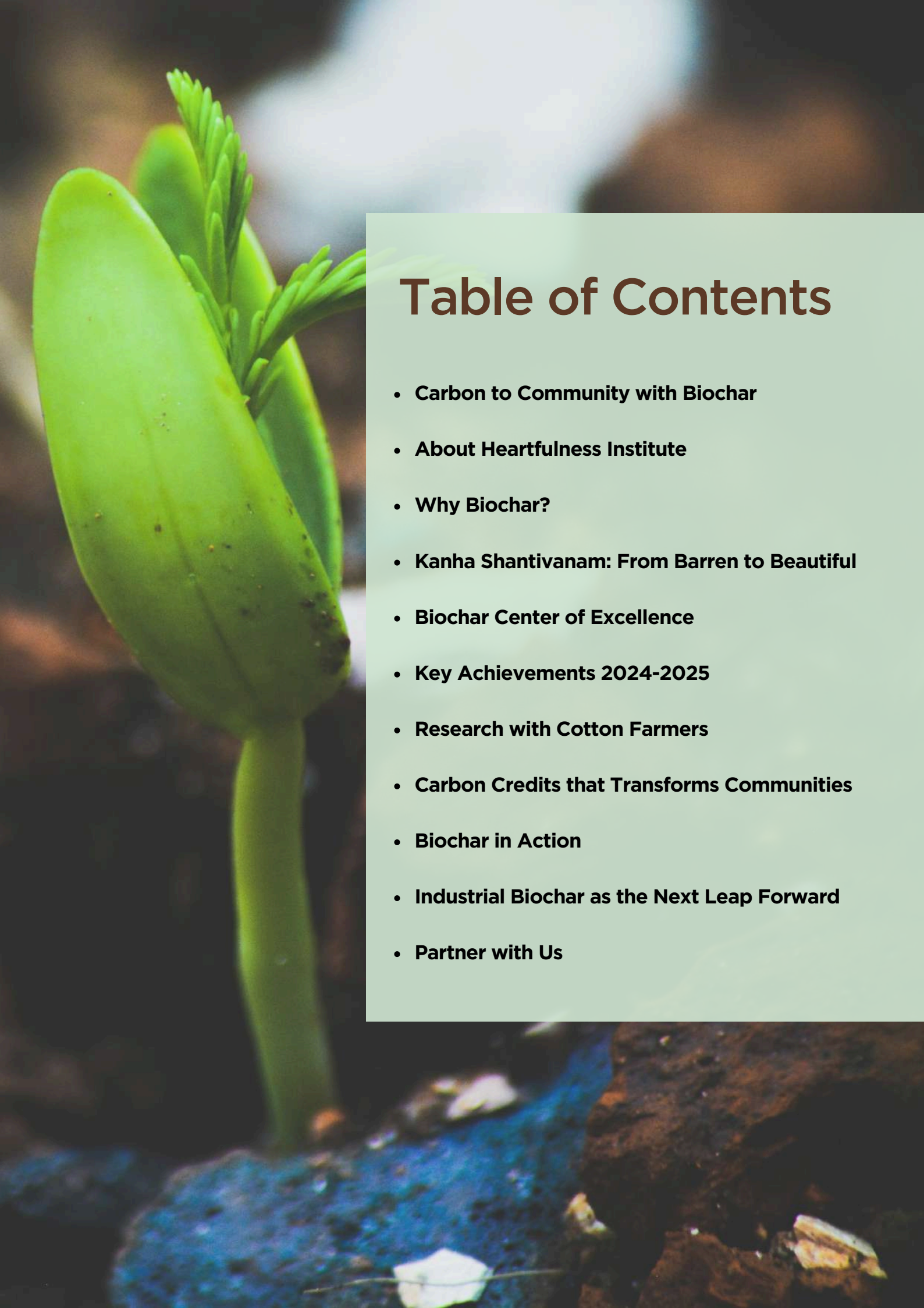
Heartyculture
BIOCHAR

Regenerating the Soils of India and beyond

heartfulness
advancing in love

HEARTYCULTURE



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Carbon to Community

with Biochar

Heartyculture Biochar is a climate-positive initiative rooted in the vision of regenerating soils, empowering rural communities, and drawing carbon back into the earth. Anchored in the values of **Heartfulness**, the initiative began at Kanha Shanti Vanam, where 1,400 acres of barren land was transformed into a Green Oasis using locally produced biochar. What started as a soil improvement effort has now evolved into a nationwide model for sustainable agriculture and carbon removal.

Heartyculture is promoting climate-smart agriculture with a farmer-centric approach combined with a strong framework of academic research, farmer trials and unit economics that includes carbon markets leading to policy advocacy. Heartyculture Biochar is building a new paradigm: One where soils are regenerated with higher levels of soil carbon, fertility and microbial life and crop yields are boosted to an all-time high in a sustainable fashion.

About Heartfulness Institute

- Heartfulness Institute is a non-profit organization, accredited by the UNCCD, IUCN and the Commonwealth with a 80-year history. Heartfulness is a simple practice of meditation offered to one and all, free of charge to promote inner development.

- Heartfulness' presence spans 160+ countries with 10+ million practitioners worldwide.

- Heartfulness Institute runs 32 social impact initiatives across ecology, environment, afforestation and agriculture.

About Heartyculture Biochar

- Heartyculture Biochar, an initiative of the Heartfulness Institute, offers circular solutions that addresses soil degradation, waste biomass, farmer income and climate change. Heartyculture converts farm waste into biochar, a carbon-rich soil amendment that restores fertility, boosts water retention, and sequesters carbon in soils for millennia.

- **Our Vision:** Scale biochar to make it affordable and accessible to farmers in every village of India and beyond.

- **Our Mission:** Scale biochar production and usage to remove 2 million tons of CO_2 by 2030.

Why Biochar?

Scalable Carbon Sequestration

Permanently sequesters carbon for 1,000+ years, effecting an immediate and lasting climate solution. Has the potential to remove one Gigaton of CO_2 annually.

Soil Regeneration

Improves water retention, scales microbial activity and revitalizes degraded soils.

Economic Opportunity

Observed increase in crop yield by 18-62%, improving income for farmers.

Environmental Health

Eliminates harmful open field burning of biomass, reducing respiratory illnesses and air pollution.

Circular Economy

Transforms agricultural waste into a valuable resource, improving resource efficiency.

Kanha Shantivanam

From Barren to Bountiful

Once a barren 1,400-acre expanse with just about 200 trees, Kanha Shanti Vanam has been transformed into a thriving green haven with over 200,000 trees, revitalised farmlands, and a water table that has risen from 1,200 feet to 300 feet.

Biochar has played a pivotal role in this ecological revival. This transformation has been achieved in a short period of six years.

Before (2015-2017)	After (2021-2023)

Forests by Heartfulness

Forests by Heartfulness (FBH) is an initiative by the Heartfulness Institute focused on large-scale afforestation and ecosystem restoration conserving the native, endangered, and endemic tree species across India.

Taranga Hill Project, Gujarat

The Taranga Hills Afforestation Project in Mehsana, Gujarat, is transforming 400 hectares of degraded forest land into a sustainable green zone.
The initiative focuses on afforestation, water conservation, local employment, and infrastructure development. It has so far planted 150,000 sandalwood trees alongside other native species, bringing the total plantation to 754,000 saplings, significantly enhancing biodiversity and promoting environmental rejuvenation.

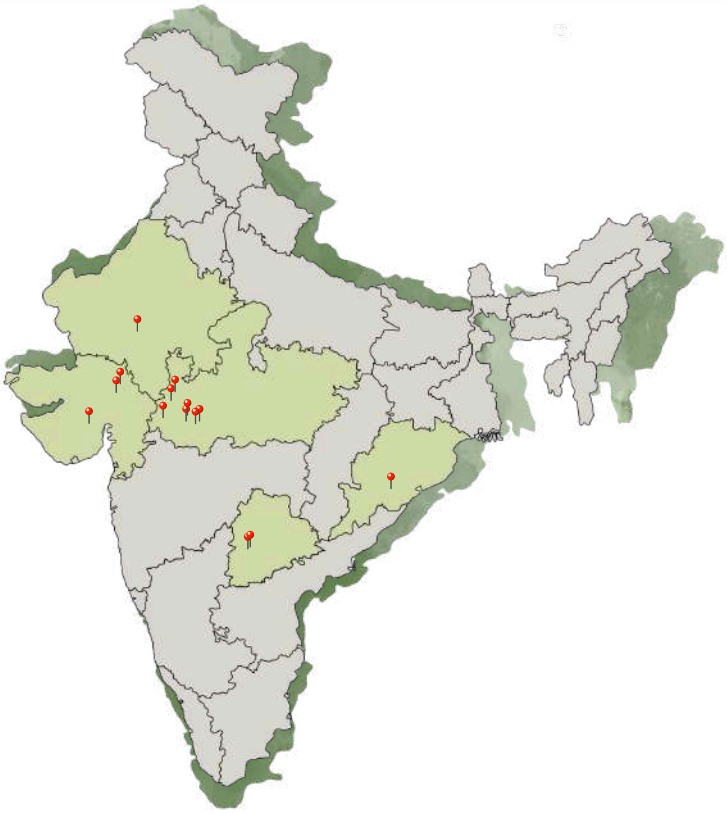
Shivgarh Project, Madhya Pradesh

This project by FBH, with the Madhya Pradesh Government and Gram Panchayats, aims to restore 800 hectares of degraded land in Shivgarh Village. The plan includes 1 million native trees with four years of care, 400 acres of water reservoirs, and medicinal gardens. Guided by forestry principles, it uses only native species, avoids construction, and ensures community participation through volunteer work and local employment, creating a sustainable green oasis for biodiversity and wellbeing.

Our Growing Footprint

Heartyculture's success is built on a robust network of strategic partnerships spanning multiple states across India. Each partnership brings unique expertise, from community engagement and farmer outreach to carbon credit certification and market access, allowing us to scale our regenerative biochar model effectively while empowering local communities with sustainable livelihoods.

Through the Heartfulness network and Agri-Ecosystem partners like Samunnati, Heartyculture has access to 3 million farmers and 100,000 villages across India.



Our Partner Ecosystem

UNCCD

IUCN

4 PER 1000

PayPal

ICAR

CENTRAL INSTITUTE FOR COTTON RESEARCH NAGPUR

SARDAR VALLABHBHAI PATEL UNIVERSITY OF AGRI. & TECH., MEERUT

Samunnati

FAIRTRADE

Arvind LIFESTYLE FABRICS-DENIMS

Pratibha

CARBON STANDARDS international

PlantVillage

First of it's kind

Biochar Center of Excellence

The Heartfulness Biochar Center of Excellence (COE) at Kanha Shantivanam, built with the generous support of PayPal, was inaugurated in May'25, by Shri Nitin Gadkari, Hon'ble Minister of Road Transport and Highways. As India's first integrated Biochar facility, the COE marks a pivotal step towards building knowledge systems, carbon removal, rural entrepreneurship, scalable models and integrating biochar into regenerative agriculture.

The COE is becoming a hub of continuous learning and collaboration. Whether it is field demonstrations, artisan training, research trials, or community engagement, the Biochar COE continues to serve as a dynamic and an interactive lab, bridging traditional knowledge, modern science, and scalable impact.

"This initiative brings together farmers and entrepreneurs, creating economic opportunities and making agriculture more dependable in villages."

Shri. Nitin Gadkari
Minister of Road Transport and Highways, Govt. of India

"The Centre for Rural Entrepreneurship offers upskilling and income generation opportunities aligned with the Skill India vision."

Shri. Nath Parameshwaran
Senior Director of Corporate Affairs
Paypal India

Research Trials at the Biochar COE*

Control | With Biochar

Raddish

Bitter Gourd

Onion

Amaranthus

*All inputs and practices are identical in both control and biochar treatment plots

Kaushal Manthan 2025

Shri Jayant Chaudhary (Hon'ble Union Minister for Skill Development and Entrepreneurship); **Inauguration of the First Rural Entrepreneurship Training at the Biochar COE**

"One of the best natural center in the globe and prestigious organisation in Telangana"

-Shri G. Kishan Reddy
(Hon'ble Union Minister of Coal and Mines) at the Biochar COE

"Very interesting and novel way of adopting charcoal to enhance organic production"

- Shri D. Sridhar Babu
  Minister of IT of Telangana

PayPal Impact Day

Hands-on engagement for corporate volunteers driving sustainability awareness.

Training for the State Forest Department

Forestry officials and guards from across India were trained in biochar production and application. Skill-building sessions equipped field teams with practical knowledge for large-scale ecosystem restoration

Maharashtra Farmer Orientation

Empowering farmers with biochar knowledge

Key Achievements 2024-2025

In just 20 months of operations, Heartyculture Biochar has made significant progress...

PRODUCTION & INFRASTRUCTURE

- Established **20** artisan biochar units across India
- Produced **1,860** tons of biochar
- Generated **3,900+** high-quality carbon credits

CARBON CREDITS

- Registered as a **C-Sink Manager** and carbon trading partner with Carbon Standards International, Switzerland.

EXPANSION & SCALE

- Developing **industrial-scale** biochar projects scheduled for 2026
- Integrating into **Ekatm Abhiyan** of HFI, reaching 100,000 villages

As of June’25

4,300 Tons of Crop Waste
Diverted

1,8600 Tons of Biochar
Produced

3,913 Tons of CO_2
Sequestered

36 Artisans
Trained

1,540 Acres of Land
Enriched with Biochar

3,120 Farmers
Impacted

Research with Cotton Farmers

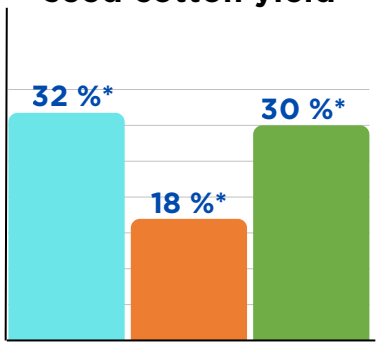
In partnership with the Indian Council of Agricultural Research (ICAR), Heartfulness Institute is conducting research on biochar's impact on crop yields and soil health to validate and scale the use of biochar in agriculture.

144 Farmers participated in the trial

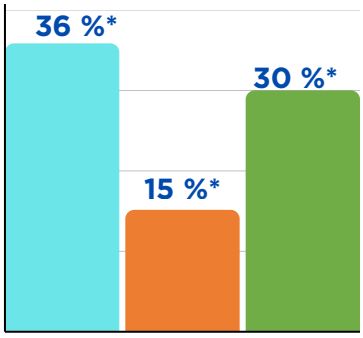
3 Districts across Gujarat & Madhya Pradesh

1 Acre per farmer

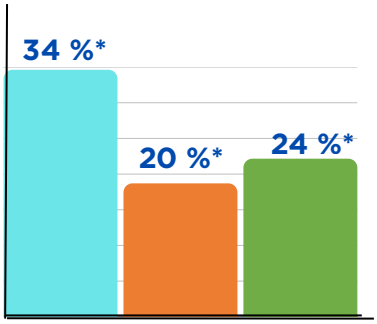
18-32% increase in seed cotton yield



15-36% higher lint yield



Increased number of bolls harvested



Khargone · Sabarkantha · Botad

* Statistically significant

Farmers reported:

- 18-32% higher yields
- Higher moisture retention
- Greener leaves = higher N
- Ease in de-weeding
- Decreased pest incidence
- Higher flower count

Farmer Testimonials on the Power of Biochar

Across Gujarat and Madhya Pradesh, farmers discovered how biochar is transforming their soils, yields, and livelihoods. From enriching degraded lands to conserving water and reducing input costs, biochar is proving to be more than just a technique. It is becoming a trusted partner in their journey towards resilience and prosperity. In these heartfelt testimonials, farmers share their own experiences and success stories, showing how this simple yet powerful solution is making a lasting difference on the ground.

Scan QR Codes for farmers' testimonials:

Madhya Pradesh

Gujarat

Maharashtra

Carbon Credits that Transforms Communities

Our carbon credits are certified by Carbon Standards International (Switzerland), ensuring the highest standards of transparency and environmental integrity. However, our credits deliver impact far beyond carbon offsetting and drive a transformative cycle of climate action and rural development.

Impact Per 100 Credits Purchased:

Every purchase of 100 biochar carbon credits from Heartyculture delivers measurable outcomes:

- 100 tons of CO_2e permanently sequestered in soil through biochar application.
- 50 acres of degraded farmland restored at negligible cost to participating farmers.
- Increase in income to farmers over 5 years.
- Up to 30% reduction in agricultural water consumption via enhanced soil water retention.
- One rural entrepreneur trained and equipped, creating 4–8 sustainable jobs in underserved communities.

A Dual Dividend: Environmental & Social Returns

Each carbon credit purchase generates cascading benefits, from soil regeneration and enhanced agricultural productivity, to sustainable livelihoods and green job creation in rural India.

Together, we can scale climate resilience while empowering rural communities across India, creating measurable impact that extends far beyond carbon accounting.

Biochar in Action

Training Highlights

This year's training sessions focused on equipping field teams with both foundational knowledge and practical skills essential for high-quality biochar production. Participants were trained in proper feedstock storage techniques, with emphasis on maintaining ideal moisture levels to ensure efficient pyrolysis.

A major highlight was hands-on learning with long-tiki kilns. Teams were taught best practices to minimise smoke, avoid incomplete pyrolysis, and produce uniform, high-carbon biochar. Sessions also included demonstrations on the use of digital MRV system, enabling transparent and traceable tracking from kiln to inoculation.

Safety remained a core priority. Trainees were oriented on fire safety protocols, including the importance of wearing protective gear and maintaining vigilance during all stages of production.

Turning Waste to Worth

Agricultural waste is transformed into carbon-rich biochar that restores soil and fights climate change.

Monitoring What Matters

The digital systems and field checks that verify every ton of carbon removed and land improved.

Farm Application

Tracing the path of biochar from rural kilns to the hands of farmers applying it to their field.

Women at the Root of Change

The leadership of women in bringing biochar practices to farms and transforming rural landscapes.

Ekatm Abhiyan

Ekatm Abhiyan, the Oneness Campaign, is a mega initiative by the Heartfulness institute to transform lives of people from 100,000+ villages in 8 states through Heartfulness practices in 2025. Integrating into this world's largest social outreach program, we are begining to offer free biochar to farmers to run farm trials.

The campaign's evolution into a replicable model can enable it to be directly accessible to villages everywhere, creating a pathway for both inner and outer transformation.

Farmer Trials from Maharashtra

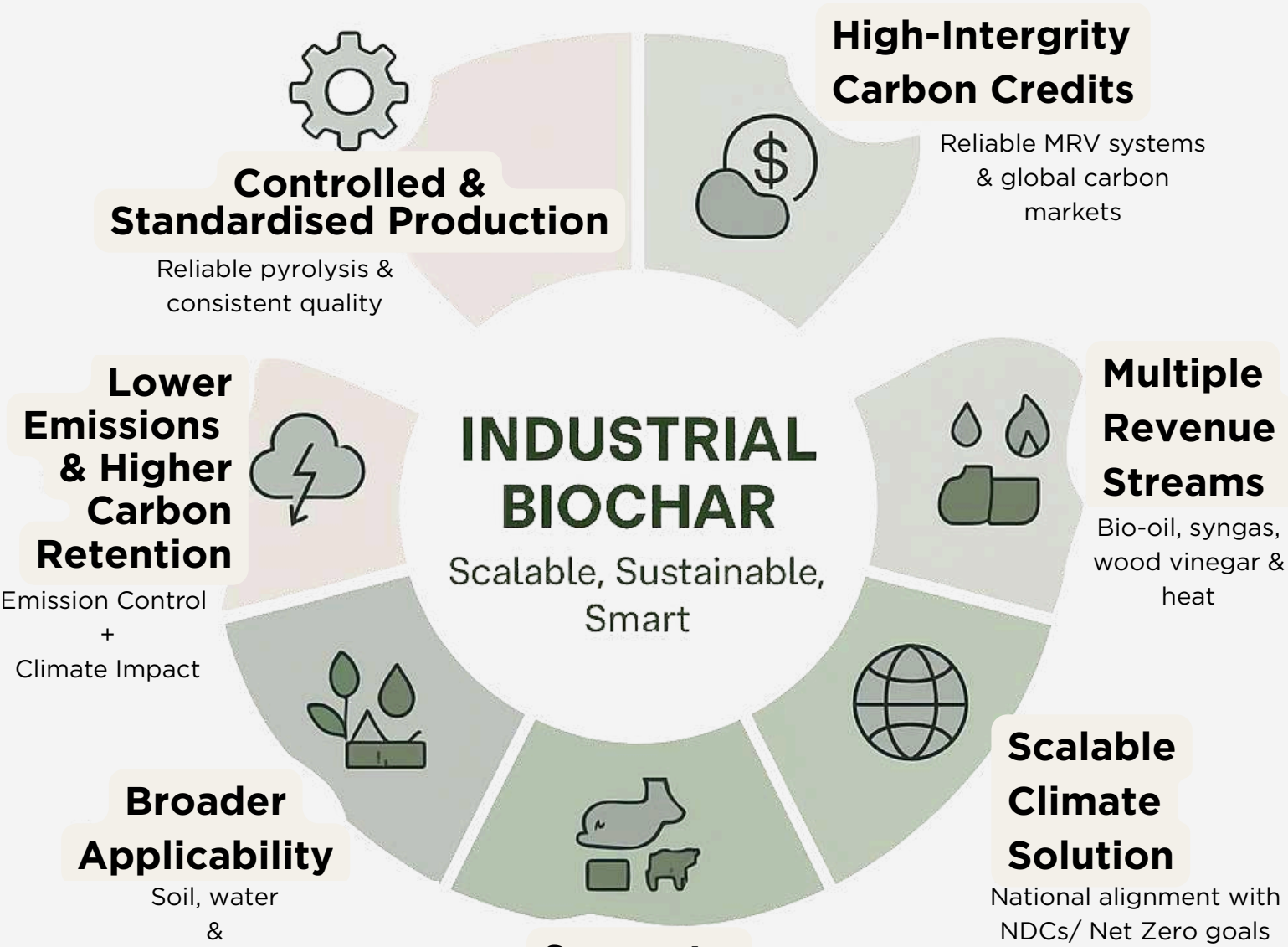
Farmers experiencing meditation

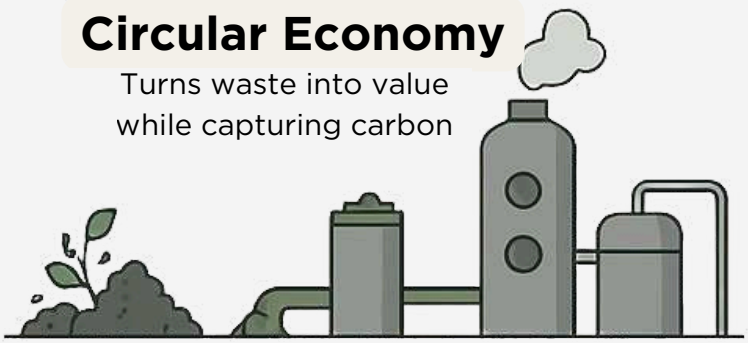
Invasive lantana was repurposed into biochar by Heartyculture in collaboration with the Forests by Heartfulness.

Industrial Biochar

as the Next Leap Forward

Industrial biochar is not a replacement but an evolution. It retains the environmental integrity of our grassroots model while bringing enhanced efficiency, consistency and scale.





Partner with us

Join us in Scaling Biochar Production for a Regenerative Future

We are actively seeking execution and biomass supply partners to help us bring the biochar revolution to scale. If you work with farmer networks, biomass aggregators, or forest waste handlers, we want to collaborate with you.

Together, we can transform surplus biomass into climate-positive, soil-restoring biochar, tailored for both field and industrial application. The raw material for change is already in our fields and forests; we just need the right hands to bring it to life.

ESG

Buy high quality carbon credits that creates significant social impact

FPOs

Setup Biochar units to produce and distribute biochar to FPO members

Rural Entrepreneurs

Setup a business to raise awareness of the beneficial effects of biochar and engage with famers on biochar sales and distribution

Farmers

Experience the benefits by applying biochar in your own farms

Looking Ahead

Deepening Roots, Widening Impact

This year was a foundational chapter in our biochar journey, from deploying decentralised models like C-Sink Networks to scaling farmer trials, building strong partnerships, and inaugurating the Biochar Center of Excellence. These efforts are not isolated milestones, but a part of the growing ecosystem grounded in community, climate action, and collaboration.

As we look forward, our focus is clear: to deepen the quality of our work, scale with integrity, and co-create value with every farmer, artisan, and partner involved. With more states coming forward, new feedstocks explored, and industrial expansion plans, the opportunities ahead are immense.

We thank our implementation partners, community leaders, and the many Artisans who have made this movement come alive, not just as a model for carbon removal, but as a vision for regenerative rural development.

Let's grow further, together.

CONTACT US

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