



14 Trees Annual Report 2023- 2024



From the Founder's desk



Dear Readers,

I am excited to share with you the Annual Report for 14 Trees Foundation, covering the financial year 2023-24. This year has been a testament to the power of small yet impactful initiatives. Our start of new microventures like - 8 Naturals plant nursery, unique bamboo tree guards, terrace farming kits, Corporate sapling gift cards, Tree tagging, EV mobile rental and Biodiversity survey though diverse, are united by a common thread: a profound respect for nature and an unwavering commitment to community-driven solutions.

One of the standout achievements of this year has been 8 Naturals, a micro venture which emerged from 14Trees has been awarded for the maximum number of native plants preserved by a nursery by Worldwide Book of records.

This year, with your support, we have successfully planted and sustained over 150,000 trees, which has not only helped in restoring ecosystems but has also provided significant economic benefits to over 150 tribal workers

As we reflect on the past year, we are deeply grateful to our supporters, volunteers, and partners for their dedication. Together, we continue to plant seeds of change, and we are more committed than ever to creating a greener, more sustainable future for all.

We look forward to your continued support as we embark on the next chapter of our journey.

Warm regards,

Pravin Bhagwat
Founder, 14 Trees Foundation

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2023-2024 at a Glance



200 Acres of land
Restored



150,000 Trees
Planted



85 Ponds



800 Growth in
Acres



150 Tribals employed



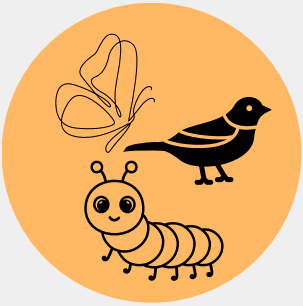
20 villages adopted



75 Farmers



300 Native species



300 Biodiversity
species



8 Micro-ventures



110 Individual
donors



20+ Corporates



30+ Schools
collaborations



3,000 Visitors



4 Events



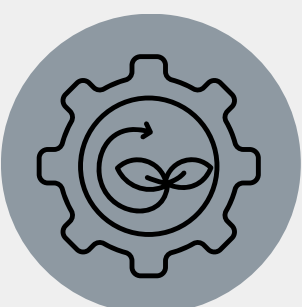
2 Districts



6 Talukas



20 Villages



200+ Livelihoods
supported



5 collaboration

About us

“The best time to plant a tree was 20 years ago. The second best time is now” - Chinese Proverb



At 14 Trees, we are building sustainable, carbon footprint neutral ecosystems through land restoration and reforestation.

 **Our Mission:** Create a people-led, replicable and sustainable model for eco-restoration on barren land for the good of this planet and for all who inhabit it.

 **Our vision:** To undo damage caused to nature by humans, regrow forests on ecologically devastated patches of land, restore ecology, rebuild biodiversity and promote harmonious, sustainable coexistence of humans with nature.

Our approach : is to build a self-sustainable system where positive growth of nature is interlinked with the social and economic growth of the society, where the people living with it appreciate the benefits of a strong natural system around them, thereby ensuring that the restored nature is being looked after without the long-term need for external interventions.

Our principle of holistic sustainability caters to all three pillars of sustainability - Planet, People, and Prosperity. With a nested model, also called the Russian dolls Model, our first priority is the planet, followed by people, followed by prosperity. With the premise of this sustainability framework being that economic activity (profit) is only required to help society (people) and society (people) can only exist if there is a viable environment (planet) on which to do so.



The main objective of the foundation is to restore barren land and regenerate the ecological system of flora and fauna on it. Within this effort of restoration & reforestation, the foundation also focuses on fostering a community comprising of local farmers, villagers, community leaders, and global sustainability enthusiasts, that can continuously champion the initiative, add to it in various ways, and possibly replicate it across the globe. The foundation also appreciates the fact that just reforestation is not enough - for the forest to sustain over time, the people living around it need to be the ones protecting it. This is best possible if there is a link between the forestation & prosperity of the locals. To ensure this link, the foundation is also focusing on generating a range of micro-ventures emerging from forest, and led by the locals, that have a positive feedback loop back to the ecological restoration effort.

About us

With a focus on planet (with people & prosperity within it), 14Trees also champions the philosophy of self-sustainability throughout its processes, by intentionally building the restoration efforts in a way that require minimal to no external materials. Before starting plantation, we first restore the water-table of the barren land by methodologically setting up retention & percolation ponds. This could take years depending on the region, but it ensures dependency on external water supply for forest sustenance, which could be faster & possibly cheaper, but not sustainable in the long term. Similarly, only native species of plants are used for restoration, regardless of whether they take longer to grow compared to foreign invasive species. This ensures the local biodiversity is supported, to generate a long-lasting ecosystem.



The process of reforestation as of today follows these steps:

- In-site water source generation - through retention ponds for immediate needs, and percolation ponds to restore the water table for long term
 - Sourcing native saplings (3 years old) from the 8Naturals - a micro-venture that emerged from this project
1. Protection and care of the planted sapling through tree guards developed by another micro-venture emerging from the project
 2. Weekly inspection & watering of the saplings for 3 years

After 3 years of monitored care, we have observed that the grown trees can survive on their own. This is also aided by the cycling rejuvenation of the soil through ground water restoration and more plantation root coverage reducing chances of soil erosion.

The project is managed by the locals, providing them with livelihood, and a better living space in the process.

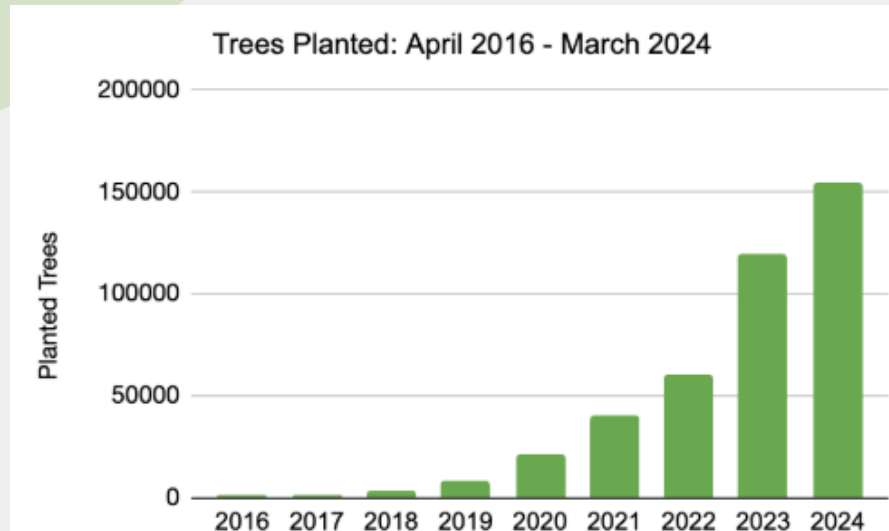
The foundation also serves as a laboratory for researchers and nature enthusiasts, and provides a soul nourishing environment to rejuvenate and brainstorm innovative, creative, and scientific ways to support the environment.

Our Impact so far

Trees Planted

As the chart shows, there was no growth from 2013 to 2015. With destroyed land (rocky terrain and no water source), it seemed like an impossible task. Attempts to create borewells met with failure, no water even at 200 meters. Rain water harvesting seemed like the only alternative. After the first set of ponds were created, it took nearly three years for the water bodies to start sustaining sufficient water.

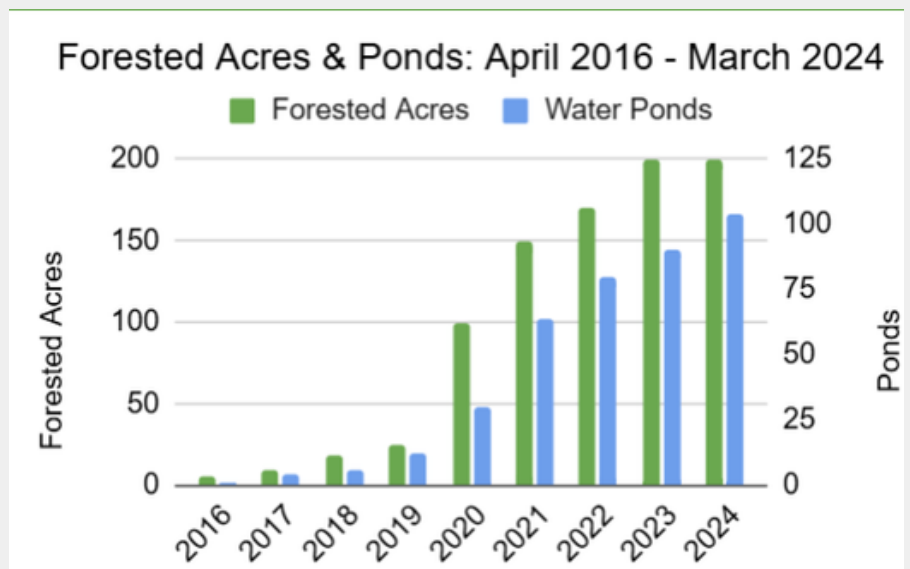
Tree plantation picked up speed thereafter. This phenomenon of non linear growth will take place in forestation of barren destroyed land. As seen in the time to create a forest, non-linearity is also visible in the tree density of the forest. Unlike organized tree plantation one sees typically in cities, a forest is uneven, has high and low tree density, barren patches, shrubs, hilly terrain etc. Consequently, Forests created by 14 Trees Foundation have 250 to 400 trees per acre. No resource (such as water pipeline, borewell creation etc) is used in the 14 Trees model.



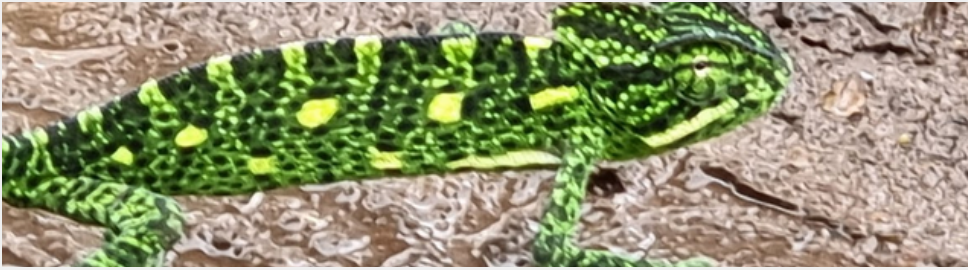
Trees Forested Acres & Water Ponds

Starting with four acres of uncultivable land in 2013, a forest was created, now grown to 200 acres of private land offered by owners and marked for 14Trees, access to ~1200 acres of public land, 125 water ponds with storage capacity of ~156 million liters and over 135,000 native trees. 14 Trees Foundation has over sixty surrounding villages. The chart depicts growth of forest (acres), trees and ponds since 2016.

The methodology to design storage ponds and percolation ponds was designed along the way. Pond locations were decided such that each acre of the potential land for forestation has a nearby storage pond. Percolation ponds are critical as they hold rainwater temporarily. The water seeps into the ground increasing the water table. As the water table rose, it created suitable conditions for reforestation.



Biodiversity



The United Nations decade on Ecological Restoration runs from 2021 to 2030 with the purpose to facilitate global cooperation for the restoration of degraded and destroyed ecosystems. At 14 Trees, the vision is to undertake ecological restoration with sustainability. The foundation has been restoring degraded barren lands since its inception with a vision to regenerate biodiversity in native forests for the well being of the planet and people.

Biodiversity has numerous benefits and contributions crucial for both humans and the environment. Biodiversity significantly affects carbon sequestration, which is the process of capturing and storing atmospheric carbon dioxide (CO₂) in various carbon sinks, like forests, soils, and oceans. Biodiverse ecosystems are more resilient to environmental disturbances, such as climate change, pests, diseases, and extreme weather events. Here at 14 Trees our aim is to go beyond just plantations and restore ecological balance to redefine the social and economical aspects altogether. Site visits conducted by experts have helped document the biodiversity. Some recent visitors reported that a leopard was spotted during regular surveys of flora and fauna. This gradual but visible growth signifies the outcome of our live project.

Right from inception, 14 Trees has not used external water resources for plantation and maintenance. Rain fed and percolation ponds support the needs of the site and has over the years resulted in increasing the groundwater level which has benefited the farmers in the nearby villages by increasing the water level in their wells. Emphasis on native species and systematic planning of the site has resulted in enhancing the biodiversity at 14 Trees site. These initiatives have aided the creation of an independent ecosystem.

Pune Ecological Society has conducted Ecological surveys since 2020. Based on the biodiversity survey conducted in FY 2023 - 2024, the total number of floral species observed in FY 2023-2024 were **287**, compared to 247 in the FY 2022-23. Survey report for FY 2023 - 2024 can be found in [ES Report 23-24](#).

Net-Zero Workshops

In an effort to bring together policy makers, academics and NGOs to discuss and synthesise their strategy towards creating demonstrable pilot projects for climate action, 14Trees hosted the third edition of Net-Zero workshop at IIT Gandhinagar on September 2nd, in collaboration with IIT Kanpur and the Ecological Society, Pune. The objective was to explore and understand the complexities of achieving a sustainable future and how the transition to net zero is interlinked with financial incentives and opportunities.



This edition of Net-Zero Dialogues aims to explore and understand the complexities of achieving a sustainable future through a holistic approach and how the transition to net-zero is interlinked with financial incentives and opportunities. The themes of the event revolve around how various institutions design, assess, support and implement sustainability proposals. Multiple dimensions, including social, ecological and techno-economic, in the decision-making process of net-zero initiatives and projects will also be deliberated upon.



Workshop #1 Gokhale Institute of Politics And Economics

Over the past decade, carbon neutrality has gained visible traction with various levels of involvement from government to local bodies aiming for Carbon neutrality and Net Zero by the year 2050. Hence Net Zero adapts low-carbon pathways to stabilize a sustainable future. Due to the current dominance of techno-economic aspects of achieving Carbon neutrality and Net zero a major socio-ecological aspect is often overlooked.

Recognizing this need, a team of dedicated members of Chandrakanta Kesavan Center for Energy Policy and Climate Solutions at IIT Kanpur, Gokhale Institute of Politics & Economics, Ecological Society, and 14 Trees Foundation convened for a one-day Net Zero workshop, conducted to bridge this vital gap by incorporating diverse comprehensive pathways to tackle this hurdle in sustainability.



Net-Zero Workshops

Workshop #2 IIT Kanpur

The meeting at IIT Kanpur focused on the essential topics like bringing transition by marketplaces, government policies, and the role of civil society in bringing climate action. Meeting discussions explored - creating sustainable engineering programs by using natural resources, waste management technologies, decentralized water treatment, rural microgrids to provide reliable power supply to the households., Vikalpa- to reduce the dependence on chemicals and fossil fuels, repurposing of thermal plants. To restore the ecosystem the target is to create more green jobs that average per capita of energy down. These learnings contribute to the Zero carbon plan for the utopian dream of restored ecology.



Workshop #3 IIT Gandhinagar

The purpose of the workshop at IIT Gandhinagar was green policy and financing to shape interactions that eventually gets us close to India becoming Net Zero by 2070. In a world where green energy is overtaken by energy security, and the damage from existing large scale pollutants, we need policies to modify the government operations. Green bonds, micro irrigation, and the interplay with taxes and subsidies were suggested to counter this. Furthermore, green hydrogen and solar panels for electricity production support the new technologies by the provision of subsidies.



Our Representative Projects

IIT Bombay Faculty Grove

IIT Bombay faculty grove was launched on August 26, 2023 at 14 Trees. The grove was inaugurated by Padma Shri Dr. Deepak B Phatak (Professor Emeritus IIT Bombay), Prof. Ravi Gudi (Dean ACR, IIT Bombay), Prof. Manish Jain (Center for Creative Learning, IIT Gandhinagar) and Prof. Kameswari Chebrolu (Department of Computer Science, IIT Bombay) in presence of several IITB alumni, 14Trees volunteers, Dakshana Foundation and leaders from Pune industry. The scope of this initiative is to forest five acres of land in the honour of current and retired IIT Bombay faculty since the Institute's inception! Dakshana Foundation that helps students from economically backward class of the society and those from rural India to prepare for IIT and medical entrance exams offered their land for IIT Bombay faculty grove.

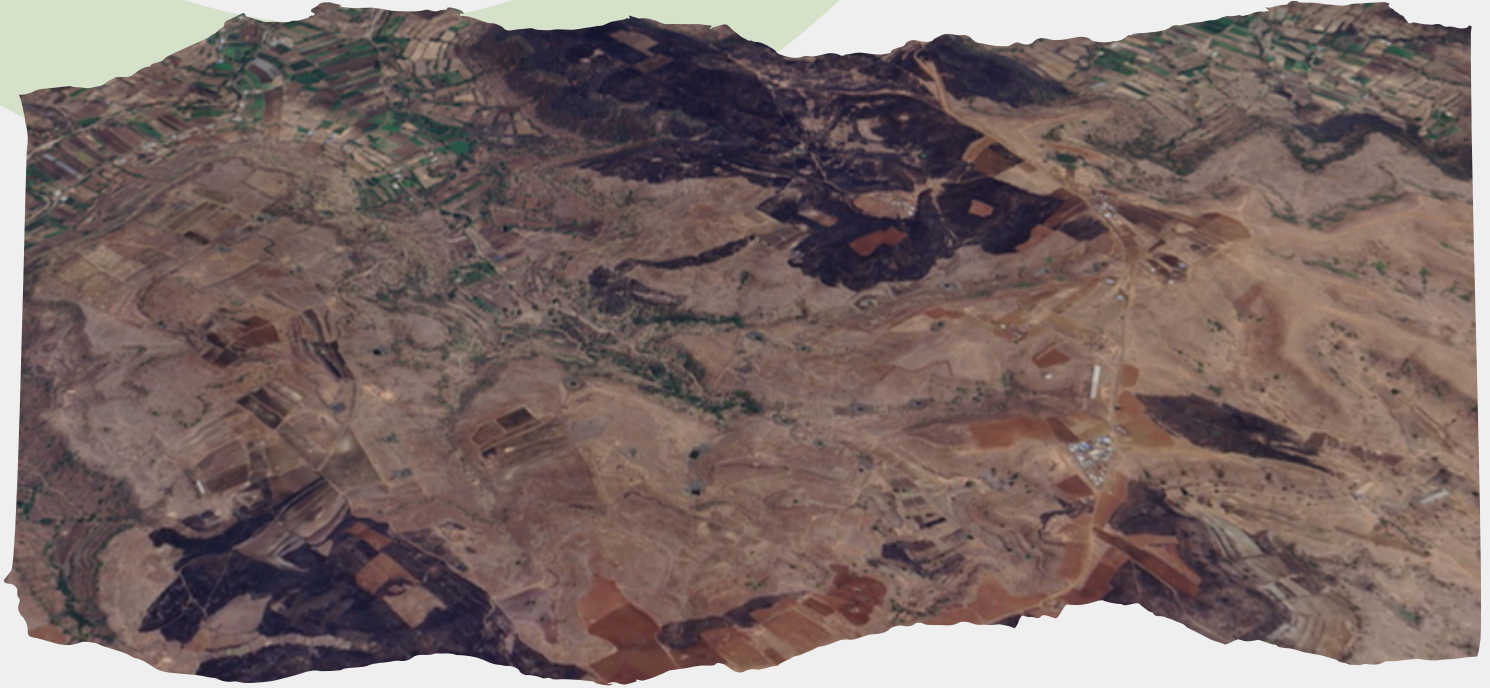
The Grove aligns with initiatives at IIT Bombay to promote ecological conservation and sustainability practices. Principal sponsor of the Grove, alumnus Shirish Deodhar describes it in his [LinkedIN post](#).



Our Representative Projects

BiNDI (Biases in NLP Models & Data for Indian Context) Summit By Google Research

Google Research organised the first BiNDI Summit in October, 2023 at Bangalore. The event brought together researchers working on Responsible Artificial Intelligence (RAI) for the Indian context. The organisers planted 55 trees at 14 Trees for each delegate and gave them Tree gifts designed entirely by volunteers and sent electronically in record time.



Dr. FC Kohli Memorial Grove

Dr. Faqir Chand Kohli (popularly known as FCK or Mr. Kohli) was the first CEO of TCS who not only built TCS but gave the world the concept of remote software services. Called the father of the Indian software industry, he was a legend who mentored and guided many other founders of software companies. He was instrumental in the formation of IIT Kanpur. Prof Dhande, former IIT Kanpur Director mentioned this during his visit to IIT Kanpur grove at 14 Trees. He passed away peacefully at the age of 97 in November 2020.

Kiran Deshpande, 14Tree Director has sponsored Dr. FC Kohli grove, 97 trees, one tree for each year of Dr. Kohli's life. Kiran spent his early professional years in TCS and worked closely with Dr. Kohli. A memoir for Dr. Kohli by Kiran can be found in his [blog](#).



Our Academic Collaborations

'Data for Public Good' Conference at IISc, Bengaluru

A tree was gifted to the special guest – Shri. Kris Gopalakrishnan (Chairman Axilor Ventures, Co-founder Infosys, President ISF) at 'Data for Public Good' conference at IISc Bengaluru on the 23rd of November, 2023. Dr. Inder Gopal (CEO of IUDX & the main organiser of the conference) appreciated the tree certificates and shared that the recipients were very happy to receive them instead of mementos.



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CHIRONJI

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Tree name: Bibba
Scientific name: Semecarpus anacardium
Tree ID: 80420
Location: IITK 85 family grove
Plantation date: 26th June 2022
Planted by: Dr. Inder Gopal
URL: dashb

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BAY LEAF

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Tree name: Bibba
Scientific name: Semecarpus anacardium
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Location: IITK 85 family grove
Plantation date: 26th June 2022
Planted by: Dr. Inder Gopal
URL: dashb

पूँस
TIRE OF THE FOREST

ir Yash,
y happy returns of the day
e's a tree planted on the occasion
our 25th birthday!



Tree name: Pal
Tree ID: 928
Scientific name: Bulsa monosperma
Plantation date: 8th October 20
Planted by: Nirmala Sami
Nirmala Sami



Symbiosis MBA Course Project Planning

The idea of the Symbiosis course project was to encapsulate the uniqueness of each micro venture to develop a full cycle plan consisting of developing the site, demographics of the employees and analyzing the consumer market along with risks associated with it. Furthermore, the project comprised other crucial aspects such as financial requirements/plan, materials, ownership and recruitment strategies



Our Microventures

8 Naturals

8 Naturals propagated its roots from the very own lands of Vetale in 2020. Aiming to educate people on the significance of growing indigenous species of flora on the land to maximize plant survival and recreate the natural balance. It puts emphasis on the landscaping and habitat restoration by sustainable practices and leveraging community support and optimizing external expenses to sustain the project.



चरो

CHERRY



John Doe,
has been planted in
name!



www.14trees.org

Tree name: Bibba
Scientific name: Semecarpus anacardium
Tree ID: 80420
Location: IITK 85 family grove
Plantation date: 26th June 2022
Planted by: Bharat Damani
Gifted by: Bhagwat
URL: dashbo



Scan this bar
the progress

Conference Sapling Gifting as a Service

The sapling gift venture aims to transform and reimagine conferences with a sustainable and environmentally friendly giveaway to inspire individuals for the green revolution.

The target audience was the businesses and corporations involved in sustainable initiatives, educational institutes and exhibitions aiming to attract attendees with eco-friendly gifts. Outreach was catered by their major pillars of digital marketing, distribution and customer support

Tree Guards

Vulnerability of the tree significantly affects the rate of global deforestation. Threats to the tree like grazing, vandalism, climate change and invasive species can be avoided by a revolutionary yet eco-friendly initiative of using tree guards. These can be generated by the local resources like bamboo to produce robust and lightweight structures allowing the essential airflow and sunlight but avoiding the threats to the plant growth. Production relies on manual labor reducing the carbon footprint additionally providing a source of income to the local community.



Highlights of the year

14 Trees Foundation is a Section 8 company and has **received the CSRI certification** in June 2023 after completing three years of operations. The CSR-1 registration is mandatory to receive CSR funding from the corporates as per the Companies (Corporate Social Responsibility Policy) Amendment Rules, 2021.

Pravin Bhagwat was a speaker at the ACM conference 2024 at Bhubaneswar alongside Bob Metcalfe who is 2022 ACM Turing Award winner (Nobel Prize of Computer Science). Bob Metcalfe was awarded a 14 Trees gift card by Pravin.

A special mention about the newsmakers from 14Trees – 8 Naturals, a micro venture which emerged from 14Trees has been awarded for the maximum number of native plants preserved by a nursery. 8 Naturals supply the saplings of native trees which are planted at 14Trees. We hope other micro ventures supported by 14 Trees also reach great heights.

14 Trees for Bob Metcalfe, 2022 Turing Award Winner



Testimonials of the year

Blog by Inder Monga

Exec. Director, ESnet, Lawrence Berkeley Labs

A beautiful blog post was written by **Inder Monga** – ‘**Greening the Barren: My Visit to 14 Trees**, Witnessing the Silent Revolution in Ecological Restoration.



The founder, Pravin Bhagwat narrated the 14 Trees story on 31st October 2023 at NITI Ayog, Delhi and **gifted a tree to Vice Chairman, NITI Ayog, Mr. Suman Berry**. Mr. Berry highly appreciated the gift and in this concluding speech announced that he plans to visit 14 Trees.
<https://twitter.com/NITIAayog/status/171937242932227975?s=20>



Prof. Abhay Karandikar, Secretary, Department of Science & Technology and former Director IIT Kanpur has been a patron of 14 Trees Foundation.



On September 25, 2023, alumni of IIT Kanpur alumni and family members from Pune visited 14 Trees to congratulate the following Distinguished Alumnus Award inductees -

- Mr. Anup Baghi (Chairman & CEO of ICICI Prudential)
- Dr. Yashwant Gupta (Director, National Centre for Radio Astronomy)

Said Samir Palnitkar, Co-Founder & VP of Zinrelo & IITK Alumnus, “Whenever I have visited 14 Trees, Pravin Bhagwat's eco-restoration initiative, I never fail to be amazed at the grandeur of his vision. We saw a really beautiful flower, growing in the wild”.

Our strength- our Volunteers



Projects at 14 Trees are managed by volunteers. Thanks to a dedicated team of volunteers, administrative costs are kept at the minimum level, enabling funds received goes into trees. Every tree that is planted can be accessed by the donor, thanks to an IT platform created by volunteers from technology companies who support 14 Trees. All the back-office work which involves creation of dashboards (for each visitor!), follow up with visitors post visit, uploading data and photos of every event, creation of gift cards, documentation, account management etc. is entirely managed by this team of volunteers. Regular meetings, training for volunteers on the operating system (Notion) and site visits are an ongoing activity at the office in IISER campus.

And this team of volunteers is also experimenting with technology to determine if it can solve problems in forestation. Another volunteer team is working at making Vetale energy independent.



Gratitude to our donors

Corporate Sponsors

There were **20+ corporate sponsors** who helped reforest 50+ acres of land planting ~ 16500+ trees in FY 2024. Of these, 16 have been first time sponsors in FY 2024, a healthy mix of existing sponsors and new sponsors. To date, 14Trees has been supported by 34 corporate sponsors. 14Trees Foundation extends heartfelt thanks to all corporate sponsors.

Individual Sponsors

Standing side by Corporate sponsors, **110 individual** donors have helped 14Trees Foundation reforest in acres of barren land with 3149 trees in FY 2023-2024. To date, 18,500 trees have been sponsored by individual donors. 14 Trees Foundation thanks individual donors and a special thanks to donors who have planted more than 100 trees each.

Environment And Social Impact

The nature of ventures who benefitted as a part of the CSR initiative include sapling nursery, bamboo products, terrace garden kit, wood carving, fire protection service, food products, tractor rental, JCB rental, saplings bag supplier, organic fertilizer and pesticides, watering pipe supplier, tree label maker, grass cutter supplier, food supplier and farming equipment supplier.

Sustainable Development Goals: SDGs : 13 of 17 map to 14 Trees activities



Get in touch



'14 Trees Foundation' is a non-profit charitable organisation dedicated to the cause of reforestation. We are inviting nature lovers to support the reforestation drive near Vetale village in Khed taluka, Pune.

This project will

- (1) transform a very large tract of ecologically devastated piece of land into a green preserve for future generations,
- (2) offer us a chance to pay our carbon debt back to the mother nature,
- (3) create employment for many tribal workers, and
- (4) bring us together in service of an environmental and social cause.

**Plant your 14 Trees !
Leave no carbon footprint behind.**

Please drop us an email at csr@14trees.org
Visit us at www.14trees.org