

Digital Green

# Digital Green Trust

## Annual Report

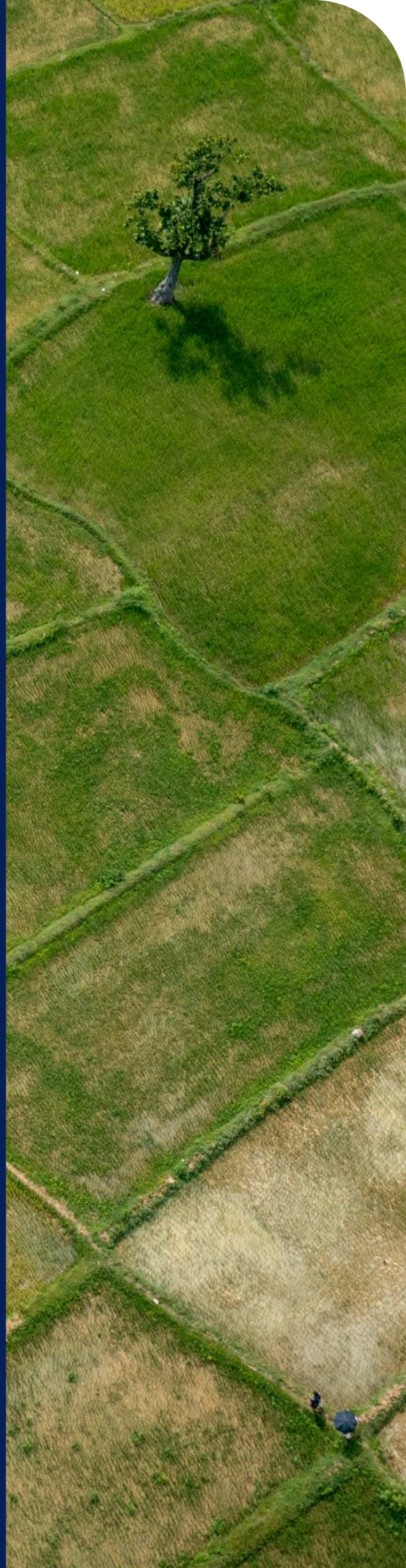
### 2024





# Index

<b>TRUSTEE'S MESSAGE</b>	<b>01</b>
<b>OUR APPROACH TO IMPACT</b>	<b>02</b>
<b>GROWING IMPACT ACROSS INDIA</b>	<b>04</b>
<b>ADVANCING SUSTAINABLE AND INCLUSIVE AGRICULTURE TO EMPOWER FARMERS ACROSS INDIA</b>	<b>07</b>
<b>FY24 FINANCIALS: SUSTAINING GROWTH AND IMPACT</b>	<b>09</b>
<b>GOVERNANCE &amp; LEADERSHIP</b>	<b>10</b>
<b>ABOUT DIGITAL GREEN</b>	<b>11</b>
<b>CONTACT US</b>	<b>12</b>
<b>NOTES</b>	<b>13</b>



# Trustees' Message

I am delighted to present our annual report for the year 2023-2024, highlighting the remarkable progress and impact of Digital Green Trust. For 17 years, we have been dedicated to empowering small and marginal farmers in India, reaching over 4.7 million individuals. This year, we witnessed significant transformations in the agriculture sector, with farmers demonstrating resilience and adaptability in the face of global challenges. Digital Green Trust remains committed to supporting these farmers through innovative digital solutions.

We believe in the transformative power of technology and actively collaborate with partners in agtech, agribusiness, and ag finance sectors. We are grateful for the Indian government's leadership in promoting digitalization of agriculture extension services. This fosters an enabling environment for modern and data-driven agriculture.

Key highlights of the year include the successful implementation of VISTAAR, a Ministry of Agriculture-led initiative that we are helping to co-create as an open digital network for extension services. We have empowered women farmers through programs in Andhra Pradesh, Bihar and Telangana, promoting climate-smart agricultural practices and strengthening women-led farmer producer organizations.

This year, Digital Green Trust has reached an impressive 1.4 million farmers, and we are continuously learning and refining our approach based on project evaluations and data analysis. As we look ahead, we remain committed to harnessing the power of technology to build a prosperous future for smallholder farmers in India. As always, we are forever grateful to our donors and supporters that enable this impressive growth and impact. With your unwavering support, we are confident in our ability to drive positive change and create a more equitable and sustainable agricultural landscape for all of India.

Sincerely,

**Tejesh Shah**

Trustee, Digital Green Trust



# Our Approach to Impact

At Digital Green Trust, we are driven by a vision to empower small and marginal farmers across India through the innovative use of technology. Our approach is rooted in the belief that technology, when used effectively, can transform agricultural practices, enhance productivity, and build resilient farming communities.

## **LEVERAGING AI AND COMMUNITY VIDEO FOR FARMER EMPOWERMENT**

Central to our strategy is the use of AI-powered tools and community videos to provide tailored agricultural advice and support. A prominent use case for creating access to timely information for farmers and extension workers through converging efforts has been the Virtually Integrated System to Access Agricultural Resources (VISTAAR), which exemplifies our commitment to digital transformation in agriculture. Promoted by the Ministry of Agriculture and Farmers Welfare, VISTAAR is an open digital network designed to optimize access to agricultural extension services across India. By leveraging AI tools, including our in-house developed Farmer.Chat, we've been able to deliver timely, context-specific advice to over 5,000 frontline workers (FLWs) across five states, including Rajasthan, Uttar Pradesh, Madhya Pradesh, Jharkhand, and Bihar, while also focusing on feedback generation to inform decision makers on advisory updates and strategy at large

The frontline workers are equipped with digital tools to provide farmers with real-time, actionable insights. The success of this initiative is evident in the high engagement rates, with a 95% user engagement and a significant increase in the number of user queries—up by 1.7 times from December 2023 to April 2024. Farmers are not only receiving timely advice but are also demonstrating increased confidence in making informed decisions about their agricultural practices.

## **ENABLING DIGITISATION OF FARMER COLLECTIVES FOR DATA-DRIVEN DECISION MAKING**

Building on our experience with farmer collectives and producer groups, we have expanded our digital efforts to include data-driven tools for extension workers and farmer collective managers. These tools are designed to provide farmers with access to targeted products, services, and market linkages, ultimately increasing their income. Alongside this, we have focused on capacity building to support data-based decision-making and stronger farmer engagement through advisory delivery, demand assessment, and business planning. Through these efforts, we have learned that digitization can significantly enhance both the growth of shareholder participation and the business success of farmer collectives.

## **FOSTERING INCLUSIVITY THROUGH GENDER-RESPONSIVE INTERVENTIONS**

In addition to our technological innovations, we are deeply committed to fostering inclusivity within the agricultural sector. This year, we developed a series of gender-focused videos and self-learning courseware tailored for frontline workers, aimed at addressing the unique challenges faced by women farmers.

Our efforts to close gender equity gaps have been particularly impactful in states like Andhra Pradesh, Telangana, and Bihar. In Bihar, we introduced initiatives such as the Potato Zero Tillage Mulching (PZTM) project, which promotes sustainable farming practices and enhances women's leadership roles within their communities. By training women frontline workers and integrating gender-sensitive content into our digital advisory tools, we have seen a marked improvement in the participation, engagement, and leadership of women farmers in their respective farming communities.



## **BUILDING CLIMATE RESILIENCE OF INDIAN FARMERS**

As climate change continues to impact agriculture globally, our approach has evolved to emphasize climate resilience. Our programs are increasingly focused on promoting climate-smart agricultural practices, with a particular emphasis on regenerative agriculture. Through our community videos and other digital outreach methods, we have successfully driven the adoption of sustainable practices that not only improve productivity but also restore and enhance the health of agricultural ecosystems.

For instance, our collaboration with the International Potato Center (CIP) and the Bihar Rural Livelihoods Promotion Society (JEEViKA) on the PZTM project has led to widespread adoption of zero tillage and mulching techniques, which are critical for sustainable potato farming. These initiatives have been instrumental in helping farmers adapt to changing climatic conditions while simultaneously improving their livelihoods.

## **LOOKING AHEAD: BUILDING ON OUR SUCCESS**

As we reflect on the strides we've made in the past year, it's clear that our approach to integrating technology with traditional agricultural practices has laid a strong foundation for future growth. However, the journey is far from over. The agricultural landscape in India continues to evolve, presenting both new challenges and unprecedented opportunities. In the coming years, we are committed to scaling our digital solutions to reach even more farmers, enhancing their capacity to adapt to changing conditions and increasing their productivity sustainably.

Looking ahead, our focus will be on expanding the reach of programs like VISTAAR to additional states and further refining the AI-powered tools that are at the heart of our strategy. We plan to deepen our partnerships with government bodies, agtech firms, and local communities to ensure that our solutions are both scalable and sustainable. By leveraging the power of collective data and AI, we aim to provide even more personalized and precise advice to farmers across India, helping them make better-informed decisions that directly impact their livelihoods.



# Growing Impact Across India

In the past year, Digital Green Trust has made significant strides in scaling our impact across India, reaching more farmers and delivering tangible results through our innovative digital solutions. Our commitment to empowering small and marginal farmers has translated into impressive numbers, showcasing the breadth and depth of our work.

## IMPACT BY THE NUMBERS

Over the 2023–2024 period, our programs have successfully engaged over 1.46 million farmers across the country, with a significant majority—over 1.06 million—being women. This reflects our ongoing efforts to promote gender equity in agriculture. Additionally, we have trained 19,438 frontline workers (FLWs), who serve as the critical link between our digital tools and the farmers who use them. These FLWs have facilitated the dissemination of 2,800 targeted advisory videos, covering a wide range of crops and farming practices. The reach of our programs extends across multiple states, with particularly strong engagement in Bihar, where we have connected with over 850,000 farmers, and Andhra Pradesh, where we have supported over 440,000 farmers.

## EVIDENCE OF PROGRESS AND OUTCOMES

Our data-driven approach ensures that we not only reach farmers but also achieve meaningful outcomes. For instance, in states like Madhya Pradesh and Jharkhand, we have seen a notable increase in the adoption of climate-smart agricultural practices, thanks to the tailored advisories provided through our digital platforms. Farmers are reporting higher crop yields, reduced input costs, and greater resilience to climate variability. This year, we also introduced new content focused on government policies and schemes, ensuring that farmers have access to the latest information that can benefit their agricultural practices.

## BIHAR FRAME PROJECT EVALUATION:

The Farmer Scorecards and video advisories developed under the Fostering Resilience in Agriculture through MRV Experimentation (FRAME) project have shown a significant behavioral change among farmers in Bihar. The evaluation revealed a notable increase in early transplanting of crops (from 71.1% to 92%) and a decrease in late transplanting (from 28.9% to 8%). Additionally, farmers who received both video advisories and scorecards were more likely to use nitrogen close to the recommended levels, resulting in optimized input usage and improved yields.

## JHARKHAND DEEP PROGRAM ASSESSMENT

In Jharkhand, the Digital Empowerment to Enhance Productivity (DEEP) program's endline assessment reported a 36% increase in the adoption of improved agricultural practices among women farmers. This included key practices such as organic farming, line sowing, and intercropping. The assessment also highlighted a significant rise in women's participation in household agricultural decisions, from 18% at baseline to 57% post-intervention.



## GENDER-INTENTIONAL PROGRAM INTERVENTIONS

Our gender-focused initiatives have led to greater participation and leadership by women farmers, particularly in Andhra Pradesh and Telangana. Evaluations of our gender-inclusive video advisories and training programs have demonstrated that women farmers who participated in these interventions are more likely to engage in decision-making processes within their households and FPOs, enhancing their economic empowerment and community leadership.

## A NATIONAL SUCCESS STORY: VISTAAR'S TRANSFORMATIVE IMPACT

VISTAAR continues to be a priority use case for optimizing and digitizing agricultural extension services across India, and its progress has paved the way for significant expansion. Over the past year, we have successfully onboarded over 5,000 frontline workers across five key states—Rajasthan, Uttar Pradesh, Madhya Pradesh, Jharkhand, and Bihar—where the network has already made a tangible impact. Building on this momentum, we have initiated the facilitation of VISTAAR in additional states, including Odisha, Karnataka, Andhra Pradesh, and Telangana. These expansions are part of our broader strategy to ensure that farmers across diverse regions can benefit from the AI-driven, real-time advisory services that VISTAAR empowers. By tailoring the network to meet the specific needs of each region, we are helping to bridge the gap between traditional agricultural practices and the digital future, enabling farmers to access timely, localized, and actionable insights that drive productivity and resilience.

### Anjali's experience in Rajasthan

Take the case of Rajasthan, where FLWs have been using Farmer.Chat to provide real-time, AI-driven advice to farmers. One such FLW, Anjali, reported a transformative experience working with a group of smallholder farmers who were struggling with declining yields due to unpredictable weather patterns.

Using VISTAAR, Anjali was able to access localized weather forecasts and crop-specific advice, which she shared with the farmers through the platform. The immediate impact was evident: the farmers adjusted their planting schedules based on the advice, which helped them avoid losses from a late-season drought. Additionally, the platform's video advisories on efficient water management techniques led to a 20% reduction in water usage, while crop yields increased by 15% compared to the previous season. Anjali's story is just one of many across the country, where VISTAAR is enabling FLWs to provide farmers with the tools they need to adapt to changing conditions and improve their livelihoods.



## **NATIONAL ROLLOUT OF FARMER.CHAT: REVOLUTIONIZING DIGITAL EXTENSION**

As part of our ongoing mission to leverage technology for agricultural transformation, we have successfully launched the national rollout of Farmer.Chat, a pioneering AI-driven chatbot designed to provide farmers with instant access to agricultural advice and information. Farmer.Chat represents a significant leap forward in our digital extension services, offering farmers a user-friendly platform to interact directly with AI-powered tools tailored to their specific needs.

Available in multiple regional languages, the chatbot has been instrumental in bridging the information gap, enabling farmers to receive real-time recommendations on best practices, crop management, weather forecasts, and government schemes. This initiative marks a major milestone in our efforts to democratize access to critical agricultural information, empowering farmers to make informed decisions that enhance productivity and sustainability using cutting-edge digital tools.

## **EXPANDING ACCESS AND ENHANCING FARMER ENGAGEMENT**

The rollout of Farmer.Chat has been strategically deployed across key agricultural states, including Bihar, Uttar Pradesh, Madhya Pradesh, and Rajasthan, where the platform is already making a significant impact. Early adoption rates have been encouraging, with thousands of farmers engaging with the chatbot daily to seek advice and resolve queries.

By integrating Farmer.Chat with VISTAAR, we have created a seamless ecosystem where farmers can easily transition between receiving general advice and more personalized, in-depth support. Moreover, we are continuously refining the chatbot based on user feedback and data analytics to ensure that it remains responsive to the evolving needs of farmers. As we expand the reach of Farmer.Chat to additional states, our goal is to make this innovative tool an integral part of the agricultural extension landscape in India, providing farmers with the knowledge and confidence they need to thrive in an increasingly digital world.





# Advancing Sustainable and Inclusive Agriculture to Empower Farmers Across India

## **ANDHRA PRADESH**

In Andhra Pradesh, Digital Green Trust has focused on empowering women farmers by promoting climate-smart agricultural practices and strengthening women-led Farmer Producer Organizations (FPOs). This year, over 212,000 (27% women) farmers have benefited from these initiatives, with a significant emphasis on enhancing the agricultural productivity and resilience of women farmers. The implementation of digital advisory services has been central to this success, providing farmers with targeted, timely advice that has led to improved yields and reduced environmental impact.

## **BIHAR**

Bihar has been a major focal point for Digital Green Trust, with extensive efforts to introduce and scale the Potato Zero Tillage Mulching (PZTM) technique. This initiative, particularly in collaboration with the Bihar Rural Livelihoods Promotion Society (JEEViKA), has reached over 850,000 (85% women) farmers, making it the largest operational state for Digital Green Trust. Thousands of women farmers across multiple districts have adopted sustainable farming practices that enhance crop yields and soil health. The success of this project is also reflected in the significant engagement with community-based video dissemination, which has facilitated the widespread adoption of these innovative agricultural techniques.

## **JHARKHAND**

In Jharkhand, Digital Green Trust has implemented the Digital Empowerment to Enhance Productivity (DEEP) program, aimed at improving agricultural practices through digital tools and training. This program has reached over 103,000 (92% women) farmers, focusing on building the capacity of women farmers and frontline workers. The DEEP program has particularly emphasized the adoption of organic farming practices and climate-smart agriculture, resulting in improved crop yields and enhanced economic opportunities for women in the state. Partnerships with local organizations like the Jharkhand State Livelihood Promotion Society (JSLPS) have been crucial in ensuring the program's broad-based support and sustainability.

## **ODISHA**

In Odisha, the Oak Foundation-supported initiative has been a cornerstone of Digital Green Trust's efforts, focusing on empowering women farmers through the establishment of women-exclusive Farmer Producer Organizations (FPOs). These FPOs have been instrumental in promoting leadership and market access among women, while also facilitating the adoption of climate-smart agricultural practices. The program has reached roughly 28,000 women farmers, helping them increase their agricultural productivity and resilience through targeted training and support.

## **RAJASTHAN**

Digital Green Trust's VISTAAR initiative has had a profound impact in Rajasthan, where it has been instrumental in modernizing agricultural extension services. Over 5,000 frontline workers in the state have been equipped with AI-driven tools, enabling them to deliver real-time, localized agricultural advice to farmers. This initiative has particularly focused on integrating weather forecasts into advisory services, which has helped farmers make informed decisions, leading to increased crop yields and more efficient use of resources. The partnership with the Rajasthan Department of Agriculture has been crucial in expanding the reach and effectiveness of this program across the state.

## **TELANGANA**

In Telangana, Digital Green Trust has made significant strides in promoting gender-inclusive agricultural practices, particularly through the rollout of video advisories designed to address the specific needs of women farmers. This year, the program has engaged over 41,000 (44% women) farmers, with a strong emphasis on enhancing the role of women in agriculture. Developed in collaboration with the Telangana State Department of Agriculture, these advisories have played a key role in encouraging the adoption of sustainable farming techniques, leading to improved agricultural outcomes and greater economic empowerment for female farmers in the state.

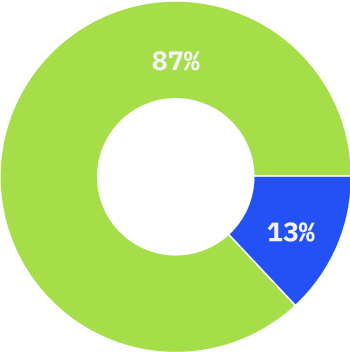
## **UTTAR PRADESH**

In Uttar Pradesh, Digital Green Trust has focused on expanding digital extension services to reach over 297,000 farmers. This effort includes the integration of government policy advisories into the digital platforms used by farmers, ensuring they have access to the latest information on support schemes and best practices. The strong partnership with the Uttar Pradesh Department of Agriculture has been essential in driving the success of these initiatives, which have provided farmers with the tools and knowledge needed to optimize their agricultural practices and improve their livelihoods.





# Financials



## EXPENSES

**255,834,886**

Total Expenses

**222,415,522**

Program Expenses

**33,419,364**

Management & General Expenses



## REVENUE

- DGF Grant 60%
- Institutional Funding 33%
- International Corporate Funding 1%
- Investment 1%
- Local Corporate Funding 5%
- Unrestricted 0%

## Digital Green Trust 2023-2024

Assets	54,229,202
Liabilities	17,636,061
Net Assets	36,593,141



# Governance & Leadership

## Trustee

- Tejesh Shah, DGT Board Chairman
- Priyanka Singh

## Board Members

- Anirban Ghose
- Neeraj Jain
- NM Prusty

## Leadership

- Ravi Shankar Sharma, Director, Programs
- Ayushi Singh, Director- DAES (VISTAAR)
- Ronali Pradhan, Associate Director for Programs, Gender & Climate
- Akash Asthana, Head, Bihar Region
- Narendra Kandimalla, Head, Andhra Pradesh & Telangana Region
- Suhasini Bali, Senior Officer, Gender
- Dr Rohit Sharma, Senior Climate Specialist
- Avinash Kumar, Sr. Head, Finance and Operations
- Parul Mathur, Head HR

Donor	Funder
Bill & Melinda Gates Foundation Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) Oak Foundation Walmart Foundation Environmental Defense Fund (EDF) Cisco Foundation Food and Agriculture Organization (FAO) Accenture Solutions Pvt Ltd	Digital Green Foundation USA International Potato Centre (CIP) Digital Green Foundation USA Digital Green Foundation USA Digital Green Foundation USA Digital Green Foundation USA Digital Green Foundation USA Food and Agriculture Organization (FAO) Accenture Solutions Pvt Ltd

**Digital Green Trust** is a public charitable trust registered under a trust deed, under Section 12A of the Income Tax Act.

The registered address is: Flat No T4, 4th Floor, #33, Racecourse Road, Swiss Complex, Bangalore, Karnataka, 560001.



# About Digital Green

Digital Green is a development organization committed to creating a world where farmers use technology and data to build prosperous communities. Since spinning off from Microsoft Research in 2008, we have fostered partnerships with several government and non-governmental organizations to reach over 2.3 million farmers across six states in India.

Over the years, we pioneered, tested, and successfully scaled our digital approach to agricultural extension. We have worked to augment existing support systems by building the capacities of a vast network of extension agents in the use of scalable, cost-effective technologies to make their work among rural communities effective, efficient, and impactful. Witnessing the positive impact of digital tools, many of our partners have also invested their resources in scaling and sustaining this approach. We will continue to collaborate with various stakeholders in the ecosystem to sustain our systems-level effort to benefit farmers' resilience and success.

As we advance, Digital Green envisions farmer organizations as micro-enterprises that control their data and lead their digitalization efforts to ensure the utmost benefits for smallholder farmer members. We are working to build open-source technology solutions co-designed with farmers to provide enhanced opportunities for them to access improved services and new income streams.



# Contact Us

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# Notes



# Digital Green

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