Impact Assessment Report

Mission Million Trees Program

Promoting afforestation and sustainable livelihoods through plantation initiatives

Implementing Partner - SankalpTaru Foundation

FY 24-25

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Acknowledgement

This impact assessment report is the result of the collective efforts and cooperation of multiple stakeholders who contributed their time, knowledge, and perspectives throughout the assessment process. We would like to express our sincere gratitude to HDB Financial Services for commissioning this study and for its continued commitment to promoting environmental sustainability and climate resilience through initiatives such as the Mission Million Trees Program. The organisation's guidance and support at various stages of the assessment helped shape both the scope and analytical direction of the study.

We extend our heartfelt appreciation to SankalpTaru Foundation, the implementing partner for this initiative, for its consistent cooperation and openness during the assessment. Their team facilitated field visits, shared project documentation, supported stakeholder interactions, and provided valuable insights into the operational and contextual aspects of large-scale tree plantation and ecological restoration activities. Their on-ground experience and willingness to engage candidly with the assessment team greatly enriched the quality of findings and analysis.

We are especially grateful to the farmers, community members, and local stakeholders who participated in surveys, discussions, and interactions during the field assessment. Many of them shared their experiences, challenges, and perspectives related to tree plantation, land restoration, and the role of fruit-bearing and native species in supporting local livelihoods. Their voices form the core of this assessment, grounding the analysis in lived realities and highlighting the environmental and socio-economic benefits of the program beyond plantation numbers.

We also acknowledge the support received from local community representatives and field coordinators who shared their perspectives on ecological restoration, land stewardship, and the long-term sustainability of plantation initiatives. Their inputs provided important context for understanding the project's contribution to strengthening green cover, restoring degraded landscapes, and supporting rural livelihoods.

The assessment would not have been possible without the dedication of the field investigators and research team members involved in data collection, verification, analysis, and report preparation. Their diligence, sensitivity in engaging with communities, and commitment to maintaining data quality ensured that the findings presented in this report are robust and credible.

Finally, we thank all individuals and organisations who contributed, directly or indirectly, to this assessment. Their collective support has enabled the documentation of valuable insights and learnings that can inform future ecological restoration and afforestation initiatives.

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List of Abbreviations

Abbreviation	Full Form
CSR	Corporate Social Responsibility
FGD	Focus Group Discussion
HDBFS	HDB Financial Services Limited
IEC	Information, Education and Communication
IP	Implementation Partner
KII	Key Informant Interview
MIS	Management Information System
OECD-DAC	Organisation for Economic Co-operation and Development – Development Assistance Committee
SDG	Sustainable Development Goal
SIA	Social Impact Assessment

Executive Summary

Afforestation and ecological restoration initiatives are increasingly recognised in India as important mechanisms for addressing environmental degradation while simultaneously strengthening rural livelihoods. Rapid urbanisation, declining green cover, climate variability, and dependence on rain-fed agriculture continue to affect both ecological sustainability and the economic resilience of communities. National policy frameworks and environmental programs therefore emphasise the role of large-scale plantation efforts that combine environmental objectives with livelihood opportunities for local communities. In particular, fruit-based agroforestry systems have gained policy and development attention as they enable farmers to generate long-term income while contributing to ecological restoration and improved land productivity.

Against this backdrop, the Mission Million Trees initiative implemented by SankalpTaru Foundation with support from HDB Financial Services was designed as a large-scale afforestation and livelihood enhancement program across multiple locations in India. The initiative integrates two complementary components: urban plantation activities aimed at strengthening green cover in public and community spaces, and rural livelihood plantations that promote fruit-bearing trees on farmers' land. Together, these components seek to address both environmental and livelihood challenges by encouraging sustainable land use practices and community participation in plantation activities. Across locations in Assam, West Bengal, Haryana, Gujarat, Tamil Nadu, Jharkhand, Telangana and Uttar Pradesh, the program has engaged over 300 smallholder farmers, covered multiple plantation sites, and promoted diverse, locally suitable species, majorly including Apple, Lemon, Mango, Areca Nut, Coconut, Cashew, Guava, Orange, Custard Apple, Kinnu and Lychee, selected based on agro-climatic conditions and market relevance.

This assessment forms part of a broader evaluation of the program implemented across several geographies. Primary data collection for the present study was conducted in Bareilly (Uttar Pradesh), Hazaribagh (Jharkhand), Gurugram, Charkhi Dadri and Bhiwani (Haryana), and Surat (Gujarat). These locations represent a mix of rural plantation models focused on livelihood enhancement as well as urban plantation initiatives aimed at improving environmental conditions in rapidly developing urban areas. The selected locations therefore provide insights into the program's implementation across diverse socio-economic and ecological contexts. The study adopted a mixed-methods approach, including beneficiary surveys (n=44), key informant interviews with program teams and site stakeholders, and field observations to assess plantation practices, survival, and maintenance conditions.

Key insights:

The Mission Million Trees initiative demonstrates how afforestation programs can simultaneously advance environmental restoration and long-term livelihood opportunities for rural communities. In rural intervention areas, the program promotes fruit-based plantation models designed to create long-term livelihood opportunities while simultaneously increasing green cover and improving land productivity. Farmers receive saplings along with technical guidance on plantation techniques and plant care practices, with 73% of farmers reporting receipt of technical support. Species selection has largely been guided by agro-climatic suitability and local market demand, with farmers also reporting that crops are well suited to local conditions, supporting higher survival and adoption.

The intervention has demonstrated strong uptake among beneficiary farmers, many of whom belong to small and marginal farming households (91% of surveyed farmers). Farmers reported that fruit-based plantations can be effectively integrated into existing agricultural systems, particularly through practices such as intercropping with seasonal crops during the early growth stages of the trees. This integration enables farmers to maintain agricultural productivity while simultaneously investing in long-term productive assets. Additionally, 66% of farmers expect to generate income from plantations, indicating strong alignment with livelihood aspirations, while a majority also reported early-stage benefits such as improved land utilisation and farm conditions.

Fruit-based plantations are perceived by farmers as a viable pathway for future income diversification, especially among small and marginal landholders.

Operationally, the program demonstrates effective coordination

Key findings and impact

between implementing teams and local stakeholders. Farmer identification and community mobilisation were undertaken through field visits, consultations, and awareness meetings to ensure participation and local relevance.

Saplings were distributed in alignment with planting seasons, supported by regular field monitoring and guidance, resulting in a high survival rate of 92% and indicating effective implementation.

A key strength of the program is strong community ownership. Farmers actively maintain plantations through watering and protection measures, while urban plantation efforts have enhanced environmental awareness and shared responsibility for upkeep.

Way Forward

Overall, the initiative demonstrates how community-based afforestation programs can generate meaningful environmental and livelihood outcomes. With continued monitoring, technical support, and community engagement, the program has strong potential to deliver sustained ecological benefits while strengthening long-term livelihood resilience for participating communities.

High Survival Rate

92%

reported as survival rate of the sapling, indicating quality training, monitoring and maintenance practices.

Guidance and Support

73%

of farmers reported receiving guidance on how to plant and care for the saplings, suggesting effective initial capacity building.

Smallholder Farmers

91%

of surveyed farmers are smallholder farmers (with less than ~5 acres of land)

Livelihood Diversification

78%

of farmers reported that plantations will reduce dependence on single-crop farming.

Economic Benefits

66%

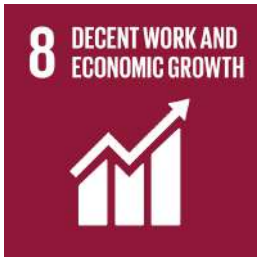
of farmers expect to generate income from the fruit trees in the future, demonstrating positive livelihood expectations from the intervention.

Technical Adoption

73%

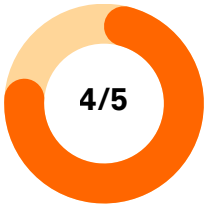
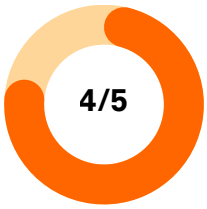
of farmers reported receiving and applying technical guidance, reflecting improved knowledge and adoption of plantation practices.

SDGs Covered

SDG	Target	Contribution Pathway
	1.5 – Build resilience of the poor and those in vulnerable situations.	By integrating fruit-bearing plantations with farmer participation, the program supports supplementary income opportunities and strengthens long-term livelihood resilience for rural households.
	2.4 – Ensure sustainable food production systems and resilient agricultural practices	By supporting agroforestry practices suited to local conditions, the program improves soil health, reduces dependence on single-crop farming, and strengthens climate resilience of agricultural systems.
	8.5 – Achieve full and productive employment and decent work for all	By promoting fruit-based plantations as long-term income-generating assets, the program enables farmers to diversify livelihoods, enhance earning potential, and move towards more stable and sustainable income sources.
	13.3 – Improve education, awareness, and capacity on climate change mitigation.	Through large-scale plantation of native and fruit-bearing trees and community engagement, the program contributes to carbon sequestration, ecological restoration, and increased awareness on climate resilience.
	15.1 – Ensure the conservation and sustainable use of terrestrial ecosystems.	By planting native tree species and restoring degraded land, the initiative contributes to improving biodiversity, strengthening ecosystem health, and enhancing green cover.

https://sdgs.un.org/goals

Program Ratings - MMT Program

PARAMETER	KEY OBSERVATIONS	SCORES
Relevance	91% of beneficiaries are smallholder farmers, indicating strong alignment with vulnerable groups dependent on climate-sensitive livelihoods. Additionally, 66% of farmers expect future income from plantations, reflecting relevance to livelihood diversification needs.	
Coherence	The Program aligns with national priorities on afforestation, agroforestry, and climate resilience. The integrated model combining rural and urban plantations complements broader environmental and livelihood-focused initiatives.	
Effectiveness	92% sapling survival rate reflects strong implementation quality. Additionally, 73% of farmers received technical guidance, supporting adoption of maintenance practices and ensuring early-stage success.	
Efficiency	Sapling distribution was aligned with planting cycles, supported by regular monitoring and follow-up. Community-based implementation and geo-tagging mechanisms contributed to efficient execution and tracking.	
Impact	66% of farmers expect income from plantations, and a majority reported early benefits such as improved land utilisation and farm conditions, indicating positive early-stage outcomes.	
Sustainability	The Program demonstrates strong relevance and effectiveness, with high survival rates and positive livelihood potential. With improvements in water management and market linkages, it is well positioned for sustained impact and scale.	
Overall	The Program demonstrates strong relevance and effectiveness, with high survival rates and positive livelihood potential. With improvements in water management and market linkages, it is well positioned for sustained impact and scale.	

**Ratings are based on the OECD-DAC five-point performance rating scale, where 5 = Very High and 1 = Very Low. For detailed rating methodology, refer to the OECD-DAC Framework section on Page 15.*

Introduction

Context Setting

India faces growing environmental challenges arising from declining green cover, land degradation, and increasing climate variability, particularly in rural and rapidly urbanising regions. According to the Forest Survey of India, while overall forest and tree cover has shown marginal increases nationally, several states continue to face localized degradation, loss of quality green cover, and pressure on existing ecosystems due to urban expansion, infrastructure development, and agricultural intensification. States such as Uttar Pradesh, Haryana, and Gujarat, in particular, face constraints in terms of low per capita forest cover and increasing ecological stress in both rural and peri-urban areas. These trends contribute to declining soil quality, reduced water retention, and heightened vulnerability to climate variability.

Tree plantation and afforestation initiatives have therefore emerged as important strategies for restoring ecological balance while supporting community resilience. In rural areas, limited livelihood diversification and dependence on seasonal agriculture often make small and marginal farmers vulnerable to income fluctuations, irregular rainfall, and climate-related risks. Integrating tree-based systems within agricultural landscapes has gained increasing attention as a sustainable approach that can improve land productivity, strengthen environmental outcomes, and create long-term livelihood opportunities.

Agroforestry and fruit-based plantations are widely recognised as viable mechanisms for promoting both ecological restoration and rural income diversification. Such interventions can enhance soil health, improve carbon sequestration, and contribute to biodiversity conservation, while also providing farmers with future income from fruit production. In addition, plantation initiatives in urban and peri-urban areas contribute to improving local micro-climates, enhancing green cover, and promoting environmental awareness among communities. In cities such as Gurugram and Surat, rapid urbanisation has further increased the need for structured plantation efforts to mitigate heat stress and improve environmental quality.

A large proportion of smallholder farmers in India depend on seasonal agriculture, often facing income instability due to climate variability and limited livelihood diversification.

EMERGING FOCUS ON AFFORESTATION AND LIVELIHOOD-BASED MODELS

In recent years, development programs and corporate social responsibility (CSR) initiatives have increasingly emphasised plantation models that go beyond tree planting alone and focus on long-term sustainability and community ownership. These models seek to integrate plantation activities with farmer participation, technical guidance, and monitoring systems to ensure survival and continued care of planted saplings. Fruit-based plantation models in particular have gained prominence as they enable farmers to establish productive assets that can generate income over time while strengthening ecological resilience.

Such approaches recognise that sustainable environmental interventions must be closely linked with local livelihoods and community participation. By supporting farmers with saplings, technical guidance, and follow-up monitoring, plantation programs can encourage long-term adoption and maintenance of trees. At the same time, urban plantation initiatives that engage local institutions and community groups can strengthen environmental stewardship and promote shared responsibility for maintaining green spaces. These integrated approaches are increasingly viewed as scalable models for addressing environmental degradation while contributing to rural livelihood security and urban ecological sustainability.

About the Program

Phase wise implementation

Phase 1

Baseline and Mobilisation:
Identification of beneficiaries and plantation sites, community mobilisation, and assessment of land use and livelihood conditions.

Phase 2

Sapling Distribution and Plantation:
Selection of suitable species, procurement and distribution, and support for plantation activities aligned with local agro-climatic conditions.

Phase 3

Capacity Building and Plantation Support:
Technical guidance on planting, watering, and maintenance practices, along with follow-up support to ensure plant survival and growth.

Phase 4

Monitoring and Sustainability:
Periodic field monitoring, use of geo-tagging for tracking plantations, and strengthening community ownership to ensure long-term maintenance and impact.

The Mission Million Trees initiative supported by HDB Financial Services and implemented by SankalpTaru Foundation was designed as an afforestation-led intervention to address environmental concerns while creating livelihood opportunities for rural communities. The project was implemented across multiple geographies through two components—urban plantations in public spaces and rural fruit-based plantations on farmer land—aligned to local ecological and socio-economic contexts.

The intervention followed a structured implementation approach combining beneficiary identification, sapling distribution, and technical guidance on plantation and maintenance. Field teams supported communities through periodic follow-ups, while digital tools such as geo-tagging were used to track plantation progress and survival.

Through this model, the project aims to establish sustainable green assets with long-term value. Rural plantations are expected to support income generation over time, while urban efforts contribute to improved green cover and environmental awareness. Overall, the initiative focuses on promoting community participation, strengthening ecological outcomes, and supporting livelihood resilience.

About the Organizations

HDB Financial Services

HDB Financial Services (HDBFS) is a leading non-banking financial company (NBFC) in India and a subsidiary of HDFC Bank. Incorporated in 2007, the company provides a wide range of secured and unsecured lending solutions to individual and business clients across the country. With an extensive branch network spanning multiple states and union territories, HDBFS serves millions of customers, particularly focusing on underserved and emerging segments of the population. Through its Corporate Social Responsibility (CSR) initiatives, the organisation supports programs that promote healthcare access, environmental sustainability, community development, and livelihood enhancement for vulnerable communities across India.

SankalpTaru Foundation

SankalpTaru Foundation is an environmental non-profit organisation working towards large-scale ecological restoration and community development through tree plantation and ecosystem conservation initiatives. Operating across multiple states in India, the organisation focuses on afforestation, restoration of degraded landscapes, and promotion of climate resilience. SankalpTaru integrates technology-enabled monitoring systems such as geotagging and satellite tracking to ensure transparency and long-term survival of planted trees while supporting rural communities and farmers through sustainable plantation models.

Mission Million Trees Program

The Mission Million Trees Program, supported by HDB Financial Services (HDBFS), is a large-scale afforestation program aligned with the company's commitment to environmental sustainability and climate action. The program adopts a structured approach to expanding green cover across rural and urban geographies through partnerships with implementation agencies and local communities. It focuses on ecologically suitable plantation models, including fruit-based plantations that also support farmer livelihoods. By integrating community participation, technical guidance, and ongoing monitoring, the initiative aims to ensure high survival rates and long-term sustainability. As a flagship initiative, the program positions afforestation as a strategic intervention contributing to climate resilience, environmental restoration, and sustainable rural development.

APPROACH & METHODOLOGY

Location - Gurugram PwD Stadium

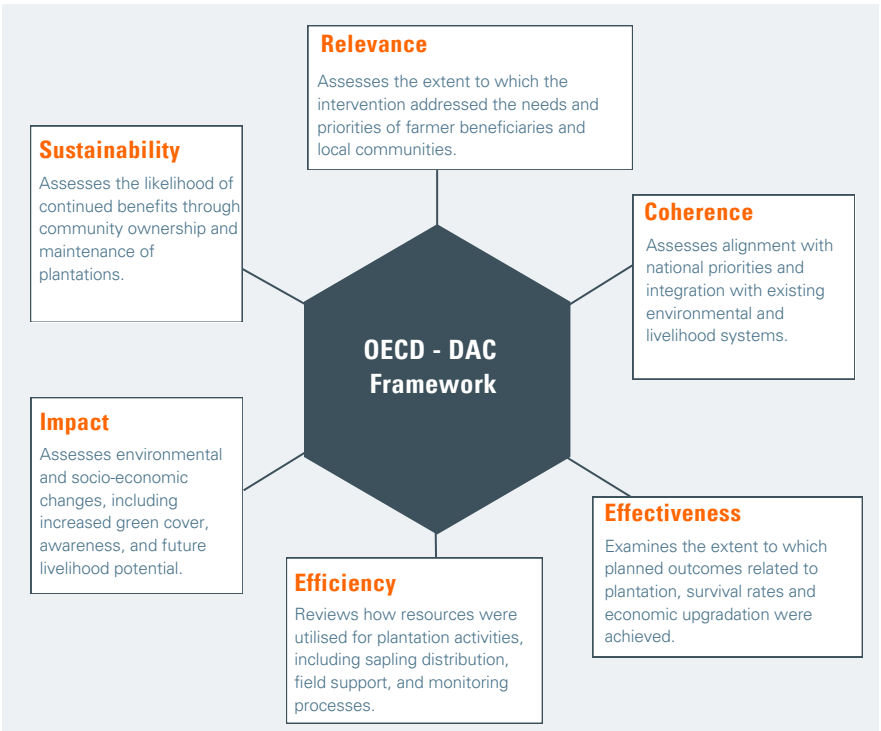
Approach & Methodology

The impact assessment of the Mission Million Trees initiative was undertaken using a mixed-methods approach, combining quantitative and qualitative techniques to capture a comprehensive understanding of program implementation and early outcomes. The assessment focused on examining how plantation activities were implemented across locations, the extent of beneficiary participation, and the effectiveness of the intervention in promoting plantation survival, community engagement, and livelihood potential. Emphasis was placed on capturing both field-level realities and beneficiary perceptions to ensure balanced and credible findings.

Secondary and primary data sources were used to inform the assessment. Program documents, plantation records, and beneficiary lists were reviewed to understand program design, outreach, and implementation processes. This was complemented by field surveys with beneficiary farmers (n~44), site observations, and interactions with implementing teams to capture plantation status, maintenance practices, and early outcomes.

Enumerators conducting Key Informant Interview with farmer beneficiary in Bareily

OECD DAC Dimensions



OECD–DAC Framework

The impact assessment was guided by the OECD–DAC evaluation framework to ensure a structured and widely accepted approach to assessing program performance and outcomes. The framework provided a systematic lens to examine the relevance, effectiveness, efficiency, impact, and sustainability of the Mission Million Trees Program. Using these dimensions, the assessment reviewed the design and implementation of the intervention, as well as its contribution towards strengthening environmental upgradation, green cover and socio-economic conditions of the beneficiary farmers.

Theory of Change

The Theory of Change for the Mission Million Trees initiative is centred on promoting afforestation through community participation and farmer engagement. By combining plantation support with technical guidance and monitoring, the program seeks to establish sustainable green assets that contribute to environmental restoration while creating long-term livelihood opportunities for rural communities.

Inputs

- Financial support from HDB Financial Services
- Technical expertise of implementing partner
- Engagement of field teams and plantation experts

Activities

- Identification of beneficiary farmers and plantation sites
- Community mobilisation and awareness building
- Distribution of saplings and plantation support
- Provision of technical guidance on plant care and maintenance
- Monitoring through field visits and geo-tagging

Outputs

- Saplings distributed and plantations established
- Farmers trained in plantation and maintenance practices
- Plantation sites geo-tagged and monitored
- Community participation in plantation activities

Outcomes

- Improved plantation survival and maintenance practices
- Increased awareness on environmental conservation
- Adoption of fruit-based plantations by farmers
- Potential for future income generation from trees

Impact

- Enhanced green cover and environmental sustainability
- Strengthened livelihood resilience among smallholder farmers
- Improved long-term income security through productive assets
- Reduced vulnerability to climate and agricultural risks

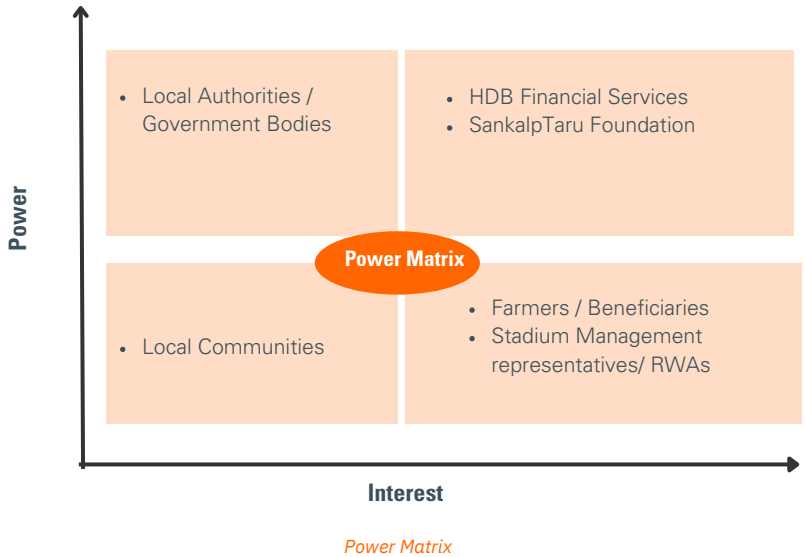
Urban plantation along the edge in Gurgaon, including plant species such as Neem, Kaner, Kadam etc.

Stakeholders Involved

The Mission Million Trees initiative involves a range of stakeholders operating at different levels, from beneficiary farmers and local communities to implementing teams and institutional partners. Each stakeholder plays a specific role in plantation activities, community mobilisation, technical support, monitoring, and overall program coordination. For clarity, stakeholders have been grouped based on their role in implementation and their proximity to beneficiaries.

TABLE 1 Stakeholder Mapping

STAKEHOLDER GROUP	ROLE
Tansport Workers / Beneficiaries	Primary users of services; availed healthcare, physiotherapy, and awareness support
Transporters / Associations	Supported mobilisation, awareness generation, and facilitated access to beneficiary groups
Centre Staff (Doctors, Physiotherapists, Mobilisers)	Delivered healthcare services, managed centre operations, and supported follow-ups and outreach
HDB Financial Services	Provided financial support, strategic direction, and overall program oversight



Power Matrix

The Power–Interest Matrix was used to assess the level of influence and engagement of different stakeholders in the program. Stakeholders with high power and high interest, such as HDB Financial Services and the implementing organisation, play a key role in program direction and oversight. Stakeholders with high interest but relatively lower power, such as farmers and community members, are directly involved in plantation and maintenance activities. This mapping helps in clarifying roles, strengthening coordination, and ensuring effective implementation across stakeholder groups.

Assessment - Deep Dive

TABLE 2 Stakeholder Coverage and Methods Used

STAKEHOLDER GROUP	PURPOSE OF ENGAGEMENT	METHOD USED	SAMPLE / COVERAGE
Beneficiaries (Rural - Farmers)	Capture land use, plantation adoption, and perceived benefits	Surveys, Key Informant Interviews/ Focus Group Discussions	44
Beneficiaries (Urban - PwD Stadium Management team)	Understand site management and environmental outcomes	Key Informant Interviews	2
SankalpTaru Program Team	Capture program design and implementation processes	Key Informant Interviews	3
Beneficiaries (Rural and urban)	Assess plantation condition and maintenance practices	Observations	5 sites (Bareilly, Hazaribagh, Gurugram, Charkhi Dadri, Bhiwani and Surat)

To gain a deeper understanding of how the Mission Million Trees initiative was implemented on the ground, the assessment adopted a focused field-based approach. The study combined beneficiary surveys, site observations, and key informant interactions to capture real-time insights on plantation activities, maintenance practices, and overall implementation quality across locations.

The assessment emphasised direct engagement with farmers, community members, and implementation teams to validate reported outcomes and understand field-level practices. This approach enabled the study to capture both quantitative indicators, such as plantation status and survival, and qualitative insights related to awareness, and emerging livelihood potential.

Beneficiaries were identified and mobilised by SankalpTaru Foundation based on availability at the time of field visits, enabling real-time insights from those actively engaged in plantation and maintenance activities while minimising recall bias.

SGS Team conducting Focus Group Discussion with farmers

Ethical Considerations

- The purpose of the assessment was clearly explained to all respondents, and verbal consent was obtained before surveys, discussions, and interviews.
- Participation was voluntary, and respondents were informed of their right to skip questions or withdraw at any stage.
- All personal information was kept confidential, and no identifying details were included in the report.
- Findings were presented in aggregated form to protect individual privacy.
- During the visits, care was taken to avoid disruption of routine operations and maintain confidentiality.

Study Challenges

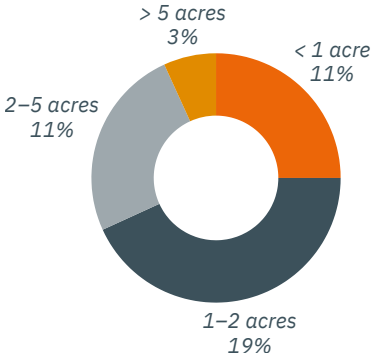
- Limited availability of beneficiaries: In some locations, a few identified beneficiaries were not available at the time of field visits, which slightly constrained direct interactions and required reliance on available respondents.
- Reliance on self-reported information: Certain responses, particularly related to practices and expectations, were based on beneficiary recall and perceptions, which may involve minor variations despite efforts to validate responses.

Chikankari stitching center

ASSESSMENT FINDINGS & ANALYSIS

This section presents the key findings from the assessment of the Mission Million Trees initiative, structured around the OECD–DAC evaluation framework. The analysis draws on primary data collected from beneficiary farmers, site observations, and stakeholder interactions across selected locations. It examines program performance across dimensions of relevance, effectiveness, efficiency, impact, and sustainability, supported by quantitative indicators and field-level insights.

Beneficiaries' Profile



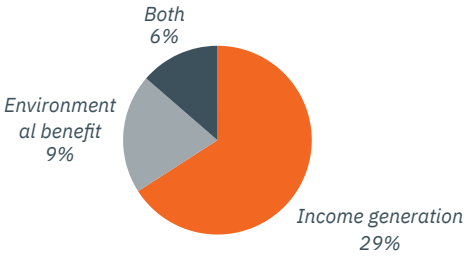
Landholding Pattern

The beneficiary profile provides an important context for understanding program reach. The intervention largely engaged smallholder farmers, with approximately 91% of surveyed beneficiaries cultivating less than five acres of land. This indicates that the program is reaching economically vulnerable groups who are more dependent on agriculture and are likely to benefit from long-term, asset-based interventions such as fruit plantations. These farmers typically rely on seasonal crops and face income variability, making diversification through tree-based systems particularly relevant. In contrast, the urban component, implemented in locations such as Gurugram - PwD Stadium, focused on institutional and community spaces where plantations contribute to improving green cover, enhancing local environmental conditions, and promoting community awareness.

Together, these contexts reflect the program's dual focus on livelihood support in rural areas and environmental improvement in urban landscapes.

Relevance

The relevance of the Mission Million Trees initiative is closely linked to both environmental needs and livelihood gaps in the intervention areas. The program addresses declining green cover and limited livelihood diversification by promoting afforestation alongside income-generating plantation models. Survey findings indicate that 66% of farmers expect to generate income from the planted trees, reflecting strong alignment with local livelihood aspirations and the perceived value of plantations as future economic assets.



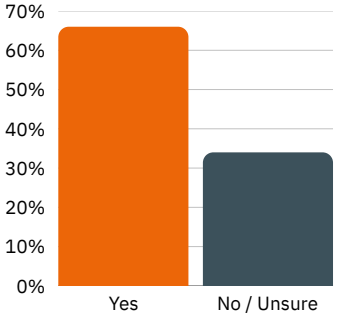
Primary Purpose of Plantation

The intervention is particularly relevant in rural locations such as Bareilly, Hazaribagh, Charkhi Dadri, and Bhiwani, where farmers depend heavily on agriculture and have limited access to long-term income-generating opportunities. The promotion of fruit-based plantations responds directly to this gap by enabling farmers to invest in productive assets that can generate returns over time. The beneficiary profile further reinforces this alignment, with over majority of surveyed farmers identified as smallholders, indicating that the program is reaching economically vulnerable groups who are most in need of livelihood diversification.

Additionally, farmers reported actively integrating plantations within existing agricultural practices, indicating that the intervention is well aligned with prevailing farming systems.

> "We saw this as an opportunity to earn something extra from our land.
>
> Balram, 36, Farmer

In urban locations such as Gurugram (including the PwD Stadium site) and Surat, the program responds to increasing environmental pressures by enhancing green cover in public and institutional spaces. These efforts contribute to improved environmental conditions while also promoting awareness around tree plantation and conservation. Overall, the intervention demonstrates strong alignment with both local community needs and broader environment



Farmers expecting Additional Future Income from Plantations

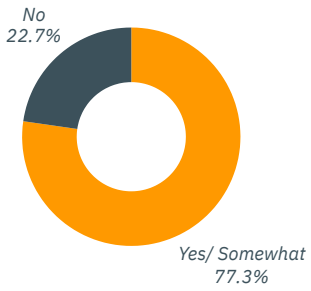
Coherence

The program demonstrates strong coherence with national priorities on afforestation, climate resilience, and sustainable agriculture. Policy frameworks such as the National Agroforestry Policy (2014) promote the integration of tree-based systems within agricultural landscapes to enhance

productivity, resilience, and environmental sustainability. The project aligns closely with this approach by promoting location-specific, fruit-based plantation models that are both ecologically appropriate and economically viable.

At the field level, species selection appears to have been undertaken with due consideration to local agro-climatic conditions, including soil type, rainfall patterns, and existing farming practices. Farmers reported that the crops provided were largely suited to their local conditions, which is further reflected in the high survival rates observed during the assessment. This alignment between species selection and local ecology strengthens the technical soundness of the intervention and increases the likelihood of long-term success.

The program also demonstrates coherence with existing agricultural systems by promoting integrated farming practices rather than crop substitution. Farmers are able to incorporate plantations within their current land use through intercropping and boundary planting, allowing them to continue seasonal cultivation while developing long-term assets. This approach reduces the risks associated with adopting new practices and ensures minimal disruption to ongoing livelihoods.



Reduced Dependence on Single Crop

Importantly, the introduction of fruit-based plantations contributes to reduced dependence on single-crop farming, enabling gradual diversification of income sources. This is particularly relevant in the context of climate variability and market uncertainties, where reliance on a single crop can increase vulnerability. By aligning ecological suitability with livelihood needs, the program demonstrates strong coherence across policy intent, design, and on-ground implementation.

Effectiveness

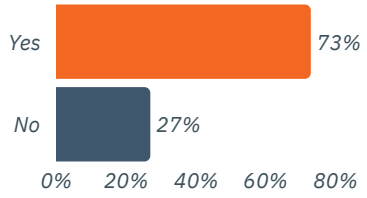
The effectiveness of the Mission Million Trees initiative is reflected in its ability to successfully implement plantation activities and ensure early-stage survival and maintenance of saplings. The program demonstrates strong performance in translating planned inputs into tangible outputs, particularly in terms of plantation establishment, technical support, and beneficiary engagement.

A key indicator of effectiveness is the high survival rate of planted saplings, with field observations indicating that nearly all saplings were found to be alive at the time of assessment. This suggests that plantation activities were carried out in a technically appropriate manner. The high survival rate also reflects the suitability of species selection and alignment with local agro-climatic conditions.

Average Survival Rate of Saplings

The provision of technical support has played an important role in achieving these outcomes. Approximately 73% of farmers reported receiving guidance on plantation and maintenance practices, indicating that the intervention extended beyond sapling distribution to include capacity building. This support has contributed to the adoption of key maintenance practices such as watering, protection from grazing, and basic plant care during early growth stages.

In addition, the timing of sapling distribution was aligned with local planting cycles, as reflected in beneficiary responses. Appropriate timing is a critical factor in plantation success, particularly in rain-fed agricultural contexts, and likely contributed to the observed survival rates. Follow-up support from field teams further strengthened implementation effectiveness by ensuring addressing early-stage challenges and reinforced proper maintenance practices. Additionally, replacement of dead saplings further contributed to the effectiveness of the project—ensuring sustained plantation density, minimising early-stage losses, and supporting consistently high survival rates across sites.



Technical Guidance Received

In urban locations, plantation activities were effectively implemented in institutional spaces, supported by coordination with local authorities. These sites showed visible establishment of saplings, indicating effective execution in non-agricultural contexts as well.

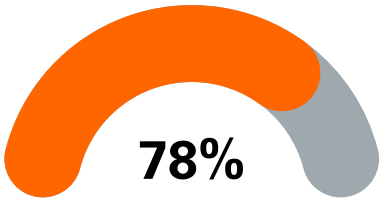
Rural plantation in the budding phase

Overall, the program demonstrates strong effectiveness in terms of plantation survival, technical support delivery, and early-stage maintenance practices.

Efficiency

The program demonstrates a structured and resource-efficient implementation approach, particularly in the coordination of plantation activities, beneficiary engagement, and monitoring systems. Key processes such as beneficiary identification, sapling distribution, and field-level support were carried out through decentralised implementation teams, enabling timely execution across diverse geographies.

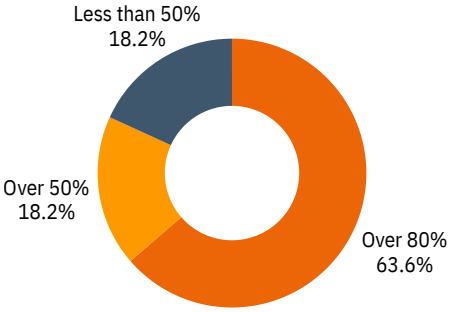
A notable strength is the integration of geo-tagging and digital monitoring systems, which allowed for systematic tracking of plantation sites. This not only improved transparency but also enabled better oversight of plantation status and survival. The use of such tools reduces dependency on manual reporting and strengthens accountability in implementation.



Perception on Timeliness of Sapling Delivery

Additionally, the timeliness of sapling distribution also plays a critical role in plantation success. Beneficiary responses indicate that saplings were largely provided in alignment with the appropriate planting season, ensuring favourable conditions for establishment and growth. This alignment with local agricultural cycles reflects strong operational planning and contributes directly to efficient outcomes.

A key indicator of efficiency is the extent of land brought under plantation, which reflects how effectively distributed saplings were utilised by farmers. Findings indicate that a majority of farmers allocated a substantial share of their land (up to 50%) to fruit plantations, while others integrated plantations across smaller portions of their land. This suggests that the intervention was efficiently absorbed within existing farming systems without requiring additional land or major structural changes.



Land Usage for Plantation

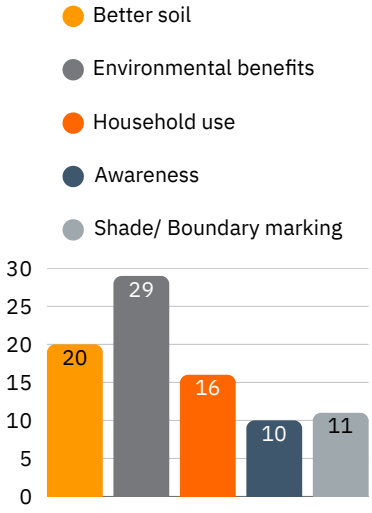
Overall, the program demonstrates efficiency through optimal utilisation of land resources and timely delivery of inputs, both of which are critical for plantation success.

Impact

The Mission Million Trees initiative has begun to generate early-stage environmental and livelihood impacts, with stronger outcomes expected to emerge as plantations mature. The impact is particularly significant in its potential to shift farmers from short-term, seasonal income dependence towards asset-based, long-term livelihood systems.

Natural manure making

A key outcome is the creation of productive assets in the form of fruit-bearing trees, which provide farmers with future income opportunities. Survey findings indicate that 66% of farmers expect to earn income from the plantations, highlighting strong perceived value and livelihood relevance. This reflects a transition from purely subsistence or seasonal agriculture to forward-looking, income-generating investments.



Perception on Benefits Beyond Income Generation Opportunities

From an environmental perspective, the program has contributed to increased green cover and improved ecological conditions across both rural and urban areas. The strategic selection of species suited to local agro-climatic conditions has supported high survival rates, ensuring that environmental benefits are not just theoretical but actively realised. These include:

- Improved soil stability
- Enhanced micro-climatic conditions
- Increased carbon sequestration potential (long-term)

> In addition to income source, the project has provided us with better farm soil and environmental benefits - further enhancing our farm yield.

Munna Lal, 48, Farmer and Laborer

In urban areas such as Gurugram (PwD Stadium) and Surat, plantation efforts have contributed to visible

improvements in green spaces, enhancing environmental quality and public awareness. These sites also serve as demonstrative models for community-level environmental action.

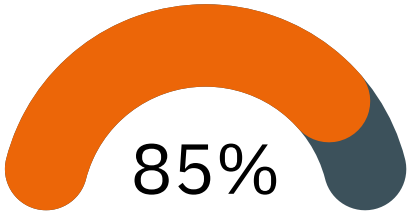
In addition to tangible outcomes, the program has contributed to behavioural and perceptual changes, with farmers expressing increased awareness of the long-term benefits of tree plantation. This shift in mindset is critical for sustaining environmental interventions.

Overall, while income-related impacts will materialise over time, the program has already established a strong foundation for long-term ecological and economic impact, particularly through asset creation, diversification, and awareness building

Sustainability

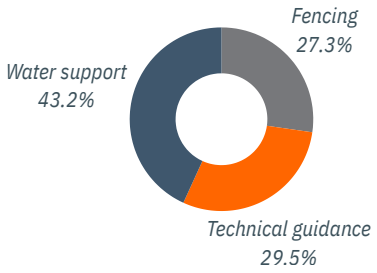
The sustainability of the Mission Million Trees initiative is strongly supported by the design of the intervention, particularly its emphasis on beneficiary ownership and long-term asset creation. In rural areas, plantations are established on farmers' own land, creating a direct incentive for continued care and maintenance.

Farmers expressed willingness to maintain the trees, driven largely by the expectation of future economic returns. This linkage between environmental action and livelihood benefit significantly enhances sustainability, as it aligns farmer incentives with long-term outcomes.



Beneficiaries Report Confidence in Maintenance

The provision of technical guidance and follow-up support has contributed to building basic capacities among farmers, enabling them to undertake maintenance activities independently. High survival rates further indicate that early-stage care practices have been successfully adopted.



Support Required for Long-term Maintenance

In urban areas, sustainability is linked to institutional ownership, particularly in sites such as the PwD Stadium in Gurugram. Continued maintenance in such locations will depend on coordination with local authorities and institutional stakeholders.

However, sustainability will depend on continued support during the early growth phase, particularly for:

- Watering
- Protection from grazing
- Pest management

The program promotes sustainable afforestation by combining farmer ownership, locally suitable species, and continued technical support to ensure long-term survival and livelihood benefits.

Overall, the program demonstrates a strong foundation for sustainability, with ownership, perceived benefits, and support systems working together to ensure long-term viability.

Key learnings & Reccomendations

Enbale Access to Water Resources for Sustained Plantation Growth

The assessment indicates that availability of water is a key factor influencing long-term survival and growth of plantations. While initial establishment has been successful, farmers highlighted the need for reliable water access, particularly during dry periods. Supporting low-cost irrigation solutions such as drip systems, rainwater harvesting, water storage structures, or community-based water arrangements can significantly improve plant survival and reduce maintenance burden, especially in water-stressed regions.

Strengthen Market Linkages to Realise Income Potential

While farmers anticipate future income from plantations, structured market linkages will be critical to translate this potential into actual earnings. Facilitating connections with local mandis, aggregation systems, and buyers, along with basic support on post-harvest handling, can help ensure that produce from plantations leads to stable and improved incomes over time.

Farmer and enumerator engaged in conversation in Hazaribagh

Conclusion

The Mission Million Trees initiative demonstrates a well-designed and effectively implemented model that integrates ecological restoration with livelihood enhancement. By combining fruit-based plantations on farmer land with urban afforestation efforts, the program addresses both environmental and socio-economic challenges in a complementary manner.

The assessment highlights strong performance across key dimensions of effectiveness and early impact. High sapling survival rates, supported by appropriate species selection, timely plantation, and continuous field engagement, indicate robust implementation systems. At the same time, strong participation from smallholder farmers and the integration of plantations within existing agricultural practices reflect the program's contextual relevance and adaptability.

From a livelihood perspective, the initiative shows promising potential to contribute to long-term income diversification. Farmer expectations of future income, along with reported early improvements in land utilisation, suggest that plantations are being perceived not just as environmental assets but also as productive investments. Importantly, the high level of community ownership evidenced by active maintenance and care strengthens the likelihood of sustained outcomes over time.

Operationally, the program benefits from effective coordination, community mobilisation, and the use of monitoring mechanisms that support accountability and performance tracking. These elements position the initiative as a scalable model that can be replicated across similar ecological and socio-economic contexts.

Going forward, sustained technical support, strengthened market linkages, and continued focus on water resource management will be critical to translating early gains into long-term impact. With these enablers in place, the program holds strong potential to deliver enduring environmental benefits while enhancing livelihood resilience for participating communities.

FGD with benedicіary farmers in Bareily

Annexure

TABLE: Stakeholder Mapping

STAKEHOLDER GROUP	ROLE
Tansport Workers / Beneficiaries	Primary users of services; availed healthcare, physiotherapy, and awareness support
Transporters / Associations	Supported mobilisation, awareness generation, and facilitated access to beneficiary groups
Centre Staff (Doctors, Physiotherapists, Mobilisers)	Delivered healthcare services, managed centre operations, and supported follow-ups and outreach
HDB Financial Services	Provided financial support, strategic direction, and overall program oversight

TABLE: Stakeholder Coverage and Methods Used

STAKEHOLDER GROUP	PURPOSE OF ENGAGEMENT	METHOD USED	SAMPLE / COVERAGE
Beneficiaries (Rural - Farmers)	Capture land use, plantation adoption, and perceived benefits	Surveys, Key Informant Interviews/ Focus Group Discussions	44
Beneficiaries (Urban - PwD Stadium Management team)	Understand site management and environmental outcomes	Key Informant Interviews	2
SankalpTaru Program Team	Capture program design and implementation processes	Key Informant Interviews	3
Beneficiaries (Rural and urban)	Assess plantation condition and maintenance practices	Observations	5 sites (Bareilly, Hazaribagh, Gurugram, Charkhi Dadri, Bhiwani and Surat)

When you need to be sure

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