



Forests by Heartfulness

Annual Report



2023 - 2024

FORESTS

by Heartfulness

Sustainable Living with Forests

Forests by Heartfulness (FBH) is an ecological movement envisioned to create spaces where humans coexist in harmony with Nature. The movement started in Kanha Shanti Vanam, Hyderabad – world headquarters of the Heartfulness Institute to respond to the call to conserve, restore and create forests and offer a solution to the challenges of climate change and loss of biodiversity.

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DAAJI'S Message

Shri Kamlesh Patel is known to many as Daaji. He is the Heartfulness Guide in a tradition of Yoga meditation that is over 100 years old, overseeing 16,000 certified Heartfulness trainers and more than 5 million practitioners in over 160 countries. He is an innovator and researcher, equally at home in the fields of spirituality and science, blending the two into transcendental research on the evolution of consciousness, and expanding our understanding of the purpose of human existence to a new level.

DAAJI shares his experience of the healing power of trees, and how a simple tree practice improved his health. He invites us all to try that same practice.

Daaji

KAMLESH D PATEL

Global Guide of Heartfulness



HEALING

Power of Trees

Why are trees so special?

Trees retain **spiritual charge** for a longer period than humans, because their consciousness is of a different quality. We have a very dynamic consciousness that gives us the potential to willfully evolve, but also of going in the opposite direction.

Trees, on the other hand, retain spiritual charge as it is given, without creating disturbance. They are **vibration banks** that retain the divine charge of Transmission. So, future generations also benefit from them holding spiritual charge.

Trees are also **conduits for the flow of energy** from the earth upward and from the cosmos downward. Through this flow, they sustain all the lifeforms around them by distributing their charge.

We have a lot to learn from being with trees. Our relationship with trees is complementary. What is not good for us, like carbon dioxide, they can use, and vice versa. There is a healthy exchange. Trees and humans generally have a good relationship. We have to look after them.

A simple tree practice

After asking a tree for permission to sit, with a prayer, you may sit on the ground with your back against the trunk of the tree. Make sure the width of the trunk is narrower than your back.

Whatever illness or disturbance you have in your system, offer it to the tree, saying, "Please take this away. Also, take whatever you need from me, and give me the strength to survive and heal myself."



Executive SUMMARY



About FBH:

- **Forests by Heartfulness (FBH)** is an ecological movement envisioned by Heartfulness Institute to create spaces where humans coexist in harmony with Nature.
- **Vision** : Through the FBH initiative, in partnership with Global communities, our vision is to grow, nurture and conserve the native, endemic, endangered tree species of the country while ensuring enhanced bio-diversity, sustainability and longevity.
- **Mission** : Conserving India's mega-biodiversity by planting 30 Million saplings of rare, endangered and threatened (RET) variety by 2027, supported by creating nationwide nurseries to grow highly resilient saplings that can compete and survive in hostile conditions.

About Heartfulness:

- Heartfulness Institute is a global non-profit organization, associated with United Nations Department of Global Communications (earlier DPI), with a 79-year history, offering unique, simple, and holistic set of practices for self-development such as relaxation, meditation, and rejuvenation which can be integrated into one's daily routine to help us find inner calm and stillness in our present day extremely fast-paced world.
- Globally Heartfulness meditation is offered pro-bono.
- Our presence spans over **160+ countries** with over **5 million practitioners**, **16,000+ certified trainers**, **280+ retreat centers** and **6000 Meditation spots** worldwide.

VISION & Values



Vision

Our vision is to conserve the native, endemic and threatened species and enrich the mega-biodiversity for a cleaner and greener world thereby contributing to sustainability and playing a critical role in transitioning to a circular bio-economy.

Values

We are an eco-friendly, nature-forward movement, committed to building a sustainable future; seeking to actively recreate peace and harmony in the world by cultivating a culture of synchronicity with nature and a loving relationship.



1027 Acres
Afforested



310+ Native Tree Species
Planted in our Afforestation projects



80+ Endangered Species
Curated



25,000+ Tons
of Carbon Dioxide offset



12 States
Projects implemented



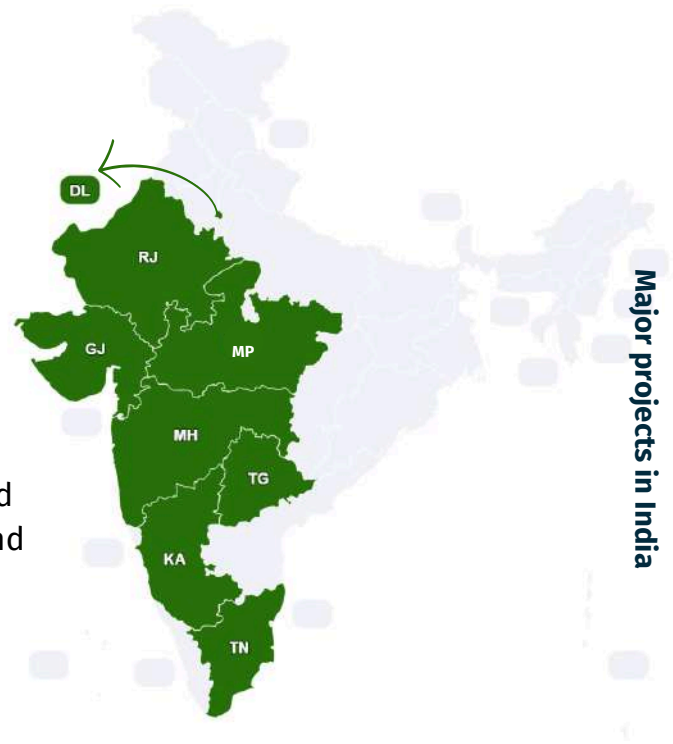
4 Lakes
Restored



An Overview

Forest loss and damage is the cause of around 10 percent of global warming. Through our Forest by Heartfulness program we commit to plant trees in a responsible way, bringing impactful social, economic and ecological benefits.

We partner with global communities to grow, nurture, protect and conserve native, endemic, and endangered tree species while ensuring diversity, sustainability, and longevity.



What we do

DIVERSITY

Through multi location-enabled mini-forests. Guidance of several agroforestry scientists, forest officers, academicians, and conservationists.

SUSTAINABILITY

Focus on native, rare, and endangered species. Diverse plantation style in sync with local ecology. Support from nationwide nurseries to grow highly resilient saplings.

LONGEVITY

Careful selection of identified land. Involvement of local community. Focused aftercare and monitoring using geotagging/satellite imagery/third-party audits.

FBH PROJECTS

2023 - 2024

Our Impact

190,000

Saplings Planted

3 Lakes

Rejuvenated

8 States

30 Projects

21 Partners

Our Donors & CSR Partners 2023 - 2024



Research & NGO partners:



Our Donors & CSR Partners 2022 - 2023



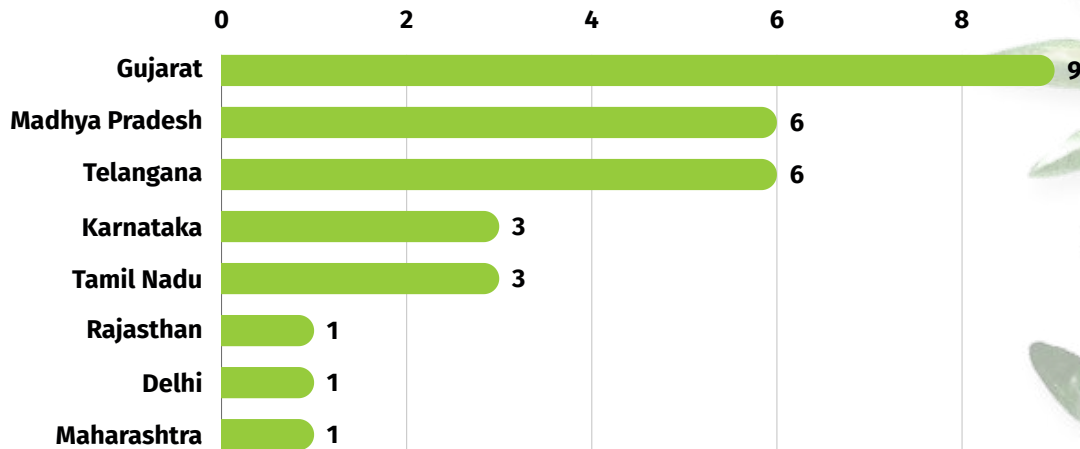
CSR & Annual data:

Forests by Heartfulness has undertaken plantation drives in several parts of the country in collaboration with private companies big & small.

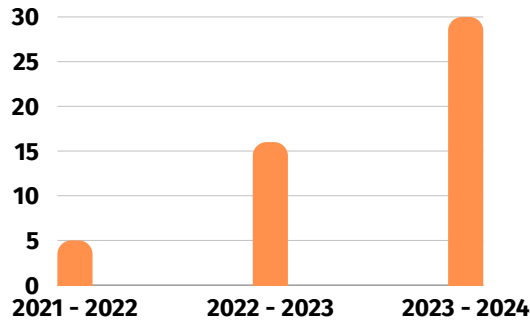
Our engagements are customized with corporates based on their needs and fitment.

FBH PROJECTS 2023 - 2024

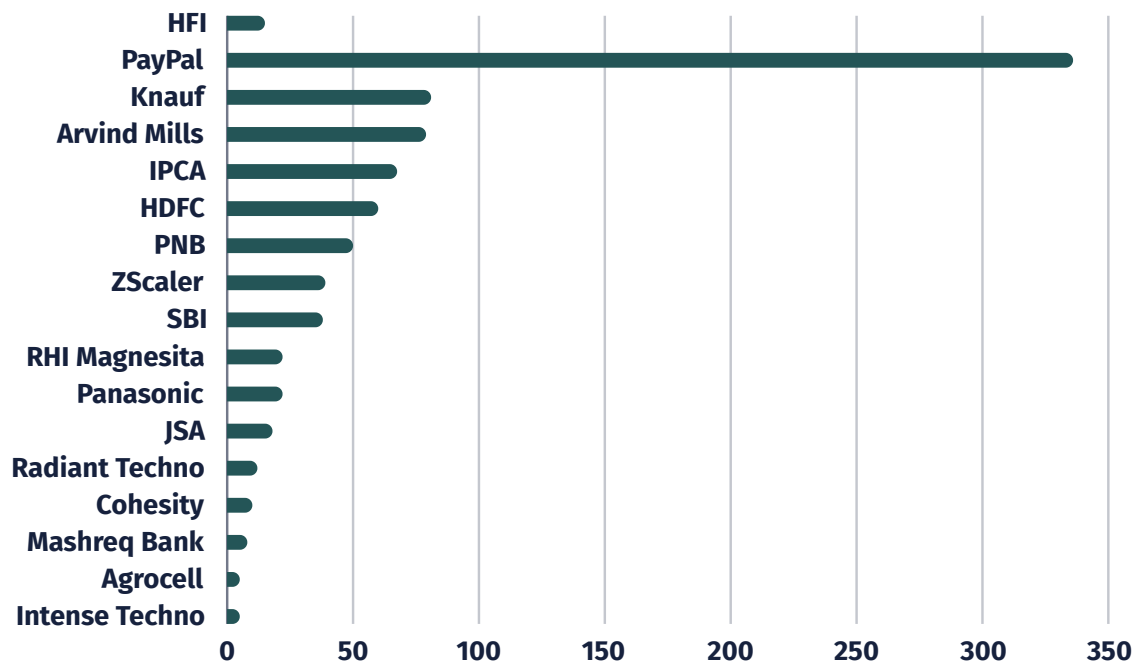
Number of Projects in each state



Year Wise FBH Projects



Our CSR Partners 2023 - 2024





GLOBAL FOREST GOALS OF THE UN

“Forests are among the world’s most productive land-based ecosystems and are essential to life on Earth.”

The United Nations Strategic Plan for Forests 2017–2030 provides a global framework for action to sustainably manage all types of forests and trees outside forests, and to halt deforestation and forest degradation. At the heart of the Strategic Plan are six Global Forest Goals (GFGs) which directly support the UN Sustainable Development Goals.

A shared United Nations vision

The shared United Nations vision is of a world in which all types of forests and trees outside forests are sustainably managed, contribute to sustainable development and provide economic, social, environmental and cultural benefits for present and future generations.

A shared United Nations mission

The shared United Nations mission is to promote sustainable forest management and the contribution of forests and trees outside forests to the 2030 Agenda for Sustainable Development, including by strengthening cooperation, coordination, coherence, synergies and political commitment and action at all levels.

The United Nations Strategic Plan for Forests 2030 provides a global framework for action at all levels to sustainably manage all types of forests and trees outside forests, and to halt deforestation and forest degradation.





GLOBAL FOREST GOAL 1

Reverse the loss of forest cover worldwide through sustainable forest management, including protection, restoration, afforestation and reforestation.

Increase efforts to prevent forest degradation and contribute to the global effort of addressing climate change.



GLOBAL FOREST GOAL 2

Enhance forest based economic, social and environmental benefits, including by improving the livelihoods of forest dependent people.

1.6 billion people depend on forests for timber, food, fuel, jobs & shelter.



GLOBAL FOREST GOAL 3

Increase significantly the area of protected forests worldwide and other areas of sustainably managed forests, as well as the proportion of forest products from sustainably managed forests.

80% of all terrestrial species live in forests.



GLOBAL FOREST GOAL 4

Mobilize significantly increased, new and additional financial resources from all sources for the implementation of sustainable forest management and strengthen scientific and technical cooperation and partnerships.

The collection, availability and accessibility of forest-related information is improved.



GLOBAL FOREST GOAL 5

Promote governance frameworks to implement sustainable forest management, including through the United Nations forest instrument, and enhance the contribution of forests to the 2030 Agenda for Sustainable Development.

Forest-related issues and the forest sector are fully integrated into decision-making processes concerning land use planning and development.



GLOBAL FOREST GOAL 6

Enhance cooperation, coherence and synergies on forest - related issues at all levels, including within the United Nations system and across member organizations of the collaborative partnership on Forests, as well as across sectors and relevant stake holders.

A greater common understanding of the concept of sustainable forest management is important.



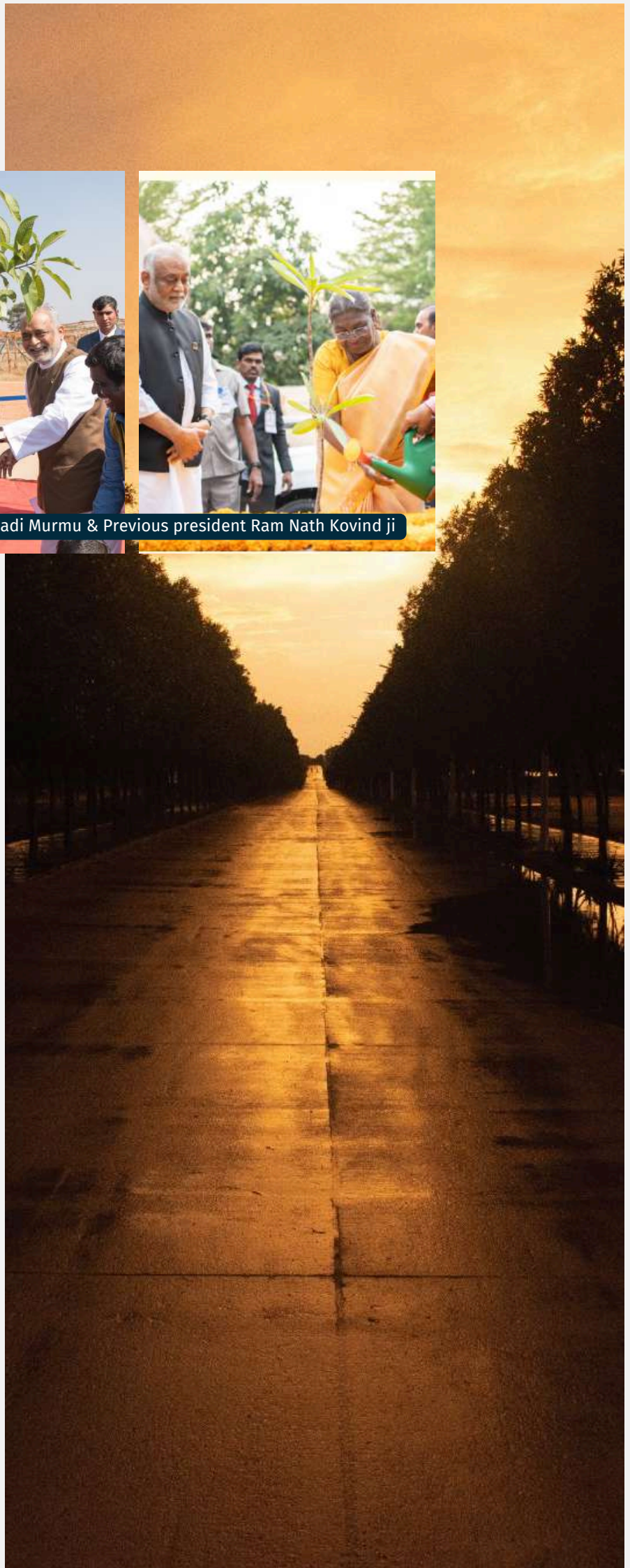
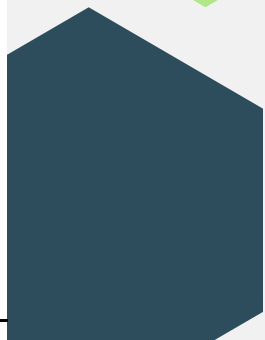
Prime Minister Narendra Modi, Hon President Droupadi Murmu & Previous president Ram Nath Kovind ji

FBH Projects

2023 - 2024

In the past year we have partnered with several esteemed organizations and initiated certain large scale projects with the help of Government and CSR partnerships.

These projects are impactful and the beginning of a greener change in society. The details of such projects is presented in this report.

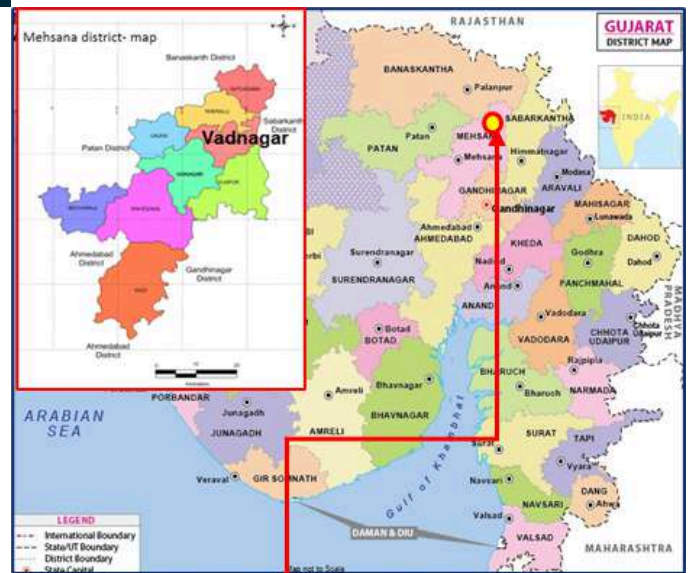


FBH

Projects 2023-24 :

Vishnupuri Talab , Vadnagar , Gujarat

- The town of Vadnagar is situated about 35 km from Mehsana city in the district of Mehsana in the northeastern part of Gujarat state. The area of Vadnagar recognized as having a long and vibrant history is dotted with many cultural heritage sites – Vishnupuri talab being one of them. (Vadnagar's ancient name was Anandapura as established by historian and archaeologist Alexander Cunningham. Also, the recent archaeological excavations indicate It was a place of importance for Buddhists and was visited by Xuanzang in 640 C.E.)
- At the commencement of the project, Vishnupuri talab water was not potable, was contaminated with plastic and waste material and the proximal areas were affected by the foul smell emanating from the lake area.



FBH Projects - Gujarat	Funding Partner
Vishnupuri Talab, Vadnagar	PayPal
Toran Hotel, Vadnagar	PayPal
Lateri vaav, Vadnagar	PayPal
Ambaji kothaq, vadnagar	Arvind Mills
Annapurna garden, Jamnagar	Arvind Mills
Happa garden, Jamnagar	Arvind Mills
IFFCO, Kalol	IFFCO
Sabarmati, Ahemdabad	Sabarmati Gandhi Ashram Trust
Taranga Hills, Mehsana	Adani

Vishnupuri Lake Details :

The lake is divided into three water bodies comprising a combined area of approximately 92000 sqm, and peripheral length of 1425 Rm. The average water depth is about 1.2 m and the water holding capacity is estimated to be around 6.6 crore litres.

Brief overview of work carried out as part of Vishnupuri Talab Rejuvenation

- Diversion of wastewater
- Thorough cleaning of the contaminated water
- Desilting and deepening the lakebed
- Strengthening of existing Bunds
- Construction of new Bunds
- Feeder canals cleaning
- Making the lake plastic free zone
- Clearing of invasive plant species
- Plantation of 7847 Saplings completed
- Approx. 2275 m of Fencing
- Drip Irrigation
- Plantation on Bunds: Vettiver, Lemon grass, Munja grass
- Bund support & retaining perforated anchor wall
- Bamboo plantation (boundary)

PROJECT ARCHETYPES

- Restoring Bio-diversity at Cultural Heritage Sites
- Lake Rejuvenation

Enhancement of Water holding capacity to **15 Crore Liters**

Plantation of **7800+ saplings** of trees & shrubs



Unification by Hume pipes / culverts.
Proposed average water depth after desilting = 2.8 M
Proposed water holding capacity = 15.47 Cr. Litres



Project Objectives

The Project Objectives include –

Cleaning and Mitigation measures

Thoroughly cleaning the highly contaminated waters of the lake by draining and flushing. Putting in place preventive measures through construction of required ‘Bunds’ at specific locations to restrict sewage water inflow into the lake. Cleaning the lake and proximal areas of invasive plant species, plastic & debris and securing it as ‘plastic free zone’ by fencing the entire project site.

Enhancing Water Holding Capacity of the lake, Biodiversity and aesthetics

Desilting, dredging of lake to increase average depth to approximately 1.5 m ; strengthening of bund wherever required; Plantation of select tree, shrub & grass saplings having aesthetic and ecological value on bunds, along slopes and walkways;

Community engagement

Contribute to improved recharging of ground water aimed at meeting Vadnagar urban population requirements and agriculture needs. Provide much needed ‘lung space’ and recreational zones for the large urban population in the vicinity. Raise awareness about the unique character of ‘Lake Eco-System of the Region – ‘ancient Vadnagar’ - smart water management city’. Introduce and make available ‘Heartfulness Meditation’ for the local populace by conducting regular engagement sessions



SCARED Vishnupuri Tank – AFTER CLEANING OF DEBRIS & BUSHES



DURING CLEANING WORK → AFTER CLEANING



PREPARING FOR AVENUE PLANTATION



MAINTAINING AQUATIC LIFE & PRESENT BIODIVERSITY OF SITE



SHALLOW LAKE – DESILTED AND MAKING BUNDS



ENGAGING LOCAL COMMUNITY FOR LABOUR – CLEANING WORK



YOGA AND MEDITATION TEACHING BY HEARTFULNESS VOLUNTEER



INTERACTION WITH DIGNITARIES & SOCIAL CIRCLE



ENGAGING LOCAL COMMUNITY FOR LABOUR – CLEANING WORK

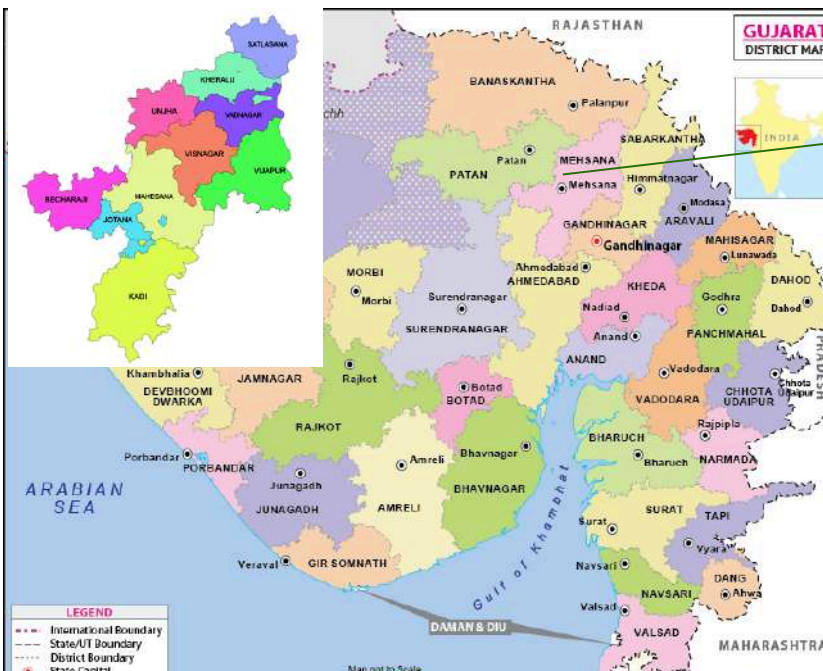
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Projects 2023-24 :

Ambaji Kotha Lake, Vadnagar, GUJARAT

PROJECT ARCHETYPES

- Restoring Bio-diversity at Cultural Heritage Sites
- Lake Rejuvenation



Amabaji Kotha Talab, Vadnagar : Lake Rejuvenation

Brief overview of work carried out as part of Ambaji Kotha Talab Rejuvenation

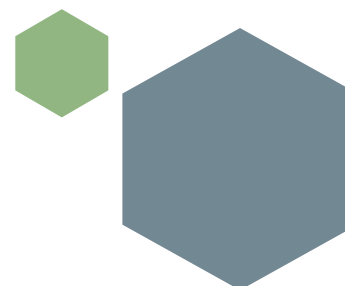
- Removing the encroachments into the site
- Cleaning the periphery
- lake plastic free zone
- Strengthening of existing Bunds and construction of new Bunds
- Feeder canals cleaning
- Clearing the lake of invasive plant species

Plantation of 2000 shrub Saplings completed

- Approx. 2200 m of Fencing.
- Drip Irrigation.
- Landscaping of the peripheral property.



FBH Projects - Gujarat	Funding Partner
Vishnupuri Talab, Vadnagar	PayPal
Toran Hotel, Vadnagar	PayPal
Lateri vaav, Vadnagar	PayPal
Ambaji kothaq, vadnagar	Arvind Mills
Annapurna garden, Jamnagar	Arvind Mills
Happa garden, Jamnagar	Arvind Mills
IFFCO, Kalol	IFFCO
Sabarmati, Ahemdabad	Sabarmati Gandhi Ashram Trust
Taranga Hills, Mehsana	Adani



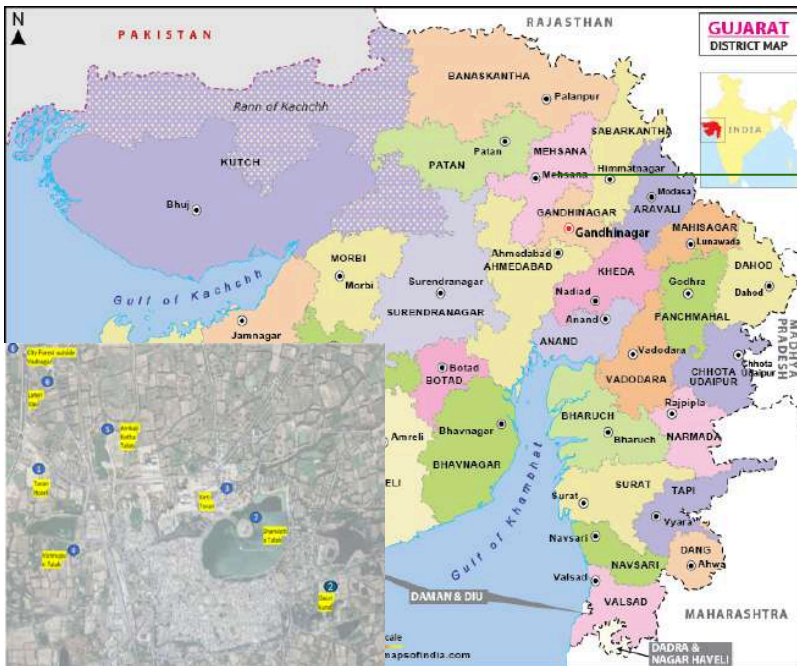
FBH Projects

Toran Hotel, Vadnagar, Gujarat

Restoring Bio-diversity at Cultural Heritage Sites



Toran Hotel Premises : Plantation of 5900 saplings (including as part of UHDP, HDP & Block Plantation) completed



Brief overview of work carried out at Toran Hotel as part of efforts to Restore Bio-diversity

- Removing the encroachments into the site
- Cleaning and preparation of the site
- Pit marking, digging and preparation : **7640**
- Plantation of **5900 saplings** (including as part of UHDP, HDP & Block Plantation) completed
- Drip Irrigation system installed
- Foot Path constructed
- Two small ponds created



Toran Hotel : One of the plantation areas



FBH Projects - Gujarat	Funding Partner
Vishnupuri Talab, Vadnagar	PayPal
Toran Hotel, Vadnagar	PayPal
Lateri vaav, Vadnagar	PayPal
Ambaji kothaq, vadnagar	Arvind Mills
Annapurna garden, Jamnagar	Arvind Mills
Happa garden, Jamnagar	Arvind Mills
IFFCO, Kalol	IFFCO
Sabarmati, Ahemdabad	Sabarmati Gandhi Ashram Trust
Taranga Hills, Mehsana	Adani

FBH Projects 2023-24 :

Lateri Vaav Vadnagar

Restoring Bio-diversity at Cultural Heritage Sites



Brief overview of work carried out at Lateri Vaav as part of Restoring Bio-diversity at Cultural Heritage Site:

- Removing the encroachments into the site
- Cleaning the periphery of the Lateri Vaav
- Landscaping of the peripheral property of Lateri Vaav Making the lake plastic free zone
- Strengthening of existing Bunds and construction of new Bunds
- Feeder canals cleaning
- Clearing the lake of invasive plant species
- Plantation of 2198 shrub Saplings completed
- Approx. 650 m of Fencing
- Drip Irrigation system installed
- Foot path construction is in progress
- Construction of two small ponds is in progress



FBH Projects - Gujarat	Funding Partner
Vishnupuri Talab, Vadnagar	PayPal
Toran Hotel, Vadnagar	PayPal
Lateri vaav, Vadnagar	PayPal
Ambaji kothaq, vadnagar	Arvind Mills
Annapurna garden, Jamnagar	Arvind Mills
Happa garden, Jamnagar	Arvind Mills
IFFCO, Kalol	IFFCO
Sabarmati, Ahemdabad	Sabarmati Gandhi Ashram Trust
Taranga Hills, Mehsana	Adani

Project Archetype
Greening & Landscaping of Municipal Parks

Annapurna & Hapa parks, Jamnagar, Gujarat



Biodiversity Parks Annapurna & Happa, Municipal Park Plots 81 & 47, Jamnagar

Project Archetype: Greening & Landscaping of Municipal Parks



Hapa Garden Area: 1 acre
Saplings planted: 1000 Tree saplings, 1600 Medicinal & 7300 Shrubs

Annapurna Garden Area: 1.1 acre
Saplings planted: 995 Tree Saplings, 430 Medicinal & 7300 Shrubs



FBH Projects - Gujarat	Funding Partner
Vishnupuri Talab, Vadnagar	PayPal
Toran Hotel, Vadnagar	PayPal
Lateri vaav, Vadnagar	PayPal
Ambaji kothaq, vadnagar	Arvind Mills
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Taranga Hills, Mehsana	Adani



Site preparation in progress

Sabarmati ashram, Ahmedabad, Gujarat

Brief overview:

- Total Ashram area planned for redevelopment **56 Acres (2,28,770 sqm)**
- Building area and service area **8.2 Acres (33,200 sqm : 15% of total area)**
- Pathways, plaza and Parking area **11.5 Acres (47,000 sqm : 20% of total area)**
- Proposed Lake area and Sand area **3.0 Acres (12,000 sqm : 5%)**
- Total open area **33.7 Acres (1,36,570 sqm : 60%)**

1. Peripheral Buffer Plantation

- Concept 1- Stratified Colour
- Concept 2- Stratified Palms and Cycads
- Concept 3- Evergreen (All types of Jamun)
- Concept 4- Water
- Concept 5- Plants of the Deccan Plateau
- Concept 6- Northeast India
- Concept 7- Andaman and Nicobar Islands
- Concept 8- Desert plants of India
- Concept 9- Edible wild and domestic
- Concept 10- Bamboos and Grasses
- Concept 11- Thorny plants of India
- Concept 12- Euphorbias (rock garden)
- Concept 13- Ferns and Orchids (enclosed area)
- Concept 14- Timber trees of India
- Concept 15- Creeper and liana garden
- Concept 16- Endangered plants of India
- Concept 17- plants of pollinators
- Concept 18- Figs of India
- Concept 19- Gingers and Banana
- Concept 20- Poisonous plant
- Concept 21- Plant families of India
- Concept 22- Aromatic plants of India
- Concept 23- Jasmines of India
- Concept 24- Sacred trees
- Concept 25- Endemic plants of India
- Concept 26- Star connected trees



Water Bodies are placed in between many trails to maintain the biodiversity of the zone.



Buffer Zone is created along the boundary so that the sound and hustle of road side should not impact the ashram. We have proposed a nature walk inside the buffer zone with seating benches and other elements. The various concepts are proposed for plantation of same.

ZONE	LENGTH	BREADTH	AREA (SQ.M.)	NUMBER	TYPES
1	60	15	900	7	Concept 1-7
2	45	15	675	8	Concept 8- 15
3	45	9	405	8	Concept 16-23
4	35	5	175	3	Concept 24-26

PROPOSED GREENEDRY AND LANDSCAPING WORK AT GANDHI ASHRAM

UNED GREENEDRY AND LANDSCAPING WORK AT GANDHI ASHRAM

Revision No: 01
Based on: Decentralised
Date: 30-05-2024

PROJECT ARCHETYPES

Restoring Bio-diversity and Landscaping

Plantation and Landscaping Plan

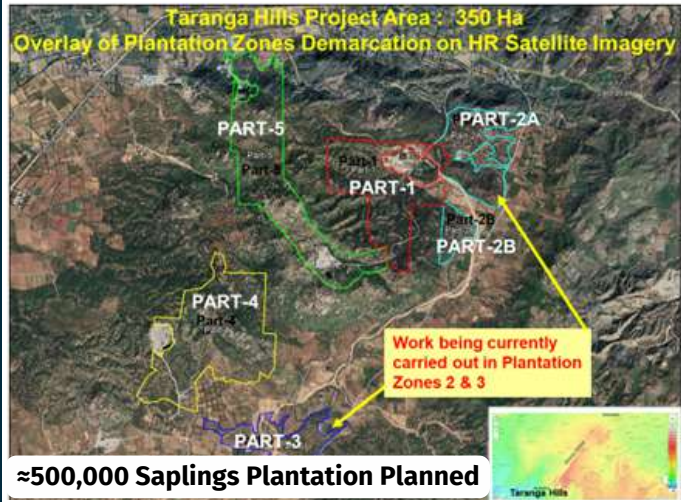
- Total Nos of Saplings : **63,900 (to be carried out in 3 Phases)**
- Number of Large Trees Planned : **4,400**
- Number of Medium Trees Planned : **6,600**
- Number of Shrubs & understory : **52,900**
- Ground Covers, Creepers etc : **1,50,000 Approx.**
- Lawn area proposed **2.6 Acres (10,815 sqm : 5% of total area)**

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Sabarmati, Ahemdabad	Sabarmati Gandhi Ashram Trust
Taranga Hills, Mehsana	Adani



FBH Projects 2023-24 : Taranga Hills, Gujarat

PROJECT ARCHETYPES Economical Eco-Restoration of Degraded Forest Land

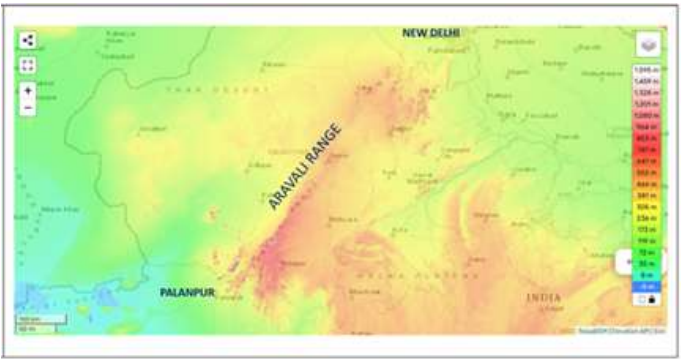


Project Area Overview

- Total area of Taranga hills = **1,450 Ha**
- Project Area allotted for Afforestation = **400 Ha**
- Phase 1, around Tapovan, Roadside & Temple = **50 Ha**
- Phase 2: remaining area in 6 parts = **350 Ha**
- Total Periphery of Site = **25 Km** (32 Km for 6 parts)
- Peak Elevation at Site = **486m MSL** (SIDDH SHILA)
- State highway road level = **260 m MSL**
- Elevation difference = **226 m**
- Total no. of Planting Zones = **6 no.**



Total No. of Plants ZoneWise																	
S.No.	Zone	Boundary Area in Ha	km	Location at site	Landform / Terrest	Workable area			Total No. of Saplings		High Biodiversity Zone @ 5000 per Ha		Hest / support plant @ 2 per Sapling wood plant		Total Plants		
						%	in Ha	Density per Ha	%	in Ha	50% Shrubs	2" Big	3" Small				
Priority 1 (Part 2a, 3 & 6)																	
P-2A	50	5.73		Road left side hill entry to Tapovan	Steep slope, 15m rise @R. (at 300 MSL) peak @ 490	12.50	400	33,500	10	5,00	11,500	12,500	99,000	32,000	51,500	81,500	
P-3	40	5.34		Outside the hill near Rajpur village, Tributary river passing through middle	Open plain land, only 2 m slope (at 245 MSL)	90	36,000	850	30,600	10	4,00	10,000	10,000	61,200	40,600	71,200	1,33,800
P-4	107	6.86		Near South side quarry	Steep slope, 150m rise @R. (at 300 MSL) peak @ 470	44.20	400	41,700	10	10,70	26,750	26,750	81,800	64,800	1,10,210	1,78,490	
Sub Total = 197 17.73																	
Priority 2 (Part 2b, 1 & 5)																	
P-1	80	6.8		Tapovan area + Approach road both side	Slope 1/2 facing N facing Valley, some plain area average Slope, 50m rise @R. (at 300 MSL) peak @ 470	85	32,000	450	31,800	10	8,00	20,000	20,000	67,600	53,800	87,600	1,41,400
P-2B	13	1.74		East periphery of hill	Steep slope, 180m rise @R. (at 300 MSL) peak @ 470	75.4	5,80	450	6,375	10	1,30	3,250	3,250	12,749	9,821	15,993	25,814
P-5	60	5.65		North of hill near Tribha village along state highway	Steep slope, 180m rise @R. (at 350 MSL) peak @ 490	30.00	600	33,000	10	6,00	15,000	15,000	30,000	33,000	51,000	84,000	
Sub Total = 153 14.19																	
Grand total = 350 31.92																	
						224,702	349	19,000.3	34.9	87,500	87,500	90,000.6	2,17,301	387,502.6	6,25,004		



FBH Projects - Gujarat	Funding Partner
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Sabarmati, Ahemdabad	Sabarmati Gandhi Ashram Trust
Taranga Hills, Mehsana	Adani



With inspiration from the Hon'ble Prime Minister of India, Shri Narendra Modi ji and the support of the Hon'ble Chief Minister of Gujarat

Base Line Data Acquisition :

- Biodiversity Survey
- Topographical and Contour Survey for Taranga Hill (Drone Survey)
- Geophysical and Geohydrological sub-surface investigation work (Electrical Resistivity Sounding).

These data have been integrated and utilized in effective Planning and preparation for initiating different streams of activities. Also, these data will continue to be utilized during the project life cycle, as required.

Economical Eco-Restoration of 350 Ha Degraded Forest land of Taranga Hills area.

Sl.No.	Plantation Zone	Area (Ha)	Boundary (Km)	Workable Area		Plantation of Saplings Planned
				%	Ha	
1	P-1	80	6.8	65	52	141,400
2	P-2A	50	5.73	65	32.5	83,500
3	P-2B	13	1.74	75.4	9.8	25,614
4	P-3	40	5.54	90	36	111,800
5	P-4	107	6.46	60	64.2	178,690
6	P-5	60	5.65	50	30	84,000
TOTAL		350	31.92		224.5	625,004



FBH Projects

IFFCO, Kalol
Gujarat

Greening & Biodiversity of Industrial complex Campus



Tree Plantation event : IFFCO-Kalol
Sri. D.G. Inamdar, Director along with FBH, Heartyculture team and employees of IFFCO



- Indian Farmers Fertilizer Cooperative Limited (IFFCO) is one of the biggest cooperative societies in the world. IFFCO has 5 fertilizer manufacturing plants located at Kalol & Kandla in Gujarat, Phulpur and Aonla in Uttar Pradesh, and Paradeep in Odisha.
- The project site of IFFCO - Kalol industrial complex with a plot area of 95.52 Ha is situated about 25 km from Ahmedabad on the Ahmedabad - Mehsana Highway in the district of Kadi, Gujarat.
- At the time of commencement of project, out of identified total green area of 47.45 hectares, 33.43 Ha had been developed as green belt area having dense trees and rest of the green area is covered with shrubs, herbs and lawns.
- In addition, 2500 tree saplings are planned to be planted during July'2024, along with follow-up maintenance activities for the entire plantation effort.

As a part of greening and enhancing the biodiversity, 30000 tree-saplings were planted in different plots spread across the IFFCO industrial complex premises during 2023 – 24.



Sr Executives of IFFCO-Kalol



Growth of tree saplings after the plantation



Work order issued for plantation of 40000 Nos of saplings within the IFFCO complex



Pit marking and pit digging activities

FBH Projects - Gujarat	Funding Partner
Vishnupuri Talab, Vadnagar	PayPal
Toran Hotel, Vadnagar	PayPal
Lateri vaav, Vadnagar	PayPal
Ambaji kothaq, vadnagar	Arvind Mills
Annapurna garden, Jamnagar	Arvind Mills
Happa garden, Jamnagar	Arvind Mills
IFFCO, Kalol	IFFCO
Sabarmati, Ahemdabad	Sabarmati Gandhi Ashram Trust
Taranga Hills, Mehsana	Adani

FBH Projects

2023-24 : Shivgarh

MADHYA PRADESH



Shivgarh Project Highlights

Project Archtype: Ecological Conservation and Restoration Work in Degraded Forest Land

- **51,905 Saplings Planted**
- 308 Acres Covered out of 2000 Acres of Protected Forest
- 36 Check Dams built
- **28.80 Crore Litre Water Retention Capacity created**
- 3 Sarovars : 200 Lakh liter Water Storage Capacity created
- 51 Rain Guns layout installed
- 1884 m of Water Pipeline for Rain guns
- 5 Borewells drilled
- 24.8 km of Pathways built
- 25450 Rm Contour Trench (1386 CTs) prepared

Shivgarh : A Large Scale Afforestation Project

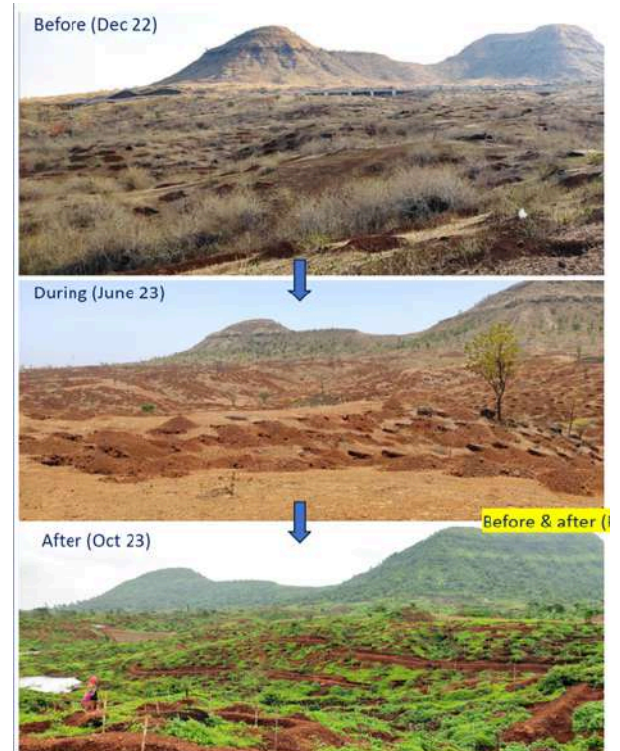
- 2,000 Acres of mostly Scrub kind degraded protected forest land (PF) with <10% vegetation density in two zones taken up for afforestation.
- Restoration through extensive water conservation, soil fertility improvement & extensive plantation of native species of M.P.
- Significant boost to the region's biodiversity.
- Offsets air & noise pollution from the 8 lane Delhi-Mumbai expressway passing through the middle of site.
- Carbon sequestration over several years
- Social initiative engaging the local communities
- Volunteer-led campaigns for plantation and after-care
- Empowerment of local community - JFMC & nearby villages. 14 nearby Villages benefitted from the afforestation project.
- 10 training events were conducted
- Meditation Sessions conducted for all the villagers
- Physical Health Checkup camps being planned



FBH Projects - Madhya Pradesh

52,000 Saplings Planted

Project site	Funding Partner
Shivgarh	PayPal
Shivgarh	HDFC
Shivgarh	Radiant Technologies
Shivgarh	KNAUF
Shivgarh	SBI
Ratlam	IPCA
Ratlam	Agrocel



This project will see progressive plantation and afforestation of **2000 acres (888 Ha)** of degraded forest over the next **5 years** with sustained interventions including water harvesting, soil fertility improvements, and plantation of native trees and shrubs.

Baseline Data

- Soil Survey carried out
- Biodiversity Assessment carried out



Planning and discussion at Project site by FBH Team members



Project site preparation : Fencing, Cleaning



Briefing to government officials



Onsite BioChar Preparation



Plantation work in progress : Employment opportunity for local villagers



Project site visit by government officials

Impact Numbers (5 Year Plan)

888 Hectares
1 million trees
160 Hectares of water bodies
200k Tonnes of Carbon Sequestration



FBH Projects 2023-24 : Ratlam, Madhya Pradesh

Ratlam Paryavaran Park:

- The city forest at Ratlam is part of the Central Government’s plan to create **400 city forests** across India.
- Within M.P, Heartfulness Institute was invited to develop the City Forest for **Ratlam** in collaboration with District Forest Department in an area of 105 acres.
- The objective is to create a biodiversity zone with native trees & shrubs of Madya Pradesh featuring **rainwater harvesting structures & large water bodies, Bee and butterfly zones** to promote pollination and an onsite nursery to produce quality planting material (QPM).



PROJECT ARCHETYPES

Urban Forestry & Biodiversity zone with native trees & shrubs

FBH Projects - Madhya Pradesh

52,000 Saplings Planted

Project site	Funding Partner
Shivgarh	PayPal
Shivgarh	HDFC
Shivgarh	Radiant Technologies
Shivgarh	KNAUF
Shivgarh	SBI
Ratlam	IPCA
Ratlam	Agrocel

Ratlam Project Highlights

- 3 Borewells dug
- 6 Check dams built
- 10110 Saplings planted
- 5000 m of Contour trenches prepared across the project area
- 2350 m of Inspection Pathway
- 1 Lotus Pond
- 2 Sumps with 3.5 Lakh litre water holding capacity.

Eco-conservation zone in an urban setting

- 105 acres “Environment Park” situated within city limits designated for City Forest, creating biodiversity zone with native trees & shrubs of Madya Pradesh and environmental awareness among residents.
- ‘Oxygen bank’ for residents of surrounding towns & villages.
- School Children have participated in a plantation drive



FBH Projects TELANGANA

About Kanha Shanti Vanam

Kanha is the epicenter of the Heartfulness Movement. Magnificent in its style and design, tranquil in its atmosphere, the beauty of the place lies in its subtlety; the natural and harmonious environment of the place resonates with the balance and love experienced by the hearts of those visiting and living in Kanha.

Prior to 2010, this entire area was largely barren and dry. At the outset, a massive plantation drive was undertaken with special emphasis being given to the endangered local species. Over the years, the green cover has steadily increased and the landscape has been transformed.

The ashram is an ecological paradise, a place for a spiritual retreat, where you can experience simple living in tune with inner and outer nature. The **Forests by Heartfulness** movement started in Kanha and from there it spread massively in the entire nation through a network of 28+ nurseries.



In 2019, Kanha was awarded
'The Pride of Telangana'
for inner wellness, by Round Table India &
Times of India.

The center also received the Indian Green Building Council (IGBC) Platinum award in 2019 for following world class environment friendly practices becoming the first meditation center in the world to achieve the feat.

FBH

Projects 2023-24 :

Kanha Shanti Vanam Institutional Land, TELENGANA

Project Archetype
Bio-diversity Multi- purpose Boundary plantation
(Indigenous Plants Conservation)



Kanha - Institutional Land :

Block & Boundary Plantation

7200 Saplings Planted : Comprising 64 species of Trees and 12 species of Shrubs.

Existing plantation and agricultural practices support 20 species of birds and 3 species of Mammals. In addition, 2000 Coconut tree saplings planted

FBH Projects 2023-24 : Telengana State

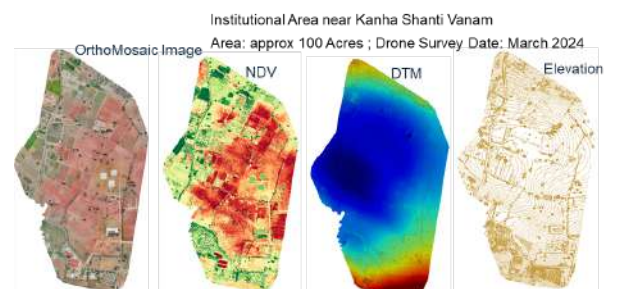
23,900 Saplings Planted

Project site	Funding Partner
Maddur Road, Mahabubnagar	PayPal
Maddur Road, Mahabubnagar	PNB
Kanha Nursery, Hyderabad	ZScaler
Kanha Institutional Area	PayPal
JVR Park, Hyderabad	HFI
Amarchinta, Mahabubnagar	Intense Technology

Plantation among the green zones of the **100-acre Institution Land** and the Maddur Road plantation blocks.

Several rare & endangered species are planned to be planted in these green zones to conserve biodiversity.

9200 saplings planned to be planted in the Institution Land.



80 Employees of PayPal along with FBH Team members: Feb'2024 Plantation event

Baseline Data Acquired & Report Issued

- Soil Test
- Biodiversity Assessment
- Drone Survey

FBH Projects

Maddur Village

Kanha West Gate

Project Archetype

Roadside Avenue

Tree Plantation

Maddur Village – West Gate, Kanha: Avenue trees (both sides of the road)

- **10000 Saplings Planted:** Consisting of 181 species of multi-purpose trees (5000 saplings planted) and 48 species of Shrubs (5000 saplings planted).
- **PayPal Employees engagement event held.**
- Existing plantation and agricultural practices support more than 30 species of birds and 5 species of reptiles and 4 species of mammals. Birds foraging activities increased post plantation effort.
- Plantation among the green zones of the 110-acre Institution Land and the Maddur Road plantation blocks.
- Several rare & endangered species are planned to be planted in these green zones to conserve biodiversity.
- 10000 saplings planned to be planted in Maddur Roadside avenue tree plantation.



FBH Projects 2023-24 : Telengana State

23,900 Saplings Planted

Project site	Funding Partner
Maddur Road, Mahabubnagar	PayPal
Maddur Road, Mahabubnagar	PNB
Kanha Nursery, Hyderabad	ZScaler
Kanha Institutional Area	PayPal
JVR Park, Hyderabad	HFI
Amarchinta, Mahabubnagar	Intense Technology



Maddur Road, Kanha, TELENGANA

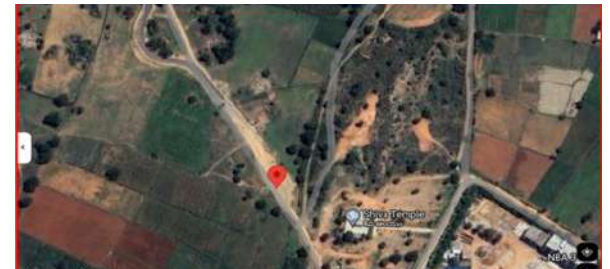
Brief overview:

Maddur Road (Highway) - Kanha: Avenue trees (both sides of the road)

- To plant **10,000 native trees** of biodiversity value along the 2.6 km Maddur road stretch connecting Kanha West Gate to Maddur Village. The tree cover will provide much needed shade to the motorists along with a sanctuary to the local wildlife (monitor lizards, mongoose, peacocks, hares)
- **7000 Saplings Planted** : Comprising 77 species of trees.
- Employee engagement event held : 30 Employees of **PNB Housing** visited the site in Feb'2024 to volunteer in the plantation drive.
- **Baseline data acquired** : Soil Testing & Biodiversity Assessment (Reports issued)
- **Utilization Certificate (UC)** issued to the extent of project execution.



Employees of PNB Housing along with FBH Team members: Feb'2024 Plantation event



Nursery Pond - Kanha, TELENGANA



- Nursery Pond- Kanha: Pond ecosystem, Rainwater conservation, Beautification of the nursery pond area with several themed plantations of trees & shrubs, including Mandala Garden, Sacred trees, Aromatic & Medicinal plants and wood value trees.
- 5000 Saplings Planted: 2000 tree saplings consisting of 118 species, and 3000 shrub saplings comprising 37 species have been planted.
- 3 Acres of Land ; Drip Irrigation System installed

Community Engagement:

- 60 Employees of Zscaler visited the site in Dec'2023 to volunteer in the plantation drive.
- Baseline data acquired : Soil Testing & Biodiversity Assessment (Reports issued)

Project Archetype

**Sacred Plants ; Rainforest ;
Mandala Garden
(Pond ecosystem)**



JVR Park, Hyderabad, TELENGANA

Project Archetype
Urban Forestry & biodiversity
zone with native trees & shrubs
Lake Rejuvenation

JVR Park Hyderabad:

- Restoration of 12 acre JVR Park including lake rejuvenation (desilting, bund strengthening and construction, water remediation) and landscaping of the entire park.
- Apart from modern landscape elements and an upgraded infrastructure, the integrated solution for water body cleaning would involve natural wetlands, constructed wetlands, cascading waterfalls over various elements, aeration, bio-remediation and floating wetlands. The result is likely to enhance the bio activity in and around the water body.
- 8000 Shrub Saplings Planted as part of Greening initiative
- Biodiversity survey carried out



Community Engagement

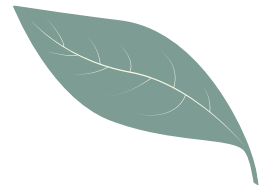
Meditation & Yoga sessions are being offered to the joggers and visitors from Jan 2024. Joggers club has been engaged and informed about the lake restoration procedure



Planned Activities:

- Developing rainforest
- Creating Herbal and Healing gardens, Aromatic gardens, Lotus & Lily Ponds ; Childcare medicinal herbs & Colorful healing garden
- Vitamin D Zone
- Flowering Climber in Arches, Pergolas and Trellises
- Garden elements and Statues/ Sculptures; Signage
- Bio-diversity enhancing elements
- Upgradation of water quality : Rejuvenation of waterbody ; Polishing of treated water entering waterbody using aerated wetlands method ; Creation of constructed wetlands & Enhancing Natural wetlands all around inside bund ; Creation of lagoon to handle upstream shocks; Creation of cascade waterfalls with various sediments; Introducing of bio culture for sludge degradation and water treatment; Rejuvenating the water by polishing and Augmenting the dissolved oxygen; Control of generation and emission of odour; Diverting the sewage coming from an Upstream nala

Amarchinta, Mahabubnagar, TELENGANA



Amarchinta Ashram : 5 Acres Plantation Theme: Plantation of fruiting trees

Project Archetype: Biodiversity zone Plantation of fruiting trees & Economic value trees

- Amarchinta is a municipality and Mandal headquarters located in Wanaparthy District. Jurala project is a dam on the Krishna River situated about 12 km from Amarchinta. Annual Rainfall-Lies between 600 to 800 mm.
- Total area of the Amarachinta Ashram is about 8 acres (rough dimensional plan is given below) of which 5 acres is available for plantation with balance used for peripheral road, Meditation hall, Dining hall and other facilities.
- Plantation of 1000 fruiting and economic value trees saplings in 5 acres area is completed.

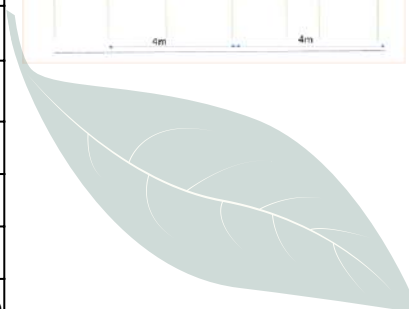
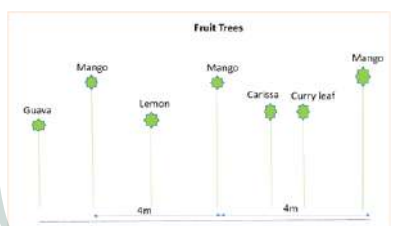
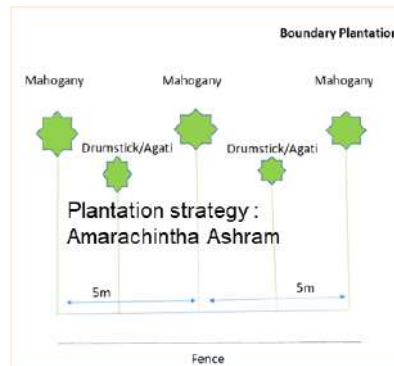


FBH Projects 2023-24 : Telengana State

23,900 Saplings Planted

Project site	Funding Partner
Maddur Road, Mahabubnagar	PayPal
Maddur Road, Mahabubnagar	PNB
Kanha Nursery, Hyderabad	ZScaler
Kanha Institutional Area	PayPal
JVR Park, Hyderabad	HFI
Amarchinta, Mahabubnagar	Intense Technology

Sl. No.	Scientific name
1	Mangifera indica (Dasher)
2	Mangifera indica (Alphonso)
3	Mangifera indica (Totapuri)
4	Mangifera Indica (Himsagar/Imampasad)
5	Mangifera indica (Kesar)
6	Syzygium cumini (Hybrid)
7	Phyllanthus emblica
8	Citrus limon
9	Cymbopogon citratus
10	Bergera koenigii (=Murraya koenigii)
11	Justicia adhatoda
12	Vitex trifolia
13	Morus alba
14	Mimusops elengi
15	Chrysopogon zizanioides (=Vetiveria zizanioides)



FBH Projects 2023-24

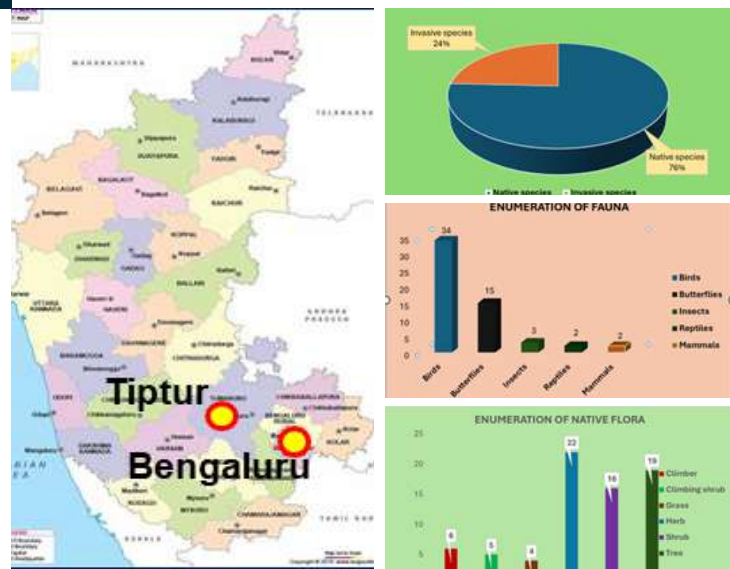
Gonighattapura Lake

Bengaluru, Karnataka



Gonighattapura Lake, Anekal Taluk, Bangalore

- The restoration of Gonighattapura Lake, spanning **13.36 acres**, stands as a remarkable example of collaborative effort and environmental stewardship.
- Baseline Biodiversity survey of the project area was carried out by Centre for Conservation of Natural Resources, FRLHT-TDU, Bengaluru during Feb-March 2024. the Impact Assessment study is planned to be conducted during Jan-Feb 2025.
- **4000** tree & shrub saplings planned to be planted.



Project Achievements

- **Area Expansion:** The initial water spread area of **3.6 acres** underwent a remarkable expansion to **12 acres**, inclusive of the incorporation of two vital wetlands.
- **Water Holding Capacity:** Significantly augmented to an impressive **21 crore litres**, ensuring sustained water resources for the ecosystem.
- **Desilting:** Proactively extended the desilting area from **6.3 to 10 acres**, mitigating sedimentation and enhancing water quality.

Community Engagement

- **200 employees** of PayPal visited the lake for its inauguration, along with 150 villagers.
- The rejuvenated lake was inaugurated by **Dr Tulsi Gowda**, a Padmashree awardee.
- The range DFO also graced the occasion and committed continued support for the green initiative through collaborative effort.



Project Archetype

Lake Rejuvenation & Bio-diversity enhancement



FBH Projects : 2023-24

NTI Layout, Bengaluru

Karnataka

NTI Layout Kodigehalli, Bangalore

- National Tuberculosis Institute (NTI) has a green zone of 10-acres in Sahakar Nagar. It was formerly a construction dump yard and is being progressively transformed into an eco-restoration zone with over 10,000 trees.
- FBH partnered with Zscaler to plant 2000 saplings in this green zone.
- 500 Trees and 1500 Shrubs Plantation planned as part of Block & Boundary Plantation. The project area is part of a restoration program done by FRLHT utilizing indigenous plants.
- Highly biodiverse zone with over 40 varieties of trees & shrubs



Community Engagement:

80 Employees of Zscaler and Children from nearby school visited the site on 5th June'2024 (World Environment Day) to volunteer in the plantation drive.



Project Archetype

Urban Forestry
Block & Boundary Plantation
Restoration of Ecosystem



FBH Projects 2023-24 Karadi gudda, Tiptur, Karnataka

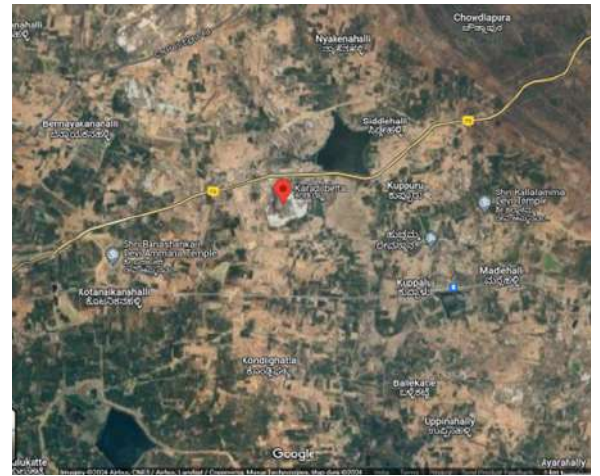
Project Archetype
Hill Restoration
Bio-diversity enhancement

Karadi Gudda, Tiptur : 9-acres barren land near the village

- Karadigudda (near Tiptur) is **140 KM** from Bangalore city. The village functionaries have requested Heartfulness Institute to plant trees of native, endemic, and endangered tree species that are not only crucial to Kardi Gudda's biodiversity but also vital for reinstating its delicate equilibrium in the 9-acres barren near the village.
- **2000 saplings planned to be planted**
- Forests By Heartfulness has taken up this project as a multi-year program to plant progressively starting with 2 acres in the current year, with corporate funding and collaboration with village administration.

Community Engagement:

- School Children and residents of Tiptur have participated in the plantation drive in June 2024



FBH Projects 2023-24 : Karnataka State

Project Site	Funding Partner
Gonigattapura, Bangalore, Karnataka	PayPal
NTI Layout, Bangalore , Karnataka	Zscaler
Tiptur, Karnataka	Cohesity

FBH Projects : 2023-24 : DJ Park, Tiruppur , Tamil Nadu

DJ Park Tiruppur, Tamil Nadu

- **3000 saplings planted** comprising 20 species of trees, as part of Block & Boundary Plantation.
- Field observations indicate enhanced biodiversity, particularly in terms of birds.

FBH Projects 2023-24 : Karnataka State

Project Site	Funding Partner
Annur, Tamilnadu	BOSCH
Tiruppur, Tamil Nadu	PayPal
Madukkarai, Tamil Nadu	Mashreq Bank



FBH Projects : 2023-24 : Annur, Coimbatore, Tamil Nadu

Annur, Coimbatore

- 4000 saplings planned to be planted in the Public Utility Park consisting of Avenue, Medicinal and Biodiversity value plants.

Project Archetype
Bio-diversity enhancement



FBH Projects 2023-24 : Karnataka State	
Project Site	Funding Partner
Annur, Tamilnadu	BOSCH
Tiruppur, Tamil Nadu	PayPal
Madukkarai, Tamil Nadu	Mashreq Bank



FBH Projects 2023-24

Madukkarai Coimbatore Tamil Nadu



Madukkarai, Coimbatore

- The proposed plantation site is in Coimbatore city. The village functionaries have requested Heartfulness Institute to plant trees of native, endemic, and endangered tree species that are not only crucial to the region’s biodiversity but also create a breathing space for the communities.
- Forests By Heartfulness has taken up this project with corporate funding and in collaboration with village administration.
- **2000 saplings planned** to be planted to create High Density Mini-Forest zone via Social Forestry
- Project Archetype: Bio-diversity enhancement



FBH Projects 2023-24 : Karnataka State	
Project Site	Funding Partner
Annur, Tamilnadu	BOSCH
Tiruppur, Tamil Nadu	PayPal
Madukkarai, Tamil Nadu	Mashreq Bank

FBH Projects 2023-24

Pune, Maharashtra

Green Sunrise Hills

- Green Sunrise Hills is a prime example of social forestry and citizen movement, where an 80-acre barren hill is being gradually transformed into a biodiversity zone.
- **2000 Saplings Planted in one Acre Hill slope.**
- Two sites selected for planting, one was at the Mangalmurti Sunrise Hills entrance and another was at the Eastern Site of Sunrise Hills. Shrubs were planted at the Sunrise Hill Top.



FBH Projects 2023-24 : Different Locations

Project Site	Funding Partner
Pune, Maharashtra	Zscaler
Dalniya, Rajasthan	JSA
Dalniya, Rajasthan	RHI Magnesita
Daulatpur, Delhi, NCR	Panasonic



FBH Projects

DALNIYA RAJASTHAN

Dalniya (near Jaipur) – Rajasthan

- Create village prosperity through planting trees of economic value in village grazing land of 100-acres.
- Train youth and rural communities on sustainable forestry practices.
- Offer Heartfulness Meditation & Yoga practices to neighboring villages.
- **5000 Trees + 5000 Shrubs Saplings** are planned to be planted.
- Land to be fenced and create a water body inside.



Community Engagement:

Over **200 villagers** took part in the launch event along with 10 employees of JSA and K&S firms. Heartfulness Meditation was conducted along with lunch provided to all villagers.



Project Archetype

Block & Boundary Plantation
Restoration of Ecosystem



FBH Projects

2023-24

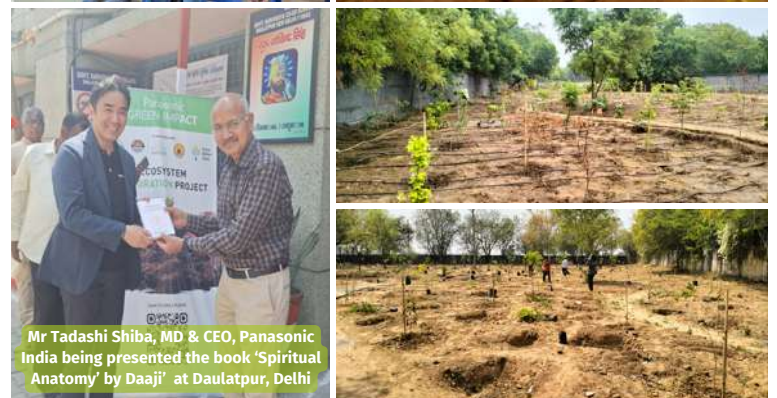
DAULATPUR, DELHI NCR



Daulatpur - Government School Delhi NCR

This project is done in collaboration with **Directorate of Education, Government of the National Capital Territory of Delhi**. It will create a dense forest and several demonstration gardens including butterfly garden, aromatic garden, medicinal & herbal garden for education the children.

- Landscaping & Educational Garden for school children.
- **13000 Trees + Shrubs + Herbs** planned to be planted as part of enhancing Bio-diversity.
- **1100 Tree Saplings** planted.
- **1 Rain gun** installed.
- Drip irrigation completed.
- Shrub plantation pending.



Mr Tadashi Shiba, MD & CEO, Panasonic India being presented the book 'Spiritual Anatomy' by Daaji at Daulatpur, Delhi



Project Archetype

Educational Garden for School children

Community Engagement:

80 Employees of Panasonic visited the site in April 2024 to volunteer in the plantation drive, along with children of Government Sarvodaya Co Ed Senior Secondary School, National Capital Territory of Delhi



Centre for Conservation and Reproduction of Endangered Tree Species



Heartfulness Tree Conservation Centre



The Heartfulness Tree Conservation Centre aims to conserve the tree species near extinction through Tissue Culture Technology to get more saplings while overcoming the challenges of traditional methods of plant propagation. The traditional methods can pose challenges in terms of reproduction thereby affecting the sapling numbers. Therefore the in vitro methods of tissue culture are adopted for the tools it provides in a variety of ways depending on the needs of the species.



S.No	Name of the saplings	No of saplings
1	Banana robusta variety	102765
2	Anthurium	1754
3	Spathiphyllum	10500
4	Syngonium	980
5	Aloevera	431
6	Calotropis	1600
7	Wrihhtia tinctoria	1000



The Heartfulness Tree Conservation Center is dedicated to not only conserving threatened tree species but also to propagating elite plus clones of disease-free saplings using clonal and micropropagation technologies. These efforts aim to benefit farmers and other stakeholders. Currently, the HTCC has successfully developed protocols and propagated several elite clones on a larger scale for plantation purposes.

The center strives to emerge as a beacon of excellence in conservation efforts, particularly focused on tree species. By the end of the upcoming fiscal year, our aim is to propagate species on the brink of extinction and conserve them in both in situ and ex situ environments.

Translocation of Trees

Methodology of Trees Translocation

Translocation is the term used to describe the digging and replanting of trees from one location to a new location. Due to the wide extent and morphology of tree root system, translocation of trees usually involves substantial removal of roots. It is ensured that the requirements such as timing of root pruning, size of root ball, translocate and lifting requirement, monitoring and post translocation maintenance, etc. shall be properly planned.

Beginning in 2016, we relocated **836 trees**, including **banyan, peepal, and neem**, during road widening near Tumkunta, Hyderabad. Within the campus, over **10,000 trees** have been translocated to accommodate construction needs, without cutting the trees or harming them in any way.

More than 300 trees that were marked for felling in different parts of Hyderabad and adjoining areas in order to facilitate road widening works and other infrastructural work have been translocated and planted at Kanha Shanti Vanam.



METHODOLOGY

The Forests by Heartfulness initiative promulgated many critically endangered indigenous plant species by employing the proprietary **Heartyculture High Density (HCHD)** plantation method. This method involves extensive soil reconstitution using Activated Biochar, Vermicompost, Cow manure, and Cocopeat.

Our methodologies include the levelling of land and creating pits using earth movers, it was undertaken in accordance with the layout design planned by our team of experts. Careful selection of species of native and endangered trees, shrubs and fruit bearing trees have been done at our various sites beforehand only.

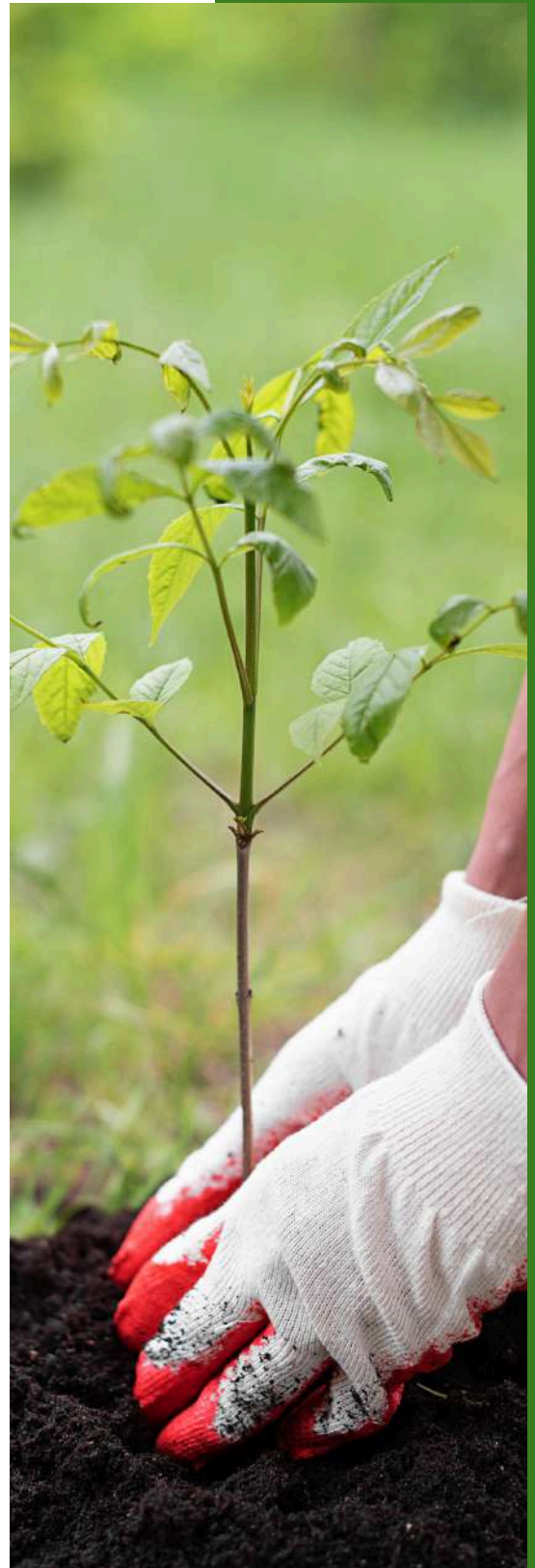
Medias are also added to better anchorage and prominent vegetation, for example;

- **Black soil**
- **Charcoal**
- **Plasma Water**

These provide enough nutrients to the saplings for their growth.

Project Archetypes

- 1.Ecosystem Restoration / Conservation
- 2.Biodiversity Park
- 3.Economic Forest
- 4.Carbon Farm
- 5.Rural Revolution
- 6.Agroforestry
- 7.Hill restoration
- 8.Lake restoration:



Soil enrichment through Biochar , Seaweed & Plasma Water

Biochar is a fine-grained, carbon-rich, porous product remaining after plant biomass has been subjected to pyrolysis at low temperatures (~350–600°C) in an environment with little or no oxygen.

Benefits of Biochar production - Biochar in the soil works as a reservoir for water, microbes, minerals and nutrients. Kanha has a full-fledged Biochar production units and expert teams to make this a widespread utility.

Seaweed is the common name for countless species of marine plants and algae that grow in the ocean as well as in rivers, lakes, and other water bodies which grows with just sunlight and from nutrients in seawater.

Benefits of Seaweed Cultivation - Helps in increasing soil and plant health acting as a growth stimulant. Can also draw down CO₂.

Heartfulness can provide expertise to farm seaweeds that suck up carbon as they grow and can be used for food, animal feed, biofuels and fertilizer.

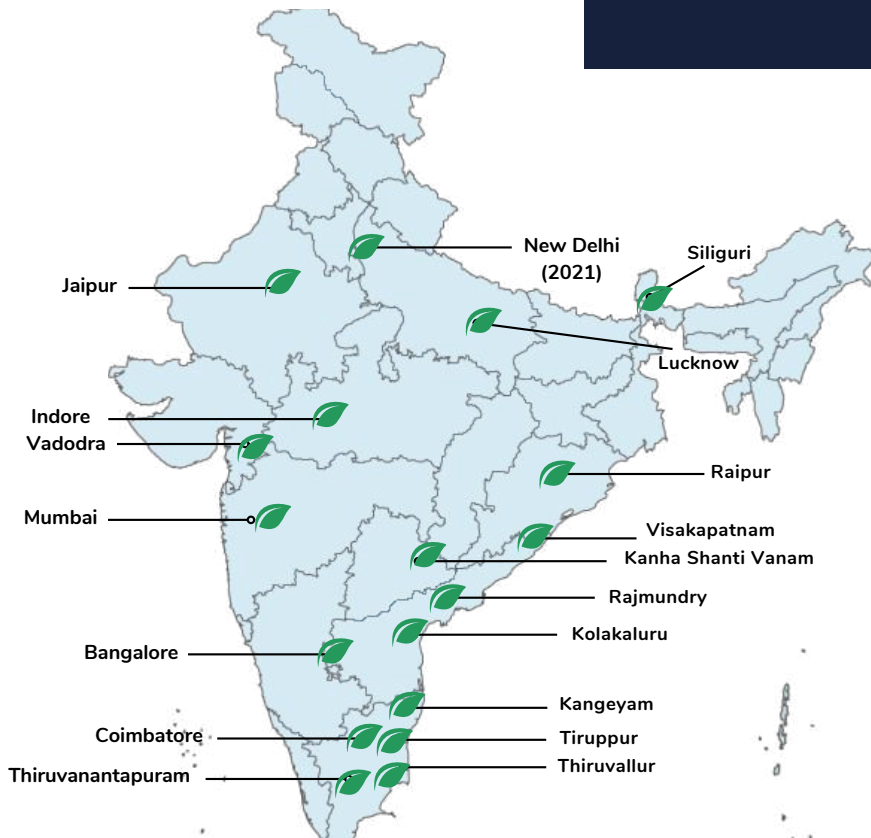
Cultivated Seaweed can be used for increasing the yield as in general, seaweeds contain 10 times the mineral levels of land-based plants.

Plasma Water: Plasma Water Solutions' proprietary breakthrough cold-plasma technology converts water from any source, in continuous flow & real-time, to Plasma-ized Water™ (PW). PW technology is used for seed treatment, crop spray and irrigation to enhance productivity through faster and more efficient germination, accelerated growth, preventing the transmission of plant pathogens and enhancing stress tolerance during the crop cycle.

*The Indian subsidiary of US Agri-Tech company Plasma Water Solutions Inc announced a very unique and promising partnership with **The Heartfulness Institute**. The two organizations have signed a collaboration agreement to promote the common purpose of enabling food security in the most sustainable manner & introducing the Green Revolution 2.0 from India to the rest of the world.*



FBH Nurseries



Forests By Heartfulness has a large hub and spoke network of 18+ active nurseries across India with a capacity of raising millions of saplings. Increase in active nationwide nurseries to 28+ in 2025.

All nursery operations of Forests by Heartfulness are managed in a market standard ERP system

- Close tie up with nation-wide nursery network to collaborate on best practices
- Promotes micro-entrepreneurs and creates livelihoods in local communities



Our various nursery sites at Raipur, Mumbai, Kolakaluru etc.



PAN India Nursery Network

- Forests By Heartfulness has a large hub and spoke network of **28+ active nurseries** across India with a capacity of raising millions of saplings.
- With Systems, process and related infra in place, FBH aims to rapidly increase production to **2000 million saplings** across its network of nurseries by 2025 from its current 10 million grown presently across Heartfulness centers, India wide to facilitate localized sapling production
- Meticulously planned activities drawing from Heartfulness' strong technical and scientific expertise with a combined mix of nursery experts, senior forest officers and tissue culture scientists.
- Central Hub of close to **54+ acres** with **5 million sapling** production in Hyderabad providing large scale production that ensures economies of scale and consistency in quality
- Slated to employ **5000+ gardeners, maintenance staff** by 2025 from neighborhood villages

PIT PREPARATION & SAPLING PLANTATION WORKFLOW

Check list for Non-plant material

- Black Soil (optional) or Red Soil
- Activated Bio-char
- Neem Powder
- Organic Manure / Compost / Vermicompost
- Organic Gel Polymer
- In-situ Top Soil (Mother Soil)
- Bamboo Sticks
- Jute / thread for tying knots (sutli)



More details in Appendix



Nitish Bhardwaj, Indian Actor



Kabir Bedi, Actor



PV Sindhu



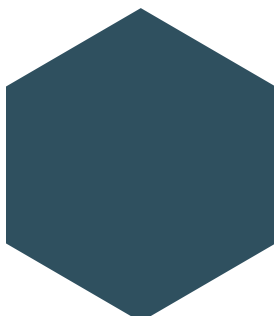
Shri Shripad Naik, Union Minister of AYUSH



Tamilisai Soundararajan, Hon'ble Governor of Telangana



Amish Tripathi, Author



Survival Rate of Plants



Ensuring the survival of the plant is critical for any afforestation project and here are the steps we take to make that happen:

1. Selecting the right species: Unless it is an ex-situ conservation project, we normally select the species which are endemic to that region. That ensures the sapling grows naturally without too many additional inputs and care.

2. Selecting the sapling size: Depending upon the season and irrigation facilities on the land, we choose the right cover size. For e.g., where water is scarce, we select tall saplings which get a head start in surviving drought-prone conditions.

3. Selection of the right plantation site: All our plantation sites are carefully selected based on the below criteria:

- a. Availability of sustainable water source.
 - b. Properly fenced land to keep out grazing animals and tress passers.
 - c. Clear land title with a written letter from the local landholding authority.
- This ensures that the forests we create remain there for several decades.

4. Replacement of casualties: We endeavor to keep our sapling survival rate above 90%. Towards that, we replace any casualties with fresh saplings and ensure the forest grows as initially designed.

5. How we select Endangered Species: FBH is guided by a team of conservation and forestry experts who guide us on the right species selection, with special emphasis on native, uncommon & endangered species.

Green Kanha Initiative

A green **'Forward into Nature'** movement to reforest our lives



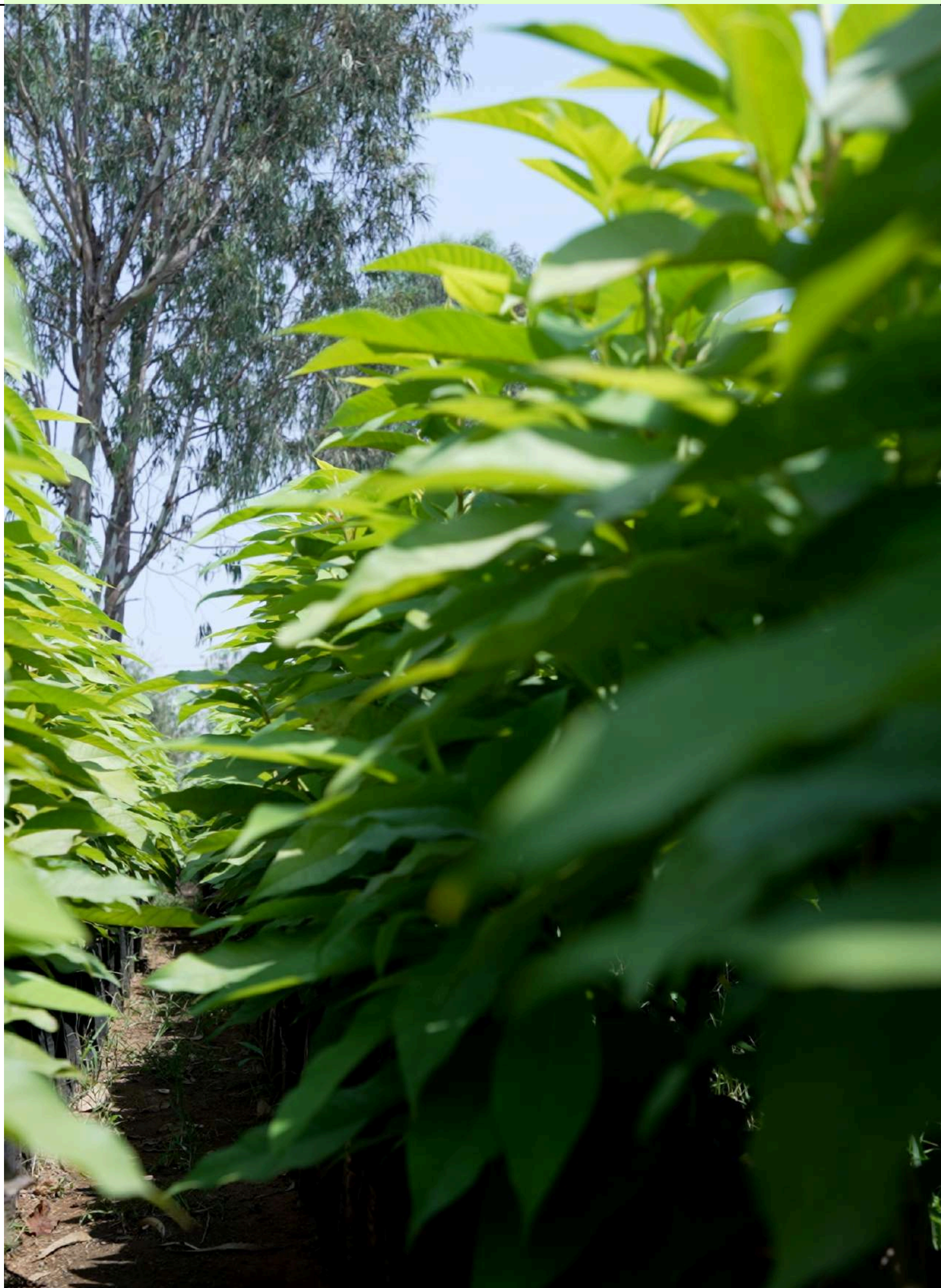
Green Kanha is an environmental initiative by the Heartfulness Institute committed to nurturing India's mega-biodiversity, indigenous and endangered species. We adopt the latest technologies with scientific planning to create an ex-situ conservation center, replete with splendid green spaces.



With a team of hardworking volunteers, including the children a thriving ecosystem at Kanha has been created from scratch, on barren land during the past 5 years; becoming a model for one of the India's mega-biodiversity which is saving endangered and rare species, creating medicinal gardens, and allowing all the natural plant and animal wildlife of the region to coexist.



Green Kanha Initiative transformed 1,400 acres of barren land at Kanha Shantivanam to what we see today as the Oasis of Peace with greenery all around and sufficient water resources across the campus



The Rainforest

100+

More than 100 species from the rainforests of the Western Ghats, the Andaman and Nicobar Islands, and North-east India are thriving at Kanha

Currently, a quarter of all plant species are endangered, and in India it could be as high as a third. Sadly, we do not have comprehensive information about many of the valuable tree species of India. In the harsh arid conditions of the Deccan Plateau, we have created mini rainforests at Kanha. And this challenging task of growing rainforest species is happening successfully without creating structures made of concrete, steel and glass. It is a miracle in the making.

More than 100 species from the rainforests of the Western Ghats, the Andaman and Nicobar Islands, and North-east India are thriving at Kanha. This is a conservation project, as many of the rainforest species are rare and endangered. Kanha has become a repository of RET plants, like *Syzygium travancoricum* and *Madhucabourdilonii*, which are both greater in number in Kanha than in the wild, as well as *Canarium strictum*, *Opia parviflora*, *Diospiros*, *candouliana*, *Saraca ashoka*, *Madhuca insignis*, *Garcenia indica*, *Myristica malabarica* and a host of others.



The Deccan Plateau



There is a Palm Grove
covering nearly 4 acre

Today, many common species that are considered holy by traditional people are on the verge of extinction. India has a large number of species with very limited natural distribution. For example, the Red Sandalwood (*Pterocarpus santalinus*) and the Indian Frankincense tree (*Boswellia ovalifoliolata*) are found in just a few districts of Andhra Pradesh. All the narrow endemic species are threatened with extinction. Greening efforts at Kanha give importance to endemic species, also including the Indian Redwood and the Indian Satinwood, and provide a second home to very rare and threatened species of plants. The initiative will also help to conserve the genetic diversity of the country.

We are developing sacred groves where the names of the plants in English and Sanskrit, their botanical names and their medicinal uses will be displayed, in order to educate visitors. They include gardens of edible wild herbs and shrubs, edible wild fruits and tubers, medicinal plants for primary healthcare and wellness, skincare and haircare. There will also be a sacred grove of species representing the astrological signs.

There is a palm grove currently covering 4 acres, a series of ponds hosting water lilies, lotuses and other aquatic plants, and rock gardens featuring the Deccan Plateau's magnificent rock formations.



FBH Projects 2024-25

Upcoming Events

“

Forests by Heartfulness as an initiative is striving for excellence with each passing day. In the past two years our projects have almost doubled, and we are consistently collaborating and partnering with more organizations to create a bigger, greener impact in society.

Some of our upcoming projects are listed below;

- **Satna, Madhya Pradesh - Phase 1 (30 Ha)**
- **Plot 102, Municipal Park, Jamnagar, Gujarat**
- **Kalla, Bharuch, Gujarat**
- **Shatrunjay Hills, Palitana, Gujarat**
- **9BRD, Pune**
- **Kanha Annex**
- **Meera Pond Plantation Zone**



heartfulness
advancing in love

Inauguration of
Heartfulness Forestation Project
in Satna, MP

Inaugurated by

divine presence of



Revered Daaji



Hon. Rajendra Shuklaji
Deputy Chief Minister of Madhya Pradesh

एक पेड़ माँ के नाम

July 21st at 7am



To participate
in this campaign
please scan this QR code

Launch of the Heartfulness Forestation Project, "Ek Ped Maa Ke Naam—A Tree in the name of Mother"

On the auspicious occasion of Guru Purnima 2024, the Heartfulness Forestation Project, "**Ek Ped Maa Ke Naam**," is being launched at Village Kherwa Saani, Amdara, District Maihar, Madhya Pradesh, by the Hon'ble Deputy Chief Minister Shri Rajendra Shukla ji, along with local MLA, Shri Shrikant Chaturvedi, the Collector of Maihar District, Superintendent of Police, District Forest Officer, and 10,000 villagers who have gathered there for this momentous occasion.



As part of this project, **350,000 trees** will be planted to develop 650 hectares of forest over one year. Each tree will be planted to revere someone's mother, their first Guru. The first tree to be planted by the Hon'ble Deputy Chief Minister of Madhya Pradesh, Shri Rajendra Shukla ji, will be in the name of respected Baa, Smt. Shantaben, mother of beloved Daaji.

Let us all join hands in this noble venture, wherever we are in the world, and plant a minimum of one tree in memory of our loving parents. Otherwise we invite you to contribute through your heartfelt donations and we will plant a tree on your behalf. Your support will contribute to our goal of creating a greener and healthier environment while honoring our mothers, fathers, and other respected family members. Together, we can make a significant impact and ensure a sustainable future for generations to come.



Other Initiatives

Green Heartfulness Run

Supported by



युवा कार्यक्रम एवं खेल मंत्रालय
MINISTRY OF YOUTH AFFAIRS AND SPORTS



3500+

Participants in the first edition



4000

Saplings planted at Institution Land, Damarapalle Village



23.3k

Kilometers covered in the first edition

"It was ideated that people come and run in the beautiful Kanha environment, and feel the place with their hearts. Simultaneously, there was a purpose in mind- to help Forests by Heartfulness initiative through this event.

The 1st Edition happened on 26th Feb, 2023 and the 2nd edition on 19th Nov, 2023.

In an age where we are talking about climate change and carbon footprints, Green Heartfulness Run would be the most thoughtful climate conscious run possible and all its proceeds will go to Forests by Heartfulness, an initiative of Heartfulness institution, to nurture, protect and conserve nature, endemic and endangered trees species of India.



To honor the runners of Green Heartfulness Run, **4000 trees of 70 varieties** were planted during Feb-May 2023.



Mahogany
(Switenia Mahogany)



Champak
(Magnolia Champaca)



Golden Shower Tree
(Cassia Fistula)



Pride of India
(Lagerstroemia Speciosa)



Agathi
(Sesbania Grandiflora)



Malabar Nut
(Justicia Adathoda)



Sandalwood
(Santalum Album)



Contact US

For more information, kindly visit our page:

heartfulness.org/forests

For corporate gifting and CSR contributions, kindly Email us at

fbh@heartfulness.org

HEARTFULNESS INSTITUTE
D NO.13-110, Kanha Village,
Nandigama Mandal, Ranga Reddy district,
Telangana - 509325, India.



Forests By Heartfulness

APPENDIX

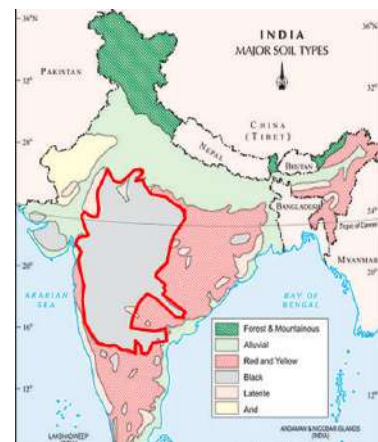
Plantation Guidelines



PIT PREPARATION & SAPLING PLANTATION WORKFLOW

Procedure for Lifting & Carrying Plant Sapling (depends on plant species)

- Bottom Cut of the growbag
- Place the Plant in the Pit in proper position (straight)
- Cut the growbag sides with vertical incision
- Fill good soil around the plant
- Tie the plant to support Bamboo stick with Jute thread
- Compact the soil around the plant by pressing with feet.
- Watering around the plant in required quantity (take care not to pour water near the plant root ball)
- Mulching (if available)/otherwise Green mulching (legumes)



Process Workflow : Step 1

Black Soil (if not available, Red Soil)

To be placed as the bottom most layer in the pit, after initial watering (wetting).
(depending on need; min 6" to max 9" or 10% of pit volume)



Major soils found in India:

- Alluvial soil [43%]
- Red soil [18.5%]
- Black/regur soil [15%]
- Arid / desert soil
- Laterite soil
- Saline soil
- Peaty / marshy soil
- Forest soil
- Sub-mountain soil

Soil is an important natural resource that requires crucial attention due to its significant role in crop yield. There is substantial ongoing research on soil health, particularly its water retention capability, moisture content, salinity, temperature, pH, concentration of dissolved gases, etc.

Black Soil

Among the in-situ soils of India, the black soils found in the lava-covered areas are the most conspicuous. These soils are often referred to as 'regur' but are popularly known as "black cotton soils," since cotton has been the most common traditional crop in areas where they are found.

Black soils are derivatives of lava and are spread mostly across interior Gujarat, Maharashtra, Karnataka, and Madhya Pradesh on the Deccan lava plateau and the Malwa Plateau, where there is both moderate rainfall and underlying basaltic rock.

Because of their high clay content, black soils develop wide cracks during the dry season, but their iron-rich granular structure makes them resistant to wind and water erosion. They are poor in humus yet highly moisture-retentive, thus responding well to irrigation.

Rich in: Iron, lime, calcium, potassium, aluminum, and magnesium.; Deficient in: Nitrogen, phosphorus, and organic matter.; Color: Deep black to light black. ; Texture: Clayey.

Process Workflow : Step 2

Activated Bio-char

**Uniformly spread Activated Bio-char in the pit.
(500 gm to 1 kg)**

Biochar is the lightweight black residue, made of carbon and ashes, remaining after the pyrolysis of biomass, and is a form of charcoal.

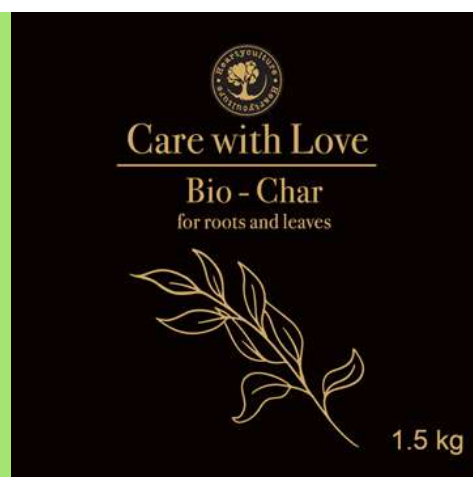
Biochar is defined by the International Biochar Initiative as "the solid material obtained from the thermochemical conversion of biomass in an oxygen-limited environment".

Biochar is a stable solid that is rich in pyrogenic carbon and can endure in soil for thousands of years.

Soil amendment

Biochar offers multiple soil health benefits in degraded tropical soils but is less beneficial in temperate regions. Its porous nature is effective at retaining both water and water-soluble nutrients.

Biochar is hygroscopic due to its porous structure and high specific surface area. As a result, fertilizer and other nutrients are retained for plants' benefit.



Process Workflow : Step 3

Neem Powder + Vermicompost

Sprinkle Neem Powder (5 gm to 10 gm) Mixed with Organic Manure / Compost / Vermicompost (1-2 kg)

The **Neem Tree (*Azadirachta indica* A. juss)** and its derivatives have great relevance in organic farming practices. This remarkable tree has been identified as a renewable resource for home grown agro-chemicals and nutrients which are bio – degradable, non-toxic and effective.

Using neem derivatives for managing pests is a non-violent approach to controlling pests. Neem products work by intervening at several stages of the insect's life. They may not kill the pest instantaneously but incapacitate it in several ways. Neem very subtly employs effects such as repellence, feeding and ovipositional deterrence, growth inhibition, mating disruption, chemo-sterilization, etc.

The action of Neem products fulfills all priorities among environmental objectives. This unique tree is perhaps the most significant example of how nature can combine diverse functions i.e., the action of de-oiled Neem cake as a pesticide cum fertiliser.

Neem for Soil Fertility & Nutrient Management:

Indian farmers have traditionally used de-oiled Neem cake as a fertilizer in their fields. The dual activity of Neem cake as fertilizer and pest repellent, has made it a favored input. Neem leaves have also been used to enrich the soil. Together, they are widely used in India to fertilize cash crops. When Neem cake is ploughed into the soil it also protects plant roots from nematodes and white ants. Farmers in southern parts of India puddle neem leaves into flooded rice fields before the rice seedlings are transplanted.

Application to the Neem seed cake to crops provides them with various nutrients. Besides the Neem seed cake also reduces the number of soil insect pests, fungi, bacteria and nematodes and protects the crop from damage caused by these organisms. Neem seed cake can also reduce alkalinity in the soil by producing organic acids when mixed with the soil. The calcium and magnesium present in Neem cake also aid in removing alkalinity.

Chemistry of Neem for Organic Farming:

Of special interest are terpenoids that are unique to Neem and some related members of this family. More than a hundred terpenoids are known from different parts of the Neem plant. Of its biological constituents, the most active and well studied compound is Azadirachtin. However in most traditional preparations of Neem as pesticide or medicine, a mixture of Neem chemicals are present and provide the active principles.

Preparation of Neem products for Organic Farming:

Neem is attracting world wide attention in recent decades mainly due to its bioactive ingredients that find increasing use in modern crop and grain protection.



Process Workflow : Step 4

Organic Gel Polymer

Place Organic Gel Polymer 5-10 gm in the proximity of plant sapling root ball.

Organic gel polymers

Organic gel polymers play a crucial role in modern agriculture, offering innovative solutions to enhance crop growth and sustainability.



Water Retention and Drought Resistance:

Hydrogels, which retain substantial amounts of water, are used to combat drought stress in crops. By absorbing and slowly releasing water, they help maintain soil moisture levels during dry periods, supporting plant growth and resilience. These hydrogels act as reservoirs, providing a steady supply of moisture to plant roots even when rainfall is scarce.

Nutrient Management:

Hydrogels serve as carriers for critical nutrients. They can encapsulate fertilizers, gradually releasing them over time. This controlled nutrient release ensures efficient utilization by plants and reduces nutrient leaching into the environment. By improving nutrient availability, hydrogels contribute to healthier crops and higher yields.

Seed Coating Agents:

When applied as seed coatings, hydrogels protect seeds during germination. They create a favorable micro-environment around the seeds, promoting successful sprouting and early growth. Seed coating with hydrogels enhances seedling establishment and vigor.

Transplantation Success:

Hydrogels aid in transplanting seedlings from nurseries to field soil. They minimize transplant shock by maintaining moisture around the roots, ensuring a smoother transition for young plants. Improved transplantation success leads to better crop establishment.

Biodegradability and Sustainability:

Natural biopolymer-based hydrogels are preferred due to their safety and environmental compatibility. Unlike synthetic alternatives, these organic gels break down naturally, leaving no harmful residues in the soil. Sustainable farming practices benefit from the use of biodegradable hydrogels.

In summary, organic gel polymers contribute significantly to agriculture by addressing water scarcity, nutrient management, seedling health, and environmental concerns. As we strive to feed a growing global population, these soft materials offer promising solutions for sustainable farming practices of the future.

Process Workflow : Step 5

**Excavated Topsoil (Mother Soil)
Complete Plantation with Excavated
Topsoil (Mother Soil) filling around the
plant and Bamboo Support Sticks as per
process steps given below**

- Bottom Cut of the growbag
- Place the Plant in the Pit in proper position (straight)
- Cut the growbag sides with vertical incision
- Fill good soil around the plant
- Tie the plant to support Bamboo stick with Jute thread
- Compact the soil around the plant by pressing with feet
- Watering around the plant in required quantity (take care not to pour water near the plant root ball)
- Mulching (if available) / otherwise Green mulching (legumes)
- Bund preparation around the Plant with let out soil



FORESTS

by Heartfulness

HOW TO IDENTIFY THE RIGHT SITE FOR PLANTING TREES?

1

Which sites are most suitable for planting trees for FBH?



Rural areas

1. Village lands owned by panchayats
2. Common grazing lands
3. Forest buffer zone (land between villages & forests)
4. Farmer owned lands for agro-forestry



Urban areas

1. Common area in apartment buildings for dense Miyawaki style plantation
2. Along the streets for shade giving trees
3. Lake sides



Industrial areas

1. Industrial lands for greening areas outside production site
2. Mining lands post excavation or topsoil dumping sites



Government institutes

1. Educational institution grounds
2. Government establishments (offices, training centers)

2

What to keep in mind when choosing a site?



Plantation permission: FBH should ensure permission from landowner before plantation. The owner should not have any other plans for that site besides growing trees.



Source of water: During first 2 years of plantation, trees need to be watered especially during dry seasons. An existing source of water (borewell, flowing canal, water body) is preferred. In the absence of any water source, watering should be done using tanker water which increases the cost of maintenance.



Maintenance responsibility: Every planted tree will need to undergo periodic maintenance to ensure healthy growth. This includes mulching, fence/stake support, watering, weeding and providing boosters. It is good to know who takes the responsibility of doing this maintenance. It could be FBH volunteers, appointed NGO, landowner, local community.



Benefit to communities: Ask yourself in what way the plantation benefits the local community. The more the benefit, the more support we get from local communities in terms of maintaining and expanding / replicating it. Benefits could be in the form of air quality, flowers & fruit, shade, increasing water table, reducing dust etc.



Accessibility: The site should be accessible to FBH teams for maintaining as well as monitoring the growth. The landowner should give our teams the permission to visit the site periodically.



Encumbrance to neighbors: The plantation should not cause a challenge to those living near it. Challenges could involve leaf fall, wild- life, unwanted shade, pollen etc. All involved people should be informed ahead of time.



Plantation style: There are 3 main kind of plantations including Miyawaki style (dense, forest-like, multi-level, diverse species), Block plantation style and Avenue plantation style (along streets, peripheries). It is important to determine this as it impacts the number of trees per area, as well as, cost of site preparation, plantation and maintenance.

3

What is a model site?

A model site is typically a farmland site which is to demonstrate the benefits of agroforestry. Heartfulness practitioners can offer their land for this purpose. Ideally, the model site should be at least 5 acres in order to properly design earth works, water works and plant diverse trees. FBH team will suggest how to transform this land into a model agro-forestry site or permaculture site. A detailed document on designing and developing a model site will be prepared.

4

How to approach landowners?

Most landowners will be willing to permit tree plantation on their land, especially if it poses no challenges to their long-term vision of what they want to do with the land. FBH team should convince the owner about benefits of tree plantation on their land including:

- * Increased soil fertility
- * Extra income (fruit, timber, medicinal herbs). The trees belong to landowner and NOT to FBH.
- * Microclimate (cooler in summers and warmer in winters)
- * Prevent soil erosion
- * Increased water table (trees slow water runoff, soak and store water in the soil)

FBH team will collate some videos showcasing the benefits for various kind of lands and provide to the volunteers.

FBH WORKS WITH PEOPLE TO DRIVE THE CHANGES THAT THE SOCIETY NEEDS. TOGETHER, WE CAN BUILD A HEALTHIER, MORE SUSTAINABLE WORLD FOR OURSELVES AND FUTURE GENERATIONS.



HEARTFULNESS GREEN

**NURTURING BIODIVERSITY AND ECOLOGICAL SUSTAINABILITY,
IN TUNE WITH NATURE.**