

ANNUAL REPORT

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India



2022-23





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MESSAGE FROM THE COUNTRY DIRECTOR

Dear friends and colleagues,

It is my pleasure to present to you Syngenta Foundation India's (SFI) latest annual report, which details the incredible work we have done in FY 2022-23. Our proudest moment this year was completing the training of 10,000 Agri-Entrepreneurs (AE), one that we celebrated with great joy. 10,000 AEs are equal to 10,000 farming clusters, and this achievement makes SFI, one of the largest foundations helping Indian smallholders. The previous year can be defined as the one in which we gained significant momentum in our goal of increasing smallholder farmers income through the AE network.

Even as the after effects of COVID-19 pandemic continued to manifest, SFI trained a record 7,052 AEs in the comfort of their homes thanks to the incorporation of digital tools in our programme. SFI during the year therefore managed to train nearly 50% of the cumulative 14,582 AEs in our family at the end of March '23. Through the meetings conducted by the AEs a record 4,30,000+ farmers across 17,000 villages have been reached.

As the on-ground and online presence grows bigger, we must acknowledge that we have come a long way from our first AE in Jawhar taluka (Maharashtra) in 2014. Not only have several of our AEs been recognized and awarded for their efforts to accelerate local agricultural development

this year, but SFI has also been felicitated for its achievements. Our efforts to introduce biofortified millets in Maharashtra was covered in the prestigious pages of Forbes magazine. SFI was added to FICCI's Sustainable Farmers Income Enhancement Compendium, and secured 1st position in the 'Award for Outstanding Sustainable Farmer Income Enhancement' category at the 2nd FICCI Sustainable Agriculture Awards.

Another highlight was the 60_decibels impact study, which captured feedback from the farmers associated with SFI and observed that 85% of the interviewees had witnessed improvement in their quality of life and that 82% reported increased incomes. The AEs getting trained with BRLPS-JEEVIKA, BMGF, ABF and IFDC will further increase the impact SFI is having on smallholder farmer lives, and enable more women farmers to participate and improve their economic condition.

All this has been possible due to the agri-businesses, governments, innovative start-ups, NGOs etc. across India that SFI has allied with. My thanks, as ever, go to our esteemed partners and their continued support. In 2022-23, we have truly managed to create a value chain that covers every possible need a smallholder could have with their help, and I am confident we will see 20,000 AEs trained this coming year.



Ours is a story that resonates strongly with India and the world. By now, we support 10,37,000+ farmers across 18 states, and help them manage 23,78,000+ acres of farms. Therefore, it is essential that we consolidate these 14,582 AEs and the smallholders they are supporting in the coming year, because their success will only ensure that they can help more farmers diversify their farms with resilient crops, utilize new innovations and combat the effects of global warming.

On behalf of the entire team at Syngenta Foundation India, I extend my heartfelt gratitude to all our stakeholders for their unwavering support and belief in our work. Let us continue

our journey together, making a positive difference in the lives of smallholder farmers and transforming the agricultural landscape of our country.

Warm regards,

Rajendra Jog

Country Director

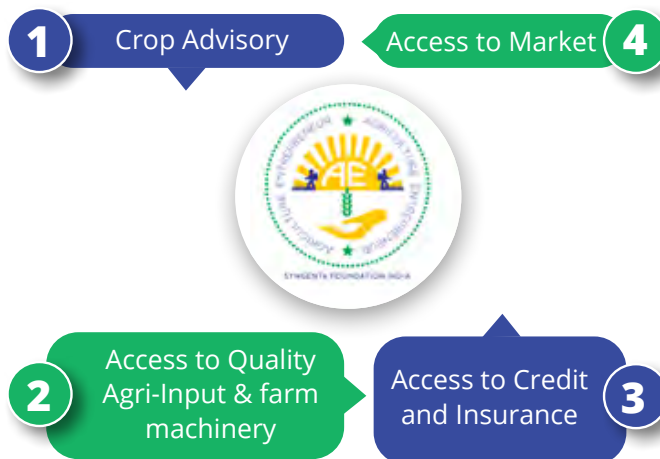
Syngenta Foundation of India

EXECUTIVE SUMMARY

SFI is an independent not-for-profit organization that works towards improving smallholder farmers income, agricultural productivity and generating livelihoods for rural youth. SFI's mission is to have small and marginal farmers participate in agricultural development by improving their access to better seeds and other inputs, increasing their knowledge of agronomic practices, establishing ease of access to credit and providing systematic market linkages. The focus is on educating small and marginal farmers about the latest developments in agriculture suited to their local needs, thereby improving their income. Small and marginal farmers with less than 2 hectares of land account for more than 86% of India's farmers. However, their contribution to the sector accounts for only 47% of the total cultivated area. Although agriculture accounts for nearly 20% of India's Gross Domestic Product (GDP), 68.5% of the total 146 million hectares of land belong to small and marginal farmers with less than 1 hectare.



Figure 1: Agri- Entrepreneurship overview





In many industries and sectors, the "last mile" refers to the final stage of delivering goods, services, or information to end-users or customers. It is often considered a critical phase, as it can greatly impact the overall success and effectiveness of a system or process. Providing reliable and affordable last mile connectivity, particularly in rural or underserved areas, is crucial for bridging the digital divide and enabling access to information, education, and economic opportunities. The Agri-Entrepreneur (AE) model was conceived by SFI in 2014 to develop and anchor self-sustaining Agri-Entrepreneurs (AEs) who can provide crucial agricultural services to smallholder farmers (SHFs). These AEs provide a wide range of services at the grassroots level such as crop advisory, agricultural inputs,

credit lines, financial literacy, market linkages etc thus empowering smallholder farmers and contributing towards alleviation of poverty and hunger. Through its programs, SFI collaborates with local stakeholders, governments, research institutions, and the private sector to develop innovative solutions and build inclusive agricultural systems. The foundation's primary aim is to significantly increase farmer incomes and create sustainable livelihoods. The program selects such candidates to go through a 45-day training program to develop a network of AEs who can fulfil the requirements of 150-200 SHFs, or roughly a cluster of 2-3 villages. The training is accredited by the National Institute of Rural Development and Panchayati Raj (NIRDPR) and National Institute of Agri Marketing (NIAM).

Figure 2 : AE Lifecycle



INTRODUCTION

India has witnessed a silent revolution evolving from food deficient and import dependent nation during the early nineteen sixties to a global agricultural powerhouse today. India has emerged as the world's largest producer of milk, pulses, jute and spices, and has the world's largest cattle herd (buffaloes). It is the second largest producer of rice, wheat, cotton, sugarcane, tea, groundnut, fruits, vegetables and goat meat.¹ The agriculture sector which is the largest employer of workforce, has experienced buoyant growth in the past two years and accounted for a sizeable share of 18.8% (2021- 22) in Gross Value Added (GVA) of the country registering a growth of 3.6 per cent in 2020-21 and 3.9 per cent in 2021-22. Growth in allied sectors including livestock, Dairy and fisheries has been the major drivers of overall growth in the sector. The resilience of the farming community in the face of adversities made agriculture the only sector to have clocked a positive growth compared to a slide in other sectors². However, its vast number of smallholders (126 million) still struggle to earn decent incomes as the sector is currently saddled with manifold issues related to low crop productivity, inefficient



land and seed treatment, water management, crop protection and harvesting & threshing. These farmers can benefit from many existing technologies and innovations but lack easy access. The problem is inadequate 'first mile access' to the farmer– or from the suppliers' point of view, 'last mile delivery', which essentially means that farmers are not able to locally access new technologies in an efficient manner.

¹[https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/02AR_170120226CD582783DB44FECB7A07AC238270E5F.PDF].

²[[https://bsmedia.business-standard.com/_media/bs/data/general-file-upload/2022-01/Economic%20Survey%202021-22%20\(1\).pdf](https://bsmedia.business-standard.com/_media/bs/data/general-file-upload/2022-01/Economic%20Survey%202021-22%20(1).pdf)]

AE PROGRAMME **STRATEGY**

The Agri-Entrepreneurship model aims to address critical challenges in the agricultural sector, by promoting entrepreneurship within the agricultural domain. This model seeks to enhance productivity, create economic opportunities, and drive sustainable development in rural communities.

The core objectives of the Agri-Entrepreneurship Programme focus on the following aspects.

- » **Gender equality:** Bringing youths' potential to agriculture through women empowerment is the core focus and SFI has strengthened the contribution to enhance the women's capability in entrepreneurship and building the farming ecosystem through them. From 19% in 2020 to 33% in 2023 March, SFI has significantly improved the reach to women AEs and farmers.
- » **Climate Smart Agriculture:** Changing environmental conditions are raising the question of agricultural sustainability, productivity and crops resistance to pest and



diseases. With the effective yet affordable crop cultivation practices SFI is facilitating the small holder farmers towards adopting the climate assertive cultivation farming practices. Major crops like Sugarcane, Cotton and Paddy are considered for the climate smart resilient interventions.

- » **Economic Empowerment:** Facilitating the transition of farmers from subsistence agriculture to agri-entrepreneurship, enabling them to generate higher incomes and improve their livelihoods.
- » **Innovation and Technology Adoption:** Encouraging the integration of modern technologies and innovative practices such as Climate Smart Agriculture leading to increased productivity, efficient resource utilization, and reduced environmental impact.

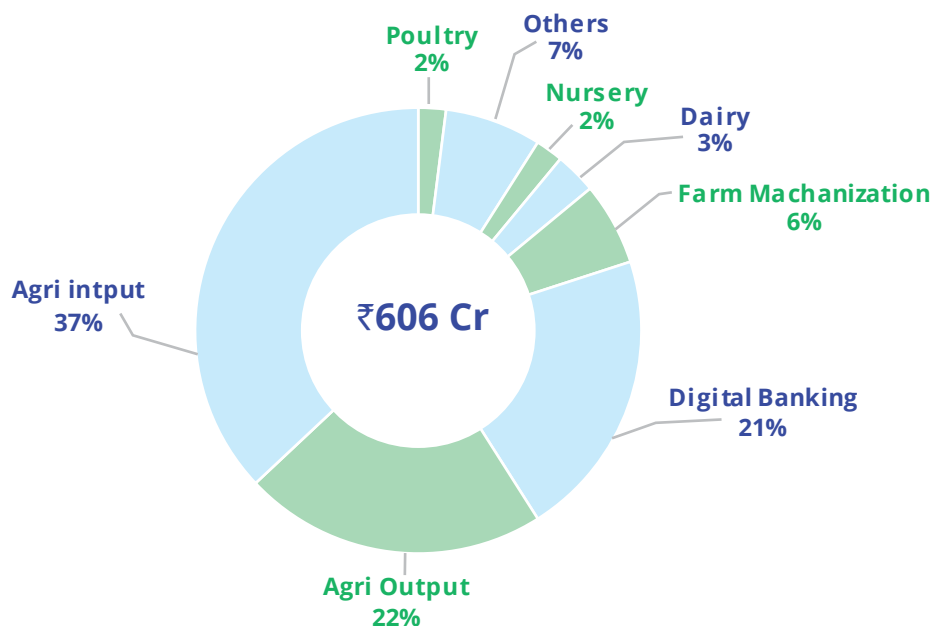


- » **Youth Engagement:** Attracting the younger generation to the agricultural sector by presenting it as a viable and attractive career option through entrepreneurial opportunities.
- » **Market Access:** Enabling Agri-Entrepreneurs to access larger markets, both locally and internationally, by promoting value addition, product diversification, and supply chain development.
- » **Sustainability:** Emphasizing sustainable practices, resource conservation, and climate resilience in agri-entrepreneurial ventures to ensure long-term viability.
- » **Capacity Building:** Training and workshops involving classroom training and

demonstration on entrepreneurship, good agricultural practices, climate smart agriculture, emerging technology & farming techniques, financial management, and marketing strategies to aspiring agri-entrepreneurs.

- » **Incubation and Mentorship Support:** Guidance to newly certified Agri-Entrepreneurs to develop their business plans and establish linkages with market, credit institutions.
- » **Technology Dissemination:** Reviewing and promoting adoption of technological practices suited to local conditions and demonstration for adoption.

Figure 3: Archetype wise transactions of our AEs





- » **Access to Finance:** Forging partnerships with financial institutions to provide tailored financial products, microloans to AEs for start-up and expansion.
- » **Market Linkages:** Creating networks connecting AE with wholesalers, retailers, and export markets, facilitating the flow of products and ensuring fair pricing.

The implementation approach adopts a multi-faceted approach to facilitate the youth on their transformative journey in ushering in economic empowerment for themselves and the farming community.

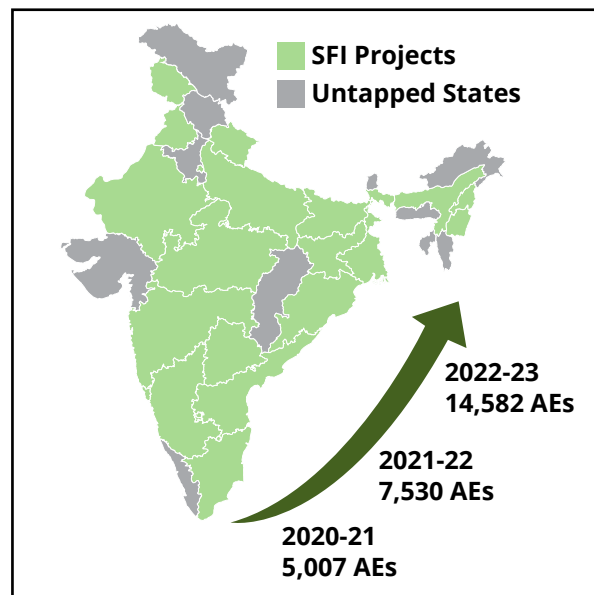
Figure 4: Popular agri-allied archetypes offered by the SFI AEs





The overall functioning of the AE programme addresses eight Sustainable Development Goals (SDGs). This network addresses the key issues of the Indian farmer, such as access to high-quality inputs, regenerative agriculture know-how, irrigation services, digital literacy, financial solutions, good agriculture practice, thus positively impacting yield and income of the small-holder farmers. The AE programme thereby serves the twin purposes of enhancing the income levels of smallholder farmers along with providing livelihood opportunities to local rural youth. Along with enhancing farm production, the AEs through their advisory inputs facilitate income diversification through other small businesses such as dairy, poultry, and vermicomposting. This programme therefore while addressing the core concept of livelihood enhancement and security also has positive externalities such as achieving gender equity, inclusive social development, climate resilience and improved health, nutrition and education outcomes for farming community households.

Figure 5: Number of AEs connected with SFI



EVOLUTION OF **SFI**

Syngenta Foundation India (SFI) was established in October 2005 as an independent not-for-profit organisation under Section 25 of the Companies Act. SFI's mission is to have small and marginal farmers participate in agricultural development by improving their access to better seeds and other inputs, increasing their knowledge of agronomic practices, establishing ease of access to credit and providing systematic market linkages. The focus is on educating small and marginal farmers about the latest developments in agriculture suited to their local needs, thereby improving their income. It has successfully implemented its flagship AE programme in various states across India, developing 14,582 AEs in 17,000+ villages. Notably, 33% of the AEs are women, contributing to gender equity. The programme has gained support from reputed foundations such as Bill & Melinda Gates Foundation, Axis Bank Foundation, The Nature Conservancy, Syngenta India Limited, Environment Defence Fund, Global Alliance for Improved Nutrition, Swiss Re Foundation,



IDH-The Sustainable Trade Initiative, Rabobank Foundation and government initiatives (State Rural Livelihood Missions), making it the largest Agri-Entrepreneurship programme in India with a comprehensive ecosystem.

SFI, over the last 16 years has been implementing programmes for small and marginal farmers in India to enhance their technical know-how and household income. Since 2014, through the route of developing Agri-Entrepreneurs, employment opportunities have been provided to rural youth. The growth of SFI and its impact on beneficiaries is a result of a well-thought-out journey map. The journey map is categorized in three distinct phases (Figure 6).



Figure 6: Three phases of evolution of SFI





- During the first phase, extension-driven agricultural projects in disadvantaged regions were the key focus areas. This was achieved by propagating new technologies, including high-performing seeds, improved agronomic practices and deploying special techniques. This had a positive impact on farmer earnings and helped SFI earn their trust.
- The second phase was built on the experiences of the first phase. Improved productivity was understood to be just one of the factors which impacts farmer income. One of the key factors to ensure increased farmer income is to connect farmers to markets. Phase II therefore focused on linkages to markets and technical advice to farmers. Under the guidance of SFI, producers' groups adopted processes that increased efficiency, such as tracking price changes by mobile phone. Increase in farmers' income was the major achievement and the indication of the scalability of these steps.
- Third phase started with the objective of replicating the successes of aggregation on a larger scale. At present, the focus is on strengthening the model with a climate focus for small and marginal farmers in the regions as well as creating an ecosystem for sustainable development which will flourish

without SFI's support. Based on this approach Agri-Entrepreneurs (AEs) are being trained by SFI to provide agricultural and financial services to the farmers. The details of the model and its success so far are provided in the latter sections of the report.

In September 2022, SFI marked an important milestone – the creation of a network of 10,000 AEs. As we mark the end of the financial year, there are a total of 14,582 trained AEs who support and provide knowledge and services to 1,037,027 farmers across 18 states, and help them manage 2,367,097 acres of land.

In November 2022, SFI also marked another milestone – through the meetings conducted by the AEs a record 4,30,000+ farmers across 17,000 villages have been reached. During these face-to-face meetings, farmers are given information about improved varieties of seeds, suitable agronomic practices, newer technologies etc. Regular 'farmer's meetings' ensure that the AE is the point-of-contact for any farmer who requires agri-advisory or training and can raise awareness about how they can tackle their issues.

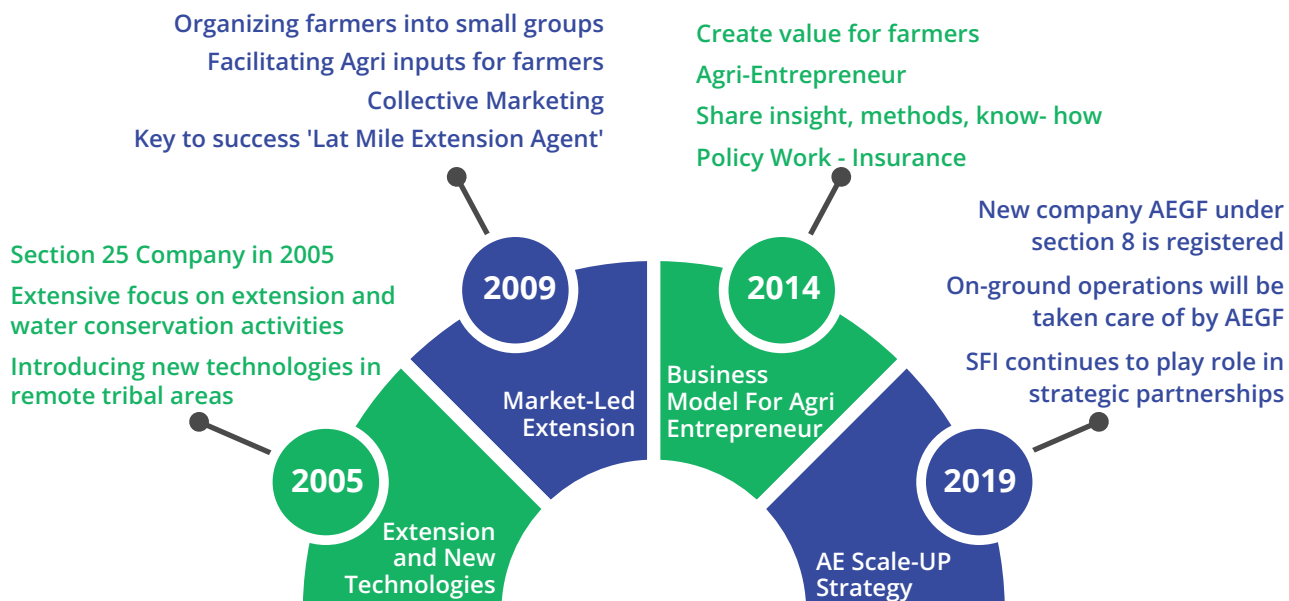
Our collaborations have also encouraged adoption of new climate-smart, sustainable cropping techniques and technologies by the farmers. The farm mechanization and crop residue management strategies implemented by our AEs



have reduced air pollution, energy consumption, water usage and overall carbon costs over thousands of acres. SFI has also continued to implement interventions such as regenerative agriculture, solar powered irrigation, biofortified crops, and Direct Seeding of Rice (DSR) with partners like The Nature Conservancy (TNC), International Fertilizer Development Center (IFDC) and DCM Shriram this year, which will accelerate the footprint and penetration of the AE network thereby catering to a large number of smallholder farmers.

These interventions ensure that the limitations of small and fragmented landholdings are countered. SFI envisages a future in which 100,000 AEs engage with 20 million SHFs across India. It is due to these efforts that it secured first position in the 'Award for Outstanding Sustainable Farmer Income Enhancement' category at the Federation of Indian Chambers of Commerce and Industry's (FICCI) Sustainable Agriculture Awards 2022, and the programme was added to FICCI's Enhancing Farmer's Income compendium.

Figure 7: Evolution of AE programme over the years





AE PROGRAMME

DASHBOARD

Table 1: Ongoing and Completed Projects during 2022-2023

Sr. No.	Project Scope	Donor	States
1	Develop 517 farm machinery AE in UP & MP	Corteva	Uttar Pradesh & Madhya Pradesh
2	Implementing DSR in identified geographies of Punjab and Haryana through the AE program	Corteva	Punjab & Haryana
3	Farmer Credit portfolio enhancement	SWISS RE Foundation	Pan India
4	Development of 10,000 Women Agri Entrepreneurs in Bihar and MP	Bill & Melinda Gates Foundation	Bihar & Madhya Pradesh
5	Multicommodity intervention through AE program	IDH	Assam
6	Test and validate climate smart agriculture technologies in Maharashtra	Environment Defense Fund	Maharashtra
7	Commercialization of biofortified Iron Pearl Millet and Zinc Wheat : Marketing	Global Alliance for Improved Nutrition	Rajasthan, Uttar Pradesh & Maharashtra
8	Develop 150 Entrepreneurs in Punjab to promote PRANA (Promotion of Regenerative Agriculture and No-Burn Agriculture)	The Nature Conservancy	Punjab



Sr. No.	Project Scope	Donor	States
9	Small Tea Growers Sustainability Platform through AE model-Phase 1	IDH	Assam
10	Commercialization of biofortified Iron Pearl Millet and Zinc Wheat : Production	Harvest Plus	Rajasthan, Uttar Pradesh & Maharashtra
11	Set-up 76 solar irrigation projects and capacity build farmers on solar irrigation*	FICCI	Odisha, Jharkhand & Assam
12	Improving Farmers' Income through Agri Entrepreneurs: Pilot of 150 AEs*	Samunnati	Madhya Pradesh & Maharashtra

* Implementation partner Agri Entrepreneur Growth Foundation(AEGF)

Table 2 : New Partnerships during 2022-23

Sr. No.	Project Scope	Donor	No of AEs created
1	Creation of 600 Accelerating Farmer Income Enhancement Champions in 3 districts of Telangana	International Fertilizer Development Corporation	Telangana
2	Creation of 1850 Agri Entrepreneurs to support 92,000 Small Holder Farmers*	Axis Bank Foundation	Maharashtra
3	Small Tea Growers Sustainability Platform through AE model-Phase 2	IDH	Assam
4	Promotion of Regenerative Agriculture and No-burn Agriculture: 4000 AEs	The Nature Conservancy	Punjab
5	Development of Modern Climate Smart Agriculture Village	NABARD	Maharashtra

* Implementation partner Agri Entrepreneur Growth Foundation(AEGF)



Figure 8 : Partners of Syngenta Foundation India





Table 3: Number of trained AEs, associated farmers, and acreage.

LOCATIONS	AE	FARMERS SERVED	ACREAGE
Andhra Pradesh & Telangana	590	38,844	1,18,119
Assam & West Bengal	355	23,540	1,01,450
Bihar	2,946	3,33,241	3,29,153
Jharkhand	424	36,152	94,212
Karnataka & Tamil Nadu	180	10,436	33,321
Maharashtra	3,162	2,11,293	4,76,303
Madhya Pradesh	1,271	1,25,765	6,04,299
Odisha	480	44,233	69,972
Punjab	1,961	99,996	19,621
Rajasthan	250	8,320	33,303
Uttar Pradesh	845	77,810	1,02,400
Others	2,118	1,27,393	3,96,525
TOTAL	14,582	11,37,023	23,78,678

Note: The numbers above do not include AE in training

AE PROGRAMME **IMPACT**

Syngenta Foundation India (SFI) was established with a vision to ensure a bright future for the smallholder farming community. The mission of the organization is to strengthen smallholder farming and food systems by catalyzing market development and delivery of innovations, while building capacity across the public and private sectors. The context in which the program works are –

- To catalyze agricultural development, rural employment, and environmental sustainability through Agri-Entrepreneurs (AEs)
- AE are rural youth trained in agronomy & entrepreneurship. Work with 150-200 farmers in a cluster of villages

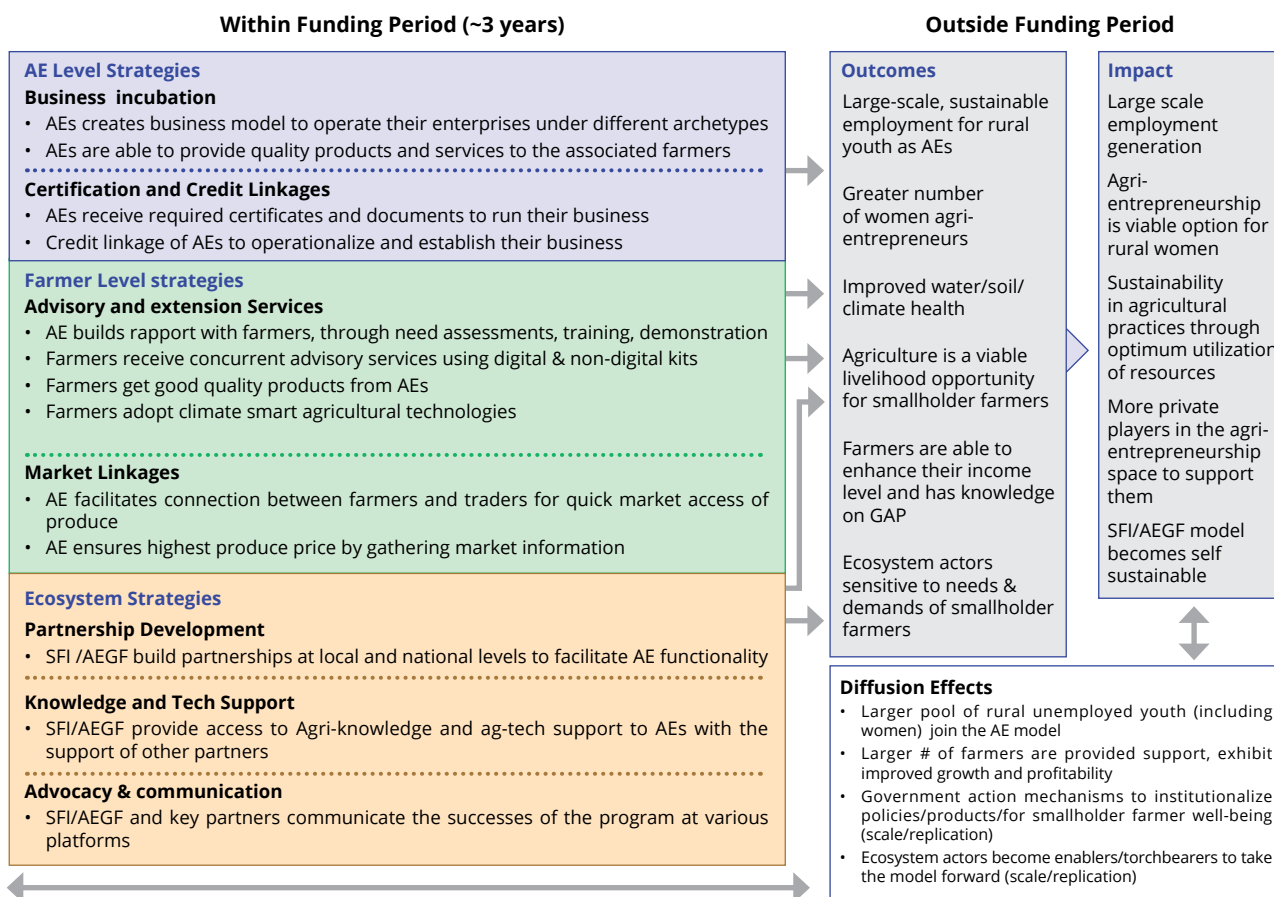


- AEs act as a one stop resource provider for customized farm & off-farm services (hyper local change agents). As farmers income increases, AEs expected to build sustainable revenue models.
- To build an enabling ecosystem, AEGF/SFI has collaborated with governments, donors, and other ecosystem actors

To measure the impact and track the progress, we have designed an organization-level Theory of Change (TOC), which is showcased below. Along with the broad TOC, we also follow project level TOCs for the larger projects.



Figure 9: Theory of Change



As stated in the above sections, SFI is promoting AE model since 2014. To know the effectiveness of the program and measure the impact in both AEs and the farmers, we do periodic assessments. During the last year, the project team achieved a great milestone of creating 10,000 Agri-Entrepreneurs (AEs) across more than 15 states of India. This was an opportune moment for the

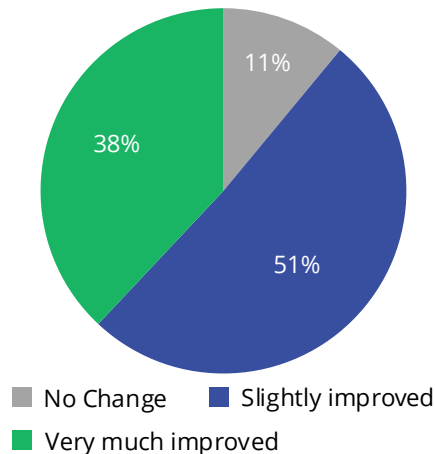
organization to reflect on its journey and assess the impact that this programme may have had on the rural youth and the small holder farmers. An independent third-party impact evaluation was therefore commissioned by 60 Decibels who interacted with AEs and the smallholder farmers. The key highlights of the studies are presented below.



AE Impact Study

1. **Quality of life** - Agri-Entrepreneurs experience meaningful improvements in their quality of life and income. 89% mentioned quality of life improved. AEs report increased incomes, ability to afford household expenses, and improved self-esteem. 83% reported increase in incomes. 35% of the respondents said that their self-esteem and social status have improved because of the services they provide to the farmers.

Figure 10: Change in quality of life of AEs



2. **Training** – Training was largely effective. Almost all the AEs found SFI's training to be useful and easy to understand. Approximately 75% of AEs apply 'all' or 'most' of it to their work. AE experiences and satisfaction with

“I have received more knowledge on farming and crops. I have also increased my knowledge about digital platforms. This has helped me a lot in dealing with my work.”

Male AE, Maharashtra, 42

the program vary by state. There is room to improve the effectiveness of the training and increase the ratio of female AEs. 17% of AEs suggest more practical trainings and 13% suggest in-person trainings. 17% want to see more diverse topics covered. However, 68% of the AEs wants to take refresher training to learn about modern technologies, market linkage, livestock related information, and potential to work in other archetypes.

3. **Farmers served** - Each AE serves, on an average, more than 200 farmers, out of that 32% are women farmers. Farmers retention

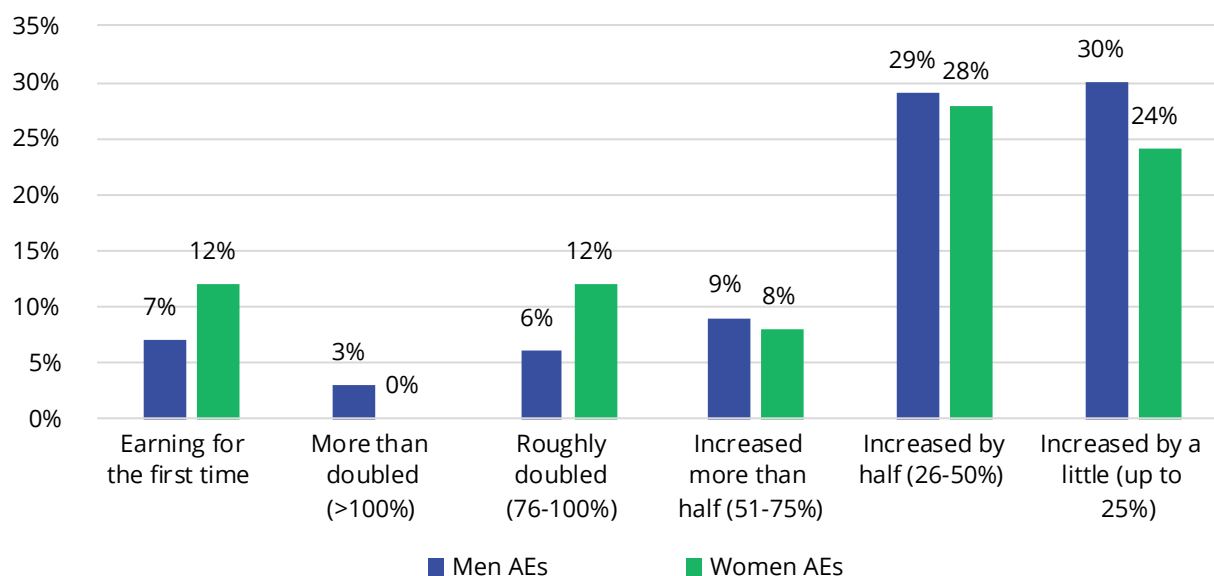


is high as 46% of the AEs reported that three fourth of the farmers, with whom they have started working, are still associated with them. The major reason of stickiness of the farmers are frequent visit by AEs to their field or meeting them frequently, as 2 in 3 AEs communicate with farmers at least weekly or more frequently.

4. **Increase in income of AEs** – Four in five AEs have reported that their income has increased after joining AE program. More than 70% of the total women AEs have reported the

increase in income, whereas, 12% of them have started earning for the first time. The Figure 11 below demonstrates the percentage increase in income for men and women AEs separately. 47% of men AEs and 48% of women AEs have increased their income by half or more than half. There is a strong link between income change and AE satisfaction levels. Income is also linked to training effectiveness. Of those who say their income has 'very much increased', 87% report 'all' of the training easy to understand compared to 48% of AEs who report no change in income.

Figure 11: Increase in income of AEs



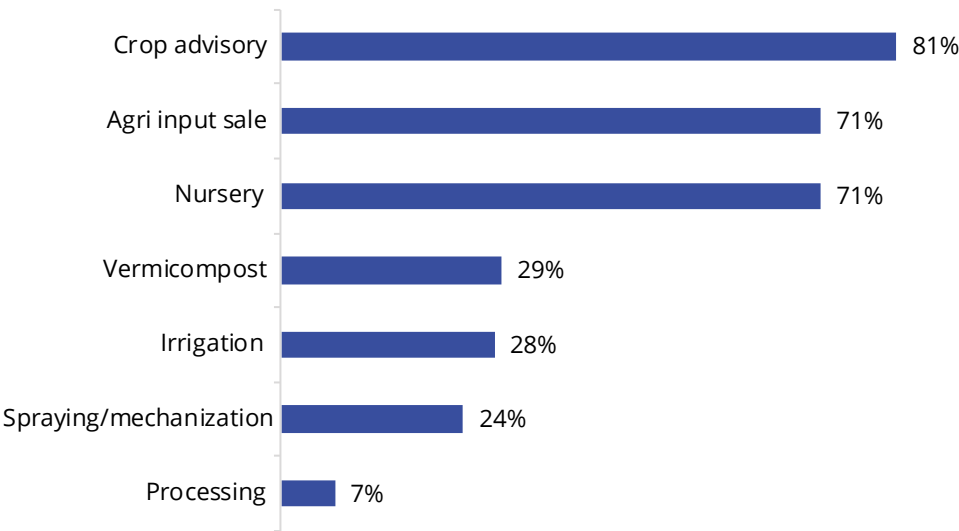


The AEs who mentioned that their income has improved, 56% of them accept that this improvement in income is the most important quality of life improvement they experience.

5. **Services provided by AEs** - The major services provided by the AEs are crop-related services (96%), Digital banking and market-related services (62%), and livestock-related services (31%). Under crop related services (Figure 12) the most demanding services

are agri advisory services, agri input sale, and nursery. There are other services also in demand under crop related services like vermicompost, irrigation facilities, spraying and farm mechanization, etc. 49% of the AEs accept that the crop related services are most valued services among the farmers. If we talk about the income generating services of the AEs, Farm input sale and digital banking services are the two main contributors of their income.

Figure 12: Breakup of crop related services provided by AEs





Farmer Impact Study

Through the AE programme, SFI has reached out to approximately 1.3 million farmers (27% are women) across the country, and it is highly

encouraging that more than 60% of the farmers who are accessing services and products from the AEs are promoters of this program.

“AE is very accessible and gives advice on farming whenever I require. One can call her and she would promptly respond over the phone. She personally visits farmers field so is aware of what needs to be done. Many in our community benefit from her support. Farmers also make better profit with her advice.”

Female Farmer, Bihar, 39

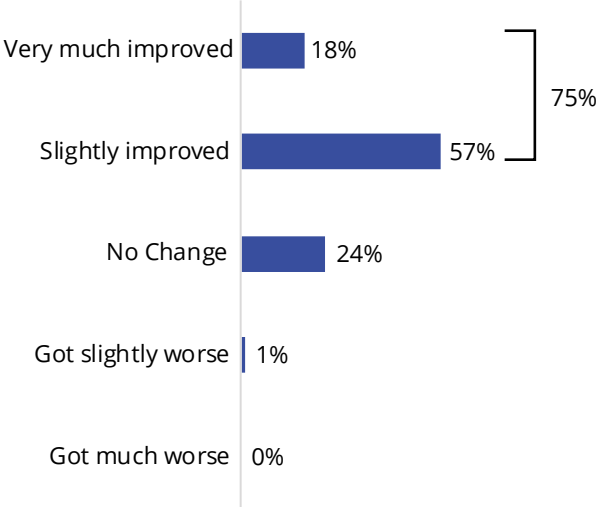
According to the survey the farmers interviewed are mostly male (23% women farmers) aged 19-52 who have been working with AEs for more than a year. The key findings related to changes in farmers are:

1. **Quality of life** - 75% of the farmers reported the improvement in their quality of life. Now they are spending more on education, health facilities, and also investing in agriculture. They say that their technical knowledge on farming has also enhanced.

2. **Way of farming** - 83% of them say that due to AE program, their way of farming has improved. Now they are practicing the agriculture in better way with quality inputs and good practices. They shared that they have limited the use of fertilizers and used good quality seeds to reduce the investment as well as increase the productivity. They also started doing organic farming at some places. 62% of farmers have reduced their fertilizer use due to the advice provided by AE. 4 in 5 farmers reported improved access to quality fertilizer.

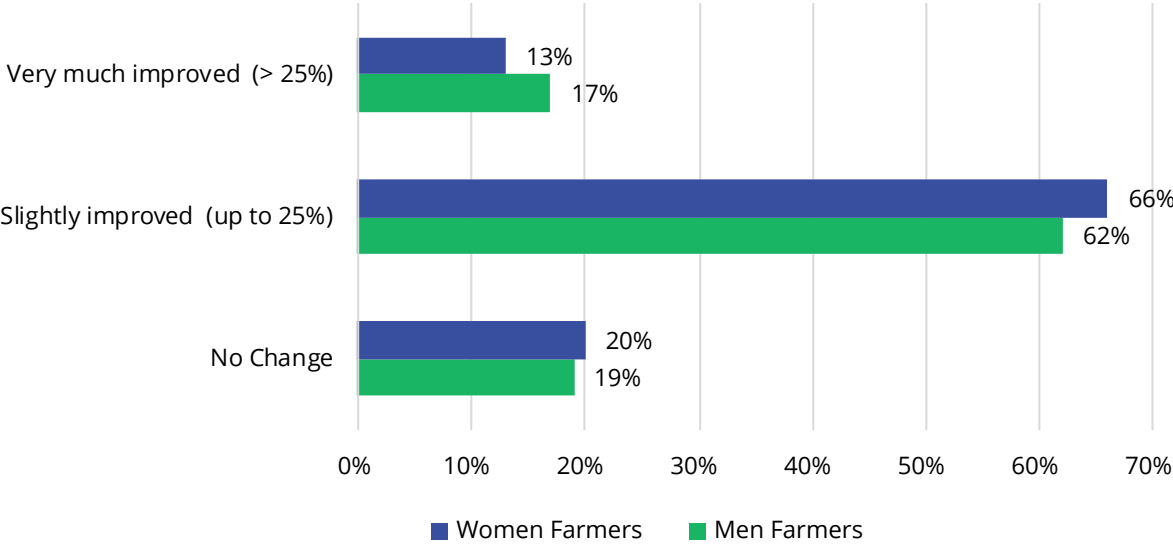


Figure 13: Improvement in quality of life of the farmers



- 3. **Women farmers** - Extending the support to women farmers is also one of the mandates of SFI, as women constitute a significant proportion of the agricultural workforce in India as it employs 80% of rural women. 23% of the total interviewed farmers are women, and 67% are promoters. They are happy about getting all the services and products at the door step. The presence of AE in the village with the bundle of services has enabled women to upgrade their knowledge and escalate their income level.
- 4. **Farmer's income** - 79% of the farmers confirmed that their income has increased due to AE program and services provided

Figure 14: Increase in income of the farmers





by the AEs. Approximately half (48%) of the farmers accepted that the income has increased by half or more. The foremost reasons leading to the increase in income are a rise in crop production, reduced cultivation cost, and a surge in crop prices due to market linkage and other reasons. In Figure 14, we may see that even four in five women farmers have confirmed the increase in income after getting associated with SFI AEs. The ultimate goal of the AE program is to increase the income of smallholder farmers including the women farmers and the result we got in the study is very encouraging and motivating.

5. **Increase in crop production** - 4 in 5 farmers reported that the production of their crop or dairy products have increased after associating with the AEs. They have given credit to the adoption of new technologies and quality agri input products for increase in crop production. More than 40% of the farmers have adopted intercropping. Of those farmers, slightly over a third adopted this because of their AE.
6. **Farmer satisfaction** - Farmers are satisfied with AE services. Frequent AE communication drives higher satisfaction. Farmer satisfaction can be accelerated by deepening AE engagement levels. More than 50% of the

farmers reported that the AEs visit them at least once in a week.

7. **Suggestions** - There are two major suggestions made by the farmers - more involvement of AEs and more topics to be covered by them during the training and farmer meetings.

The study has well presented the views and expectation of AEs and farmers. In one hand, the positive outcomes are very encouraging and motivating to continue the good work in the field, on the other hand it also gave an opportunity to understand the pain point of both the group of respondents. SFI is taking the necessary steps, for instance, revising the training curriculum, arranging refresher training for the AEs, ensuring more involvement of AEs with farmers, including more topics, which are also relevant for the farmers etc. These actions will definitely enhance the quality of the program and farmers will benefit more out of this AE program.

AE Transactions (2022-23)

The AEs operate under a revenue-based and market-linked model, so that the services they provide allow them to earn a fair income through commissions or other modes. During 2022-23, new archetypes such as floriculture; vegetable



and fruit cultivation; protected environment nurseries; dairy, fishery and poultry farming; milk collection centres, custom hiring centres and

vermicomposting were introduced alongside popular ones like sale of agricultural inputs, collective marketing, and food processing.

Table 4 : AE transactions in various archetypes

S. NO	SERVICE	TOTAL TRANSACTIONS (INR)
1	Agri-Inputs	244.58 cr.
2	Agri-Outputs	145.05 cr.
3	Digital Banking	145.09 cr.
4	Farm Mechanization	36.67 cr.
5	Nursery	10.91 cr.
6	Dairy	18.37 cr.
7	Poultry	11.31 cr.
8	Credit & Insurance	1.46 cr.
9	Others	46.80 cr.
Total		660.24 cr.

Figure 15 : AE Programme Impact

Agri-Entrepreneur Performance Snapshot

Agri-Entrepreneurs experience meaningful improvements in their quality of life and income. There is room to improve the effectiveness of the training.

Practicality of Trainings 24% applied 'all' of the training to their work as an Agri-Entrepreneur	Impact 85% quality of life improved	What Impact <ul style="list-style-type: none"> • 38% mention increased income • 23% talk about affording household bills and expenses 	Farmer Interactions 67% communicate with their farmers daily, 2-3 times a week, or once a week	Agri-Entrepreneur Voice "I learned how to interact with farmers and make them listen or respond to me. Before it was very difficult as they would just not listen to me. I also gained respect at home as a woman." – Female, Maharashtra, 35 Data Summary Company Performance: 151 Agri-Entrepreneur phone interviews in November 2022 in India.
Net Promoter Score® 39 on a -100 to 100 scale	Benefit to Farmers 34% think farmers are getting very high benefits	Income Earned 82% report increase in incomes	Gender 34% female farmers served on average	

PROGRAMME UPDATES

Maharashtra

The first state where the foundation began its operations, Maharashtra has the highest number of active projects. 4,589 AEs are spread across 28 districts in association with partners such as the Environmental Defense Fund (EDF), Pragati Prathisthan, Sanskriti Samvardhan Mandal (SSM), Yuwa Mitra, Snehalaya, Gramin Samassya Mukti Trust (GSMT), Axis Bank Foundation (ABF), Samunnati, Maharashtra State Rural Livelihoods Mission (UMED), Dhan Foundation and Google. They are helping farmers adopt digital banking and Climate-Smart Agriculture (CSA), sell their produce to new clients (such as hypermarket chains), and fight crop and animal diseases. Let us look at the achievements of our AEs in various regions of the state:

Nanded: 363 AEs in Nanded held 3,400 farmer meetings this year. They reached out to over 53,094 farmers with a combined landholding of 1,83,395+ acres across 5 districts. The AEs



extended Agri-advisory services and access through 21 archetypes to these farmers. Our collaboration with the Axis Bank Foundation in the region led to the addition of 195 newly-trained AEs and a network of 12,000 more farmers with a combined landholding of 33,000+ acres.

The Nanded team enabled INR 95 crore of value in total, with a special emphasis on encouraging farm mechanization, providing market linkages, and combating lumpy skin disease in cattle, together with the local Krishi Vigyan Kendras (KVK) and Dhan Foundation. An outbreak of the disease had reduced cattle strength and productivity, especially in Maharashtra. Over 18 demonstration plots were prepared for the upcoming Rabi



season to display new interventions as well, with the team encouraging the cultivation of high-value crops like sunflowers, kidney beans, chilies, melons, and coriander for the first time in Nanded this year.

Nashik: 659 AEs in Nashik helped farmers manage their paddy crops with soil health management techniques and e-training through Krishi Abhyaas, our YouTube channel, which helps farmers access a large portion of our agri-knowledge easily. They also shared their knowledge about several crop insurance schemes they could utilize to avoid losses that have been seen because of the pandemic and low demand in the last two years.

The team has had a significant impact on market linkages in Nashik, with common crops like



cotton, soybean, onion, and jasmine flowers being marketed alongside paddy to companies such as Big Basket and Star Bazaar. They provided entrepreneurial services worth INR 50 crore to 46,000+ farmers. On average, every farmer who links their produce to the market through an AE sees a minimum 4% increase in sales prices. The bustling project location added 60 AEs to its roster this year.





Palghar: Team Palghar has been spreading awareness about soil health, safe pesticide usage, and vermicomposting with the Environmental Defense Fund (EDF). Alongside the objectives being pursued in the neighboring project locations in Maharashtra, the team in Palghar has a special mission – to help farmers in the drought-prone region use Climate-Smart Agriculture (CSA) to protect 58,000+ acres of crops.

Over 52,000 associated farmers have discussed these topics in the 1,000+ farmer meetings held by Palghar's 336 AEs and started using the state's digital crop survey project, e-Pik Pahani, to monitor their crops. AEs have also helped the farmers set up drip irrigation systems and trained them to use pheromone traps to fight pest attacks.



Vidarbha: With 1427 AEs, the Vidarbha Team is working with the Environmental Defense Fund (EDF) to demonstrate sustainable soil, water, and crop management methods like Integrated Pest Management (IPM), soil testing, and vermicomposting; and enabled access agri-

technologies like pheromone traps to combat a common issue for the region's many cotton farmers, pink bollworm attacks. AEs are becoming DGCA-certified drone pilots under our iSafe program and starting safe and efficient pesticide spraying businesses – a new archetype. Drone spraying demos were conducted in Wardha and Yavatmal districts as well.

Most launched ventures:

- Digital banking kiosks
- Milk collection centres
- Goat farms
- Custom hiring centers,
- Protected environment nurseries

The project location has trained several batches of AEs with our partners this year: 349 candidates with Axis Bank Foundation (ABF), who reached out to 21,000+ farmers (there are 214 more AEs in training, as of March 2023). 98 AEs were developed under the Samunnati project, which reached out to 11,000+ farmers. An expert team of 31 Market AEs (MAE) from the latter batches linked farmers to agri-marketing companies like Shalimar, AgriBazaar, Amravati AgroFoods, Kirti Group, Patanjali Group, etc. and the local markets. The team is providing 12 business archetypes to 1,13,638+ farmers reached through FM at the Gram Panchayat level, with support from local agricultural departments and NGOs (POCRA, ATMA, MSRLM, Nandi Foundation, etc.).



Ahmednagar: Under Axis Bank Project, our project team has been campaigning and selecting candidates to expand our reach in Ahmednagar. to expand our reach in Ahmednagar, 220 new AEs joined the project this year taking the total to 538 AEs. 2,900 farmer meetings and 25 demonstration plots of rabi crops were set up to let the district's farmers understand the advantages of agri-advisory services, high-quality agri-inputs, and modern agronomic interventions for themselves. These demonstration plots are set up in a small part of an associated farmer's land and used to provide a real-time comparison between the crops grown traditionally and modern ones. AE's businesses generated a whopping INR 58 crore of transactions, out of which INR 39 crore were attributed to high-quality agri-inputs – utilized for the cultivation of 109,000+ acres by 48,000+ farmers. Another major archetype the

Ahmednagar Team has worked on is providing market linkages for onions, soybeans, and bajra produce, which generated INR 8.1 crore of agri-outputs.



Jalna: The project team in Jalna district with 275 active AEs provided agronomic services for 42,000+ acres and set up 9 demo plots. The team generated INR 14 Crore of value, mainly by selling INR 4 Crore of produce and enabling INR 3 Crore of digital banking transactions for 10,000+



farmers. Most of these transactions are the result of a small kiosk set up in AE homes or offices for farmers to use. The micro-commission on each payment is beneficial to the AE, while the kiosk

enables farmers to make and receive all sorts of payments digitally. In the coming quarter, Jalna Team will see 200+ candidates selected under the ABF collaboration join its ranks.



सिन्नर : दोडी बुद्रुक गावत शेतकऱ्यांना डायरी वाटप करताना गोकुळ कडभाने, भूषण अहिरे, ए. डी. अल्लाट, डी. सी. साळुंखे, श्रीहरी केदार, प्रदीप भोर व सुरेश शेळके आदी.

सिजेंटा, एईजीएफकडून शेतकऱ्यांना डायरीवाटप

सिन्नर : सिजेंटा फाउंडेशन इंडिया, एईजीएफकडून दोडी बुद्रुक गावत शेतकऱ्यांना डायरी वाटप, तसेच शेतकऱ्यांना येणाऱ्या अडचणींचे निवारण करण्यासाठी मदत करण्यात आली. या कार्यक्रमास सिजेंटा फाउंडेशन इंडियाचे सिन्नर प्रकल्प अधिकारी गोकुळ कडभाने उपस्थित होते. नाशिक प्रोजेक्ट लीड भूषण अहिरे यांनी व्हिडिओ कॉन्फरन्सिंगद्वारे शेतकऱ्यांना अक्सिस बँक फाउंडेशनचा कृषी उद्योजक विकास प्रकल्प कार्यक्रमाबद्दल माहिती दिली. यात दूध व्यवसाय, शेळीपालन, कुक्कुटपालन, डिजिटल बँकिंग, नर्सरी व्यवस्थापन असे अनेक व्यवसाय सुरू करण्यासाठी प्रशिक्षण व प्रात्यक्षिके दिले जातात याची माहिती दिली. याप्रसंगी मंडळ कृषी अधिकारी ए. डी. अल्लाट, कृषी पर्यवेक्षक डी. सी. साळुंखे, कृषी सहाय्यक श्रीहरी केदार, प्रदीप भोर व सुरेश शेळके यांनी उपस्थित शेतकऱ्यांना मार्गदर्शन केले. समूह प्रवर्तक योगेश आव्हाड व कार्तिक केदार उपस्थित होते. सुखदेव आव्हाड, गणपत केदार, रघुनाथ आव्हाड, गजानन सांगळे, विठ्ठल आव्हाड, विलास आव्हाड आदी शेतकरी उपस्थित होते. कार्यक्रमात शेतकऱ्यांनी आपले अनुभव कथन करून प्रकल्पातील यशस्वितेवर चर्चा केली.

सिजेंटा फाउंडेशन व अग्रीकल्चर ग्रोथच्या माध्यमातून शेतकऱ्यांना मिळणार नवसंजिवनी

दै. पुण्य विचार • मुन्वाड (प्रतिनिधी)

- मुन्वाड तालुक्यातील ओजीबले गावात सिजेंटा फाउंडेशन आणि अग्रीकल्चर इंटरप्रीनिअर ग्रोथ फाउंडेशन यांच्या पालघर प्रोजेक्ट मधील ए.ई.एम. प्रणय देसले यांच्या अंतर्गत एरिथात माध्यमातून डेमो प्लॉट देऊन शेतकऱ्यांना नव - नवीन पिकांच्या माहिती साठी प्रात्यक्षिक प्लॉट बनविण्यात आला आहे आणि या प्रात्यक्षिक प्लॉट ला आत्तापर्यंत २८३ शेतकऱ्यांनी भेटी देऊन माहिती घेतली आहे. या प्लॉट मध्ये टिडा या फळ भाजी पिकाचे उत्पन्न ओजिवले येथिल शेतकरी गणेश पवार यांच्या शेतात घेतला



असून यात मल्विंग पेपर, डीप, भेसला डोस आणि दोन वेग वेगळ्या जातीचे लागवड केली

असून त्यात शेतकऱ्यांना उपन्न घेत असतांना नवीन पिके व नवीन पद्धतीचा अवलंबून करून उत्पादन कसे वाढवता येईल यावर सिजेंटा फाउंडेशन आणि अग्रीकल्चर इंटरप्रीनिअर ग्रोथ फाउंडेशन चा महत्वाचा उद्देश असून यात करापा आणि नागीण या रोगाचा प्रसार टळल्यास चांगल्या प्रकारे उत्पन्न मिळते व या पिकात शेतकऱ्याला २०मुठेत २१४३kg इतके उत्पादन झाले असून ४८ रुपये भावाने लाख भर रुपये शेतकऱ्याला २०मुठे जागेत मिळून देण्यासाठी फाउंडेशन प्रयत्नशील राहील अशी माहिती फाउंडेशनचे प्रतिनिधी AEM प्रणय रमेश देसले यांनी दिली आहे.



Punjab

A team of 1,961 AEs has been working with our partners The Nature Conservancy and Corteva Agrosiences in Punjab to conduct on-ground reviews and advance sustainable agricultural practices like crop residue management (CRM) and Direct Seeding of Rice (DSR). The collaboration's objective is to promote farm mechanization and has reduced air pollution, energy consumption, water usage, and overall carbon costs over 25,600+ acres by sowing the land using CRM (from our Custom Hiring Centres).

The highlight of this year has been our work on the PRANA (Promoting Regenerative And No-Burn Agriculture) project, which enabled us to work with farmers on finding solutions for better crop residue management. Crop residue is a major cause of pollution, and contributes to severe air pollution in the surrounding region. Burning stubble requires labour and in many cases also causes fire related incidents.

The team has been holding farmer meetings and generating awareness about the benefits of CRM across Mansa, Bathinda, Sangrur, Patiala, Muktsar, and Faridkot, and holding field demonstrations to show farmers the benefits of using early-maturing

rice over traditional varieties to reduce stubble production by 2 to 3 tons. This has also allowed us to reach out to over 77,500+ farmers in six districts.

Punjab Team has also conducted farmer awareness meetings, gurdwara announcements, school programs, and mobile van campaigns to spread awareness about the importance of Crop residue management specifically focusing on promoting "In-situ" management of stubble. Newly joined AEs and AEMs have also been invited to exposure visits and impact assessment sessions with government officials, Krishi Vigyan Kendras (KVK), and District Agriculture Offices in six districts to strategize the widescale adoption of machines like the Super Seeder and Happy Seeder in the state.





Rajasthan



The team in Rajasthan comprises of 250 AEs has focused on introducing Iron Pearl Millet (IPM) to 8,300+ farmers, especially as we celebrate the International Year of Millets in 2023. Micronutrient deficiencies, such as zinc and iron, are a major contributor to India's malnutrition problems. Biofortification of staple crops such as wheat and pearl millet can significantly aid in overcoming the problem by facilitating access.

Wheat is an important staple crop in Punjab, Uttar Pradesh, and Bihar, which are among India's top wheat producers and consumers. According to the 558th NSSO report, per capita consumption of PDS wheat is increasing. The states of Rajasthan,

Maharashtra, and Karnataka, on the other hand, eat a lot of pearl millet. Our Commercialization of Biofortified Crops (CBC) initiative with GAIN and HarvestPlus aims to commercialize these two commodities in their respective states by taking a holistic strategy that includes interventions throughout the value chain of biofortified crops, from capacity building of producers to boosting aggregators for marketing. It puts together an end-to-end solution that allows players from many areas to collaborate and have access to knowledge and markets.

61 active AEs have helped cultivate 33,000+ acres of biofortified crops, which ensures that consumers get the micronutrients lacking in traditional produce and farmers get better yields from the high-quality seeds. The team has also been providing market linkages for the same, and connecting farmers to fellow farmers to supply IPM for their daily meals. The most popular archetype this year in Rajasthan has been goatery, with the team adding INR 1.16 cr. of transactions to the local agri-economy.



Uttar Pradesh



Uttar Pradesh is one of SFI's largest project locations. Our AE programme in the state is aided by Corteva Agriscience, and Uttar Pradesh State Rural Livelihoods Mission (UPSRLM). In Uttar Pradesh our team constitutes of 845 AEs working in 35 districts; serving 77,810 farmers; in over 1.02.400 acres of farmland. 785 active AE added INR 14.57 Crore to the agri-value chain in FY22-23 while conducting 2,000+ Farmer meetings.

In current year, the team generated leads for the screening process and interviewed 316 candidates from 85 villages, selecting 265 AEs for onboarding. A novel training program was prepared that taught candidates how to practice modern agronomy and Direct Seeding of Rice (DSR) in local dialects.

This can be attributed to the seasonal acreage plans that were collectively prepared by the team. 126 AEs registered 19,300+ farmers on the AE Digital Diary (AEDD) application and geotagged 20,000+ acres to create a regional agricultural baseline, and even provided up to INR 1,25,000 in incentives according to the number of acres sown by them. The events, organized with the help of Tata Trusts and the local Krishi Vigyan Kendras (KVK) in Lakhimpur Kheri, Bahraich and Sitapur districts trained 77,000+ farmers.

The Direct Seeding of Rice (DSR) and Commercialization of Biofortified Crops (CBC) campaigns have been particularly effective, and out of the 100,200+ acres of land managed by UP Team, 6,200+ acres were cultivated by 137 farmers using their new DSR machines in 2022. 1,040+ acres of Zinc-fortified Wheat (ZnW) and 770+ acres of mustard were also cultivated by the SFI and Corteva teams in the rabi season. The state saw the inauguration of 66 agri-input shops, 128 digital banking kiosks, 29 poultry farms, 46 collective marketing businesses, and 24 milk collection businesses.



Bihar



SFI has trained one of the largest Agri-Entrepreneur (AE) networks in India with the Bihar Team - 2,946 AEs in 33 out of 38 districts. The team generated an incredible INR 149 crore through 14 archetypes. The success of this project location can be attributed to the invaluable support provided by partners Bihar Rural Livelihoods Promotion Society (BRLPS-JEEViKA) and the Bill and Melinda Gates Foundation (BMGF), which helped SFI spread the AE model by leveraging existing rural development programs and combining them with Climate-Smart Agriculture (CSA).

In the current year we have been working with BMGF to train and help 5,000 women farmers become Agri-Entrepreneurs (AEs) – an initiative that aims to empower and recognize their efforts in developing the Indian agricultural sector. The team has also created a hyper localized network

of digital banking kiosks to facilitate e-payments between farmers and buyers and organized over 3,500 meetings for 2,50,000+ participants. 1,341 AEs have been trained with BRLPS-JEEViKA so far, and since the collaboration with BMGF was launched in 2021, adding to the total of 1,405 women farmers that have become AEs.

Our operations with BMGF have also resulted in the development of a project to strengthen the agricultural financial services available to our entrepreneurs. Stemming from research conducted to identify the specific requirements of women entrepreneurs and smallholder farmers with the help of the Asia-Pacific Rural and Agricultural Credit Association (APRACA), the project aims to provide crucial resources such as financial literacy, digital platforms, credit, and insurance.





Assam & West Bengal

Small Tea Growers (STG) account for a major portion of the total tea produced in Northeast India, and our collaboration with IDH under the Small Tea Growers' Sustainability Platform (STGSP) has transformed the fabric of agriculture in the region. The many farming techniques, technologies, and agribusinesses developed by our Agri-Entrepreneurs (AE) have reduced the Living Income Gap – and resulted in lower costs of cultivation, higher productivity, healthier crops, and ultimately, greater incomes. The focus of the SFI teams in Assam with 249 AEs and West Bengal with 106 AEs has been developing agribusinesses ranging from mushroom cultivation and tea leaf marketing to pig farming and financial advisory services, which help farmers and small tea growers (STG) diversify their income streams. 355 AEs have jointly generated INR 18 cr. this year, and helped 12,828 STGs get fair prices for their green tea leaves – and the archetype accounts for INR 16 crore of the total.

Our many efforts to help STGs are supported by IDH, and the Small Tea Growers' Sustainability Platform (STGSP) provides agri-advisory services like machine-assisted plucking, pruning, and spraying; and also implements interventions

like intercropping, in which STGs grow areca nuts, black king chillis, pepper, lemons etc. to supplement the income from their tea gardens. 50+ AEs have also been involved in setting up large-scale polyhouse nurseries to grow high-quality tea saplings. Along with Odisha and Jharkhand, two districts in Assam have also been a part of our efforts to increase SHF productivity with Micro Solar Powered Irrigation Systems (MSPIS), high-quality organic fertilizer, and seedlings, which are difficult to get in the remote states. The teams in Assam and West Bengal tested 780+ soil samples and reached 30,000+ farmers.





Andhra Pradesh & Telangana

In the captive project of Andhra Pradesh and Telangana, 590 AEs discussed orchard management and gap-filling with farmers, where fruit is a primary crop. The team tracked the progress of the associated farmers with our digital tool stack and organized 990+ farmer meetings to also discuss opportunities like cashew mulching, animal husbandry, coffee cultivation, vegetable farming, crop disease management, and market linkages.

In Telangana, a highly successful partnership between SFI, IFDC, and Walmart Foundation developed 598 Accelerating Farm Income (AFI) Champions in three districts this year. Serving over 38,000+ farmers and 1,10,000+ acres, the state teams also focused on providing market linkages and agri-advisory services for new and traditional crops alike, with cashew, groundnut, paddy, onion, cotton, and coffee linkages generating INR 15.7 Crore. These farmers were able to take a chance and diversify their crops for the first time because they had proper guidance, and many received funding from our finance partners to start their businesses, which mitigated the risks they faced. A total of INR 42 cr. was recorded in transactions from 14+ archetypes this year.

Odisha

SFI has provided the resource-poor farmers of the drought-prone state with the means to get their soil tested and enabled access to water across three districts by installing 26 Micro Solar Power Irrigation Systems (MSPIS) with partners GIZ India and FICCI. The 480 AEs in Odisha served 44,000+ farmers in FY2022-23 and developed much-needed market linkages for maize and other crops every month.

Through such efforts, the Odisha Team has generated INR 29 Crore of transactions. They held 660+ farmer meetings across 5 districts and helped 120+ farmers become AE and successfully launch their businesses. For example, with new farm machinery procured with credit from our finance partners, 30+ AE leased their services to marginal farmers at affordable costs through custom hiring centers.





Madhya Pradesh

SFI team constituting 1,271 AEs is working in partnership with MPSRLM, BMGF, and Samunnati to help farmers and several SHGs in Madhya Pradesh. By conducting over 5000+ farmer meetings, our team reached out to 125,000+ associated farmers, provided agri-advisory services for rabi crops, and taught modern agronomic practices such as mulching, double-row planting, and drip irrigation. Most of these farmer meetings included a demonstration plot visit for the participating farmers to see how DSR was highly efficient and compatible with much-needed interventions like mechanization and crop protection. SFI's efforts to introduce DSR with Corteva Agriscience have ensured that they no longer use resource-intensive methods such as transplanting seedlings and flooding fields. 108 demo plots were also set up in the crops of associated farmers.

This year, the MP team was involved in the cultivation of an impressive 600,000+ acres of farmland. They achieved this by leveraging the existing administrative and SHG networks at the grassroots level with our partners and developed 874 women AEs in eight districts. The team also leveraged the Madhya Pradesh State Rural

Livelihood Mission (MPSRLM) knowledge of the districts with the data compiled by SFI analysts to create a campaign strategy for what has become one of our largest networks of nurseries, soil testing labs, food processing units, agri-input shops, and poultry/goat farms. A team of 74 AEs also provided financial and digital support to 34,400+ market traders and marginal farmers through our digital tool stack of apps. The project locations in MP have generated a respectable INR 18.7 Crore. in transactions this year. These 874 AEs have been working with 397 new AEs trained in partnership with Samunnati and the MPSRLM team – to coordinate with District or Block Program Managers, and Community Resource Persons (CRP).





Karnataka & Tamil Nadu

SFI has trained 103 AEs in Tamil Nadu who have begun to help farmers improve their yields and keep their soil healthy with sample tests. The focus in these locations this year has been to collaborate with institutions such as the Deshpande Foundation, where the 77 AEs from Karnataka were exposed to a wide range of 18 archetypes that they could incubate and launch as their ventures.

Now, the 180 active AEs in the two states cover 3 districts and help 10,000+ farmers manage 33,000+ acres of farmland. They added INR 2.2 crores of value to the state's agricultural sector in FY22-23.





Jharkhand

Our team in Jharkhand constituting 424 AEs works in 5 districts, serving 36,152 farmers and covering 94,212 acres. The team has been studying cropping patterns in the state in the last two seasons to help farmers diversify their crops and shared their findings with them in the 700+ farmer meetings they organized. 264 AEs showed farmers how planting crops similar to potatoes, a major crop in the five districts covered, would increase their income and yield without them having to cultivate a new crop for the first time. They provided much-needed soil testing, government subsidy access, crop planning, and market linkage services; and also taught modern cultivation methods for key crops in the state, such as pest management in paddy crops and the package of practices (POP) for tomatoes.

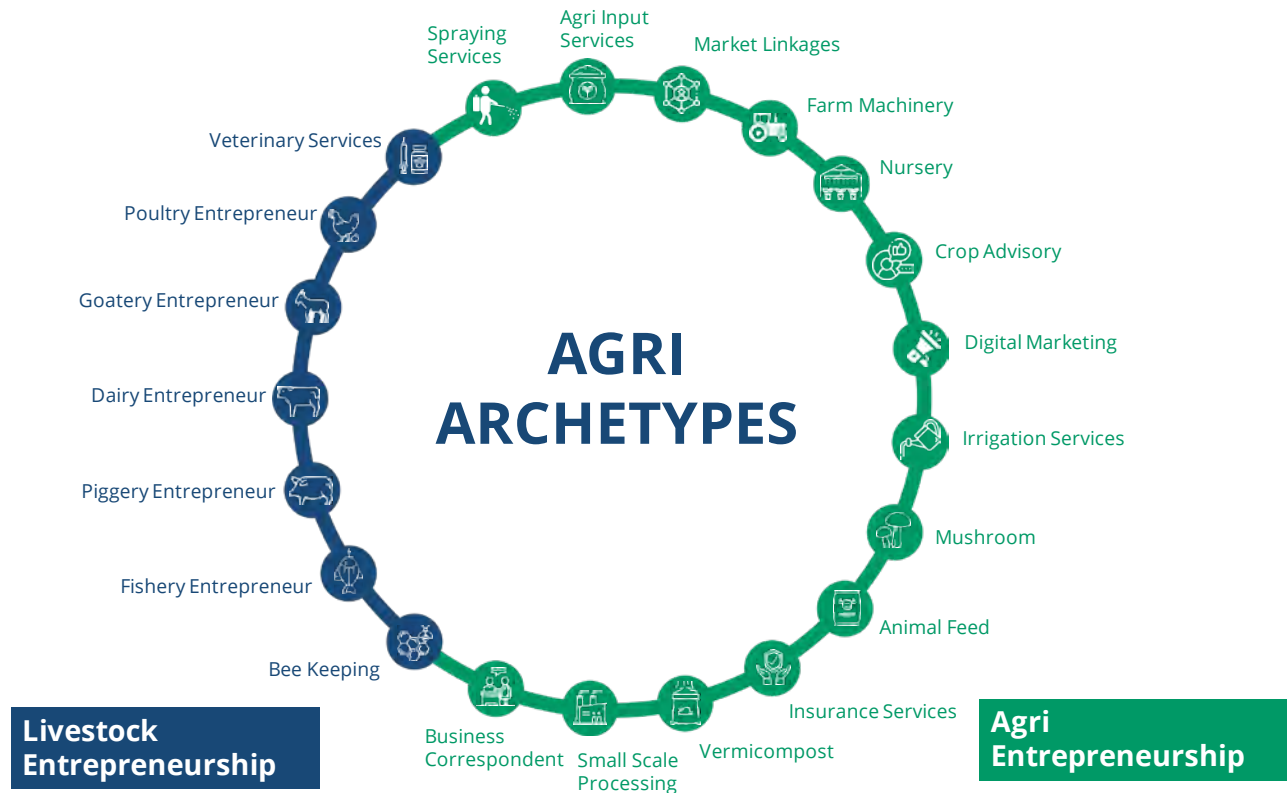
Jharkhand Team also worked with local administrations to help 390 AEs get shop licenses to enable last-mile access to high-quality agri inputs. They have also enabled 250+ farmers in

drought-prone areas to access water by providing climate-smart Micro Solar Power Irrigation Systems (MSPIS) with partners GIZ India, FICCI, and TRIF; and drip irrigation systems under the Pradhan Mantri Krishi Sinchai Yojana (PMKSY). The project team's efforts created value worth INR 19 cr. and brought INR 8 Crore. of revenue to 34,000+ farmers by linking sweet potatoes, potatoes, watermelon, onions, flowers, paddy, etc. to the market and getting them fair prices





Figure 16: Various Agri - Entrepreneurship archetypes offered by SFI AEs



CASE STUDIES

Padmabati Naik **Solar Farmer**

Ms. Padmabati Naik's journey from a traditional farmer to an empowered agriculturalist in Chhoriagad village, located in the Junagarh block of Kalahandi district, Odisha, is a remarkable tale of resilience and innovation. Supporting a family of four, Padmabatiji faced the challenges that many farmers in her region encountered: a lack of resources and access to reliable irrigation for their crops. In the past, she cultivated 5 acres of paddy during the kharif season and 1 acre during the rabi season, depending on the availability of water. However, her farming potential was limited by the absence of an efficient irrigation system. Padmabatiji's life took a transformative turn

when she was introduced to the 1 HP Micro Solar Powered Irrigation System (MSPIS), a zero-cost pump that draws water from nearby sources.

This innovative solution was made possible through the collaborative efforts of SFI, GIZ India, and FICCI, aimed at providing sustainable agricultural solutions to enhance farmer incomes in drought-prone states like Odisha, which often suffer from weak agricultural value chains. With the installation of the solar pump, Padmabatiji's agricultural capabilities expanded significantly. She could now cultivate 5 acres of paddy during the rabi season as well, effectively doubling her productivity. This newfound capability translated





into a substantial increase in income for her household, with nearly ₹200,000 in additional annual earnings.

The impact of the solar pump extended beyond the financial realm. Padmabati's success story served as an inspiration to her community, demonstrating the potential for sustainable and innovative solutions to overcome agricultural challenges in drought-prone regions. In essence, Padmabati Naik's journey embodies the power of innovative technology and collaborative efforts to transform the lives of farmers. Her transition from limited irrigation and income to a thriving agriculturalist underscores the importance of empowering farmers with access to advanced agricultural solutions. It is a testament to how resilience, knowledge, and innovation can elevate not only individual livelihoods but also the entire farming ecosystem.



Mahesh Patil **Strawberry Star**

Mahesh Patil's success story shows the transformative impact of the Agri-Entrepreneur (AE) program. In Hinganghat city, located in the Wardha district of Maharashtra, he achieved a remarkable feat by becoming the first to successfully cultivate strawberries. Mr. Patil's journey into strawberry farming began in October 2022 when he enrolled in the AE program.

With dedication and the knowledge acquired from the program, Mr. Patil cultivated an astonishing 500 kilograms of strawberries from 1,000 trays of plants in a single season. Implementing advanced techniques such as mulching and drip irrigation, he achieved an impressive yield of half a kilo of



fruit from each tray. His efforts translated into earnings of ₹4,50,000 from selling the produce. Mr. Patil's accomplishment did not go unnoticed, as he was honored at the state-level Krishi Mahotsav 2022-23 for his pioneering efforts in strawberry cultivation. Buoyed by this success, he has ambitious plans for the future. Mr. Patil intends to expand his farm to 2,000 trays before the next season, demonstrating the potential for growth and innovation in agriculture through the AE program.

Mahesh Patil's journey showcases how empowerment through knowledge and innovation can lead to groundbreaking achievements, inspire others, and pave the way for agricultural advancement. His success in strawberry cultivation not only adds diversity to local agriculture but also contributes to his own economic prosperity and the growth of the agricultural sector in his region.



Pinky Priya Udyami Didi

The success story of Ms. Pinky Kumari Priya is a remarkable testimony to the transformative power of Agri-Entrepreneurship (AE) and the indomitable spirit of determined individuals. After completing her AE training in October 2022, Ms. Priya emerged as a beacon of change and empowerment in Begusarai district, Bihar. Ms. Priya wasted no time in putting her newfound knowledge to practical use.



Over the course of just two months, she diligently collected valuable information from more than 300 farmers in Majnupur and neighboring villages. Armed with insights into their needs and challenges, she embarked on a mission to establish an agri-input shop that would not only cater to these farmers' requirements but also help reduce their cultivation costs. Today, Ms. Priya is affectionately known as 'udyami didi,' which translates to 'entrepreneur sister.' Her agri-input shop has become a lifeline for the local farming community, providing high-quality fertilizers, seeds, and invaluable crop advisory services to over 400 farmers in the previous season alone. Through her dedication and commitment, she has not only improved the agricultural practices in her community but has also made a tangible impact on the livelihoods of the farmers she serves.

Beyond the immediate benefits, Ms. Priya's efforts have also had a positive effect on her own family. By adding ₹5,000 to their monthly income, she has eased the financial burden on her parents and contributed to their well-being. Ms. Priya's outstanding contributions did not go unnoticed. In January, she received the prestigious title of 'Best Woman Agri-Entrepreneur of the Year' from SFI, a well-deserved recognition of her

dedication and accomplishments. Her success story is a source of inspiration not only for women in Majnupur but for all aspiring entrepreneurs. Looking to the future, Ms. Priya is determined to continue her mission of empowerment. She plans to teach more women farmers in Majnupur about accessible and profitable businesses, such as vermicomposting and mushroom cultivation. Her vision extends beyond personal success, as she seeks to uplift her entire community through sustainable and innovative agricultural practices. In summary, Ms. Pinky Kumari Priya's journey from AE training to becoming a respected 'udyami didi' and a 'Best Woman Agri-Entrepreneur of the Year' is a heartwarming testament to the potential of individuals to drive positive change. Her dedication, entrepreneurial spirit, and commitment to the well-being of her community serve as an inspiring example for all. Ms. Priya's story showcases the profound impact that Agri-Entrepreneurship can have in empowering individuals, fostering economic growth, and transforming the agricultural landscape.



Altaf Hussain Champion Cultivator

Mr. Altaf Hussain's journey is a shining example of how knowledge and determination can transform the lives of farmers and uplift entire communities. Prior to graduating from our training program in October 2022, he was engaged in cultivating maize and paddy on his half-acre plot in Belwa village, situated in the Kishanganj district of Bihar. Supporting a family of four, he sought opportunities to improve his income and livelihood.

During the training program, Mr. Hussain developed a profound interest in the cultivation of vegetables and fruits. Driven by his newfound passion, he embarked on a remarkable transformation. He shifted his focus to cultivating papayas and guavas, harnessing the knowledge and skills acquired during the training. By the

end of the season, Mr. Hussain's hard work and dedication paid off handsomely. He not only managed to successfully cultivate papayas and guavas but also doubled his monthly income to approximately ₹30,000. This substantial increase in earnings significantly improved his family's financial well-being and overall quality of life. Mr. Hussain's agricultural expertise and success did not go unnoticed. In March 2023, he was awarded the prestigious first prize for his outstanding cultivation skills at the state-level Bihar Bagvani Mahotsav.

His papayas, entered into the competition, not only impressed the judges but also served as a testament to the transformative power of adopting innovative farming practices. Beyond personal success, Mr. Hussain's proficiency in orchard management has had a ripple effect throughout his community. His achievements have inspired and encouraged hundreds of fellow farmers to explore and embrace the cultivation of new crop varieties, thereby diversifying their agricultural practices and income sources. Moreover, Mr. Hussain's entrepreneurial spirit and the profits he generated from his successful ventures enabled him to set up an agri-input shop in his village. This shop not only serves as a valuable resource for local farmers but also contributes to the agricultural development of the entire community.



Santosh Varma DSR Pioneer

Santosh Varma, a smallholder farmer in the village of Bargadawa Mafi, located in the Harraiya Block of Basti district, Uttar Pradesh, has undergone a remarkable transformation from a traditional farmer to an agricultural innovator and community leader. With a 4-acre family-owned plot primarily dedicated to paddy cultivation, Santosh's life took a significant turn after he completed Agri-Entrepreneur (AE) training. Returning to his village after this training, Santosh felt a newfound sense of purpose. Instead of keeping his newly acquired knowledge to himself, he made it his mission to introduce fellow farmers to Direct Seeding of Rice (DSR), an efficient alternative to traditional paddy cultivation.

Santosh's mission received crucial support from Corteva Agriscience, one of our partners, which

assisted him in acquiring a cutting-edge DSR machine. Empowered by this technology, Santosh embarked on a journey to revolutionize farming practices in his village. In the last growing season, he used the DSR technique to sow an impressive 104 acres of land. The impact of Santosh's efforts was profound. Farmers who embraced his services realized substantial savings, amounting to approximately ₹6,000-₹7,000 each.

These cost savings were largely attributed to the elimination of traditional nursery seedlings and the significant reduction in labor and water requirements for transplanting. Santosh's dedication bore fruit financially. His efforts earned him ₹1,60,000, a substantial increase in income compared to previous farming seasons. This financial gain not only improved his family's living conditions but also underscored the economic potential of innovative agricultural practices. Through farmer meetings and outreach efforts, Santosh conveyed the numerous benefits of this modern approach, including increased cost-efficiency, water conservation, and reduced labor dependency. One of Santosh's most notable achievements was inspiring over 150 farmers to transition to cultivating Zinc-fortified Wheat (ZnW). By promoting this shift in crop cultivation, Santosh not only championed sustainable farming practices but also contributed to improved crop nutrition in the region.



List of Abbreviation

ABF	Axis Bank Foundation
AE	Agri-Entrepreneur
AEDD	AE Digital Diary
AEM	Agri-Entrepreneur Mentor
AFI	Accelerating Farm Income
BMGF	Bill & Melinda Gates Foundation
BRLPS	Bihar Rural Livelihoods Promotion Society
CBC	Commercialization of Biofortified Crops
CRM	Crop Residue Management
CRP	Community Resource Persons
CSA	Climate-Smart Agriculture
DGCA	Directorate General of Civil Aviation
DSR	Direct Seeding of Rice
EDF	Environmental Defense Fund
FICCI	Federation of Indian Chambers of Commerce & Industry
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IFDC	International Fertilizer Development Center

IPM	Iron Pearl Millet
IPM	Integrated Pest Management
KVK	Krishi Vigyan Kendras
MPSRLM	Madhya Pradesh State Rural Livelihoods Mission
MSPIS	Micro Solar Power Irrigation Systems
NIAM	National Institute of Marketing
NIRDPR	National Institute of Rural Development and Panchayati Raj
PMKSY	Pradhan Mantri Krishi Sinchai Yojana
POP	Package of Practices
SFI	Syngenta Foundation India
STGSP	Small Tea Growers' Sustainability Platform
TOC	Theorry of Change
TRIF	Transforming Rural India Foundation
UPSRLM	Uttar Pradesh State Rural Livelihoods Mission
ZnW	Zinc-fortified Wheat



Financials

SYNGENTA FOUNDATION INDIA Balance Sheet as at 31 March 2023

	Notes	As at 31 March 2023 Rs.'000	As at 31 March 2022 Rs.'000
Equity and liabilities			
Reserves and surplus	3	(4,722)	5,943
		(4,722)	5,943
Non-current liabilities			
Long-term provisions	4	6,343	8,056
		6,343	8,056
Current liabilities			
Trade payables	5	-	-
- total outstanding dues to micro enterprises and small enterprises		-	-
- total outstanding dues of creditors other than micro enterprises and small enterprises		-	-
to related parties		7,309	10,947
others		10,767	1,818
Short-term provisions	4	376	1,165
Other current liabilities	6	2,703	12,047
		21,155	25,977
Total		22,776	39,976
Assets			
Non-Current Assets			
Fixed Assets	7	1,675	-
Other Non-current asset	8	131	-
Current assets			
Cash and bank balances	9	6,934	25,186
Short-term loans and advances	10	2,393	2,290
Trade Receivables	11	7,859	2,547
Other current assets	12	3,784	9,953
		20,970	39,976
Total		22,776	39,976
Significant accounting policies	1-2		
Notes to the financial statements	3-29		

The notes referred to above form an integral part of the financial statements

As per our report of even date

For B S R & Associates LLP
Chartered Accountants
Firm's registration no.: 116231W/W- 100024

Sucheta Kolhatkar
Partner
Membership No. 114192
UDIN:23114192BGYYSL4309

Place: Pune
Date: 13 September 2023

**For and on behalf of the Board of Directors of
Syngenta Foundation India**
CIN: U91120PN2005PTC139186

K C Ravi
Director
DIN- 07245784

Sannadi Baskar Reddy
Director
DIN- 07245794

Place: Delhi
Date: 13 September 2023

Place: Delhi
Date: 13 September 2023



SYNGENTA FOUNDATION INDIA
Statement of Income and Expenditure for the year ended 31 March 2023

	Notes	Year ended 31 March 2023 Rs.'000	Year ended 31 March 2022 Rs.'000
Income			
Grants and donations		250,150	209,469
Fees from activities		23,894	14,621
Transfer from earmarked fund		6,123	-
Other income	13	1,435	1,274
Total income		281,602	225,364
Expenses			
Project expenses	14	243,676	155,590
Employee Benefit Expenses	15	36,813	56,770
Depreciation		519	-
Other expenses	16	11,260	8,097
Total expenses		292,267	220,457
Excess of expenditure over income - deficit		(10,665)	-
Excess of income over expenditure - surplus		-	4,907
Significant accounting policies	1-2		
Notes to the financial statements	3-29		

The notes referred to above form an integral part of the financial statements

As per our report of even date

For B S R & Associates LLP
Chartered Accountants
Firm's registration no.: 116231W/W- 100024

For and on behalf of the Board of Directors of
Syngenta Foundation India
CIN: U91120PN2005PTC139186

Sucheta Kolhatkar
 Partner
 Membership No. 114192
 UDIN:23114192BGYYSL4309

K C Ravi
 Director
 DIN- 07245784

Sannadi Baskar Reddy
 Director
 DIN- 07245794

Place: Pune
 Date: 13 September 2023

Place: Delhi
 Date: 13 September 2023

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 Date: 13 September 2023



For further information, please contact:

Syngenta Foundation India

Amar Paradigm, Survey No - 110/11/3
Baner Road, Baner, Pune, Maharashtra 411045

www.syngentafoundation.org