



ADMINISTRATIVE REPORT

2025-26



Submitted By
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1. INTRODUCTION :

The Directorate of Environment & Climate Change in the State serves as the nodal agency for coordinating and promoting all environment-related matters and also integrating significant activities within various developmental programmes. In view of its essential functions and wide-ranging responsibilities under the Environment (Protection) Act, 1986 and subsequent Rules, as entrusted by both the State Government and the Government of India from time to time, the office was strengthened and upgraded into a full-fledged Directorate of Environment in 2011–12. Further, in 2016, it was reconstituted as the Directorate of Environment & Climate Change, reflecting its expanded mandate within the State Government.

At present, the Directorate of Environment & Climate Change is implementing seven different schemes under the State Plan with active community participation. These includes-

- i. Eco-development Programme and Natural Resources Conservation
- ii. Environment Education and Information Dissemination Programme
- iii. Environmental Monitoring, Research & Development with Multidisciplinary Scientific Study of River catchments and Spring-sheds
- iv. Climate Change and Environment Impact Studies
- v. Environmental Planning and Management of Wetlands / Lakes and Waterbodies
- vi. Solid Wastes Management
- vii. Information Technology

Beside these plan scheme / programme activities, the Directorate has also been implementing various CSSs (Central Sponsor/Sector Schemes), namely

- i. Rejuvenation and Conservation of Nambul River in Greater Imphal area
- ii. Integrated Management Plan and Conservation of Waithou-Phumnom Pat, Imphal East & Thoubal
- iii. Integrated Management Plan and Conservation of Yaral Pat, Imphal East District
- iv. Integrated Management Plan and Conservation of Ultra Pat, Bishnupur District
- v. Integrated Management Plan and Conservation of Jaimeng Lake, Kangpokpi District
- vi. Rejuvenation of Imphal – Kongba River and Faecal sludge and septage Management at 27 ULBs
- vii. Climate Resilient Spring shed Management at Lunghar
- viii. Plants for Collecting Plastic and other Floating Debris from the Rivers
- ix. State Climate Change Cell, Ministry of Science and Technology, Govt. of India
- x. EIACP Centre (Environment Information, awareness, capacity building and livelihood programme)

Moreover, the Directorate has been designated as State Nodal Agency for various responsibilities and authorities as

- i. **Manipur State Wetlands Authority (MSWA)** for conservation and management of wetlands;
- ii. **State Environment Impact Assessment Authority (SEIAA)** for Environmental Clearances;
- iii. **Social Impact Assessment (SIA)** for land acquisition;



- iv. **River Rejuvenation Committee (RCC)** for preparation of action plan, implementation and evaluation of polluted rivers identified by Central Pollution Control Board;
- v. **State Action Plan on Climate Change (SAPCC)** for preparation, implementation and evaluation of climate action the state;
- vi. Coordination and Compliances of **directions from Hon'ble NGT** (National Green Tribunal), etc.

In addition to the above responsibilities, the Directorate has been assigned to coordinate and comply with the directions from Hon'ble Supreme Court of India, National Green Tribunal (NGT) and High Court of Manipur in respect of various litigations on different environment related matters. Some of the major directions from Hon'ble NGT's original applications (OAs) are

NGT OAs	Subject
OA 673 of 2018	Compliances of Action Plan on polluted river stretches (13 Rivers in Manipur namely (i) Barak river, (ii) Chakpi River (iii) Imphal River (iv) Iril River (v) Khuga River (vi) Khujairok River (vii) Lokchao River (viii) Maha River (ix) Manipur River (x) Nambul River (xi) Sekmai River (xii) Thoubal River and (xiii) Wangjing River)
OA 325 of 2015	Preparation of Action Plan on Polluted Water bodies
OA 593 of 2017	Compliances of Establishment & Functioning of STP / ETP / CETP
OA 164 of 2018	Compliances of Violation of Environmental norms by the Thermal Power Plants (TPPs)
OA 360 of 2018 with OA 351 of 2019	Preparation, implementation and Compliances of District Environment Plan (DEP) and State Environment Plan (SEP) to integrate the National Environment Plan (NEP) covering maintenance, conservation & protection of wetlands in the DEP
OA 438 of 2018 with OA 392 of 2022	Regulation of ground water for sustainable water resource management and Indiscriminate withdrawal of ground water (Prepared Manipur Ground Water (Control & Regulation) Policy, 2023
OA 462 of 2018	Compliances of carrying capacity of Eco-sensitive Zones
OA 512 of 2018	Compliances of unscientific disposal of E-Waste resulting in contamination of ground water and soil acidification (E-waste Management Rules)
OA 606 of 2018	Compliance of Municipal Solid Waste Management Rules, 2016
OA 180 of 2021	Compliances of Bio-Medical Waste Rules (BMW), 2016
OA 333 of 2021	Compliances on prevention of air pollution on account of dust emissions during cremation
OA 178 of 2022	Compliances on mitigation measures to offset the adverse impact of Tourism activities on the Environment
OA 156 of 2023	Compliances on discharge of untreated sewage directly into river & ponds in violation of Water (Prevention and Control of Pollution) Act, 1974 and non-compliance of statutory rules.
OA 156 of 2021	Formulation of guidelines of State Action Plan for Clean Air



2. FINANCIAL BUDGET AND TARGET:

Demand No. : 19 (Environment and Forest)
Major Head : 3435 – Ecology and Environment (Plan)
Major Head : 5425 – Capital Outlay on other Scientific and Environment Research

Budget Heads	RE (2025-26)	BE (2026-27)	Increase and Decrease
Normal Plan Scheme	1570.00	2096.00	(+) 33.50%
Direction (Salaries)	681.85	681.85	0.00%
Direction (TA / Electric / Water / Office Expenses)	151.00	400.00	(+) 164.90%
Grant-in-aid to MPCB	1020.00	1800.00	(+) 76.47%
Sub Total under MH : 3435 (Plan)	3422.85	4977.85	(+) 45.43%
CSS ongoing	00.00	2328.70	-
State Component Nambul Project	00.00	00.00	-
Direction and Administration (viz. motor vehicle, machinery & equipment, ICT, Furniture, Building Construction, etc.)	120.00	260.00	(+) 116.67%
New CSS Imphal River Project	4445.00	4795.01	(+) 7.87%
New CSS IMP of Loktak Lake	100.00	2222.22	(+) 2122.22%
Sub Total under MH : 5425	4865.00	9605.93	(+) 97.45%
GRAND TOTAL	8287.85	14583.78	(+) 75.97%

Major Target During 2025-26:

1. Establish and setting up of **District level Offices** and District level Environment Monitoring Cells;
2. Endorsement of **State Action Plan on Climate Change, Version 2 (2021-2030)**;
3. Climate Resilient and Science based **Spring-shed revival** and maintenance of **e-flow** of the Rivers under Climate Change Adaptation Programme;
4. Commission of **Nambul River Rejuvenation Project**;
5. Implementation of Rejuvenation and conservation of **Imphal – Manipur River during 2025-26** under National River Conservation Plan, Govt. of India
6. Implementation of IMPs (Integrated Management Plan) at 4 (four) wetlands namely (i) Waithou-Phumnom Pat, (ii) Yaral Pat, (iii) Ultra Pat and (iv) Jaimeng Pat under National Plan for Conservation of Aquatic Ecosystem (NPCA), Govt. of India
7. Implementation of Project on **collection of plastics and debris from rivers under NEC**
8. Notification of 3 (Three) important Wetlands Namely, (i) Yaral Pat, Imphal East, (ii) Ultra Pat, Bishnupur and (iii) Waithou-Phumnom Pat, Imphal East and Thoubal as State Priority under the Wetlands (Conservation and Management) Rules 2017;
9. Conservation of other important Wetlands and its Aquatic Ecosystem in the state;
10. Upgradation of the office building as **Green Building**;



3. ONGOING PLAN SCHEMES :

3.1 Eco-development Programmes and Natural Resources Conservation :

This scheme focus on

- i. Development and maintenance of road median and traffic island by planting trees within greater Imphal area i.e. 38 Km(approx)
- ii. State Botanical Garden at Khonghampat for an area of 100 hectares
- iii. Development and maintenance of Bio-Diversity Park at Ningsingkhul, Jiribam
- iv. Beatification and bio-diversity conservation at Kangla
- v. Development of Eco parks at District level etc

Planting vegetation in road medians and Traffic islands at Urban area has numerous benefits, as:

- i. Air quality improvement: Vegetation helps absorbs pollutants such as carbon dioxide and particulate matter leading to cleaner air.
- ii. Noise reduction: Plants can act as sound barriers, reducing the noise pollution from Traffic.
- iii. Temp regulation: It helps to mitigate the urban heat island effect through the process of evapotranspiration.
- iv. Visual Barriers: Median plants can reduce headlight glare from oncoming traffic, improving night time during conditions.
- v. Well maintained medians with greenery enhance the visual landscape, contributing to overall aesthetic of the area.

The Directorate of Environment and Climate Change, under the scheme Eco-Development Programme, is actively engaged in the maintenance of road medians and traffic islands across the Greater Imphal area. This initiative is designed to enhance urban aesthetics, improve air quality, and contribute to climate resilience through sustainable landscaping practices. The vision is to transform Imphal into a vibrant cityscape with a tapestry of blossoming flowers and greenery which striving toward a pollution-free metropolis that embodies purity and elegance.

In pursuit of this aspiration, the Directorate has also undertaken maintenance of key ecological and cultural sites, including:

- i. C.M. Secretariat Office Complex – ensuring its upkeep and eco-friendly landscaping.
- ii. Eco-development at historic Kangla – preserving its heritage and ecological value.
- iii. State Botanical Garden at Khonghampat – conserving rare botanical species and maintaining its role as a hub of biodiversity.
- iv. Ningsingkhul Biodiversity Park at Jiribam – nurturing a sanctuary of ecological richness and cultural significance under the Eco-development and Natural Resources Conservation Programme.

Plantation and maintenance of Road Medians as Green Buffers:

Road medians serve as vital ecological buffers in urban areas. They reduce vehicular emissions, mitigate dust pollution, and provide essential ecosystem services such as carbon sequestration and biodiversity



support. Proper maintenance — including plantation, pruning, soil improvement, fencing, and watering — is critical to ensuring plant survival and growth, thereby sustaining both ecological and visual value.

Conservation of Natural Resources:

Natural resources must be managed rationally and sustainably to safeguard them for future generations. Conservation involves protecting forests, water bodies, minerals, fuels, and other resources to prevent depletion and environmental imbalance. Unsustainable use can lead to severe consequences such as global warming, floods, climate change, famine, and drought. Thus, conservation has become an urgent necessity to mitigate these challenges and ensure ecological stability.

Development of Botanical Garden:

Botanical gardens are institutions dedicated to the scientific documentation, conservation, display, and education of living plant collections. Their mandate includes proper labeling of plants with botanical names, ensuring both scientific accuracy and public awareness. The State Botanical Garden at Khonghampat, located in Lamshang sub-division of Imphal West district (13 km from Imphal along NH-2), spans nearly 100 hectares. Established on 6th January 2000 by the then Chief Minister of Manipur, the garden represents two distinct ecosystems: Wetland ecosystem – surrounded by the Langol Hill Range, providing habitat for diverse flora and fauna; Terrestrial ecosystem – represented by hilly slopes with planted trees, some of which have reached maturity. Currently, about 25 hectares have been developed, with plans to expand further. The Directorate envisions increasing tourist flow to the Botanical Garden, thereby raising biodiversity awareness among the local population.

Ningshingkhul Biodiversity Park:

The Ningshingkhul Biodiversity Park in Jiribam, the western gateway of Manipur, is the only recreational and tourist destination in the area. It requires proper development and protection not only to provide recreation for the public but also to conserve the natural and cultural environment. The park stands as a symbol of ecological magnificence and community pride, making its conservation vital for both environmental and cultural sustainability.

Objective of the Scheme:

- i. Air quality improvement: Vegetation helps absorb pollutants such as carbon dioxide and particulate matter leading to cleaner air.
- ii. Noise reduction: Plants can act as sound barriers, reducing the noise pollution from Traffic.
- iii. Temp regulation: It helps to mitigate the urban heat island effect through the process of evapotranspiration.
- iv. Well maintained medians with greenery enhance the visual landscape, contributing to overall aesthetic of the area.
- v. The basic objective of this scheme is "to arrest further damage in the eco-systems"



The scheme mainly focuses on the conservation of biodiversity, in-situ & ex-situ conservation of indigenous flora, landscaping, land development and Eco-tourism approaches with proper application of Indigenous Traditional Knowledge (ITK) and scientific know-how with current national/international approaches by conducting detail study on threatened / endangered / extinct species of flora of the region.

Under this scheme the Directorate is taking up numerous programmes like setting up of Biodiversity Parks, Eco-Parks, landscaping/land development and tree plantation programme at School/Colleges and other important places of Manipur.

Target during 2025-26 :

1. Intensive plantation of road median at a stretch of about 35 km within Greater Imphal areas.
2. Development and beautification of traffic Islands and roadside plantation within Greater Imphal.
3. Development of Arboretum, Plant Conservation Green house, Nursery and Plantation at Kangla.
4. Construction of Fern House and maintenance of the State Botanical Garden complex;
5. Construction of Green House and new plantation at Ningshingkhul Biodiversity Park, Jiribam.
6. Documentation of District level Natural Resources Information and Conservation works.
7. Capacity Building & HRD programme for Indigenous Traditional Knowledge system on conservation of natural resources (flora, fauna & habitat).
8. Promotion of the ethno tribal's conservation and preservation practices of the hill people of the state who are inhabiting in a diverse way since the time immemorial in order to improve their livelihood.
9. Conservation of natural resources like forests and groves, floral/faunal diversity, water resources, mineral resources.
10. Targeted to harvest rain water as well as to make proper use of natural resources.
11. GRIDSS (GRID Based Decision Support System) for 16 Districts.
12. Holistic Environmental Survey and Reporting including up-to-date Resource Mapping
13. Sustainable Planning Database of Sustainable resources.

Major achievements of the Scheme during 2025-2026 :

Maintenance, Plantation, improvement and beautification of Road Median and Traffic Islands at a stretch of 38 km within Greater Imphal Area and State:

- i. Maintenance of Keishampat to Malom Oil Depot (7.51 Km), Imphal West district
- ii. Maintenance and plantation from Bijoy Govindaji to Oriental College 1.4km
- iii. Maintenance and plantation from BT Flyover , Uripok Kangchup Road to Naoremthong Bazar (1.4 km), Imphal West district.
- iv. Plantation of bougainvillea plants under BT Fly over, Uripok.



- v. Maintenance and plantation from Takyel Oriental College to Wahengbam Leikai (Jiri Parking) (2.44 km), Imphal West district .
- vi. Dual (intensive) plantation of Waheng Leikai Parking to Keishamthong Ramlal Paul Hr.Secondary School, Imphal. 1.3km
- vii. Dual (intensive) plantation of North AOC Traffic Point to Khongnang Ani Karak 1.0km
- viii. Dual Plantation of Sangakpham To CRPF Mantri pukhri, 1.2km
- ix. Dual plantation of IGRA South to Liberal College, 1.67km
- x. Chingmeirong Khongnang Ani Karak to Khoyathong via Thangmeiband (1.58 km), Imphal West
- xi. Nagamapal Kangjabi Leirak machil to Fly over Bridge (0.52 km), Imphal West
- xii. Lamlong Thong to Khongnang Ani Karak / Dinku Road median (1.53 km), Imphal East district
- xiii. Hicham Yaichampat to M.U.
- xiv. Beautification and plantation at traffic islands in greater Imphal area.
- xv. Landscaping Eco-development works at CM's Secretariat Office complex.
- xvi. Improvement of Eco-development & Beautification of Kangla;
- xvii. Plantation of Uningthou plants at various temple of Imphal East and West area.
- xviii. Construction of foot path inside the State Botanical Garden complex.
- xix. Construction of Firebreak at State Botanical Garden.
- xx. Plantation of new medicinal plants at Ningshingkhul Biodiversity Park.
- xxi. Major construction of fencing Ningshingkhul Biodiversity Park, Ziri.
- xxii. Installation of cemented Gumlas at State Botanical Garden.
- xxiii. Improvement works on Biodiversity Conservation and Development of Eco- Park.
- xxiv. Improvement of Biodiversity Park at Ningshingkhul, Jiribam.
- xxv. Raising of Nursery Plants in the Office Complex and State Botanical Garden, Khonghampat.
- xxvi. Renovation of main entrance gate and installation of arc sign board at Ningshingkhul Biodiversity Park.
- xxvii. Plantation of bougainvillea plants at State Botanical Garden, Khonghampat.
- xxviii. Levelling of approach road at State Botanical Garden, Khonghampat.

Target for 2026-2027:

- i. Intensive plantation .from Keishamthong bridge to Heirangoithong ,Ningthemcha Karong (3.47 km), Imphal West district
- ii. Intensive plantation from North AOC Traffic point to Konung Mamang via Chekon (1.62 km), Imphal East district.
- iii. Intensive plantation from Liberal College to BSF Koirengei.1.7km.
- iv. Intensive plantation from Mantri Pukhri Bazar to IGAR South.
- v. Intensive plantation from Sanjeng thong to Konung Mamang Traffic Point, Wangkhei Road (1.2 km), Imphal East.
- vi. Extension of road median and traffic island plantation at Thoubal and Bishnupur Districts.



- vii. Development and beautification of traffic Islands and roadside plantation within Greater Imphal.
- viii. Development of Arboretum, Plant Conservation Green house, Nursery and Plantation at Kangla.
- ix. Gap filling plantation of Greater Imphal areas.
- x. Development and beautification of traffic Islands.
- xi. Continuation of maintenance of activities taken up in 2025-2026.
- xii. Development of scared grooves of Manipur.
- xiii. Construction of Green House and new plantation at Ningshingkhul Biodiversity Park, Jiribam.
- xiv. Construction of Fern House at State Botanical Garden, Khongampat
- xv. Development & beautification of Arboretum, Plant Conservation Green house, Development of Nursery and Plantation of seasonal at Ibudhou Pakhangba Ground , Kangla
- xvi. Documentation of District level Natural Resources Information and Conservation works.
- xvii. Promotion of the ethno tribal's conservation and preservation practices of the hill people of the state who are inhabiting in a diverse way since the time immemorial in order to improve their livelihood.
- xviii. Conservation of natural resources like forests and groves, floral/faunal diversity, water resources, mineral resources.
- xix. Holistic Environmental Survey and Reporting including up-to-date Resource Mapping

Financial Outlay of the Scheme :

R.E. 2025-26 : Rs. 180.00 Lakhs

B.E. 2026-27 : Rs. 240.00 Lakhs



3.2 Environment Education and Information Dissemination Programme :

This scheme focus on

- (i) Creation of Environment Awareness Education communication and Dissemination through different stakeholders.
- (ii) Observation of International events for Environment as per annual Calendar.
- (iii) Updation of State of Environment report.
- (iv) Green Education Programme at college level for enhancing capacity building of Institution through quiz, symposium etc.
- (v) Strategic networking and capacity building to Media Fraternity by creating Media Resource Centre.
- (vi) Green skill development programme etc.

The Directorate organizes a wide range of activities to foster environmental awareness and community participation. These include the observation of international days with the presence of VVIPs, panel discussions, symposiums, essay and painting competitions, tree plantation drives, cleanliness programs, and awareness campaigns. Such initiatives are conducted in collaboration with registered bodies of Manipur, ensuring that people understand the environment and recognize how their actions directly influence it.

This scheme is not limited to events alone; it embodies a deeper, systemic approach to building a responsible society. It integrates knowledge of environmental care with the sustainable use of natural resources, highlighting their role in human development and progress. The scheme seeks to instill in citizens a sense of responsibility toward the environment and the urgency of protecting it. By encouraging active involvement, it nurtures a spirit of community and a shared vision for environmental stewardship.

Environmental education and information dissemination thus serve as powerful tools under this scheme. They foster awareness, shape attitudes, and inspire meaningful action in support of sustainable development and conservation policies. A well-informed society, aware of environmental challenges, provides the foundation for long-term commitment and collective action toward safeguarding ecosystems and ensuring a healthier future.

Objective of the Scheme:

- I) Inspire and involve young people in environmental activities and provide leadership and encourage partnership in caring for the environment by inspiring, informing and enabling them to improve their quality of their life without compromising that of future generations thereby fostering a new generation of environmentally conscious generation.
- II) This programme focuses on filling up the gaps in the field of environmental information among common people through the use of print and electronic media, information display at public places as well as to highlight progress and achievement in environmental conservation and sustainable development.



Target of the scheme during 2025-26 :

1. Collaboration with ULBs, NGOs and local clubs in organizing awareness campaign on Environmental Education;
2. Publicity of awareness theme on media including AIR, DDK Imphal and other media houses;
3. Widespread coverage of the stakeholders on environmental Education including students of colleges and schools of Manipur;
4. Dissemination of Environmental Information through electronic display at public places;
5. Network with educational institutions for exploration of Environment Education System;
6. Activities under Green Education Programme by conducting Environment Symposium, Environment Conclaves, Seminars, Conferences, etc.
7. Training to different level of stakeholders including ToT (Training of Trainers);
8. Environment Education and Awareness on Save River and Protect water body Campaign;
9. District level Environment Awareness Campaign on District Environment Plan;

Significant Achievements during 2025-26 :

1. Observation of International events.
2. Awareness campaign in collaboration with NGOs.
3. Media fellowship for Information Dissemination.
4. Series of media workshop on reporting of environment.
5. Awareness cum public Consultation workshop at village level for conservation & rejuvenation of polluted rivers.
6. Consultation workshop on the Theme, "Green education programme at schools" held on 27th September 2025 .
7. Symposium at 26 various colleges of Manipur on World Environment theme of UN, 2025.
8. State Level Symposium on UN theme of World Environment Day, 2025.
9. Poster and 3-D model competition among institutes.
10. Lecture Talks on environment at 75 schools under Nation first @75 Campaign.
11. Cyclothons (Cycle rally) organized for public awareness.
12. Painting completion at school and NGOs.
13. Training Programme on Green skill Development Programme.
14. Symposium at 12 colleges on the UN wetlands day theme of 2026.
15. State level symposium on the UN wetlands day theme of 2026.
16. Conclave on Indo-Himalayan region Climate Change at City Convention Centre.
17. Photo exhibition by Manipur Amateur Photo Club on UN Wetlands Day, 2026.

Target under this Scheme during 2025-26

1. Expansion and outreach programme under green education Programme to schools
2. Display of environmental information at Public places
3. Green auditing at educational Institutes



4. New methods of participatory approach of environment education.
5. Skill development for wise use of natural resources.
6. Continuation of activities taken up during 2025-26

Financial Outlay of the Scheme :

R.E. 2025-26 : Rs. 150.00 Lakhs

B.E. 2026-27 : Rs. 180.00 Lakhs



3.3 Environment Monitoring, Research & Development (R&D) with Multidisciplinary Scientific Study of River Catchment and Spring-sheds

The scheme emphasizes systematic data collection on diverse environmental parameters to assess quality and track changes over time. Its purpose is to understand the impacts of human activities and natural processes on ecosystems. The Directorate regularly monitors rivers, ponds, and wetlands, documenting scientifically validated evidence of anthropogenic pollution and ecological degradation, while disseminating findings through outreach platforms. Over the years, the scheme's mandate has expanded beyond pollution monitoring to include comprehensive environmental observations, referral services, and research aimed at addressing critical environmental challenges.

As a state referral laboratory, the Environment R&D Laboratory provides facilities to research scholars, institutions, NGOs, and other stakeholders for environmental sample analysis. Weather monitoring is conducted at the district level through 16 Automated Weather Stations and 20 telemetric rain gauges installed across varying elevations. The scheme also seeks to develop innovative solutions and technologies to address pollution, climate change, and habitat destruction, with a focus on mitigation strategies.

Currently, the laboratory operates with instruments such as the ICP-OES, UV-Vis Spectrophotometer, COD Analyzer, Flame Photometer, and Nitrogen Digester and Analyzer, etc. However, further infrastructure is required to integrate cutting-edge technologies like artificial intelligence, machine learning, remote sensing, and big data analytics for advanced data collection and interpretation. Plans are underway to establish district-level Environmental Quality Monitoring Laboratories across all districts.

In compliance with Hon'ble NGT Orders (M.A. No. 26/2019 dated 22nd May 2020 and related directives), the Directorate has prepared action plans for restoration of prioritized ponds, lakes, and wetlands. An inventory of approximately 4,000 water bodies has been completed in consultation with district authorities and line departments. Ground truthing, engineering surveys, and quality monitoring of these water bodies are pending for preparation of Detailed Project Reports (DPRs).

Additionally, rejuvenation and conservation activities of major rivers are being undertaken to comply with NGT directives and preserve the state's socio-cultural heritage. Action plans for nine polluted river stretches have been prepared. Pollution abatement of the Nambul River is ongoing under the National River Conservation Plan (NRCP), Ministry of Jal Shakti, Government of India. On the other side, rejuvenation and conservation activities are also undergoing for Imphal-Kongba river under the same Ministry.

Objective of the Scheme: The main objective of the scheme is to-

- Monitor environmental quality and enhance ecosystem services.
- Conduct research on river ecosystems and rejuvenate polluted stretches.
- Revive springs for water security and maintain river e-flow.
- Undertake climate-resilient interventions for river catchments and spring-sheds



Target under this Scheme during 2025-26

1. Regular monitoring, maintenance and augmentation of existing Environment Monitoring, Research and Development Laboratory ;
2. Establishing / setting up of Environment Monitoring Centers at 16 Districts in compliance of NGT order for District Environment Plan in compliance of NGT Order OA 360 / 2018;
3. Publication of State Action Plan on Climate Change Ver.-II;
4. Preparation of action plan / feasibility studies / DPRs for polluted rivers namely (i) Thoubal River (ii) Iril River (iii) Khujairok River and (iv) Wangjing River (v) Heirok River (vi) Khujairok River, (vii) Sekmai River under National River Conservation Plan in compliance of NGT Order OA 673 / 2018 and enhancing ecosystem services and environmental sustainable projects.
5. Cleaning of Nambul River from Iroisemba to Heirangoithong, Samurou area and Imphal River at Salanthong and other important rivers;
6. Collaboration with the Meira Paibi, ULB, NGOs and local clubs in organizing awareness campaign on environmental Education including students of colleges and School;
7. Organization of river festival/river day for protection and conservation of rivers.
8. Enforcement of the environmental laws on disposal of waste along the river banks.
9. Proper management of waste including recovery, recycling and reducing waste
10. Development of river front garden along the banks of Nambul River for enhancement of recreational and aesthetic;
11. Maintenance and augmentation of existing Environment Monitoring, Research and Development Laboratory;
12. Continuation of inventory of critical springs, Hydro-geology mapping and climate resilient;
13. Intervention for spring-shed management at river heads / catchment for enhancing e-flow of river;
14. Climate Resilient Villages through Spring Revival for village water security;
15. Preparation of technical reports for the inventoried springs including feasibility report for critical springs with spring recharge / revival activities;
16. Trainings to community resource persons (CRPs), line department officials, other stakeholders for science-based spring-shed management based on six-step protocols;
17. Assessment of Environmental Impact Studies and Climate Risk Assessment on Shiroy hill range;
18. Implementation of Imphal River- Kongba River under Rejuvenation and programme under NRCD, Govt of India
19. Implementation of plant for collecting plastic and other floating debris from rivers under NEC, Govt. of India.

Significant Achievement under this Scheme during 2025-26

i. Survey and Investigation

- Regular quality monitoring of major rivers, ponds and lake including Loktak lake quarterly (physico-chemical & microbiological parameters).



- Conducted survey on the Impact of Extreme Climatic Events on Horticulture Crops in Villages of Bishnupur District.
- Conducted survey and investigation on bamboo invasion at Shirui Kashung peak.
- Conducted routine discharge quality monitoring of 16 MLD STP plant under Nambul river project at Heirangoithong
- Laboratory staffs participated in the 6 (six) days Intensive Training Programme on Microplastic Quantification and Characterization from water, soil, air and food samples at Centre for Science Education and Research, Nitte Deemed to be University, Mangalore, Karnataka
- Routine physico-chemical, microbial and heavy metals analysis of spring water samples collected from Ukhrul, Senapati, Kangpokpi, Tamenglong and Noney districts of Manipur.
- Conducted survey and water quality monitoring on the highly turbid nature of Imphal River.

ii. Maintenance of State Environment Research and Development Laboratory

- Maintaining sophisticated instrument like Atomic ICP-OES, UV-Vis Spectrophotometer, COD Analyser, Flame Photometer, Nitrogen Digester and Analyzer, Automated Weather Stations, etc.
- For smooth functioning the laboratory chemical and glassware are procured as quality grade.
- Laboratory staff completed training for ISO/IEC 17025:2017 for NABL accreditation.
- Applied for Laboratory NABL Accreditation and undergoing standardization of existing laboratory equipments.
- Maintaining safety measures as per norms and regulations.

iii. Regular Monitoring of Water-Air-soil quality

- Regular Water Quality Monitoring for Rivers, Pond and Wetlands, etc.
- Monitoring weather at district level with 16 Automated Weather Stations installed in 9 Districts;
- Installed 20 (twenty) nos. of Telemetric Rain Gauge in all the 16 district Head Quarters
- Continuing air quality monitoring on PM 2.5 and PM 10 around the office premise;
- Continuing Water quality monitoring of major wetlands in the state;
- Continuing laboratory facilities to about thirty (30) Research scholars from various institutions.
- Analysis reports and data for preparation DPRs of various line departments;

iv. River Catchment Studies and Cleaning of River

- Seasonal cleaning of polluted rivers, collection of plastics and debris from the bank and basin of Nambul River and Imphal River, followed by awareness campaign to the community on different themes like "Save River – Clean River", "Solid Waste Management", etc;.
- Awareness campaigns on solid waste management with the communities dwelling in and around the Nambul river.
- Motivation of stakeholders and capacity building on sorting of recyclable and non-recyclable waste for a sustainable environment.



- Being the most polluted river, cleanliness drive of Nambul River from Iroisemba to Heirangoithong cleaning activities along the targeted dumping sites. Activities includes cleaning of river bed, river banks, sorting of wastes, transferring waste to the dumping sites, etc.

v. Preparation of Action Plans and Technical reporting

- Published State Action Plan on Climate Change Ver 2.
- Prepared Action Plan for Rejuvenation of Polluted River.
- Approved and Sanctioned by Ministry of Jal Shakti, Govt of India for Rejuvenation of Imphal-Manipur-Kongba River and implementation of work is undergoing.
- Ongoing feasibility studies for pollution abatement of rivers.
- Compliance with NGT, Supreme Court, and High Court directives

vi. Spring-shed Management and Maintenance of e-flow of Rivers at Catchment

- Inventory and mapping of springs in the state is under progress and a total of 846 springs at different district of Manipur identified and mapped
- Geo-hydrology study critical springs at another 11 (eleven) villages in the districts of Noney, Senapati, Kangpokpi, and Imphal East have been completed for preparation of action plan for rejuvenation of springs
- Implemented a pilot project at Lunghar village, Ukhrul district, supported by Swiss Agency for Development and Cooperation (SDC) with partner of ICIMOD, Advanced Center for Water Resource Development and Management (ACWADAM) and IIT Roorkee
- Development of Hoomi village, Ukhrul district as a climate resilient village through intervention activities at spring recharge zones for maintenance of the river head of Thoubal river
- Distributed 15 nos. of PBC water tank for roof-top rain water harvesting at Hoomi village
- Spring revival activities at the periphery of Waithou lake and adjoining Thiyam Konjin village (Imphal East district)
- Prepared water security plan for Tera Karong (Imphal East District) and Mapao Thangal village (Kangpokpi district) through integrated climate resilient springshed management approach
- Conducted 4 nos. of training-workshop on the six-step protocols of springshed management and development for various stakeholders including line departments, community resource persons, NGOs, etc. with a total of 92 participants
- MIS for Spring inventory and monitoring
- Published a book on "Springs of Manipur Version 1.0".

The present scheme "Environmental Monitoring, Research & Development (R&D) with Multidisciplinary Scientific Study of River catchments and Spring-sheds" is being proposed to be bifurcated into two sub-Heads i.e.

- i) Environment Monitoring R&D, and**
- ii) Ecosystem of River Catchment and Spring sheds**



Target under this Scheme "Environment Monitoring R&D" during 2026-27

1. Certification of NABL Accreditation of existing Environment Monitoring, Research and Development Laboratory.
2. Maintenance of existing Environment Monitoring, Research and Development Laboratory.
3. Submission of proposal for "Augmentation of Environmental Monitoring Research Centre and Digital Infrastructure Analytical Network System" under NEC, Govt of India.
4. Expansion and augmentation of Environment Monitoring Centers at 16 Districts in compliance of NGT order for District Environment Plan in compliance of NGT Order OA 360 / 2018.
5. Quality monitoring of major water bodies such as lakes, ponds rivers and wetlands including spring water
6. Development of MIS for environment monitoring data
7. Working with the NGOs, local clubs, Meira Paibi and ULBs in organizing awareness campaign on environmental Education including students of colleges and School;
8. Assessment of Environmental Impact Studies and Climate Risk Assessment at district and village level;

Financial Outlay of the Scheme :

R.E. 2025-26 : Rs. 280.00 Lakhs

B.E. 2026-27 : Rs. 250.00 Lakhs

Target under the New Proposed Scheme" Ecosystem of River Catchment and Spring sheds" during 2026-27:

1. Prepare action plans/DPRs for polluted rivers (Moirang, Nambol, Thoubal, Iril, Khujairok, Wangjing, Heirok, Sekmai) under National River Conservation Plan in compliance of NGT Order OA 673 / 2018.
2. Cleaning of Nambol River and Imphal-Kongba River and other important rivers;
3. Organization of river festival/river day for protection and conservation of rivers.
4. Awareness programme on disposal of waste along the river banks.
5. Beautification work of river front garden along the banks of Nambol River for enhancement of recreational and aesthetic.
6. Continuation of inventory of critical springs, Hydro-geology mapping for development of climate resilient villages and maintenance of e-flow of river
7. Preparation of village water security plan through climate resilient springshed management and development
8. Preparation of feasibility report for critical springs of vulnerable villages with spring recharge / revival activities
9. Trainings to community resource persons (CRPs), line department officials, other stakeholders for science-based spring-shed management based on six-step protocols;



10. Implementation of plant for collecting plastic and other floating debris from rivers under NEC, Govt. of India.

Financial Outlay of the Scheme :

R.E. 2025-26 : Rs. 000.00 Lakhs

B.E. 2026-27 : Rs. 200.00 Lakhs



3.4 Climate Change and Environment Impact Studies

This scheme focuses on

- i. Developing a Management Information System (MIS) for the state's weather database to inform Climate Change adaptation and mitigation policies.
- ii. Conducting post-environmental clearance studies for developmental project sites, as reviewed by SEIAA and SEAC.
- iii. Conducting Social Impact Assessments for land acquisition for public purposes,
- iv. Creating Climate Resilient Water Bodies at various locations,
- v. Operating and maintaining Climate Change Adaptation villages across the state.

The Directorate of Environment & Climate Change, Govt. of Manipur, is the designated State Nodal Agency for Climate Change. The State Climate Change Cell, established in 2012, has been strengthened with technical and financial support from the Department of Science and Technology, Ministry of Science and Technology, Govt. of India (since Oct 2014). This aligns with National Action Plan on Climate Change (NAPCC) missions: National Mission for Sustaining the Himalayan Ecosystem (NMSHE) and National Mission on Strategic Knowledge for Climate Change (NMSKCC). The State Action Plan on Climate Change (Version 2) have been prepared in compliance of Govt. of India directives.

The Directorate also handles Environmental Impact Assessment (EIA) to assess potential impacts of development projects. Pre- and post-EIA studies are conducted to ensure environmental safeguards. The State Level Environment Impact Assessment Authority (SEIAA) and State Level Expert Appraisal Committee (SEAC), constituted under EIA Notification 2006, review and recommend projects for **Environmental Clearance**.

List of the Projects Granted No Objection Certificate (NOC) & Environmental Clearance (EC):

Sl. No.	Name of the project	Category of the project	Site/Location
1.	Request for NOC – springshed based watershed development programme Machi village, Tengnoupal	Construction	Machi village, Tengnoupal
2.	Request for Approval for construction of Sanitary landfill at Bishnupur (NOC)	Construction	Bishnupur
3.	Request for Environmental Clearance for Bioremediation of legacy waste at kakching nambol, Bishnupur and thoubal Municipal councils (NOC)	Construction	Kakching Nambol, Bishnupur and Thoubal
4.	Request for issuanc of Environmental Clearance for srpingshed based watershed Development Programme in Churachandpur District Manipur.	Construction	Churachandpur District



Sl. No.	Name of the project	Category of the project	Site/Location
5.	Requesting fro EC/NOC of construction Building held at Battalion HQ Moreh	Construction	Moreh, Tengnoupal
6.	Submission of Detail Project Report for Screening and Appraisal under EIA Notification, 2006 regarding Augmentation of water treatment plant at Thanga	Construction	Thanga, Bishnupur
7.	Application for Environment Clearance/NOC for kangla Energy Solutiuon Pvt. Ltd.	Construction	Imphal West
8.	Seeking No Objection Certificate (NOC) for laying Overhead OFC Between Rengpang MSPCL substation to Khongsang Railway Station.	Construction	Between Rengpang MSPCL substation to Khongsang Railway Station.

The Directorate of Environment and Climate Change is the State Social Impact Assessment Unit, appointed under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013. Key roles include:

- I. Conducting Social Impact Assessments (SIA) in consultation with local bodies (Panchayat, Municipality, etc.).
- II. Selecting SIA teams from registered individuals/institutions, including independent practitioners, social activists, academics, technical experts, and at least one-woman member.

List of project conducted Social Impact Assessment :

Sl. No.	Name of the Project	District	Acquiring Body	Area of land to be acquired
1.	Acquisition of additional for construction of Rail fed Oil Depot at Village No. 1. Malom Tuliyaime and 2-Malom TulihaI	Imphal West	Indian Oil Corporation	9.029 acres
2.	Acquisition of land for construction of Imphal Kangchup Tamenglong Road under ADB assisted SASEC Road Connectivity Investment Programme (SCIRP)loan No. 3118-IND	Imphal West & Tamenglong	ADB	63.3697 acres
3.	Construction of an ADIT Tunnel (Tunnel No. 7) at Kambiron Village, Railway Chainage 37445.724 m by NF Railways	Tamenglong	NF Railways	2.10 hectares



Sl. No.	Name of the Project	District	Acquiring Body	Area of land to be acquired
4.	Construction of an ADIT 1 & ADIT 2 of Tunnel No. 10 at Railway Chainage 42100 & 42200m at Okoklong, Tamenglong District.	Tamenglong	NF Railways	10.046 hectare
5.	Acquisition of land for expansion of the Manipur Zoological Garden, Iroisemba.	Imphal West	Manipur Zoological Garden	7.35567 acres
6.	Acquisition of land at Mahakabui (Namching) village for location of Assam Rifles	Senapati	AR	39.25 acres
7	Acquisition of land for construction of New Manipur Police Headquarters	Imphal East	Manipur Police	10 acres
8.	Acquisition of land for Construction of Imphal Ring Road within Imphal East District	Imphal East	PWD	28.20694 Ha
9.	Acquisition of land for Additional Land between Railway Ch. 105840 to 112900 in Kangpokpi District in connection with the Construction of New B. G. Railway Line from Jiribam to Imphal	Kangpokpi	Railway	7.66 acres
10	Acquisition of land for Construction of Imphal Ring Road within Imphal West District	Imphal West	PWD	18.2431 Ha
11	54-Acquisition of land for connection between Adit-1 & Adit-2 with T-10 of Tunnel No. 10	Noney	Railway	4.4 Ha
12	Construction of Public Road at Meitei Langol Village	Imphal West	PWD	0.646 Acre
13	Construction of Water Supply Scheme at Meitei Langol	Imphal West	PHED	0.122 Acre
14	Construction of road from Koide (Besho) to Liyai in Senapati District	Senapati	PWD	6.246 Acre
15	Development of Information Technology Hub	Imphal East	IT	101.65 Acre
16	Construction of Pipeline Irrigation of Heirok Branch Canal	Thoubal	WRD	4.2460 Ha
17	Acquisition of land for setting up of Manipur Football Academy	Imphal East	YAS	1.0011 acres
18	Acquisition of Additional land for construction of New Broad-Gauge Railway (Jiribam to Imphal) at Makhuam/Marangjing Village, Haochong Sub-Division, Noney District	Noney	NF Railway	144.91 acre
19	Acquisition of Additional land for construction of New Broad-Gauge Railway (Jiribam to Imphal) at	Kangpokpi	NF Railway	36.0 acre



Sl. No.	Name of the Project	District	Acquiring Body	Area of land to be acquired
	Charoipandongba/Pongringlong Village, Kangchup Geljang Sub-Division, Kangpokpi District			
20	Acquisition of 1.7292 Hectare land for construction of Single Line BG Tunnel No. 12 (App. Total Length 9551.00RM) from Ch. 105840.00 to 115391.00 Adit-1 (Approx. length 1440.00m) at Ch. 112623.00 and Adit(Approx. length 420.0m) at Ch. 115391 in between Tupul to Imphal in connection with construction of New Railway Line Project from Jiribam to Tupul(Two Packet System) at 69-Kangdabi & 70-Tairenpokpi, Lamsang Sub-Division, Imphal West District, Manipur,	Imphal West	NF Railway	1.7292 Ha

Objective of the Scheme :

The scheme's objectives are:

- i. Develop strategies and action plans to address climate change issues in the state.
- ii. Appraise projects for Environmental Clearance with stipulated conditions.
- iii. Conduct social impact assessments for land acquisition for public purposes;

Target and Significant achievement under this Scheme during 2025-26 :

- Organized a two day `Indian Himalayan Region Climate Change Conclave', (October 2025), attended by over 300 participants.
 - Drafted the 2nd version of State Action Plan on Climate Change, Manipur
 - Completed Climate Change Vulnerability and Risk Assessment at District level of Manipur
 - Organized 2 nos. of awareness on Climate Change & Agriculture: Climate Resilient Agricultural Practices
 - Conducted 2 nos. of workshop on Climate change and Invasive Alien species for various stakeholders including line departments.
 - Organized 6 nos. of Interaction Programme for the 6th Media Fellowship on Climate Change Reporting (2025-26)
 - Laboratory staff completed training for ISO/IEC 17025:2017 for NABL accreditation
 - Initiation of NABL accreditation process and completed proficiency testing (PT)
 - Published a book on "Alien Species of Manipur Version 1.0"
 - Granted Environmental Clearance/NOCs to 8 projects; received 66 SIA proposals and approved 20 final reports.



Target under this Scheme during 2026-27

- i. Conduct post-impact studies and quarterly monitoring of developmental projects.
- ii. Launch sample model projects in each district to assess impacts on air, soil, water, and vegetation.
- iii. Evaluate projects granted Environmental Clearance through field surveys.
- iv. Continuing intervention in bamboo invasion at Shirui Kashong peak, Ukhrul district.
- v. Assess impacts of Jhum cultivation in hill districts.
- vi. Inventory and monitor dried-up springs for scientific intervention.
- vii. Conduct post-Social Impact Studies and field surveys for projects with SIA reports.
- viii. Conduct of Awareness and Workshop on Climate Change Impact on related sectors including Agriculture, Forest, Health and Water Resources.
- ix. Continuation of Media Fellowship Programme on Climate Change Reporting.
- x. Promotion of Climate Resilient Villages.
- xi. Assessment of Vulnerability and Risk at Sub-Division Level.

The present scheme "Climate Change" is being proposed to be bifurcated into two sub-Heads

i.e.

- i) Climate Change, and**
- ii) Environment Impact Studies**

A- Financial Outlay of the Scheme "Climate Change":

R.E. 2025-26 : Rs. 200.00 Lakhs

B.E. 2026-27 : Rs. 200.00 Lakhs

B- Financial Outlay of the Scheme "Environment Impact Studies" (New Head):

R.E. 2025-26 : Rs. 00.00 Lakhs

B.E. 2026-27 : Rs. 50.00 Lakhs



3.5 Environmental Planning and Management of Wetlands / Lakes and Waterbodies

This scheme focuses on:

- i. Providing secretarial support to Manipur State Wetlands Authority.
- ii. Inventory, conservation, rejuvenation and integrated management of wetlands, water bodies and traditional community ponds.

Water bodies are an integral part of freshwater resources in the state of Manipur. With these facts, monitoring, R & D activities for protection of wetlands and waterbodies in the state of Manipur has been taken up by the office since last few years back. Important wetlands and waterbodies of the state for protection / conservation as state priority based on its threats and challenges have already been identified by the Directorate of Environment and Climate Change for conservation.

Manipur's wetlands, as per the 2021 Wetland Atlas by Space Application Centre (SAC), Ahmedabad, cover around 3% of its total area, with 132 wetlands larger than 2.25 hectares. Lakes, ponds, rivers, and streams make up about 90% of these wetlands. Interestingly, while the number of wetlands has decreased by 30 since 2010, the overall wetland area has actually increased by 4751 hectares, mainly due to growth in lakes, ponds, and reservoirs.

It is reported that 1591 numbers of water bodies have already been identified by Water Resource Information System (WRIS), Ministry of Jal Shakti, Govt. of India. In addition, 1280 nos. of water bodies/ponds have also been identified by Directorate of Environment and Climate Change, Manipur.

The Manipur State Wetlands Authority (MSWA) was set up on 31st January 2018, along with its Technical and Grievance committees, under the Wetlands (Conservation and Management) Rules 2017. The Directorate of Environment and Climate Change (DoE&CC) serves as the nodal office and secretariat. MSWA comprises 22 members, including the Chairperson (Hon'ble Minister, Forest, Environment, and Climate Change), Vice-Chairperson (Chief Secretary), and Member Secretary (Director, DoE&CC).

The Manipur State Wetlands Authority recommended 7 wetlands for state priority in Phase-1 in 2020:

- (i) Jaimeng Wetland, Kangpokpi
- (ii) Kachouphung/Achau Maki Wetland, Kamjong
- (iii) Utra Pat Wetland, Bishnupur
- (iv) Yaral Pat Wetland, Imphal East
- (v) Waithou-Phumnom Pat Wetland, Imphal East-Thoubal
- (vi) Pumlun-Khoidum Pat Wetland, Kakching
- (vii) Ikop-Kharung Pat Wetland, Thoubal-Kakching.

These are natural, perennial wetlands. Earlier, 23 wetlands were shortlisted for techno-feasibility studies from 119 identified by Manipur State Remote Sensing Application Centre.



Major Objective of the Wetlands Scheme:

The scheme's objectives are:

- Identify and notify wetlands in the state;
- Repair, rejuvenate, and restore wetland ecosystems;
- Enhance eco-system services: conserve water, biodiversity, and groundwater; create green belts; mitigate climate change; and improve livelihoods;
- Promote eco-tourism and restore ecosystem services;
- Develop carbon sequestration and climate mitigation strategies;

Target of the Wetlands Scheme 2025-26:

- Identify, map, and ground-truth wetlands in Manipur, covering their locations and characteristics;
- Prepare and revise Brief Documents and Integrated Management Plans (IMPs) for wetlands, and submit them to the ministry for implementation;
- Notification appraisal of 7 (seven) wetlands recommended by Manipur State Wetlands Authority (MSWA) on priority basis and two more wetlands for notification;
- Identify peatlands and estimate Soil Organic Carbons, and conduct studies on wetland hydrology and ecosystems;
- Assess biodiversity (flora and fauna) in wetlands and prepare Health Cards;
- Preparation of Integrated Management Plan of 2 Valley Wetlands and 2 Hill Wetlands;
- Continue implementing Integrated Management Plans for 5 wetlands under National Plan for Conservation of Aquatic Eco-system (NPCA), MoEF&CC namely (i) Jaimeng Wetland (ii) Utra Pat Wetland (iii) Yaral Pat Wetland (iv) Waithou-Phumnom Pat Wetland and (v) Loktak Lake;

Significant achievements of the Wetlands Scheme 2025-26:

- Mapped and ground-truthed 132 wetlands as per Wetland Atlas 2021.
- Delineated 71 Wetlands and Demarcated 3 (three) Wetlands.
- Initiated Biodiversity, Hydrology and Socio-economic survey of the 71 Delineated Wetlands for the preparation and revision of Brief Documents and Health Cards of Wetlands;
- Published the draft notification of 3 (three) wetlands in the e-Gazette of Manipur namely, (i) Yaral Pat Wetland, Imphal East District (ii) Utra Pat Wetland, Bishnupur District & (iii) Waithou-Phumnom Pat Wetland, Imphal East- district and Thoubal District;
- Implemented activities under Save Wetland Campaign 2.0, aligning Ministry targets;
- Executing Integrated Management Plans for 5 wetlands under National Plan for Conservation of Aquatic Eco-system (NPCA), MoEF&CC (i) Jaimeng Wetland (ii) Utra Pat Wetland (iii) Yaral Pat Wetland (iv) Waithou-Phumnom Pat Wetland and (v) Loktak Lake;
- Published the book "Wetlands of Manipur, Version 1.1";
- Preparation of the IMP of Ushoipokpi Pat and Pumlen Pat under progress;
- Conducted Asian Waterbirds Census of the Loktak and other wetlands jointly organized by Directorate of Environment and Climate Change, Forest Department, Loktak Development Authority, Indian Bird



Conservation Network (IBCN), Wetlands International, South Asia (WISA) and Bombay Natural Historical Society (BNHS);

- Launched Virtual Wetland Museum at the campus of Green Gold, Yaral pat.
- Rejuvenation of 15 waterbodies/ponds of different valley and Hill Districts of the state under progress;

Target of the Wetlands Scheme 2026-27:

- Identify, map and ground-truth more wetlands across Manipur; prepare Brief Documents with updated data;
- Notify the remaining 2 wetlands recommended by Manipur State Wetlands Authority (MSWA);
- Identify peatlands, estimate Soil Organic Carbons and conduct studies on wetland hydrology and ecosystems;
- Assess biodiversity (flora and fauna) in wetlands and prepare Health Cards;
- Prepare Integrated Management Plans for 2 valley wetlands and 2 hill wetlands, outlining conservation strategies;
- Implement Integrated Management Plans for 5 wetlands under National Plan for Conservation of Aquatic Eco-system (NPCA), MoEF&CC:
 - (i) Jaimeng Wetland
 - (ii) Ultra Pat Wetland
 - (iii) Yaral Pat Wetland
 - (iv) Waithou-Phumnom Pat Wetland and
 - (v) Loktak Lake;

Financial Outlay of the Scheme :

R.E. 2025-26 : Rs. 300.00 Lakhs

B.E. 2026-27 : Rs. 360.00 Lakhs



3.6 Solid Wastes Management

This scheme focuses on:

- i. Implementing comprehensive Urban and Rural Solid Waste Management, covering inventorisation, segregation, collection, and management in both urban and rural areas,
- ii. Setting up Bio-medical Waste Treatment and Disposal Facilities and Hazardous Waste Treatment, Storage, and Disposal facilities across the state,
- iii. Setting up of Material Recovery Facility across all 18 Model Panchayats and 30 model Hill villages across the state,
- iv. Ensuring timely compliance with directions from the National Green Tribunal (NGT) regarding Solid and Liquid waste management,
- v. Organizing workshops and awareness programs on proper Solid and Plastic Waste management practices,
- vi. Implementing the Manipur Plastic Policy, 2022, to promote sustainable waste management.

Effective solid waste management is crucial for public health and environment, especially as cities grow and villages urbanize. It's a critical issue in urban, rural, and hilly areas, requiring strengthened Municipal Solid Waste Management Planning with a focus on technical aspects of processing and treatment.

Key strategies include prioritizing waste minimization through community awareness programs, maximizing material recovery, recycling and segregating waste at source to tap into viable recycling potential. This approach supports sustainable development, protects communities and conserves resources.

Municipal Solid Waste has a significant impact on climate change, but effective management can mitigate this. Key strategies include:

- (i) Integrated Solid Waste Management reduces greenhouse gas emissions, mainly methane, from landfills.
- (ii) Waste minimization, recycling, waste-to-energy projects and landfill gas capture can cut emissions and optimize resource use.
- (iii) MSW planning must consider climate change adaptation, such as selecting landfill sites with changing groundwater tables or rainfall patterns in mind.

Manipur faces a waste management gap in urban and rural areas, highlighting the need for improved infrastructure. The National Green Tribunal (NGT) is closely monitoring the state's solid and liquid waste management under OA 606/2018. Monthly Progress Reports are submitted to the Central Monitoring Committee, Ministry of Jal Shakti, to track progress and ensure compliance.

Target and Achievement of the Scheme during 2025-26 :

Under this Scheme the Directorate is taking up Environmental Research and Development activities and awareness generation on Solid Waste Management for better environment as well as for future



sustainability. The assessment results of these schemes are being used as inputs for preparation of Solid Wastes Management Action Plan in all the towns. The Directorate is planning to maintain a baseline database on waste generated in all district Headquarters /major towns of the state.

Some of the major targets and achievements of the Scheme include:

- Scientific data on waste generation, collection and management in 27 ULBs, 18 Model Gram Panchayats and 30 hill villages.
- R&D on microbiological composting and microbe multiplication.
- Studies on waste inventorization, quantification and qualification, including urban solid waste and hazardous waste.
- Prepared database on municipal solid waste characterization and quantification in Imphal City;
- Ongoing work on Common Bio-medical Waste Treatment Facility (CBWTF) and Hazardous Waste Treatment, Storage and Disposal Facility (TSDF) at Lamdeng.
- Field demonstrations and awareness programs on domestic solid waste management and single-use plastic pollution.
- Distributed Plastic Bottle Banks to 1,032 locations, promoting plastic waste collection.
- Conducted awareness programs on Solid and Plastic Waste Management in districts.
- Initiated waste inventorization at Panchayat level in Imphal East district.
- Collaborated with Manipur University and Central Agricultural University on R&D projects, including microbe propagation and composting.

Target during 2026-27:

1. Implementing Waste Management actions under District Environment Plans;
2. Distributing 1000 Plastic Bottle Banks (3 per location) to Gram Panchayats and Hill villages.
3. Upgrading the Common Bio-medical Waste Treatment and Disposal Facility (CBWTF).
4. Conducting village-level awareness campaigns on waste management.
5. Creating an inventory of waste generated at village level in hills and valleys.
6. Building waste segregation sheds at village level;
7. Improving existing dump sites at village level;
8. Initiating door-to-door solid waste collection at village level;
9. Setting up of Material Recovery Facility across all 18 Model Panchayats and 30 model Hill villages across the state.

Financial Outlay of the Scheme :

R.E. 2025-26 : Rs. 400.00 Lakhs

B.E. 2025-26 : Rs. 480.00 Lakhs



3.7 Information Technology

The scheme aims to create an Environment Database Hub and user-friendly Information System. By leveraging technology, it enables data-driven decision-making and swift responses to environmental challenges through a single window. Key functions of the scheme focus on:

- i. Training, website management and MIS
- ii. GIS and Remote Sensing applications
- iii. Networking and e-filing management
- iv. Library, software/hardware management and other IT activities.

The IT Division of the Directorate of Environment & Climate Change is a tech powerhouse. They harness cutting-edge technology to supercharge environmental protection and climate change mitigation efforts. By implementing advanced IT solutions like software database applications, they ensure seamless operations, efficient data management and effective communication.

This enables data-driven decision-making and swift responses to emerging environmental challenges. The IT Division goes the extra mile, driving innovation and efficiency. Key functions include:

- Conducting training programs and managing the Directorate's websites and Management Information System (MIS) to keep everyone connected and informed.
- Using Geographic Information System (GIS) and Remote Sensing to monitor environmental changes and track progress.
- Maintaining robust network infrastructure and e-filing systems to ensure smooth operations.
- Overseeing library resources and IT hardware/software management to keep everything up-to-date and running.

By doing so, the IT Division fuels sustainability and significantly contributes to the Directorate's mission, making a tangible impact on the environment.

Objective of the Scheme:

The IT Division's objective is to turbocharge the Directorate's mission. They leverage tech to boost environmental protection and climate initiatives. Key goals include:

- Implementing efficient IT solutions for smoother operations.
- Enhancing data management and communication.
- Strengthening network systems.
- Keeping all IT assets up-to-date.

This fuels the Directorate's sustainability drive.

Achievements of the scheme during 2025-26

- The 'STATE ENVIRONMENT DATA CENTRE, MANIPUR' was launched by the Hon'ble Governor of Manipur on 17th October 2025. This centre features a Central Monitoring System (CMS), Management



Information System (MIS), environmental information dissemination, reporting systems, public displays and more.

- An Environmental Outdoor LED Display Board is now live at Kangla Southern Gate, showcasing weather information, STP water quality data and environment-related updates.
- Central Monitoring System (CMS) hardware setup is complete and CMS software development is underway.
- An online Management Information System for Manipur's springs and Wetlands of Manipur online dashboard are being developed, allowing for real-time updates of spring survey data on the spot. This will help track and manage water resources more effectively.
- Conducted 4 training programs on GIS, computer skills and networking.
- An MIS database app is being developed for water quality monitoring in Manipur's key water bodies, including Imphal River, Nambul River, Iril River, and Wetlands. This app enables data entry, editing, approval, report viewing, graphical representation and printing.
- An MIS database app is being developed to monitor air quality, calculating Air Quality Index and offering features like data entry, editing, approval, report viewing, graphical representation and printing.
- The Weather MIS database is being maintained to track key weather parameters like rainfall, temperature, humidity, wind direction, solar radiation and wind speed for Manipur's hills and valleys. This data is shared with researchers, students, and relevant agencies, supporting informed decisions.
- Initiated R&D for MIS database apps on Manipur's flora, fauna and STP operations.
- Completed watershed delineation, water body mapping, and district mapping.
- Revised data and maps of water bodies across all districts, along with a kml file.
- Completed mapping of all 16 districts, with each district featuring four to five maps, including district boundaries, sub-divisions, water bodies, land use, and more.
- Catchment and forest mapping of Manipur's rivers.
- Completed mapping of Keibul Lamjao village, springshed management areas, and automatic weather stations.
- Updated Environment Manipur and Climate Change websites.
- Networking, internet connections and online services like webinars and video conferences are set up, with regular maintenance of conference rooms, including hardware and software.
- Implemented and managing e-Office, e-filing, and biometric attendance.
- Govt e-mail IDs are live, enabling smoother digital communication. e-Office is functional with e-filing systems, streamlining document management. Official documents are now dispatched digitally, boosting efficiency and reducing paperwork.
- Ongoing maintenance of both physical and digital library resources.
- Designed and published newsletters, pamphlets and more.
- Managing of Biometric employee's attendance.



Target under this Scheme during 2026-27

- Ensure STATE ENVIRONMENT DATA CENTRE, MANIPUR is fully operational and maintained effectively, serving as a key environmental data hub.
- Install more Environmental Outdoor LED Display Boards across Imphal, sharing real-time environmental data with the public.
- Complete CMS software and hardware setup and get it fully operational.
- Organizing training programs to boost skills - from service matters to drone handling.
- Continuing MIS database updates for water quality and weather monitoring in Manipur, ensuring data-driven decisions.
- Develop more MIS Database apps for the Directorate's schemes.
- Developing MIS apps for Manipur's flora, fauna, STP operations and Air Quality Index.
- Keeping Environment Manipur (www.environmentmanipur.gov.in) and Climate Change websites (www.ccmanipur.mn.gov.in) fresh and updated.
- Publishing quarterly newsletters, pamphlets, and calendars to spread awareness.
- Conducting land use and land cover mapping of Manipur (2022-2023) using cutting-edge Remote Sensing and GIS.
- Extracting drainage networks from Digital Elevation Model (DEM) to support planning.

Financial Outlay of the Scheme :

R.E. 2025-26 : Rs. 60.00 Lakhs

B.E. 2026-27 : Rs. 136.00 Lakhs

PROGRESS & ACHIEVEMENT OF PLAN SCHEME DURING 2025-26 IN RESPECT OF DIRECTORATE OF ENVIRONMENT & CLIMATE CHANGE, MANIPUR

Eco-Development Programme and Natural Resources Conservation



Plantation and maintenance at Kangla under Eco-Development Programme



Plantation at Road Median and Traffic Islands under green Imphal City



Maintenance and Plantation at Road Median

PROGRESS & ACHIEVEMENT OF PLAN SCHEME DURING 2025-26 IN RESPECT OF DIRECTORATE OF ENVIRONMENT & CLIMATE CHANGE, MANIPUR

State Botanical Garden at Khonghampat and Ningshingkhul Biodiversity Park at Jiribam



Construction of footpath at state botanical garden, Khonghampat



Costruction of Green House at State Botanical Garden



Installation of New gumlas



Remval of Unwanted weeds at Ningshingkhul Biodiversity Park, Jiribam



Fencing and Plantation at Ningshingkhul Biodiversity Park, Jiribam

PROGRESS & ACHIEVEMENT URING ANNUAL PLAN 2025-26 IN RESPECT OF DIRECTORATE OF ENVIRONMENT & CLIMATE CHANGE, MANIPUR

Environment Education & Information Dissemination Programme



Conclave on Indo- Himalayan Climate Change



Celebration of world Environment Day, 2025



Observation of World Ozone Day



Cycle Rally as part of awareness campaign



State level symposium on UN theme of World Environment Day 2025



Organization of Spot painting Competition



State level symposium on theme of world Environment day, 2025



Observation of World Wetlands Day, 2026 at Yaral Pat

PROGRESS & ACHIEVEMENT DURING ANNUAL PLAN 2025-26 IN RESPECT OF DIRECTORATE OF ENVIRONMENT & CLIMATE CHANGE, MANIPUR

Environment Monitoring, R&D with Multidisciplinary Scientific Study of River Catchment and Springsheds



Nambul River cleaning at Khagepali



Manipur River cleaning at Ithai Barrage



Collection of plastic bottle from Manipur River.



Tree Plantation programme.



Quality Monitoring of ETP discharge at JNIMS



On spot analysis of water sample



Training on 'Springshed Management and Development' for the Community Resource Persons (CRPs)



Construction of brushwood check-dam at Hoomi, Ukhrul

PROGRESS & ACHIEVEMENT DURING ANNUAL PLAN 2025-26 IN RESPECT OF DIRECTORATE OF ENVIRONMENT & CLIMATE CHANGE, MANIPUR
Climate Change and Environment Impact Studies



Indian Himalayan Region Climate Change Conclave, October 16 – 17, 2025 at City Convention, Imphal



Roundtable Discussion on "Invasive Alien Species and Climate Change in Manipur"



"Swachhata Hi Seva" cleaning Drive programme with the Wetland Mitras at Utra Pat Wetland



Desiltation of Waithou-Phumnom Pat Wetland



Interaction of the 6th Media Fellowship Programme (2025-26) on Climate Change Reporting



Installation of Automatic Weather Station



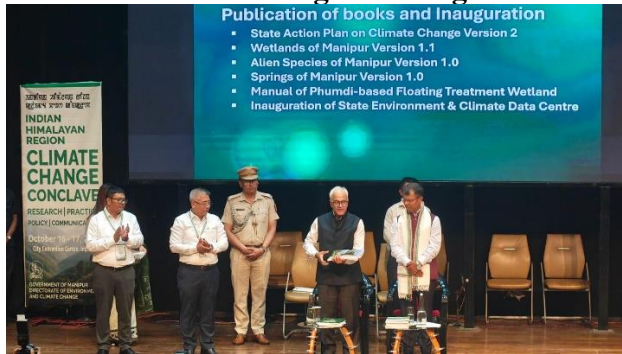
Maintenance and Repairing of AWS



Assessment on Impact of Extreme Climatic Events on Horticulture Crops in Villages of Bishnupur District

PROGRESS & ACHIEVEMENT DURING ANNUAL PLAN 2025-26 IN RESPECT OF DIRECTORATE OF ENVIRONMENT & CLIMATE CHANGE, MANIPUR

Environmental Planning & Management of Wetlands/ Lakes and Water Bodies



Release of "Wetlands of Manipur, Version 1.1" by Hon'ble Governor



Observation of World's Wetlands day, 2026 at Yarl Pat



"Swachhata Hi Seva" cleaning Drive programme with the Wetland Mitras at Utra Pat Wetland



Desilting of Waithou-Phumnom Pat Wetland



Cluster based training programme INM of Paddy and distribution of Soil fertility Report and Organic Inputs at Thiyam Konjil, Imphal East



Orientation Programme for farmers on "Modernization of Fishery as Model Fish Farm at Waithou-Phumnom Pat Wetland"



Conservation and rejuvenation of water body at Yubrajpalli



Training Programme on Preparation of Jeevamrutha and Agniasthra at a residence of a farmer at Thiyam Konjil, Imphal East

PROGRESS & ACHIEVEMENT DURING ANNUAL PLAN 2025-26 IN RESPECT OF DIRECTORATE OF ENVIRONMENT & CLIMATE CHANGE, MANIPUR

Solid Waste Management



Distribution of Plastic Bottle bank



Segregation of solid waste at village level



Door to Door collection of wastes from household at village level



Door to Door collection of wastes from household at village level



Collection of Plastic Bottles collected from Plastic Bottle Bank installed by the Directorate for sending to recyclers



Awareness Programme on Proper Solid Waste Management at Village level



Sensitization programme on banning of Single Used Plastic



Material Recovery Facility at Sendra

PROGRESS & ACHIEVEMENT DURING ANNUAL PLAN 2025-26 IN RESPECT OF DIRECTORATE OF ENVIRONMENT & CLIMATE CHANGE, MANIPUR

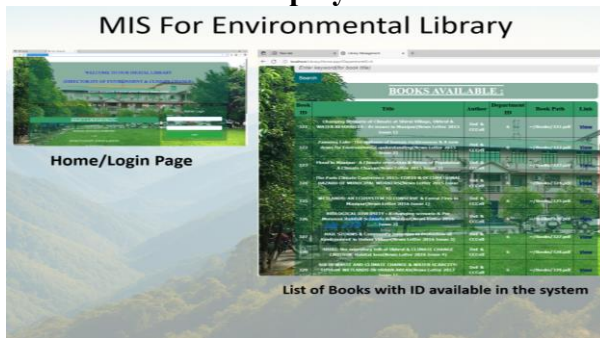
Information Technology & GIS



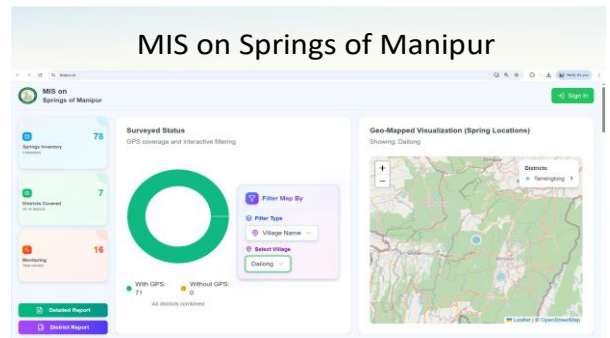
Displaying Water Quality Data for Sewage Treatment Plant (STP) of Nambul River at LED Display Board



Displaying District Wise Weather Data of Manipur at LED Display Board



MIS for Digital Library



MIS on Springs of Manipur

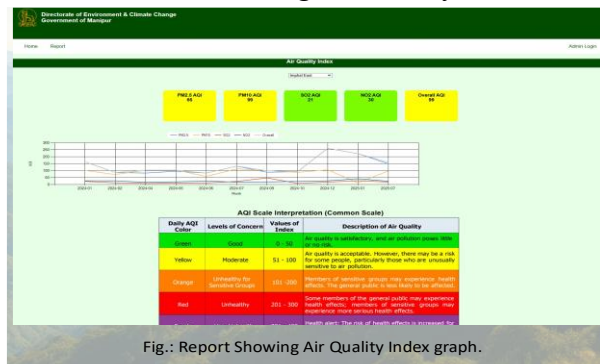


Fig.: Report Showing Air Quality Index graph.

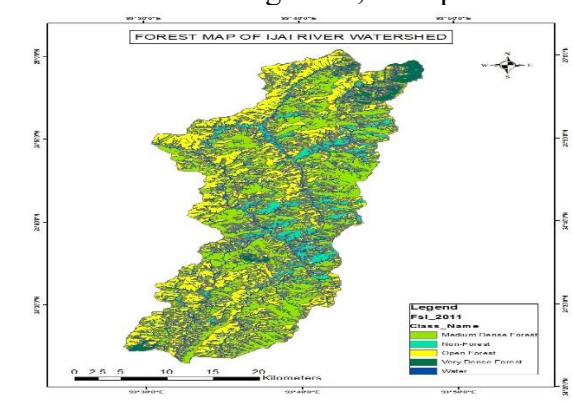
MIS for Monitoring of Air Quality Data



State Climate Change Cell, Manipur Website



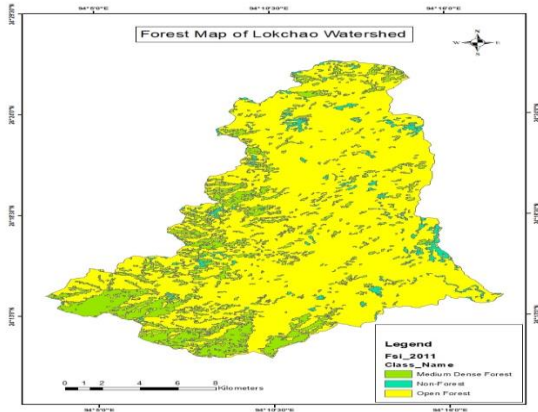
Ponds/Water Bodies Map of Bishnupur District of Manipur



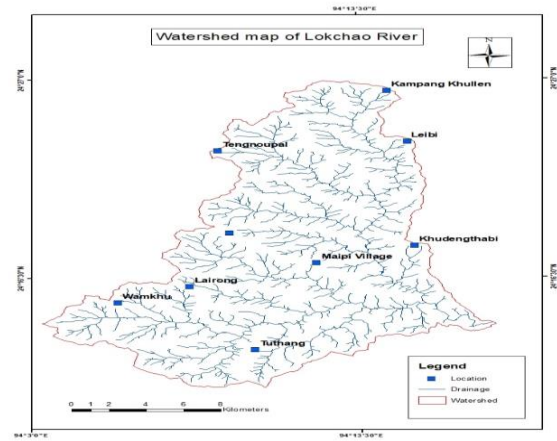
Forest cover map of Ijai River Catchment Area Year 2011(FSI)

PROGRESS & ACHIEVEMENT DURING ANNUAL PLAN 2025-26 IN RESPECT OF DIRECTORATE OF ENVIRONMENT & CLIMATE CHANGE, MANIPUR

Information Technology & GIS



Forest Map of Lokchao catchment area
(FSI 2011)



Watershed Map of Lokchao River