

A close-up photograph of a person's hand holding a small amount of water, positioned over a pond. The pond is covered with green lily pads and other aquatic plants. The background is a soft-focus view of the pond and surrounding greenery. The hand is the central focus, with the water being held between the fingers. The overall tone is natural and serene.

OUR PONDS NEED OUR OWNERSHIP TO THRIVE

A collaborative initiative to rejuvenate ponds in Rural and Peri-Urban geographies in India

Ponds in India are
dying. It is time to
Revive, Rejuvenate
and Restore them.

Development Alternatives collaborated with various stakeholders to take on this challenge and launched an initiative "*Humare Talab Humari Pehchan*" to work on pond rejuvenation.



States

Uttar Pradesh &
Madhya Pradesh
Himachal Pradesh

Districts

Peri-urban:

Solan

Districts

Peri-urban:

Gautam Buddha Nagar

Districts

Rural:

Fatehpur & Newari

Number of Villages

74



Total ponds rejuvenated

91



Why should we conserve these water bodies?

Besides serving as an important **source of water** for humans and aquatic plants and animals, ponds help in **increasing groundwater levels** and **recharging ground aquifers**. Ponds also help in storing carbon in their sediments, thus helping in **carbon sequestration**. These water bodies trap sediments and **retain their nutrients**, thereby **improving the water quality**. Studies have shown that the presence of water ponds in urban areas can be effective at **removing pollutants and heat from cities**. The pond ecosystem is an important site for **biodiversity conservation** and it also provides **livelihood opportunities** for the community.

Ponds have been an integral part of peri-urban and rural geographies across India, serving many purposes. However, in the current scenario, these traditional water bodies are mostly neglected. Rapid urbanisation has led to ponds being replaced by water pumps and borewells to meet the increasing water demands of the community. Encroachments and construction have led to catchment areas being used as dumping grounds.

It is time to revive our respect for the ponds.



Almost two-thirds (63%) of India's districts are threatened by falling groundwater levels. **A cause for serious concern.**

The challenges that water bodies face:

The amount of water extracted from aquifers has increased

Groundwater levels are decreasing at an alarming level and there is reduced availability of water

There is a lack of community ownership and care towards ponds

The water holding capacities of the ponds have reduced due to heavy siltation

Untreated grey water is entering the ponds and contaminating the water

Increased urbanization and industrialisation

The catchment areas around the ponds face encroachment

We Take Pride in Facilitating Water Resource Conservation

The Expertise We Provide

1. **Technical Advisory** aids in implementation work for pond rejuvenation
2. **Planning Advisory** aids in the preparation of DPRs on pond rejuvenation
3. **Design & Construction** of wastewater treatment models
4. **Training & Capacity Building** on water conservation

And the Action We Take

We understand it is imperative to bring a change to the existing pond scenario. So, we undertake an **action-oriented and community-driven approach** to restore and rejuvenate these water bodies. The process is simple and effective.

Well-defined conservation interventions are planned and implemented through **participatory assessment**, thereby involving various stakeholders. **Water resource management strategies and landscape management regimes** are carefully devised for long-term sustainability which instill a sense of ownership amongst the stakeholders.

Our action is supported by our **technical and communication expertise** and the aim is to empower the community so that they can contribute to **preserving and utilising the resources** of the ponds in a responsible manner.

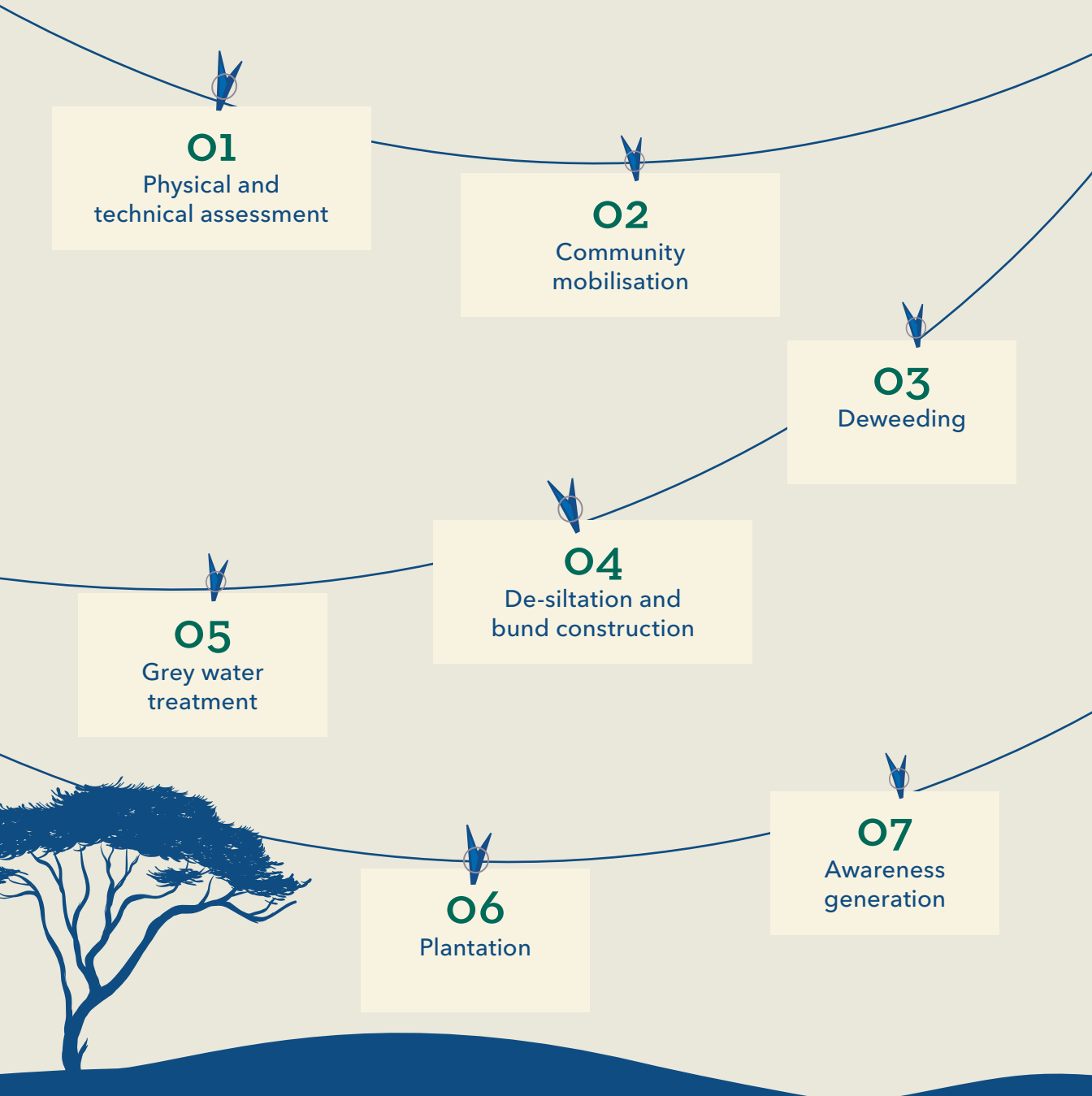




Rejuvenated Pond of Milak Lachhi,
Gautam Buddha Nagar, Uttar Pradesh

This is How We Work

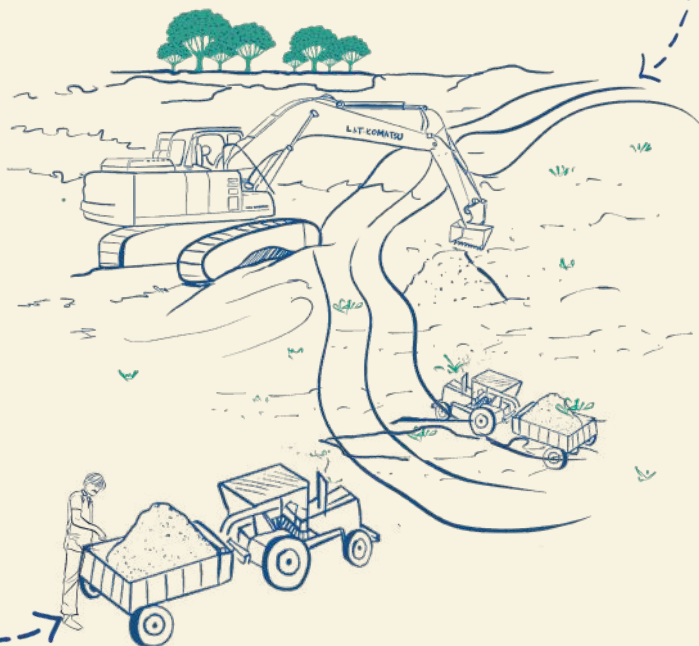
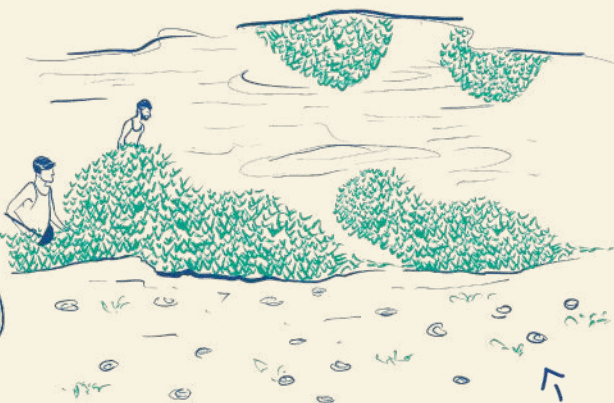
The pond rejuvenation process is simple and eco-friendly.



Members of the community are mobilised.



Ponds are cleaned and weeds and aquatic plants rooted in the ponds are removed



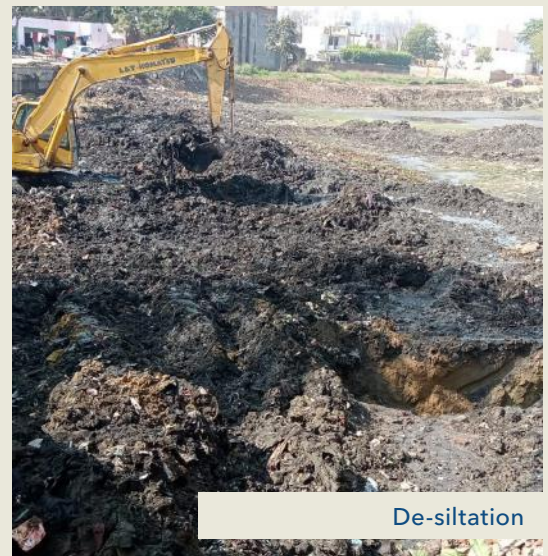
Green cover is increased by planting tree saplings on the bunds.



Accumulated silt is removed from the pond using JCB machines to increase the water storage capacity of the pond. The excavated silt is used to construct bunds around the ponds.

Also, farmers can take this silt for use in their agricultural fields for crop growth.

In Pictures

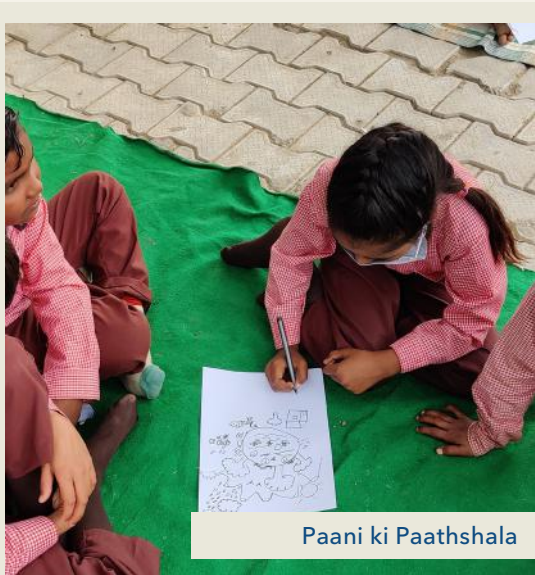




Bund construction



Plantation on bunds



Paani ki Paathshala



Awareness street plays



Nalagarh, Solan District, Himachal Pradesh



Water Treatment Solutions

Three models were designed to filter and treat the greywater before it entered the ponds.

D-structure

The D-structure is a two chambered settlement structure built for treating the incoming grey water in the ponds. The wastewater enters the first chamber where the maximum fraction of sludges settle down. The supernatant water then enters the second chamber, leaving the settled sludge in the first chamber. The second chamber is filled with gravel and aquatic plants which aid in the treatment of microbiological contamination the treated wastewater percolates through these and enters the pond.

Drainage filtration chamber/Septic tank

This is a wastewater treatment unit in which the tank is partitioned wherein the first chamber capacity has double the capacity of the second chamber. Hence, the maximum fraction of sludge gets settled in the first chamber and the wastewater is allowed to retain for 24 to 48 hours, thereby undergoing anaerobic digestion. The wastewater then flows into the second chamber and enters the outlet liner filled with gravel through which the water infiltrates and enters the pond.

Artificially constructed wetland

This is a treatment system designed to treat wastewater using the natural functions of vegetation, soil, and organisms by passing it through the wetland. This system consists of two chambers-the collection chamber and the settling chamber- both of which help in the primary treatment of the wastewater, along with the wetland.



Our Interventions Make a Difference



Before rejuvenating
pond capacity in cubic
meters

15,06,111 cum

Total hectares of pond
rejuvenated

98.31 hectares

(which we also claim has
been saved from future
encroachments)

After rejuvenating
pond capacity in cubic
meters

25,43,970 cum



And improve
management
of village water
bodies in the future.

Percentage increased
68%

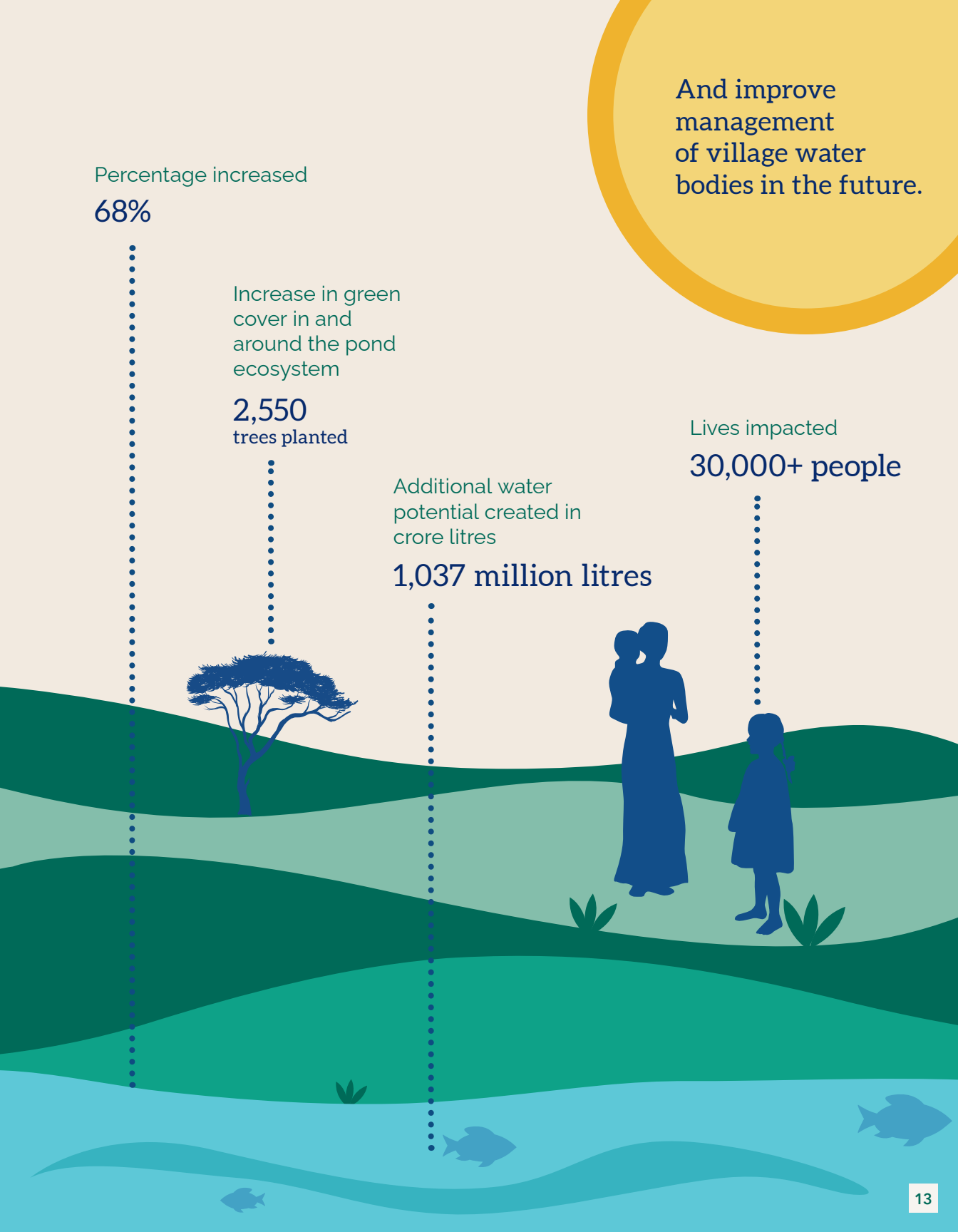
Increase in green
cover in and
around the pond
ecosystem

2,550
trees planted

Additional water
potential created in
crore litres

1,037 million litres

Lives impacted
30,000+ people





Support from Stakeholders

The pond here was very dirty. It was stagnant and our children would fall ill often because of the mosquitoes around the water. The DA & HCL team has worked very hard on it.

~ Ritu Nagar, Milak Lachhi

The pond in our village was a mess-full of weeds, insects and dirt. After pond rejuvenation, the area looks nice. Bunds have been constructed, plantations have increased. It has been very good for our village.

~ Jitendar Nagar, Khodna Kala

We used to have many problems with the pond near our house. It was filthy, infested with mosquitoes, and there was fear of our children falling into these ponds. Many times, our cattle have fallen into these ponds and a lot of people were needed to pull them out. We are thankful for the rejuvenation, as it has all changed for the better.

~ Archana, Mahawad



Sustainability Plan for Pond Rejuvenation

Since the inception of the programme, we have adopted a sustainable approach towards the interventions and scale-up in the larger areas. To ensure sustainability, we have:

- Formed waterbody management committees at the village level which comprise of community members and key stakeholders from the area. The inclusion of local representatives has created a sense of shared responsibility and active participation in the management and preservation of the pond. The committees play a crucial role in decision-making processes related to the pond's maintenance, ensuring that the actions taken are in line with the community's aspirations and needs.
- Introduced various income-generating activities, particularly focused on aquaculture and pisciculture. The aim has been economic empowerment of the community while fostering a sustainable connection with the pond. This integrated approach harnesses the pond's resources and unlocks its potential to provide additional sources of income for the local population.
- Secured the drainage line connection with the pond; this has helped in the continual availability of water in the area.





The Transformative Impact of Pond Rejuvenation in Mahawad Village

The village of Mahawad was about to witness a remarkable transformation that would bring new life to the village and its residents. HCL joined hands with Development Alternatives to rejuvenate the Mahawad village pond, which was lying unused and neglected.

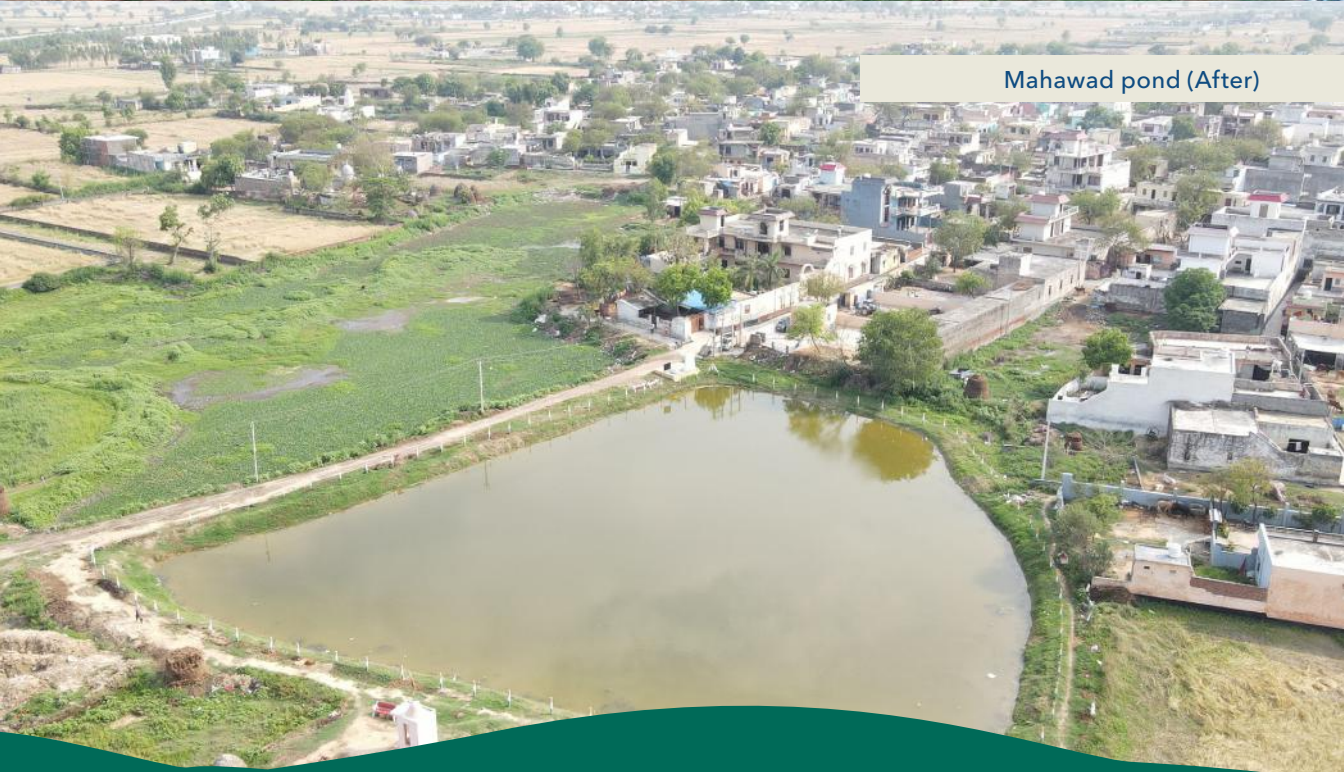
The team sprung into action by de-silting, dewatering, and removing weeds from the pond, thus increasing the pond's capacity. The renewed pond now provided abundant water for farming, consequently reducing the reliance on groundwater. It also became a thriving habitat for diverse plants and animals and the increased green cover in and around the pond led to the preservation of fertile soil and the prevention of soil erosion.

Residents now had improved access to clean water for daily use and agriculture, resulting in better hygiene and increased crop yields. The rejuvenation efforts created employment opportunities, boosting the local economy, and reducing migration. Regular community meetings and awareness programmes instilled a sense of ownership and responsibility, ensuring the pond's long-term sustainability.

The inspiring collaboration between HCL and Development Alternatives in reviving Mahawad Village's pond showcases the power of conservation and community engagement and serves as an example of sustainable development.



Mahawad pond (Before)



Mahawad pond (After)

Accomplishments & Appreciation



lak Laochi in Greater Noida.

It may come as a surprise that humble ponds make up a majority water bodies in India. Of the 24,24,540 water bodies enumerated Shakti in the Water Census Report 2023, 14,42,993 are ponds.

Unfortunately, encroachment

[Article in The Hindu](#)

Consequently, many of them are in disuse, depleted and in urgen

Development Alternatives
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We are really delighted to share that Development Alternatives has been felicitated by **HCL Foundation** for our efforts in reviving and restoring the ponds in Gautam Buddha Nagar District. We also congratulate **HCLTech** for winning the National Water Award 2022 for water conservation and management initiatives in India through community action and innovative technologies. Let's join hands to help our pond breathe again!!

#HCLTech, #HCLFoundation, #HCLHarit

Felicitation by HCL Foundation

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FREE TRIAL

Reviving a vital resource of water

Updated - July 05, 2023 at 04:03 PM

Traditionally ponds played a key role in serving rural communities. A project aimed to revive these bodies has taken off

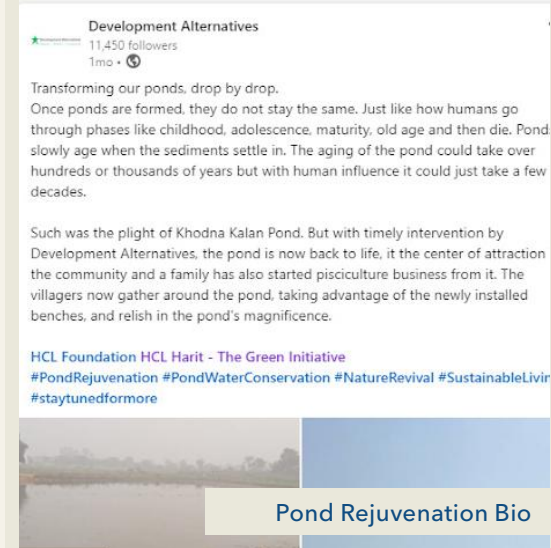
BY PREETI MEHRA

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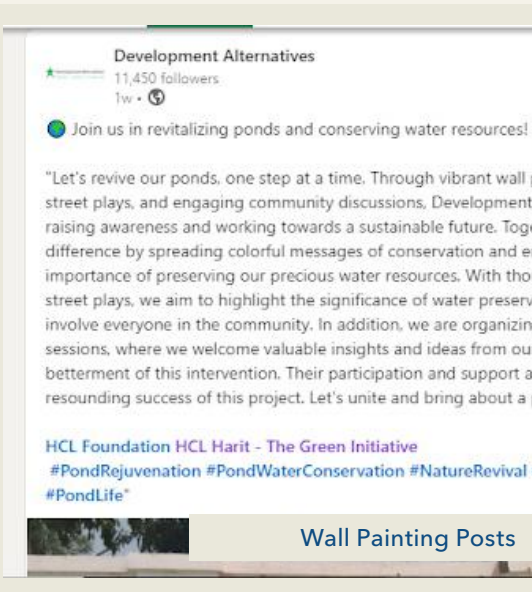
[Article in The Hindu](#)



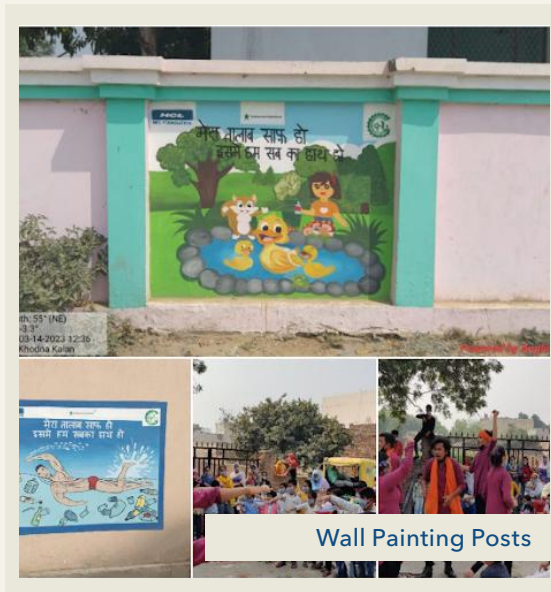
Pond Rejuvenation Before and After



Pond Rejuvenation Bio



Wall Painting Posts



Wall Painting Posts

Development Alternatives
is committed to restore and
revive our pond ecosystem.
It is a huge challenge and a
lot still needs to be done.






Let us join hands
to help our ponds
breathe again...



We thank our Partners

 **Partners:** HCL Foundation, ATE Chandra Foundation, MARICO India, HUL, NABARD

 **Administrative Departments:** Greater NOIDA Industrial Development Authority (GNIDA) and Yamuna Expressway Industrial Development Authority (YEIDA)

 **Institutions:** Community, Schools, Panchayati Raj Institutions (PRIs)



ABOUT DEVELOPMENT ALTERNATIVES

Development Alternatives (DA) is a premier social enterprise with a global presence in the fields of green economic development, social empowerment and environmental management. It is credited with numerous innovations in clean technology and delivery systems that help create sustainable livelihoods in the developing world. DA focuses on empowering communities through strengthening people's institutions and facilitating their access to basic needs; enabling economic opportunities through skill development for green jobs and enterprise creation; and promoting low carbon pathways for development through natural resource management models and clean technology solutions.



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