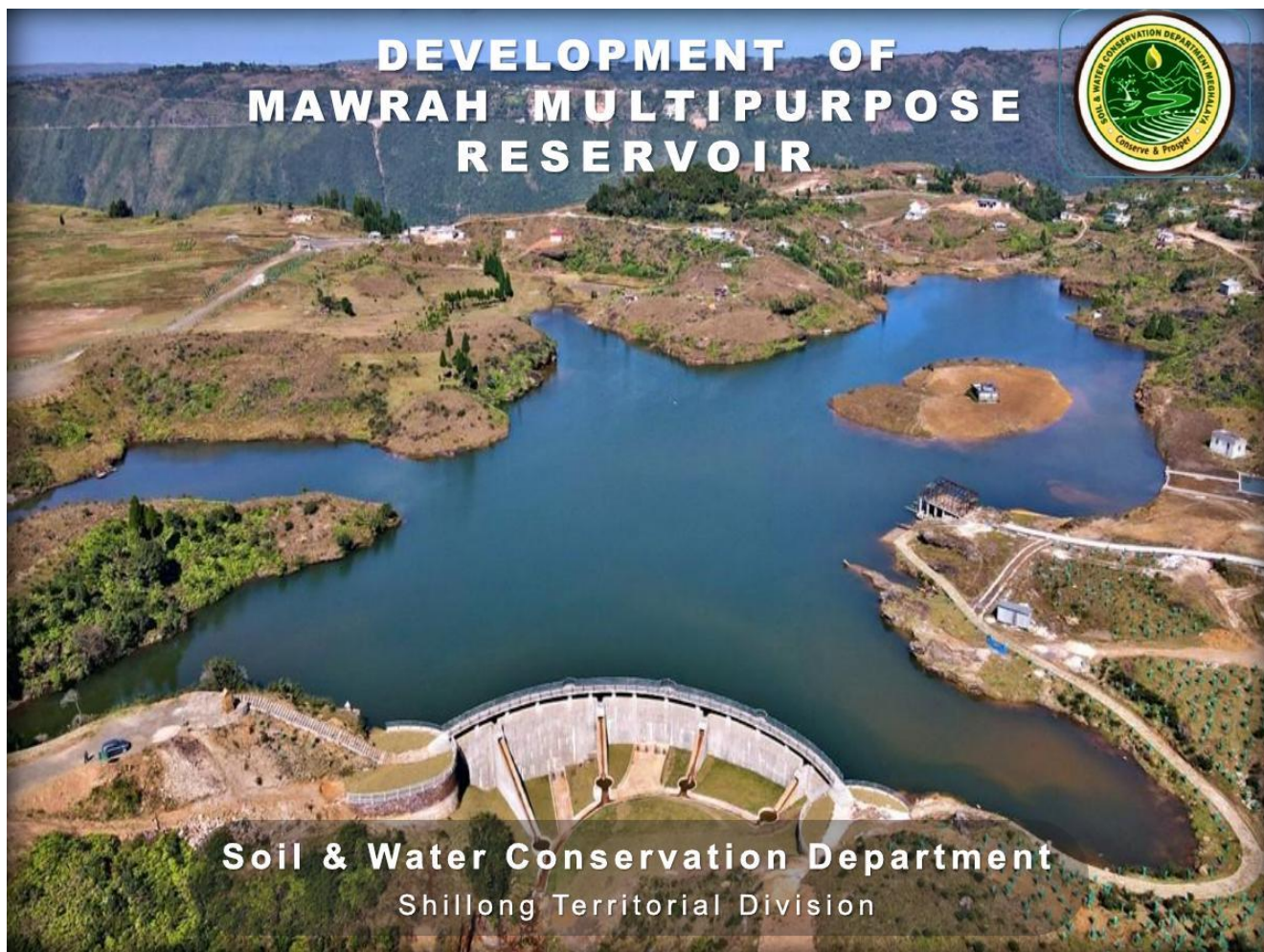




Aerial view of the completed Mawrah Multipurpose Reservoir, Meghalaya

SUCCESS STORY

Development of Mawrah Multipurpose Reservoir

Soil & Water Conservation Department | Shillong Territorial Division | Government of Meghalaya

1. Project at a Glance

Funding Agency	NABARD – Rural Infrastructure Development Fund (RIDF)
Project Cost	Rs. 150 Lakh (Rs. 1.5 Crore)
Implementing Department	Soil & Water Conservation Department, Shillong Territorial Division
Project Commencement	April 2021
Project Completion	December 2023
Eco-Tourism Development	Currently Ongoing
Benefitted Villages	Mawrah (215 HH) + Rangtmah (37 HH) = 252 Households
Total Project Area	27.30 Hectares
Water Impound Area	7.7 Hectares
Storage Capacity	5,28,000 Cubic Metres (52.8 Crore Litres)
Water Source	Perennial Springs (9 Nos.) & Rainwater Harvesting
Site Elevation	1,770 m – 1,815 m AMSL
Geo-coordinates	25.379569° N, 91.779984° E

2. The Challenge: A Scarred Landscape

The project site is a small watershed with a micro-catchment of 27.30 hectares in Mawrah village, East Khasi Hills District. Despite its natural and geological endowment — nine perennial freshwater springs — the valley had been severely degraded by rat-hole coal and slate mining activities taken place over four to five decades ago. The consequences were stark:

- Complete deterioration of the catchment's ecological health.
- Severe pollution of streams and natural water courses.
- Mine-spoilt wasteland with no productive use.
- Loss of groundwater recharge capacity.
- Community dependent on degraded and unreliable water sources.

THE ABANDONED COAL MINE



The abandoned coal mine site before project intervention — a degraded wasteland at 1,800 m elevation

3. Project Objectives

The project was designed with a multi-dimensional mandate — not merely infrastructure, but ecological revival and sustainable livelihood generation:

- a) Harvest and conserve freshwater from perennial springs as well as rain water.
- b) Reclaim mine-spoilt wasteland and restore it to productive use.
- c) Ecological restoration and springs rejuvenation.
- d) Enhance groundwater recharge through 300 staggered contour trenches and 10 number percolation tanks.
- e) Protect the catchment through active community participation.
- f) Conserve native fish species naturally thriving in the basin.
- g) Provide year-round domestic water supply to villages.
- h) Generate livelihoods through eco-tourism, irrigation, livestock, and fishery.

4. Project Approach: Community at the Centre

What sets Mawrah apart is its foundational philosophy: the community is not a mere beneficiary — it is a co-owner. The Soil & Water Conservation Department built the entire project around this principle from day one.

COMMUNITY AWARENESS & SENSITIZATION



Community awareness & sensitization sessions

COMMUNITY PARTICIPATION IN PLANNING & DECISION MAKING



Village-level planning and decision-making meetings

- a) Community awareness and sensitization programmes conducted in Mawrah and outside the village.
- b) Land voluntarily provided by Mawrah Village Dorbar — no land acquisition required.
- c) All field work executed by the Village Executive Committee.
- d) Local workers, including head masons, sourced entirely from the community.
- e) Village Dorbar contributed local construction materials — sand, stone — from the site itself.
- f) Free labour contributed by each household whenever needed during construction.
- g) Women actively engaged in maintaining cleanliness around the water body.

Local Materials are Collected from the Site through community involvement



Local materials collected by community members

WOMEN PARTICIPATION



Women participating in afforestation and catchment protection

During the COVID-19 lockdown (April 2021), the project became a vital source of livelihood for the community — employment was provided through construction activities precisely when the village economy was most vulnerable.

**LIVELIHOOD SUPPORT TO THE COMMUNITY DURING COVID -
19 LOCKDOWN – APRIL 2021**



Community members at work during the COVID-19 lockdown period — construction provided critical livelihood support

5. Works Undertaken

Category	Key Works	Details
Main Reservoir	RCC Arch Dam	52.8 crore litre (5,28,000 cum) storage capacity; footbridge, wingwalls, safety railings
Water Supply	RCC Harvesting Structure	3,00,000 litre capacity structure; dedicated pump house constructed
Ecological Restoration	Afforestation + Recharge Works	6 Ha. afforestation with native species; 300 staggered contour recharge trenches; 10 numbers of percolation in upper catchment as part of springs rejuvenation
Eco-Tourism Infra	Access & Amenities	Approach road, connecting footpaths, boating platform, parking areas, tourist cottages, restaurant, island development

WORKS TAKEN UP



The completed RCC Arch Dam — key civil structure of the reservoir

Tourist cottages, Restaurants & other Amenities
developed near by the lake for better experiences of Visitors



Tourist cottages and restaurant under development near the lake

AFFORESTATION & GROUND WATER RECHARGE



Afforestation with native species and contour recharge trenches

6. Community Achievements

The community's ownership of the project translated into concrete protective actions — demonstrating genuine stewardship:

- 1) Catchment and reservoir catchment area declared protected — no extraction of sand, stone, or slate permitted.
- 2) No new settlements allowed within the project area.
- 3) 8 existing fishery ponds relocated from the project site by village authority.
- 4) In 2023, one family living in close proximity to the reservoir was voluntarily relocated by the Dorbar — alternate land allotted at a new location.
- 5) Women mobilised for regular cleanliness maintenance of the water body and surroundings.

RELOCATION OF SETTLEMENT



Relocation of settlement near the reservoir boundary

Livelihood Generation:

Local Youths & Women employed in operating Eco-Tourism Activities thereby earning their Daily Livelihood



Local youth and women engaged in eco-tourism operations

7. Project Impacts

7.1 Socio-Economic Impact

- a) 252 households in Mawrah and Rangtmah villages now receive year-round domestic water supply.
- b) Potential water supply capacity extended to 18 downstream villages.
- c) Employment generated locally throughout the construction phase (2021–2023).
- d) 15 to 20 numbers of local youth and women are earning daily livelihoods from eco-tourism operations (entry, boating, hospitality).
- e) Community skill-building in water resource management and conservation.

7.2 Ecological Impact

- a) Groundwater recharge significantly enhanced through 300 contour trenches and 6 Ha. afforestation.
- b) Tree cover actively expanding across previously barren mine-scarred slopes.
- c) Native fish species (tentatively identified as *Aristonei Channa*) now thriving in the reservoir.
- d) Migratory avian species (tentatively identified as *Baer's Pochard*) sighted at the water body — species names unverified by experts.
- e) Underlying aquifer and catchment under active community-led protection.

The Reservoir is Turning into a Home of Few Native Fish Species and Some Migratory Avian Species

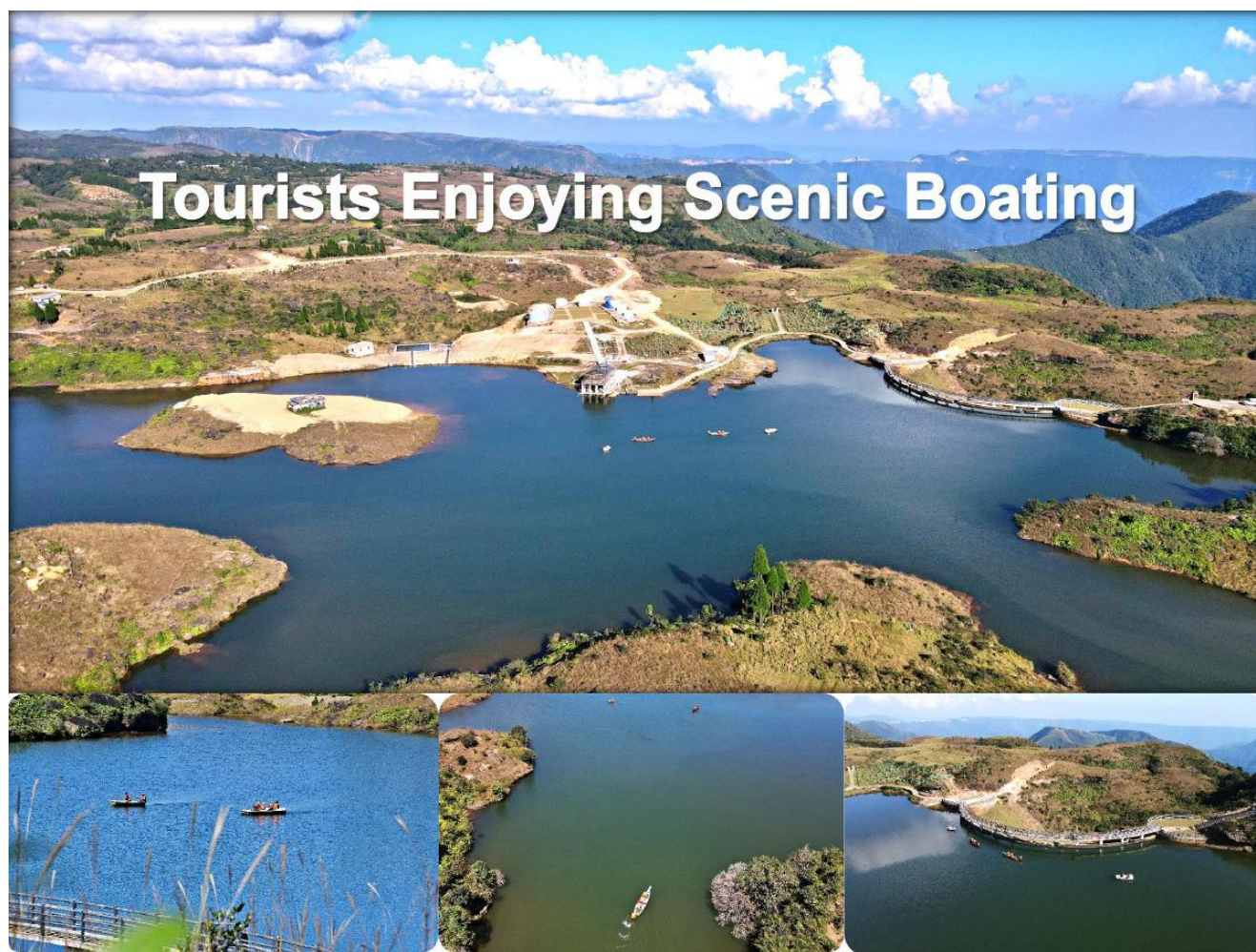
(*Aristonei Channa* & *Baer's Pochard* – Species Name have not been verified by Experts)



Native fish and migratory birds sighted at the reservoir — an indicator of ecological recovery

7.3 Revenue Generated (Since August 15, 2025)

Revenue Source	Amount (INR)
Entry Fee (Tourists)	Rs. 1,82,750
Boating Revenue	Rs. 66,350
Water Supply to Road Construction Company	Rs. 74,200
TOTAL REVENUE (since Aug 15, 2025)	Rs. 3,23,300



Tourists enjoying scenic boating on the Mawrah Reservoir

8. Recognition & National Appreciations

The Mawrah Reservoir has earned recognition at the highest levels of government and civil society, validating both its technical and community-driven approach:

National Water Sustainability Award — Best Community Participation Category 4th Water Sustainability Awards 2025 | Organised by TERI (New Delhi) & UNDP India

Mawrah Reservoir Bags National Honour at the 4th Water Sustainability Awards for Best Community Participation Category Orgd. by TERI, New Delhi & UNDP India



Mawrah Village Dorbar receiving the National Water Sustainability Award 2025 at the 4th Water Sustainability Awards ceremony, New Delhi

Highlighted as a National Model in India's Economic Survey 2025 Presented by Hon'ble Union Finance Minister during the Parliament Budget Session

Mawrah Reservoir:

Turning Vision into Sustainable Value

The Reservoir is highlighted as a Model for Economic Survey by the Hon'ble Union Finance Minister during the 2025 Parliament Budget Session.



The Shillong Times front-page coverage: Mawrah Reservoir cited as a model in the Union Government's Economic Survey 2025

Chief Minister of Meghalaya personally acknowledged the project mid-implementation (June 2023) Noted as a blueprint — 1,000 such reservoirs planned state-wide in partnership with ADB



Mawrah Reservoir

Draws CM's Attention Mid-Implementation for Visionary Impact on Community Livelihood and Ecological Sustainability

June 2023

Chief Minister Conrad K. Sangma's tweet acknowledging the Mawrah Reservoir during implementation (June 2023)

The reservoir has also become an active field learning destination — attracting students, researchers, IAS probationers, and officers from CGWB and Brahmaputra Board for hands-on training in water conservation and ecological restoration.

Mawrah Reservoir

attracts numerous students and trainees from different institutions across the state for field studies, hands-on learning and educational programs on Water Conservation & Ecological Restoration.

Officials from CGWB, Brahmaputra Board, IAS Probationers, etc. visited for Field Learning Experiences.



Students and officials from across the state visiting the reservoir for field learning and training programmes

9. Way Forward

Mawrah is no longer just a reservoir — it is a proven model. With its revenue generation potential, a one-time Government investment is sufficient for it to become a self-sustaining entity. The next phase is about turning one success into a movement:

- a) Replicate at scale — Roll out 1,000 Mawrah-type reservoirs across Meghalaya under the ADB partnership, using this project's community framework as the state standard.
- b) Extend the water lifeline — Connect 18 downstream villages to the surplus storage capacity already sitting in the reservoir — the infrastructure is ready, the pipeline isn't.
- c) Complete the eco-tourism loop — Finish cottages, restaurant, island, and boating facilities to convert visitor interest into sustained, year-round community income.
- d) Lock in governance — Formalise the Village Dorbar's role into a registered Water Management Committee before informal stewardship becomes a gap.
- e) Measure the ecology — Commission a biodiversity survey and spring health monitoring to document recovery scientifically and strengthen the project's conservation credentials.