%
Phase-III	2033–2035	30,000	30%
Total		1,00,000	100%

19.17 Funding Pattern

Funding Source	Amount (₹ Crore)	Share
Government of India	35,000	35%
Government of Manipur	15,000	15%
Public-Private Partnership (PPP)	20,000	20%
Multilateral Development Agencies	15,000	15%
Private Sector Investment	10,000	10%
CSR & Philanthropic Support	5,000	5%
Total	1,00,000	100%

Smart Manipur Development Mission

SMART MANIPUR DEVELOPMENT MISSION;SMDM) – 2035

DEVELOPMENT INFRASTRUCTURE & INVESTMENT MAP



DEVELOPMENT PROJECTS (SMDM)

- Road / Highway Projects
- Bridge / Major Bridges
- Healthcare Infrastructure
- Education & Skill Development
- Water Supply & Sewerage
- Smart Markets / Commercial
- Tourism Infrastructure
- Smart Public Transport
- Digital Infrastructure / Smart Governance
- Renewable Energy Projects
- Affordable Housing
- Logistics Hub / Industrial Park
- Disaster Management

KEY HIGHLIGHTS

- 4 National Highways Connectivity
- 2 Operational Airports (Imphal, Ukhrul)
- 1 Proposed Airport (Churachandpur)
- Loktak Lake – Major Tourism & Environment Asset
- Strategic Connectivity with Myanmar via Moreh (NH-102)
- Balanced Development across Valley & Hill Districts

MAP NOT TO SCALE
FOR PLANNING PURPOSE ONLY



LEGEND (BASE MAP)

- International Boundary
- State Boundary
- District Boundary
- National Highway
- State Highway
- Major Road
- Railway Line
- River / Waterbody
- District HQ
- Other Town
- Airport

Message of Gratitude

Palmei Sorojini
President

NAVGYAN TRIBAL EMPOWERMENT AND RURAL TRUST

It is with great pride and sincere gratitude that I present the **Smart Manipur Development Mission (SMDM) – 2035**, a visionary initiative dedicated to building a prosperous, sustainable, inclusive, and future-ready Manipur.

On behalf of **NAVGYAN TRIBAL EMPOWERMENT AND RURAL TRUST**, I extend my heartfelt thanks to the **Government of India**, the **Government of Manipur**, policymakers, planning authorities, technical experts, development professionals, academic institutions, civil society organizations, and all stakeholders whose guidance, encouragement, and commitment have inspired the preparation of this comprehensive development proposal.

I express my sincere appreciation to every member of our team for their dedication, hard work, and unwavering support throughout the development of this project. Their expertise, innovation, and collaborative efforts have played a vital role in shaping a roadmap that addresses the aspirations of the people of Manipur while aligning with the national vision of **Viksit Bharat @2047**.

We are especially grateful to the local communities, youth, women, entrepreneurs, farmers, and tribal representatives whose aspirations and perspectives have strengthened this proposal. Their participation reinforces our belief that sustainable development can only be achieved through inclusive planning and collective responsibility.

This proposal is more than a development document; it is a shared commitment to improving lives, strengthening infrastructure, protecting our natural environment, preserving our rich cultural heritage, generating employment, and creating opportunities for future generations. We firmly believe that with strong partnerships, transparent governance, and dedicated implementation, the Smart Manipur Development Mission can become a model of integrated and sustainable development for the entire North Eastern Region.

Finally, I convey my deepest gratitude to everyone who has contributed directly or indirectly to this mission. Your trust, encouragement, and continued support inspire us to work with greater dedication toward transforming this vision into reality.

Together, let us build a Smart, Sustainable, Resilient, and Prosperous Manipur for present and future generations.

With sincere appreciation,

Palmei Sorojini
President

NAVGYAN TRIBAL EMPOWERMENT AND RURAL TRUST