GuruJal

COLLABORATIVE . COMMITTED . CONSCIOUS

An initiative of **Abhipsa Foundation**

ANNUAL REPORT

2023-2024

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THOUGHTS FROM THE FOUNDING DIRECTORS

This year marked a step forward in scaling nature-based solutions and shaping them into institutional practices. At GuruJal, we focused on building robust pilots that could be adapted by diverse stakeholders. We ensured that innovation was grounded in participation. **Each pilot became a living lab, teaching us not only about the science of water but also about the importance of governance, trust, and collective action.** We moved closer to embedding our learnings into policies and frameworks, so that water security is no longer an isolated project. It becomes a shared responsibility anchored in ecosystems of care.

Ms. Shubhi Kesarwani
Founder & CEO

2023-24 was about scaling the impact and making it more transparent for all stakeholders. GuruJal's pilots and initiatives began to show results that could be measured, shared, and replicated. It gave everyone a clear picture of what collective action can achieve. What stood out for me was the commitment to openness. **We ensured that data, outcomes, and learnings were not hidden and shared generously.** This spirit of transparency built trust, deepened partnerships, and created momentum for change, proving that real impact grows when it is both visible and shared.

Mr. Ashish Dev Kapur
Trustee & Vice-Chairman

HIGHLIGHTS OF THE YEAR

Revival of G'gram ponds raises water table

'GuruJal' initiative launched three years ago helps administration reclaim dried-up water bodies

SUMEDHA SHARMA

GURUGRAM, APRIL 6

Groundwater level in villages of the district has increased considerably in the past three years.

Thanks to the "GuruJal" initiative, which aims to address water scarcity, groundwater depletion, flooding and stagnation, dried-up ponds in 27 villages of the district have been revived and, as a result, the average water table level has increased by 100 per cent.

According to the Central Ground Water Authority (CGWA), more than 90 villages in Sohna, Pataudi, Farukhnagar and Gurugram blocks are in red zone. The rate of extraction of groundwater exceeds the recharge rate by 308 per cent. The average depth at which the groundwater is found is 40 m.

A survey has found that water bodies in the district has reduced from 644 in 1994 to 124 in 2019.

The situation, however, has started to take an upturn as dried-up ponds in 27 villages have been reclaimed.

WASTE WATER USED

- Thanks to the "GuruJal" initiative, the average water table level in 27 villages has increased by 100%
- It aims to address the issues of water scarcity, groundwater depletion, flooding and stagnation
- About 80 per cent of the village ponds have been revived with the help of treated water

GAME-CHANGER FOR CITY

The revival of ponds has been a game-changer. The revival of ponds not just ended water table woes in many areas, but also helped the authorities design a model for treating waste water. Nishant Yadav

For example, Mojabad village recorded an average dip of 5 m in the water table annually before the "GuruJal" initiative was launched. The village pond was encroached upon. Under the initiative, the pond was revived and, subsequently, Mojabad recorded a 200 per cent increase in the water table level.

Similar results have been recorded in 26 other villages such as Daula, Bilaspur and Palasoli and Daultabad, where an average rise in the water table level has been 100 per cent.

About 80 per cent of the ponds have been revived with the help of treated water.

The district administration has so far revived 27 ponds. These days, it is working to revive 33 more ponds, while the authorities have shortlisted 18 more dried-up water bodies that will be reclaimed.

Deputy Commissioner Nishant Yadav said, "The revival of ponds has been a game-changer for the city. Gurugram was in the dark zone and struggling to treat waste water. The revival of ponds has not just ended water table woes in many areas, but has also helped the authorities design a model for treating and reusing waste water."

The GIS mapping by the Gurugram Metropolitan Development Authority has identified 320 ponds on panchayat land and 18 water bodies in urban areas that can be revived.

Recognition of the efforts of District administration and GuruJal in The Tribune for reviving 27 ponds in the last three years.

CP Vikas Arora inaugurated rain water harvesting system prepared by GuruJal Company

-The rainwater harvesting structure was built by Ashish Kapoor, a trustee of Gurujal Company based in Gurugram

Nidhi Priya
info@impressivetimes.com

FARIDABAD : CP Vikas Kumar Arora inaugurated the rain water harvesting system prepared by GuruJal Company, Gurugram, at his office in Sector 21C. On this occasion, DCP Headquarters Hemendra Kumar Meena, Assistant Commissioner Under Training IAS Sonu Bhatt, ACP Headquarters Aman Yadav, Office Care Taker Kuldeep Nagar and Trustees Ashish Kapoor, Aditya Kapoor, Manager Sachin Kumar and Civil Engineer Ashish Kumar Tiwari were present on behalf of GuruJal company. In this regard, police spokesman Subey Singh said that the rain water harvesting system will prove to be a boon for the betterment of the society because earlier a lot of water used to get accumulated in the CP office during the rainy days, now this water can be used to recharged the ground water. The rain water will get collected in this system and will filter into the earth, which will help in raising the ground water level which is depleting day by day. The capacity of this water harvesting system is about 92 thousand liters which can meet the water requirement of 8148 people in a day of the year and its recharge capacity is equal to 55000 buckets of water per year. Due to this, during the rains in the last few days, about 5.50 lakh liters of water has been recharged in this water harvesting system. With its construction, there will be no shortage of water in the nearby water pump and it will be able to run for a long time. In this regard, CP said that this type of water harvesting system is needed in the whole of Faridabad because the rain water of Faridabad flows into the drains instead of going inside the ground. Along with this, there is a need to install this type of rain water harvesting system in other institutions of Faridabad as well. Further, the police spokesperson said that if any organization or individual wants to set up this type of rainwater harvesting system, they can contact the GuruJal office on 93114 11998.

CP SAID THAT THIS TYPE OF WATER HARVESTING SYSTEM IS NEEDED IN THE WHOLE OF FARIDABAD BECAUSE THE RAIN WATER OF FARIDABAD FLOWS INTO THE DRAINS INSTEAD OF GOING INSIDE THE GROUND.

Inauguration of Rainwater Harvesting System at CP Office, Faridabad

अरावली का पानी संजोने को बीएसएफ परिसर में दो तालाब बने

जल जागरण

- जैबिया सीएसआर फंड के सहयोग से बने तालाब का किया शुभारंभ
- दूसरे तालाब में बीएसएफ परिसर के अपशिष्ट जल को शोधित करेंगे

संवाद सहयोगी, बादशाहपुर : अरावली की तलहटी में बने सीमा सुरक्षा बल (बीएसएफ) 95 बटालियन परिसर में गुरुजल सोसायटी ने दो तालाब विकसित किए हैं। आधा-आधा एकड़ में बनाए गए इन तालाबों में एक को जैबिया सीएसआर फंड के सहयोग से बनाया गया है। एक तालाब में वर्षा के जल को संचयित किया जाएगा। दूसरे तालाब में बीएसएफ परिसर से आने वाले अपशिष्ट जल को शोधित कर तालाब में ले जाया जाएगा। मंगलवार को बीएसएफ परिसर में कार्यक्रम का आयोजन का तालाब का शुभारंभ किया गया।

शुभारंभ समारोह में गुरुजल सोसायटी की मुख्य कार्यकारी अधिकारी शुभी केशरवानी ने कहा कि अरावली की तलहटी में बना बीएसएफ परिसर चारों तरफ से अरावली पहाड़ियों से घिरा है। वर्षा के दिनों में अरावली से बहकर आने वाले पानी के संरक्षण के लिए यहां तालाब विकसित करना जरूरी था। बीएसएफ के अधिकारियों ने इसम सहयोग किया। तालाब बनकर तैयार हो गया। उन्होंने कहा कि अभी इस परिसर में और ज्यादा तालाब विकसित करने की संभावना है। भविष्य में पांच से छह तालाब तैयार करने की दिशा में काम किया जाएगा। यह तालाब जल संरक्षण की दिशा में मील का पत्थर साबित होगा। बीएसएफ 95 बटालियन के डीआइजी नरेश लाकड़ा ने कहा कि बीएसएफ देश की सुरक्षा के साथ-साथ सामाजिक कार्यों में भी पूरा सहयोग करती है।

बीएसएफ परिसर में विकसित तालाब का निरीक्षण करती गुरुजल सोसायटी व बीएसएफ के अधिकारी ● सौजन्य : सोसायटी

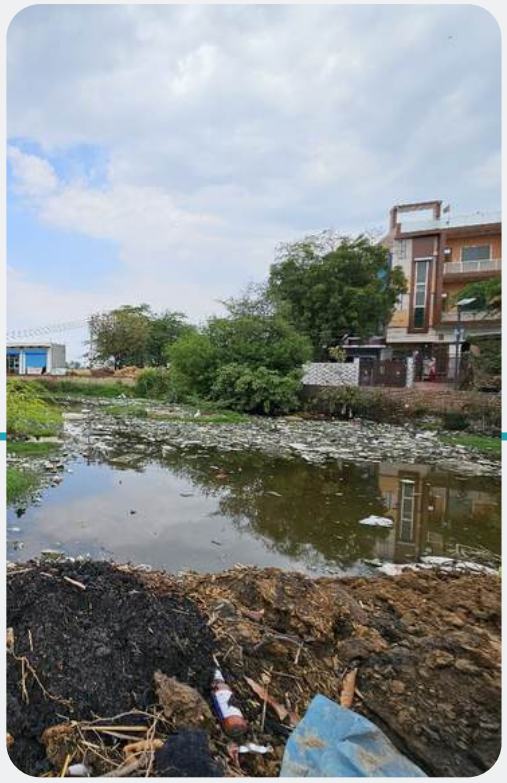
पर्यावरण संरक्षण और जल संरक्षण के लिए बीएसएफ की विशेष भूमिका रही है। शुभारंभ कार्यक्रम में बीएसएफ के डीआइजी नरेश लाकड़ा, जैबिया के वैश्विक सीईओ आनंद सहाय, मुख्य लोक अधिकारी [illegible] नेल्सन, जैबिया की महाप्रबंधक [illegible] त्यागी, गुरुजल सोसाइटी के आशीष देव कपूर, एलीशा सूरी, सीईओ शुभी केशरवानी के अलावा गुरुजल सोसायटी और बीएसएफ के अधिकारी मौजूद रहे। बीएसएफ परिसर का क्षेत्रफल लगभग 200 एकड़ में है। इसमें बीएसएफ अधिकारियों और जवानों के लिए आवासीय कालोनी के अलावा महिलाओं के लिए बैरक बने हैं। परिसर में पीने के पानी की आपूर्ति के लिए 11 बोरवेल लगे हुए हैं। भूजल स्तर नीचे जाने के कारण इनमें से आठ बोरवेल ठप हो गए। इसकी वजह से बीएसएफ परिवार में पानी की किल्लत है। गुरुजल सोसायटी की सीईओ शुभी केशरवानी का कहना है कि तालाब का शुभारंभ करने से पहले ही इसमें वर्षा का पानी जमा हो गया था। यह पानी पूरे का पूरा भूमि में रीचार्ज हो गया। इससे भूजल स्तर 18 इंच बढ़ गया है। तालाबों के वर्षा का पानी रीचार्ज होने के कारण भूजल स्तर ऊपर उठेगा तो ठप बोरवेल के चालू होने की भी संभावना है। इसके साथ ही अरावली की तलहटी में होने के कारण बीएसएफ परिसर में पानी भी भर जाता था। यहां पर तालाब बनाए जाने से जलभराव की स्थिति भी खत्म हो जाएगी।

Inaguration Of Xebia Pond Mahila Barak Pond

SUPPORT A POND

At GuruJal, we are addressing the crisis by integrating pond rejuvenation with wastewater treatment. Our mission is to restore the ponds not only as resilient systems for groundwater recharge, but also abundant sources of water for community use. We deploy our 8 step methodology to ensure sustainable impact for 20 years

Freshwater pond



Wastewater pond

New pond

01 PRE-FEASIBILITY → 02 BASELINE → 03 GOVERNANCE → 04 TREATMENT

05 LANDSCAPING → 06 Operations & Maintenance → 07 Monitoring & Evaluation

RESTORATION OF ADMIN BLOCK POND : 95 BSF CAMPUS, BHONDSI

SUPPORTED BY BROOKFIELD PROPERTIES

It lies under the jurisdiction of Municipal Corporation Gurugram. The ownership of the land is under the ambit of Border Security Force (BSF). The pond is located at a latitude of 28.365270° and longitude of C 77.056611° respectively. The cumulative area of pond with buffer is approximately 0.5 acres. There is Admin Block, Family Quarters in the North and environmental park in the south and east side of pond.

Aerial Image of Project Area

During the primary site visit, we observed the following

- There is a sewage logging around the manhole, making the surrounding a cesspool and degrading the land.
- There is a 50 KLD Sewage Treatment Plant which is dysfunctional from past few years.
- The surrounding open area is being developed as an environmental park. A good number of native species of plants are growing in the vicinity of project area.
- In addition, water logging of other areas during rainy day.

SCOPE OF WORK

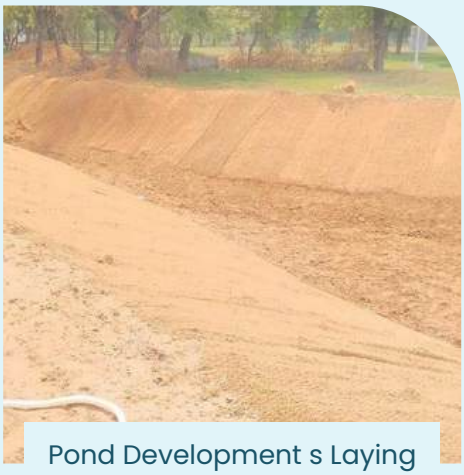
- Pond development
- Construction of 50 KLD wastewater treatment plant based on nature-based technology
- Walkway around the pond
- Fencing of the pond
- Plantation of hedges, shrubs and trees
- Seating and dustbin
- Installation of Automatic/Digital Water Level Recorder

Site Demarcation

Pond Excavation

Excavation for Wastewater Treatment Plant (WWTP)

PCC for ABR



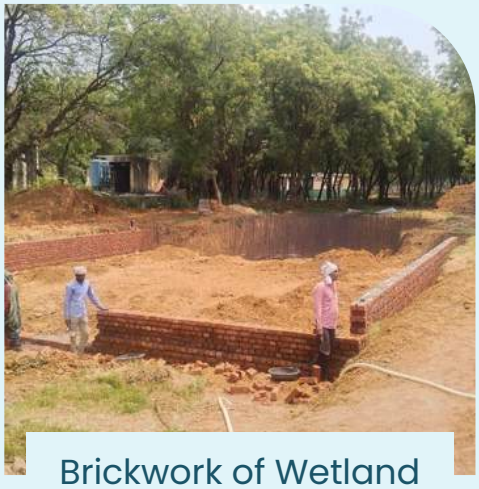
Pond Development s Laying of Geo-Coir on Pond Slope

Reinforcement for Walls over the Raft Foundation of WWTP

Construction of ABR Walls

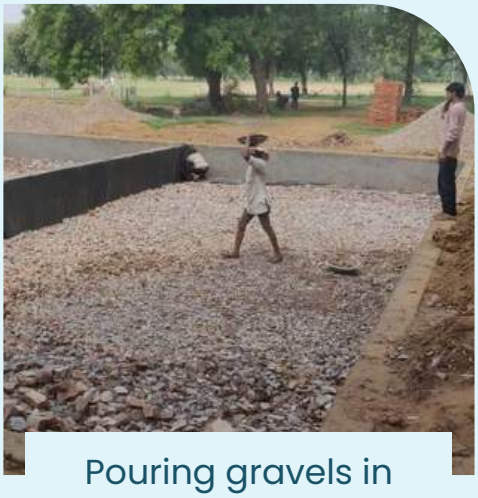
Development of Walkway around the Pond Periphery

Slab Casting of ABR

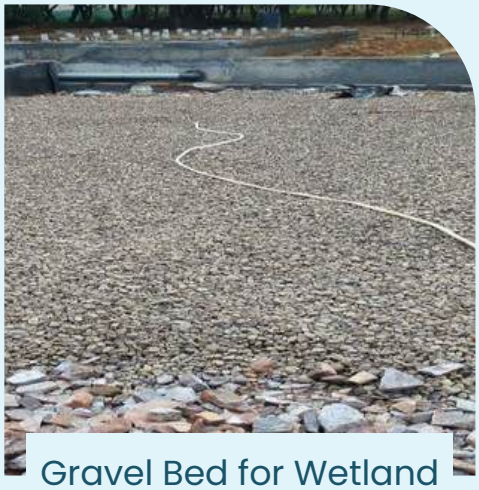


Brickwork of Wetland

Plaster work on brick walls of constructed wetland



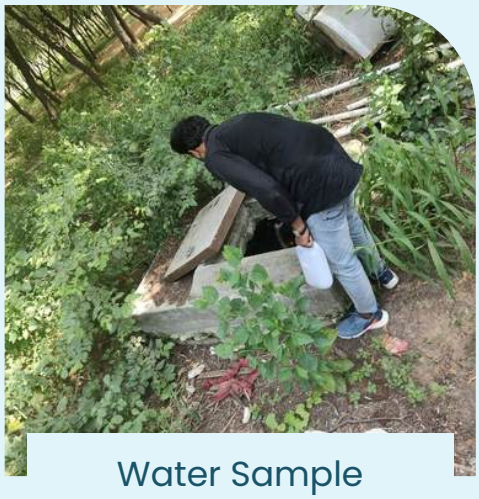
Pouring gravels in wetland



Gravel Bed for Wetland Plantation

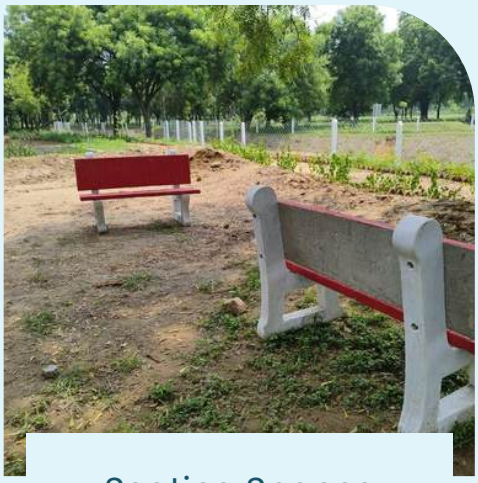
Plantation at Wetland

Paintwork of Brick along the Walkway



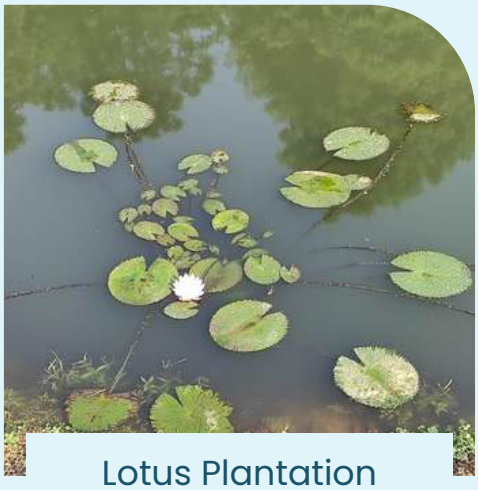
Water Sample Collection

Site Visit by Add. CEO, FMDA



Seating Spaces

Channelization of Rainwater to the Pond



Lotus Plantation

Plantation Work along the Pond

POTENTIAL IMPACT

- Treatment of approx. 50 KLD of wastewater, which would previously stagnate near the pond or open area, creating soil and water pollution.
- Annual ground water potential will be 9.1 million litres. Changes monitored via automatic water level recorder installed near the pond site.
- Landscaping near the pond would improve aesthetic values of peoples.

RESTORATION OF MAHILA BARRACK POND : 95 BSF CAMPUS

SUPPORTED BY XEBIA

It lies under the jurisdiction of Municipal Corporation Gurugram. The ownership of the land is under the ambit of Border Security Force (BSF). The pond is located with a latitude & longitude of 28.368326° & 77.050815° respectively. The cumulative area of two ponds with buffer is approximately approx. 1.75 acres. There is Mahila Barrack and Archery Ground in the East and west side of pond respectively.

Satellite Image of Project Area

During the primary site visit, we observed the following

- There are two depressions at the pond site.

  - One receives the rejected water from RO's and wastewater from WC's.
  - The other depression gets fresh water during rains.

- Currently, lot of native species of plants are in the vicinity of project area.

- In addition to this, the overflow from the septic tank of Mahila Barrack also finds its way to the pond, which further degrade the pond and surrounding areas.

SCOPE OF WORK

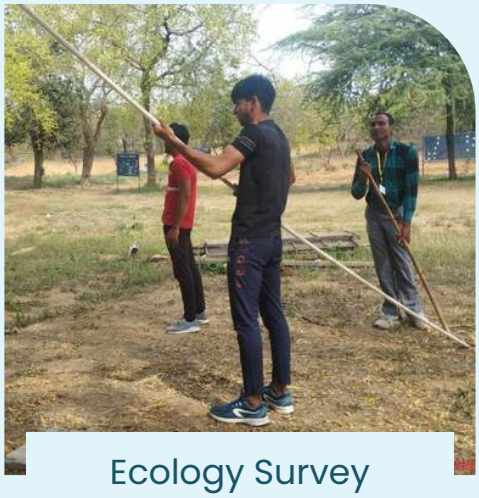
- Pond Profiling
- Foundation stone & Pond dredging
- Embankments & dual bunds around the periphery of the pond
- Slope stabilization with geo-coir of polishing pond
- Excavation and PCC for WWTP (50 KLD)
- Raft foundation for settler, ABR and constructed wetland
- RCC wall for settler and ABR
- Levelling and Earth filling around the landscape area
- Construction of the RCC wastewater drainage pipeline
- RCC slab for silt chamber, settler and ABR
- Laying of sandbag and liner for wetland
- Filter media and plants for WWTP
- Installation of AWLR
- Footpath & Fencing around the pond
- Plantation & Landscaping

INAUGURATION OF POND SITE NEAR MAHILA BARRACK

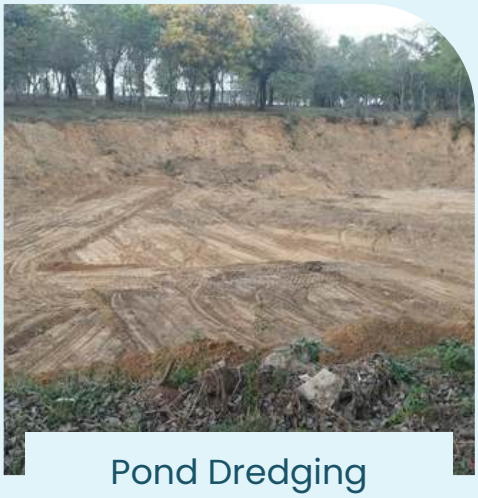
The inauguration ceremony took place on 4th July 2023 at the BSF campus Bhondsi, and was graced by the presence of Mr. Naresh Lakra, SIC, Commandant BSF, Mr. Anand Sahay, Global CEO of Xebia, Ms. Glory Nelson, Chief People Officer (CPO), Ms. Shalu Tyagi, G.M Xebia along with the trustees of GuruJal Mr. Ashish Dev Kapur, Ms. Elisha Suri, Ms. Shubhi Kesarwani and representatives from GuruJal and BSF.

Team GuruJal with BSF Officials and the team of XEBIA

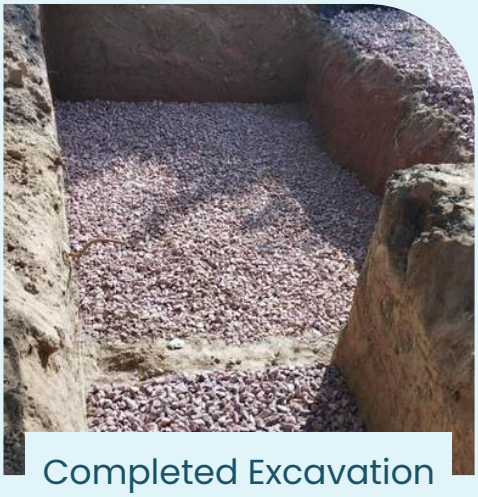
Veneration taking place in Inaugural Ceremony



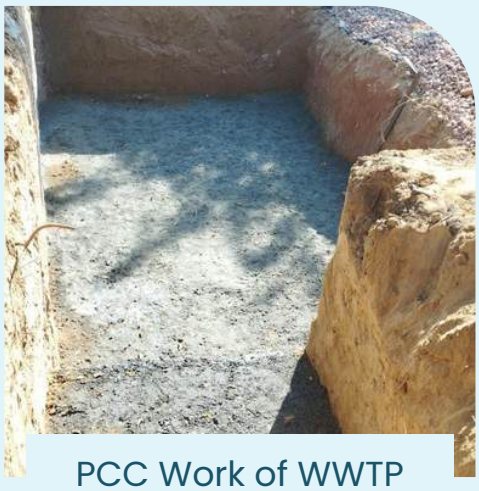
Ecology Survey



Pond Dredging

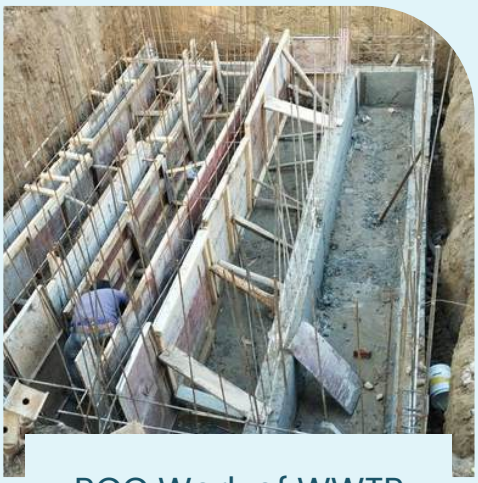


Completed Excavation Work



PCC Work of WWTP

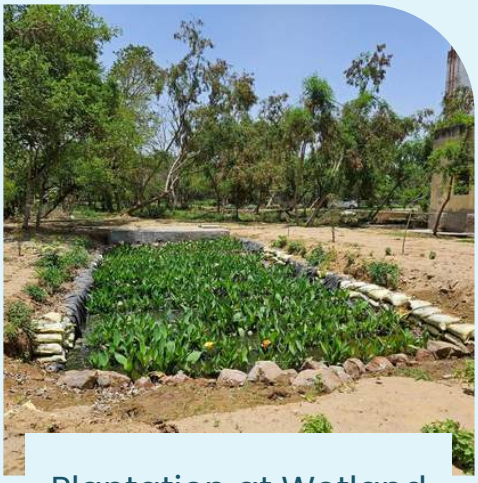
Raft Foundation for WWTP



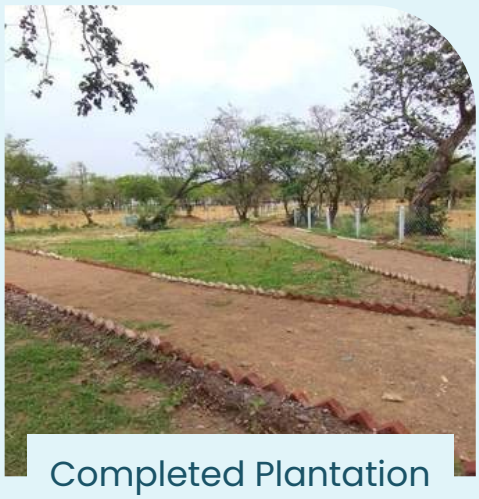
RCC Work of WWTP

Constructed Wetland Development

Development of Footpath

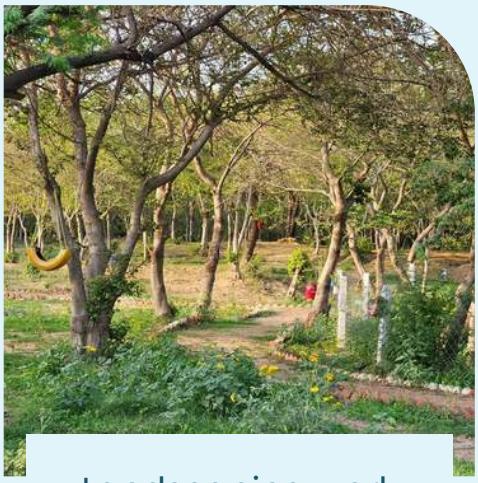


Plantation at Wetland



Completed Plantation & Footpath

Pond Fencing



Landscaping work

Benches along the walkway

AWLR Installation

Site Board

POTENTIAL IMPACT

- Treat approx. 18250 kiloliter of wastewater per year.
- Annual ground water potential will be 9.1 million liters per year.
- An increase of 0.4 m in ground water level in approximately one month only in the area through automatic water level recorder.
- Planting of approx. 140 trees, 568 flowering plants, 6200 hedges near the pond.
- Potential carbon sequestration will be 19600 kg with an offset period of minimum 10 years.
- Influencing ambient temperature by 1-2 degree Celsius decrease.

INITIATION OF RESTORATION OF POND : MALAB VILLAGE, NUH

SUPPORTED BY RITES

GuruJal focused on Battu ka talab pond, one of the seven ponds in the Malab village, six of which receive untreated domestic wastewater. The project aims to restore the pond's ecological balance and create a sustainable water resource system that enhances groundwater recharge, improves biodiversity, and provides a safe, green community space for local residents.

During the primary site visit, we observed the following

- Inflow of untreated household wastewater into ponds
- Poor drainage and solid waste management system
- Decreasing groundwater table and soil pollution
- Loss of aquatic and terrestrial biodiversity
- Neglect of waterbodies as community assets

Drone image of Pond befire Intervention

Proposed Solution

The project integrates Nature-Based Solutions (NbS) to restore the pond's ecological health while providing long-term water sustainability for the village.

- Installation of a 100 KLD Constructed Wetland-based Wastewater Treatment Plant (WWTP) to treat the domestic sewage before it enters the pond.
- Rainwater diversion from the natural catchment area into the pond to supplement treated water inflow.
- Landscaping and ecological design to enhance pond aesthetics, create green buffer zones, and promote biodiversity.
- Development of the area as a recreational and learning space for the community.

STEPS INITIATED ON GROUND

- **Site Assessments:** Soil and water quality testing conducted to determine contamination levels and treatment requirements.
- **Technical Design:** Detailed Project Report (DPR) prepared with design drawings, cost estimates, and landscape enhancement plans.
- **Formal Collaboration:** MoU signed between GuruJal and RITES Ltd., outlining the scope, implementation schedule, and financial framework.
- **On-Ground Implementation:** Dewatering and de-silting initiated to remove accumulated silt and sludge, restoring pond depth.
- **Site preparation:** Setting up the 100 KLD Constructed Wetland system near the pond site.

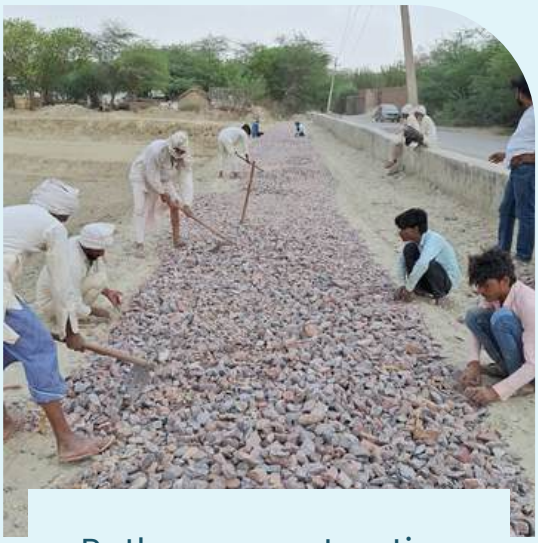
Dewatering of pond

Desilting

Leveling of the site

Potential Impact

- Treat and reuse 100 KLD of domestic wastewater through natural systems.
- Enhance groundwater recharge & availability.
- Improve local biodiversity and micro-climate.
- Convert a polluted waterbody into a community-owned ecological asset.



Pathway construction

INITIATION OF RESTORATION OF TRIVENI POND AT BHOKARKA

SUPPORTED BY BEAM SUNTORY

Bhokarka village pond is situated on the outskirts of the settlement, within the catchment of the now-dried Sahibi River. The pond spreads across nearly 3 acres and is surrounded by approximately 8 acres of open space. The site's soil profile is predominantly loose and sandy with a high percolation rate, making it ideal for groundwater recharge.

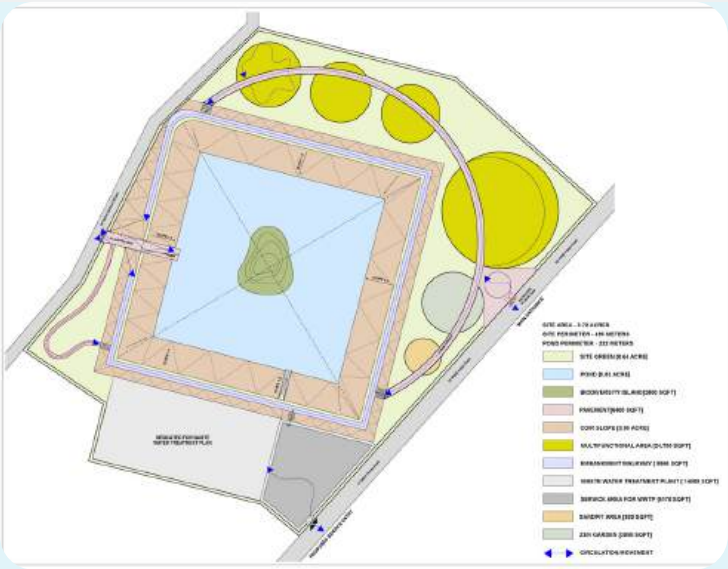
Drone image of Pond before intervention

During the primary site visit, we observed the following

- Polluted and stagnant waterbody
- Solid waste dumping and soil contamination
- Declining groundwater table
- Poor wastewater and drainage management
- Loss of biodiversity and ecological balance

Proposed Solution

- Installation of a 200 KLD Nature-Based Wastewater Treatment System (WWTP)
- Architectural landscaping for improved aesthetics and access
- Creation of a healthy pond ecology with native plantation and buffer zones
- Development of community space for awareness and engagement activities

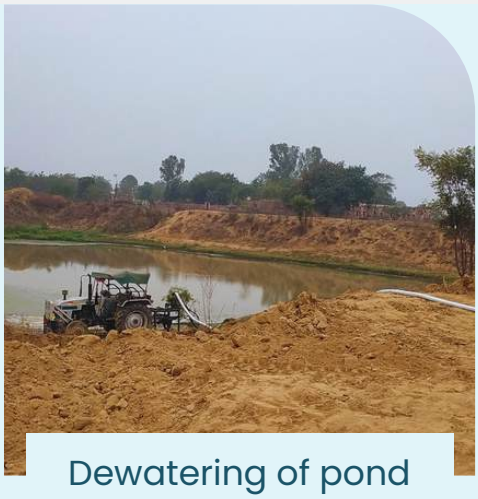


Conceptual Design

COMPLETED STEPS ON GROUND

- **Soil and water testing:** Baseline analysis of pollutants and infiltration potential of water and soil
- **Desilting and Dewatering:** Removal of contaminated sludge and wastewater to revive pond depth and percolation capacity.
- **AWLR Installation:** Automated Water Level Recorder installed for continuous water level monitoring.
- **Leveling and Fencing:** Earthwork and fencing completed to stabilize embankments and prevent waste inflow.
- **Site Preparation:** Clearing of solid waste, grading of pond edges, and soil stabilization for future construction of the NBS system.

Wastewater Testing



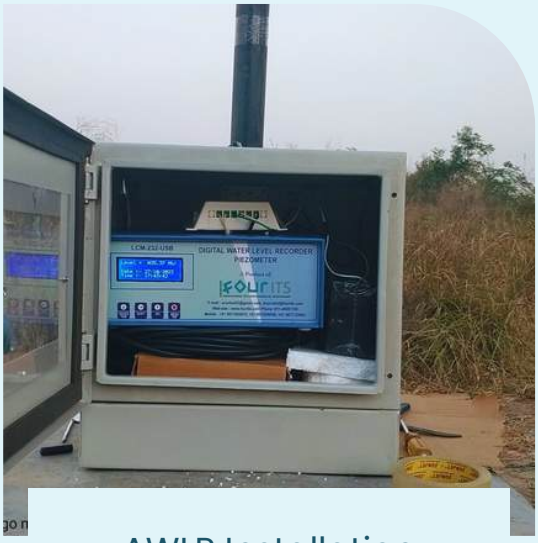
Dewatering of pond

Desilting of pond

Potential Impact

The Bhokarka Pond Rejuvenation project will serve as a demonstration model of nature-based wastewater treatment.

- Treat 200 KLD of wastewater naturally
- Recharge the groundwater table
- Improve soil and water quality
- Restore local biodiversity and create a public eco-space.



AWLR Installation

LAUNCH : WEFORWATER FELLOWSHIP

We for Water fellowship is **India's first apprenticeship program** to skill youth in becoming workers, leaders, managers and enablers for sustainability. In August, we piloted our first batch of five fellows with an intention to create local leadership who can become change agents and support GuruJal's work within their own communities.

We worked on three key aspects for their comprehensive development for a year.

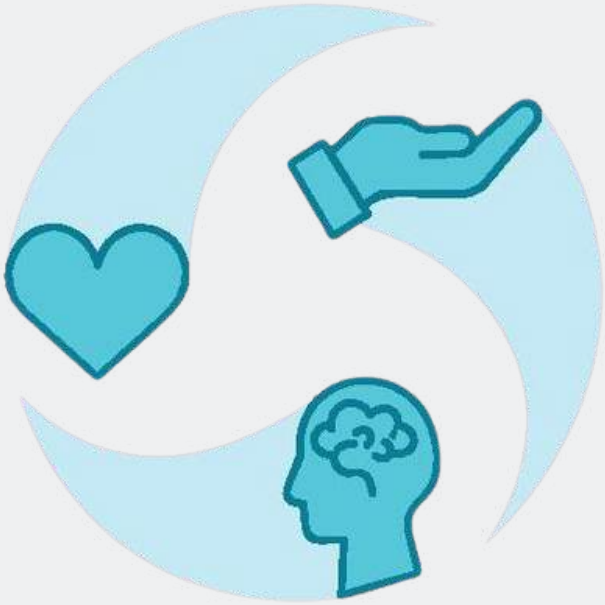
Intention

Knowledge

Skills

3H APPROACH
HEART, HAND AND HEAD

ANCHORED IN THIS APPROACH, LEARNING MODULES WERE DEVELOPED FOR THEIR SKILLING



Heart : Focus on personal development, fostering self-awareness, and understanding community dynamics.

Hand: Focus on hands-on skills and fieldwork,practical understanding of the real-world challenges in environmental and community projects.

Head: Focus on technical knowledge, policy understanding, comprehensive insights and practical knowledge.

Selection: This included a drive in 5 villages and a three step selection process. Post which, the selected candidates went through a general induction and a field induction.

Capacity Building: We held 25 training sessions over a year, focused on our 3H approach, along with multiple expert sessions too to increase their exposure and knowledge.

Field work: All fellows engaged in live projects at our on-going sites which included working on pond rejuvenation, water and soil sampling, rain water harvesting and crisis management

Community mobilisation: They also learnt to interact with the community through surveys, awareness drives, activities and workshops with different members of the community.

Governance: We followed a regular assessment framework to map the growth of each fellow and supported them in any learning challenges that came along the way.

5 FELLOWS
5 VILLAGES

DEEPAK

Village: Damdama | 12th Grade, Diploma in Medical Lab Technology

When Deepak joined the GuruJal Fellowship, he was quiet and reserved. He found it difficult to communicate his knowledge with confidence. Community interactions, particularly with women, were challenging, and he often preferred to stay in the background. But beneath his shyness was a calm and polite nature, qualities that, over time, became strengths in his journey.

Learning and Growth

As the fellowship progressed, Deepak began to open up. Through self-assessment and continuous mentoring, Deepak reflected on his growth:

- His leadership skills developed steadily, enabling him to lead events by March.
- Planning and execution became an areas where he gained confidence with team support.
- Coordination and facilitation came naturally to him and improved further with practice.
- His communication skills strengthened, helping him express himself better in both team and community spaces.

Community Project: Becoming a Nature Guide

Combining his interest in ecology with community engagement, Deepak chose to prepare himself as a tour guide. He expanded his knowledge of local flora, fauna, and biodiversity. This culminated in him leading a forest walk, where he guided visitors through the landscape, explained forest types and the importance of conserving local biodiversity.

Leading the forest walk was a turning point for me. I stood with confidence, sharing my village's ecology and becoming a bridge between my community and the outside world.

AJAY

Village: Abheypur | Education: 12th Grade

His journey with the Fellowship began at a time of uncertainty. Preparing for exams and feeling disappointed by setbacks, he applied to the fellowship with the hope of finding a new path. Quiet and introverted by nature, he expressed himself less at first. Though His enthusiasm for learning was evident from the start. His logical thinking and need for clarity shaped his approach to tasks.

Learning and Growth

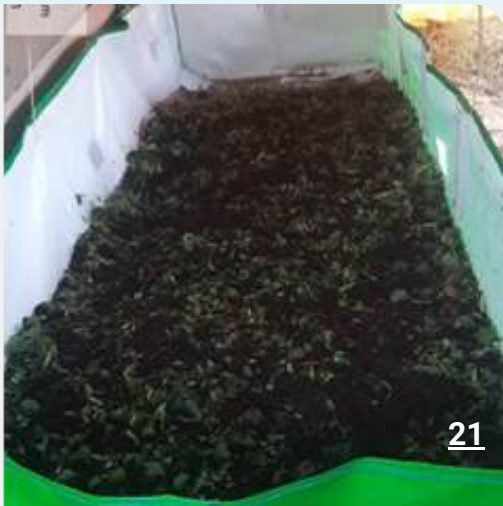
Over the months, Ajay began to find his footing. One of his biggest shifts was in leadership: though hesitant at first, Ajay went on to manage events single-handedly. Through self-assessment and reflection, Ajay recognised:

- A stronger grasp of processes and tasks.
- Leadership skills that grew gradually, balancing his introverted nature with steady confidence.
- Progress in communication, though still challenging at times, especially in conversations with women.
- Consistency in completing tasks, with his enthusiasm.

Community Project: VermiComposting

Ajay chose to focus on waste management through composting for his field work. He set out to prepare 50 kg of manure from vermicomposting, starting with site identification and bed preparation. Guided by his mentor, Dr. Syed Maqbool, Ajay put in consistent effort despite challenges. He conducted household surveys, experimented successfully with composting, and mobilised a volunteer team.

When I set up the composting beds and produced manure, I realised I could turn waste into something valuable for my village.



VINOD

Village: Kherla | Education: 12th Grade

He joined the Fellowship in between in November though he quickly proved that discipline and hard work could bridge any gap. Initially shy and introverted, he often hesitated to speak up. Yet, through consistent effort, team support, and capacity-building sessions, he began to catch up with his peers at a remarkable pace.

Learning and Growth

Vinod's personal growth has been steady and consistent:

- He has developed a strong grasp of processes, carefully following instructions and ensuring quality in his work.
- His leadership skills grew gradually, moving from hesitation to taking initiative in activities and events.
- With time, his planning and execution abilities improved, allowing him to pay attention to micro details.
- In two months, he built strong relationships with the community and team, showing an ability to connect deeply with people.

Community Project: Setting up a Nursery

Vinod's community project reflects his passion for biodiversity and nature. Under the guidance of Program Manager Mr. Pulkit, he has been learning nursery management, from preparing nursery beds to managing plant stock. He expanded his knowledge of indigenous species, traditional ecological practices, and the unique flora and fauna of the Aravalli region.

When I started, I was shy and unsure of myself. Working with the nursery taught me patience and confidence. Every plant I nurture feels like a step towards bringing nature closer to my community.

SANDEEP

Village: Bhokarka | Education: 12th Grade

He is known for his quiet presence and impactful work. At the start of the fellowship, he was hesitant and often resistant to step into new roles. Yet, once on the ground, he consistently delivered excellent results. His commitment to community work, eye for detail, and disciplined execution have set him apart. he developed a strong interest in civil work, showing both natural aptitude and growing confidence in handling complex tasks.

Learning and Growth

Sandeep's personal journey has been marked by steady progress and practical achievements:

- Built a strong understanding of processes, translating them into quality outcomes.
- Gradually developed leadership skills through coordination and on-ground management.
- Improved his planning abilities, learning to strategise and adapt in field situations.
- He overcame his struggles with facilitation and communication and became more confident.

Community Project: Site-supervision

As a Site Supervisor, Sandeep efficiently managed on-ground implementation, ensuring quality execution of civil and restoration works. His keen observation, problem-solving attitude, and coordination with the team strengthened project delivery and field operations.

The Fellowship helped me understand the ground realities of civil work and community participation. I've learned how every structure we build connects to people, nature, and purpose.

VIRENDRA

Village: Daultabad | Education: 12th Grade

When he joined the Fellowship, he stood out for his extroverted personality and eagerness to contribute. Enthusiastic and expressive, he engaged readily in conversations and shared his viewpoints with confidence. Over time, however, Virendra learned to balance this energy with stronger listening skills and a deeper understanding of processes.

Learning and Growth

Virendra's personal development has been significant and multi-dimensional:

- Improved steadily, learning to balance effort between steps and outcomes.
- Gained confidence in leadership over time, moving from hesitation to leading effectively.
- Became consistent in organising and executing tasks and developed strong, collaborative relationships within the team.
- His communication improved to a confident level, though with occasional fluctuations.

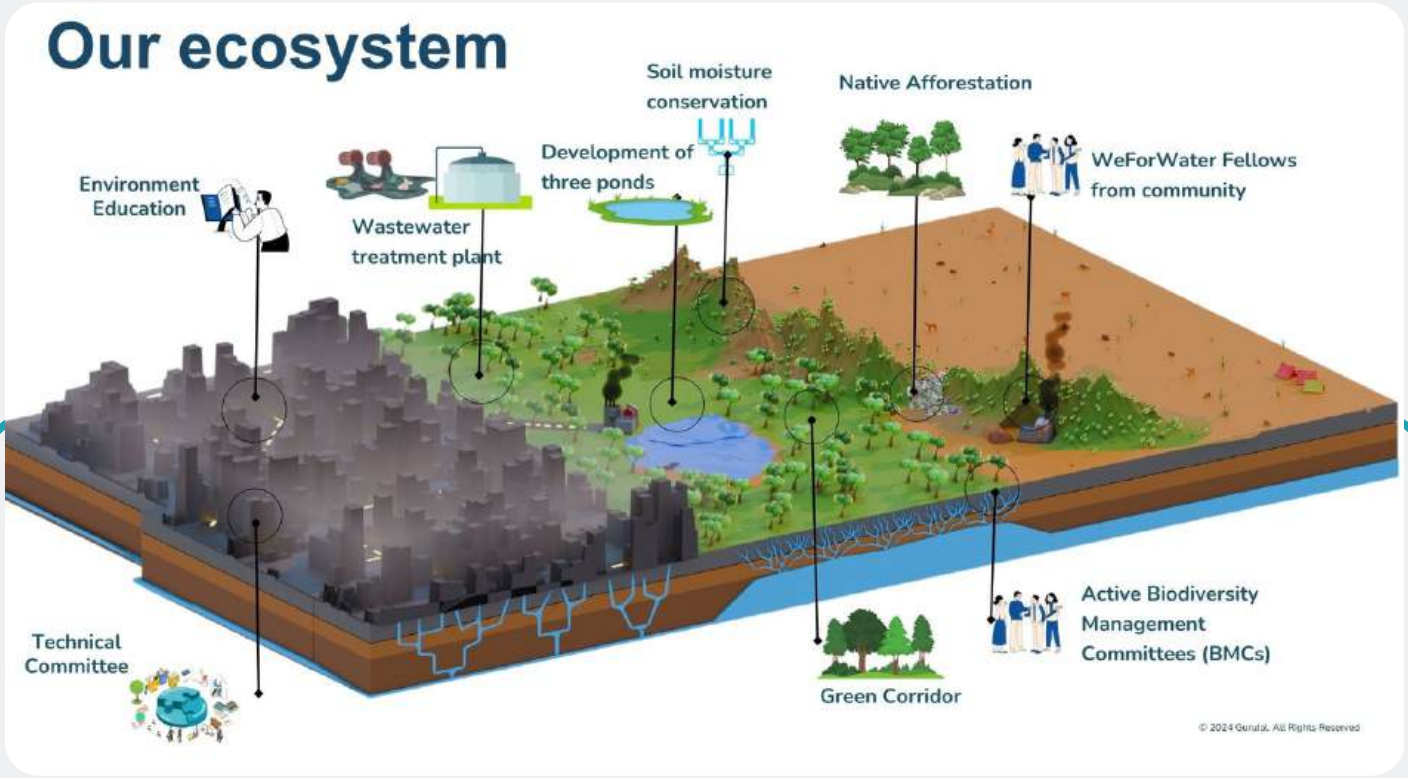
Community Project: Site-supervision

His project work reflected his adaptability and growing expertise. From site supervision to office management, he showed resilience in shifting roles while maintaining focus on learning. His aspiration is to continue strengthening his skills in both site supervision and office management.

When the Daultabad project stopped, I thought my journey had paused. But shifting to office and site management taught me adaptability. I feel ready to take on any challenge.

ECO-RESTORATION

Ecosystem restoration is the process of halting and reversing degradation, resulting in improved ecosystem services and recovered biodiversity. At GuruJal, we have imbibed this principle into our model and focus on six key aspects of the same for our intervention.



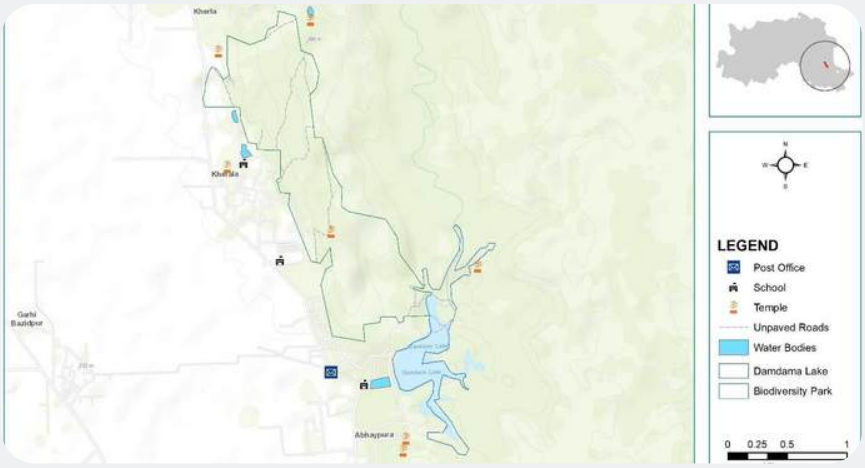
LAND | **WATER** | **WASTE**

COMMUNITY | **BIODIVERSITY** | **GOVERNANCE**

BASELINE ASSESSMENT OF DAMDAMA ECO-RESTORATION SITE

GuruJal conducted a comprehensive baseline assessment to evaluate the current ecological, hydrological, and political landscape surrounding the Damdama Biodiversity Park, encompassing the Damdama Lake and adjacent villages of Damdama, Abheypur, and Kherla.

The primary objective of this study was to establish a foundational understanding of the present state of water resources, biodiversity, archaeological significance, waste management, community dynamics, political ecology, and governance within the Damdama Ecosystem.



Baseline of Damdama Lake and Villages

Foundation Ceremony

Strategic Components of the Study

To achieve the project objectives, the report outlines a comprehensive study composed of the following components:

- **Climate:** Understanding the climatic conditions and their impact on the region.

Land: Assessing land use patterns and degradation.

- **Hydrology and Hydrogeology:** Studying water resources and groundwater recharge mechanisms.
- **Biodiversity:** Documenting existing species and habitats, identifying key conservation areas.
- **Archaeology:** Preserving the cultural heritage of the region.
- **Social Assessment:** Evaluating the social impact of the project on local communities.
- **Governance:** Analyzing the governance structures that will support the project's implementation and sustainability.

FINDINGS

Climate Conditions

- PM10 and PM2.5 account for 84-85% of total pollution, with levels 3-6 times above permissible limits.
- In January, temperatures in the park ranged from 18-21°C.
- June saw temperatures exceeding 45°C in the north-eastern and eastern boundaries.
- September temperatures exceeded 35°C in the north-eastern and south-western parts during the monsoon.

Soil Characteristics

- Organic matter is less than 0.5%, indicating poor soil quality.
- Moisture content is below 3% in most areas, except around the lake. Immediate improvements are needed.

Land Assessment

- In June, vegetation was mainly around the lake with NDVI values up to 0.32. Other areas had low NDVI values (0.1-0.2), indicating bare soil.
- By September, NDVI values increased to 0.4, with some areas showing negative values (- 0.03), indicating water presence.

Hydrology

- Check dams and gully plugs are recommended at critical locations to improve water retention and restore channels.
- These interventions could increase lake depth by one meter, ensuring more consistent water availability.
- Gully plugs will help with erosion and sedimentation, while check dams will control water flow and facilitate groundwater recharge.

Biodiversity

- **Forest Types:** The area features Tropical Dry Deciduous Forests and Tropical Thorn Forests, with common types including 6B/E2 Acacia senegal forest, 5B/E1-DS1 Anogeissus pendula scrubs, and 6 E4/DS1/1S1 Desert Dune Scrub near the lake.
- **Dominant Vegetation:** Acacia senegal forms extensive patches, while degraded Anogeissus pendula scrubs indicate past dominance of 5B/E1-Anogeissus pendula forest. Prosopis juliflora an invasive tree species dominates the majority of area.
- **Understory Plants:** Grewia tenax and G. flavescens are common in hilly areas, with presence of young Holoptelea integrifolia and Vallaris solanacea .
- **Other Vegetation:** Ziziphus scrubs are found, and Desert Dune Scrub is noted in sand deposition areas.
- **Plant Species Checklist:** The survey identified 262 plant species, including 40 tree species (23 within plots, 17 outside), 20 shrub species (8 within plots, 12 outside), 167 herbs, and 35 climbers, reflecting diverse habitats and vegetation types.

RECOMMENDATIONS

Climate-linked Suggestions

- Utilize the lake's water surface for temperature control and balance evapotranspiration. Monitor temperature and oxygen levels to assess microclimate variations and the biodiversity park's impact on air quality.
- Implement rooftop rainwater harvesting to meet the water needs of 200-1200 persons, reduce groundwater pressure, and enhance water security.
- Adopt eco-restoration measures to increase groundwater levels by at least 0.3 meters within a year.
- Protect the lake through soil conservation and check dams to maintain its 15-hectare spread and support eco-tourism with a water level of 1.5-2 meters.

Rooftop Rainwater Harvesting

- Capture rainwater to reduce groundwater stress. Damdama, Abheypur, and Kherla can harvest up to 13.42, 19.42, and 31.45 million liters annually, respectively, meeting the water needs of 525, 760, and 1231 persons.

Biodiversity Park Interventions

- Implement soil conservation techniques such as jute or coir geo-textiles on slopes to prevent erosion.
- Install micro-check dams and trenches to conserve soil moisture and support seedling growth.
- Use abandoned borewells for rainwater harvesting to help maintain lake water levels

Fuelwood and Grazing

- Allocate areas for fuelwood collection and grazing while focusing on regeneration. Engage fuelwood collectors in site restoration and invasive species management.

Alternate Energy Sources

- Assess and promote alternative energy sources to reduce reliance on forest resources, making conservation efforts more acceptable.

Invasive Weeds

- Gradually replace invasive exotic weeds to enhance native biodiversity and prevent their dominance.

Lake-side Zone

- Remove invasive species and prevent waste dumping around the lake. Treat wastewater before it enters the lake.

Waste Management

- Conduct an IEC/BCC campaign to shift community behaviour, enhance waste management infrastructure, and align with national and global sustainability goals. Reduce waste burning, promote source segregation, and compost wet waste.

Social Recommendations

- Focus on enhancing rural livelihoods and income through agroforestry connections and community-based initiatives. Support cultural practices, social cohesion, and environmental aesthetics to foster community engagement and pride. Address socio-economic inequalities and promote educational and cultural activities within ecological spaces.

WATER-PROOFING

Our Water Proofing program helps campuses and institutions understand how they use water and how they can save it. We design simple, affordable systems that reduce waste, reuse greywater, and recharge the ground. We also train the people who run these spaces like maintenance staff, officers, students, so they can take care of the systems long after we leave.

WATER PROOFING

GURUJAL HELPS INSTITUTIONS BECOME 'WATER SMART'

Rainwater Harvesting
Utilising rainwater harvesting, reducing the demand on groundwater.

Pond Rejuvenation
Using nature-based solutions to restore and maintain existing water bodies.

Nature based STPs
Building sewage treatment plants to effectively treat wastewater and reuse.

Green Belts
Creating green spaces to enhance water retention and reduce runoff.

Bioswales
Establishing bioswales to manage stormwater runoff and recharge groundwater.

Check Dams
Constructing check dams/gully plugs to control surface runoff & prevent soil erosion.

RAINWATER HARVESTING

AT FARIDABAD POLICE COMMISSIONER OFFICE

The initiative aims to enhance the site's water efficiency rating, promote groundwater restoration, and support sustainable community development while contributing to improved microclimate regulation and local employment generation.

SITE CHARACTERISTICS

- **Groundwater Category:** Over-exploited
- **Groundwater Level:** 33 mbgl (cgwb, 2020)
- **Rainfall:** 521.4 mm/year
- **Extraction Borewells capacity:** 2 Nos, rate – 800-1200 ltr./min
- **Dependency on the premises:** 550 people
- **Proposed RWHs capacity:** 92 KL
- **Recharge Potential:** 1917280 ltr./year

Water Logging in the campus

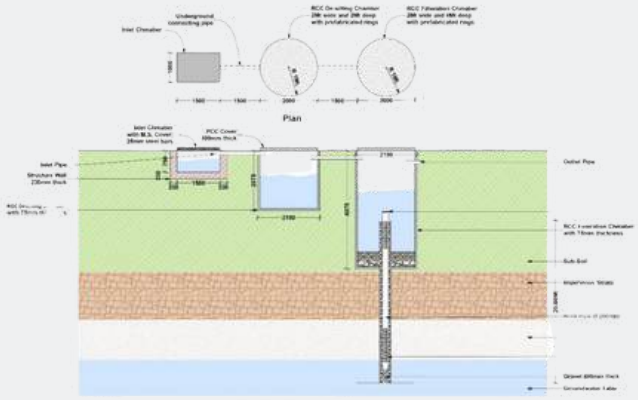
ADVANTAGES OF RWH MODEL IN CP OFFICE

- The decentralized system divides the runoff and transports the water to different locations.
- Multiple recharge borewell helps to recharge the water at different location and if one of the recharges well is chocked, other will be working.
- Large Borewell diameter creates extra space to filter the water and increases up the infiltration rate.
- Multiple filtration systems reduced the chocking of recharge Borewell.
- Small size Desilting chamber helps in cleaning silt instead of a whole RWH tank.
- Perforated Drain helps in collecting runoff from large surface area and transport to RWH Tank.

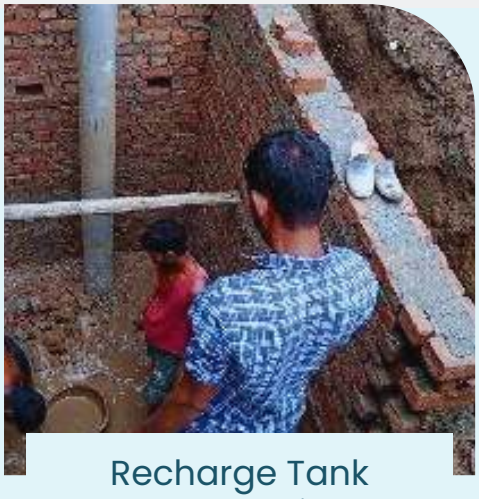
SCOPE OF WORK

Total no. of structure: 3 R.W.H System | **Design capacity of structure:** 92 KL | **Recharge potential generated:** 1917.28 KL /annually

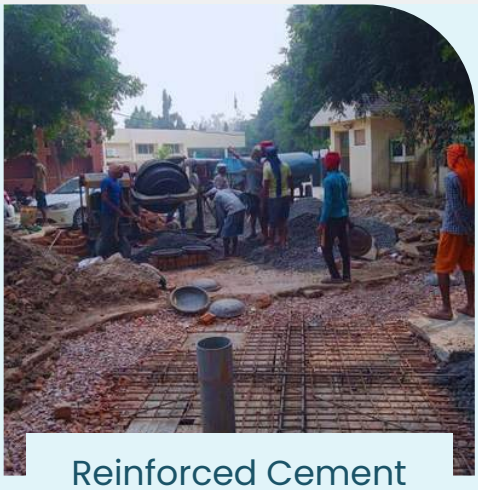
- Desilting Chamber
- Filtration Chamber
- Recharge Borewell
- Rainwater Tank
- Conveyance System
- Collecting Manhole
- Slope Stabilization
- Collection Drain



Conceptual design



Recharge Tank Construction



Reinforced Cement Concrete Casting Work

Site Leveling and Surface Finishing

Rainwater System Cover Slab

Completed Rainwater Harvesting Structure

CONNECT THE DROPS

We focused building a relationship between corporates and environment. We designed a climate calendar to inspire and empower corporate teams to actively participate in creating a sustainable future. created hands-on activities, workshops, and community outreach projects to contribute meaningfully to environmental and social change.

Team Building
building belongingness at work

Values Alignment
increasing the retention rate

Mental well-being
through hands on experience

Seva (Community service)
enabling grounding

CLEANLINESS DRIVE

SUPPORTED BY BROOKFIELD PROPERTIES

The objective of the clean-up drive at the Kasan pond site and biodiversity park area is to improve the area's environmental conditions and promote the community's health and well-being and to create awareness among the community.

- **Venue:** Kasan Village (Pond site and Biodiversity Park area)
- **No. of Participants:** 150+
- **Major Stakeholders:** Officers from MCM, volunteers from brookfield properties, local volunteers and GuruJal team

WE COLLECTED AROUND 900 KG OF SOLID WASTE

CLEANLINESS DRIVE

SUPPORTED BY EY FOUNDATION

The objective of the clean-up drive was to improve the area's environmental conditions and promote the community's health and well-being and to create awareness among the community.

- **Venue:** Jharsa Bandh, Sector 15 Part- II
- **No. of Participants:** 70+
- **Chief Guest of the event:** Shri Sudhir Singla, MLA, Gurugram
- **Major Stakeholders:** Officers from GMDA, volunteers from Ernst & Young Foundation, Youth Alliance, GuruJal team and Local residents.

WE COLLECTED AROUND 600 KG OF SOLID WASTE

ENVIRONMENT, SOCIAL AND GOVERNANCE

We partner with ESG consultants, corporates, and CSR arms to translate ESG strategies into measurable on-ground action and sustainability reports. Our team understands frameworks like GRI, BRSR, CDP, and works to ensure that our work aligns with larger ESG reporting and compliance goals.

We are implementers and strategic collaborators who understand both the macro ESG landscape and the grassroots reality.

ESG ADVISORY

- Carbon & Water Offsetting through Verified Projects
- Water Audits & Resource Budgeting
- Nature-Based Infrastructure Development
- Water-Neutral Campuses & Supply Chains
- Monitoring, Reporting & Verification (MRV) Support
- Community Engagement & Behaviour Change

SUSTAINABILITY ROADMAP

FOR PEARL GLOBAL'S TRANSFORMATION

The project aimed at driving sustainability integration across Pearl Global's operations. It focused on assessing the current sustainability performance, aligning them with international benchmarks, and fostering a culture of responsible business practices within the company.

INTERVENTION

PHASE 1: BASELINE ASSESSMENT & MARKET NAVIGATION

- Auditing current environmental and social practices across factories.
- Mapping market trends and client and investor expectations around sustainability performance.
- Identifying key compliance gaps, improvement areas, and potential ESG risks.

PHASE 2: SUSTAINABILITY ROADMAP DEVELOPMENT

- Development of a Sustainability Roadmap aligned with GRI (Global Reporting Initiative) and IR (Integrated Reporting) frameworks.
- Setting short-, medium-, and long-term goals for energy efficiency, waste reduction, water management, and social impact.
- Creating a Plan of Action for integrating sustainability into daily operations and decision-making processes.

PHASE 3: AUDIT & REPORTING

- Annual Sustainability Audits to track progress against defined KPIs.
- Preparation of Sustainability Reports in IR/GRI formats.
- Data analysis and recommendations for continual improvement and external stakeholder communication.

PHASE 4: CAPACITY BUILDING – EMPOWERING CHANGE

- Foster a clear understanding of what sustainability means in the apparel manufacturing sector.
- Create awareness about the sustainability ecosystem and environmental footprint.
- Equip employees with practical knowledge on how to reduce their environmental impact within factory operations.

HONOURED FOR IMPACT

'Social Impact Award' by KalaGram in collaboration with Municipal Corporation of Gurugram and District Administration of Gurugram

'Women in Science' by Climate School of Columbia University

'Social Impact Award' for Water by Hero Group

WomenOnTop Award

ACTIVE PROJECTS

Sr. no.	Name of Project	Funded by
1	Damdama & Kherla BDP restoration & Lake rejuvenation	ERNST & YOUNG FOUNDATION
2	Rejuvenation and Restoration of 1 Freshwater Pond	ARLIGA INDIA OFFICE PARKS PVT LTD
3	Rejuvenation and Restoration of 1 Wastewater Pond	BEAM GLOBAL SPIRITS & WINE(INDIA)PVT LTD
4	Rejuvenation and Restoration of 1 Wastewater Pond	RITES LIMITED
5	Maintaining the Green Belt at Sec 32	PEARL GLOBAL INDUSTRIES LIMITED
6	BSF CAMPUS	XEBIA IT ARCHITECTS INDIA P LTD
7	Maintaining the Green Belt at Sec 61	XEBIA IT ARCHITECTS INDIA P LTD
8	Sustainblity	PEARL GLOBAL INDUSTRIES LIMITED
9	Earth Day Event	CANDOR INDIA OFFICE PARKS PRIVATE LIMITED
10	Earth Day Event	CANDOR KOLKATA ONE HI-TECH STRUCTURES PRIVATE LIMITED
11	Earth Day Event	CANDOR GURGAON ONE REALTY PROJECTS PRIVATE LIMITED
12	Earth Day Event	SHANTINIKETAN PROPERTIES PRIVATE LIMITED
13	Earth Day Event	SEAVIEW DEVELOPERS PRIVATE LIMITED

NOTE OF APPRECIATION

GuruJal's ability to integrate scientific research with local realities is truly commendable. During the study of 'The Green Wall of Aravalli: A Roadmap for Ecological Restoration', we witnessed how GuruJal led a multi-disciplinary effort — bringing together over 20 experts to assess the 5000-acre Aravalli landscape around Damdama Lake across themes like biodiversity, hydrology, groundwater recharge, social challenges and cultural heritage.

The report not only presented a clear picture of ecological degradation but offered practical and sustainable solutions to revive the landscape. What stood out most was GuruJal's commitment to long-term sustainability — empowering local communities to reclaim their connection with nature. This is more than a report — it's a call to action, and we are proud to have partnered with them on this journey."

> *Working with GuruJal has reaffirmed our belief in the power of community-driven change.*

Ashish Srivastava
Associate Director
EY Foundation (India)

MEET THE LEADERS

Shubhi Kesarwani

Founder & CEO

She holds an MS in Sustainability Management from Columbia University and brings rich experience at the intersection of governance, sustainability, and community development. She has also served as Assistant Manager at the Chief Minister's Office in Haryana and an Advisor to CERO, a Management Development Institute (MDI, Gurgaon) and an Invited Trustee with Youth Alliance.

Dr. Fawzia Tarannum

Trustee & Strategic Head

She holds a PhD in Water Governance from TERI School of Advanced Studies and Master's degrees from Cornell University and IHE Delft. With over 25 years of experience in water resources and governance, she has served as an Assistant Professor in the Water Resources Department at TERI SAS and continues to contribute her expertise to advancing sustainable water management.

Mr. Ashish Dev Kapur

Trustee & Vice-Chairman

He is a leading hospitality industrialist and entrepreneur. An MBA graduate from McGill University, he is the founder of iconic ventures such as Yo! China, Whisky Samba, and The Wine Company, and continues to shape India's dining and lifestyle landscape with his innovative concepts.

Funders & Partners

Brands and Foundations

Funders & Partners

Government

BSF

GMDA

सिंचाई एवं जल संसाधन विभाग हरियाणा

MCF MUNICIPAL CORPORATION OF FARIDABAD

MCG MUNICIPAL CORPORATION of GURUGRAM NURTURING GURUGRAM

MUNICIPAL CORPORATION MANESAR MAKING MODERN MANESAR

NITI Aayog

Other Collaborations

BIOSPHERE ENVIRONMENT SOLUTIONS

CEDAR CENTRE FOR ECOLOGY DEVELOPMENT AND RESEARCH

ecosan SERVICES FOUNDATION

MDI GURGAON Management Development Institute

raahgiri foundation TRANSFORMING MOBILITY

SUF.

teri school of advanced studies

AMITY INTERNATIONAL SCHOOL

Bhumi

Volunteer

raman kant munjal FOUNDATION A Hero Group Initiative

saniverse environmental solutions

COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

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