Deloitte.

Impact assessment of Project- Environment Sustainability Plantation & Rainwater Harvesting

DLF Ltd

February 2025

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Introduction

Executive Summary

Project title	Environment Sustainability Plantation & Rainwater Harvesting
Implementing partner	DLF Foundation
Project overview	To establish plantations in designated public green belts within urban areas, to support the maintenance of ecological balance and promote environmental sustainability, in collaboration with GMDA (Gurugram Metropolitan Development Authority) and SDMC (South Delhi Municipal Corporation).[1]
Project period	FY 2022 – 2023

Project Location Project Entity Project Contribution	Project Location	Entity	Contribution (INR)
	Plantation on Sector Road dividing Sector 91 & 92	DLF Ltd	4.67 cr
	Plantation on Sector 93 & 94	DLF Ltd	1.19 cr
	Adoption of 2 parks in GK	DLF Ltd	0.46 cr
	Plantation Works at Green Belt and Central Verge at Sector 84	DLF Ltd	1.81 cr
	Plantation from AIT chowk to Medawas (Sector 63)	DLF Ltd	6.28 cr
	Total		14.41 cr

Direct Beneficiaries	General Public
Problem statement	Gurugram, like many urban cities, faces challenges related to environmental sustainability, particularly in terms of its green spaces. The rapid urbanization has led to the reduction of natural greenery, contributing to air pollution, climate change, and loss of biodiversity. The project aimed at plantation and greening drives in public spaces in G.K. Parks, New Delhi, Gurugram and New Gurugram (Sectors 63, 84, 91/92, 93/ 94). The Project involved adoption of green belts for plantation in partnership with the Government. The Project has also included rainwater harvesting in public areas.[1]
SDG alignment	

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[1] Details provided by DLF Foundation.

Summary of Findings

A comprehensive account of Deloitte's observations and results from the impact assessment study of the DLF supported projects within the OECD DAC framework parameters.

| Parameter	Rationale	Score
Relevance	• By developing plantations in designated green belts, the project helps restore natural habitats, improve air quality, offers cleaner, healthier spaces for the community, promoting physical and mental well-being.	🟢
Coherence	• By collaborating closely with local governments, the project ensured alignment with urban planning and environmental policies. This strategic partnership enabled the optimization of the project's impact, promoting sustainability and enhancing the health of urban ecosystems. • By transforming underutilized pathways, curb sides, dividers and junctions into green belts that serve as thriving ecological zones, the project fostered community engagement, raised environmental awareness, and encouraged participation of local citizens in sustainable practices.	🟢
Effectiveness	• The program successfully developed an area of **51,558 square meters** of green belts in urban settings. • In addition to the green belt, **8 acres of park land** have been developed into a model park, providing residents with recreational space and a venue for community activities. • The planting of **409,890 trees and plants** was aligned with the objective of improving the urban ecosystem. • These initiatives contributed to the UN Sustainable Development Goals 3, 11, and 15, as well as to the Green India Mission's Sub-Mission 3 of enhancing tree cover in Urban & Peri-urban areas.[2]	🟢
Efficiency	• The Green Belt Development project has demonstrated high efficiency in its execution from land use optimization to resource allocation, maintenance practices, and achieving significant ecological and social outcomes.	🟢
Impact	The impact findings for stakeholders of the DLF Foundation's green belt development project in Gurugram are as follows: • **100% of respondents** observed significant improvement in their local environment, creating a cleaner and greener space. • **100% of residents** became more aware of the environment's impact on health. • **61% of respondents** rated the quality of the green spaces as excellent, **29% rated it as good**, and **10% rated it as satisfactory**, reflecting the community's positive reception of the project.	🟢
Sustainability	• This initiative is designed for long-term environmental sustainability, offering a model for other cities to follow in integrating nature within urban spaces. • The plantations supported ecological balance and served as recreational areas, enhancing the overall well-being of city inhabitants.	🟢

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[2] DLF Impact Assessment Project FY 2022-23 (as shared by DLF Foundation).

Recommendations for the way forward:

The assessment study has highlighted opportunity areas to enhance the grant's effectiveness and maximize impact. These are tabulated as recommendations below:

Recommendation	Description
Promoting Awareness and Advocacy	• Conduct community workshops, tree-planting events, and educational programs to raise awareness about the importance of green belts. • Create local "green ambassador" programs where volunteers assist in maintaining and monitoring the health of green belts and parks. • Collaborate with local educational institutions for volunteer initiatives, environmental sensitization, and events to engage young citizens in sustainability efforts.
Leverage Technology for Smart Management	• Expand the use of smart technologies to optimize water usage, energy consumption, and maintenance efficiency.
Foster Partnerships for Cross-Industry Support	• Strengthen relationships with government, local businesses, and environmental organizations for continued support and resources.

Pictures taken before the intervention in Sector 83-84, Gurugram
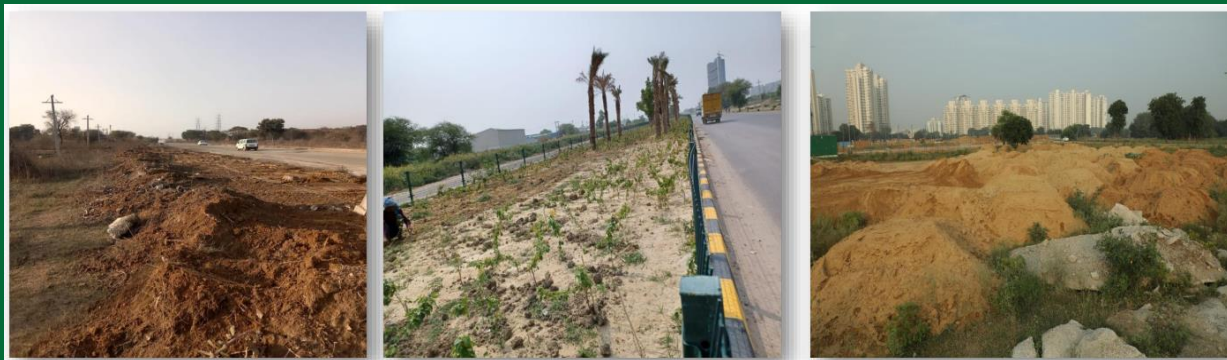
Pictures taken after the intervention in Sector 83-84, Gurugram
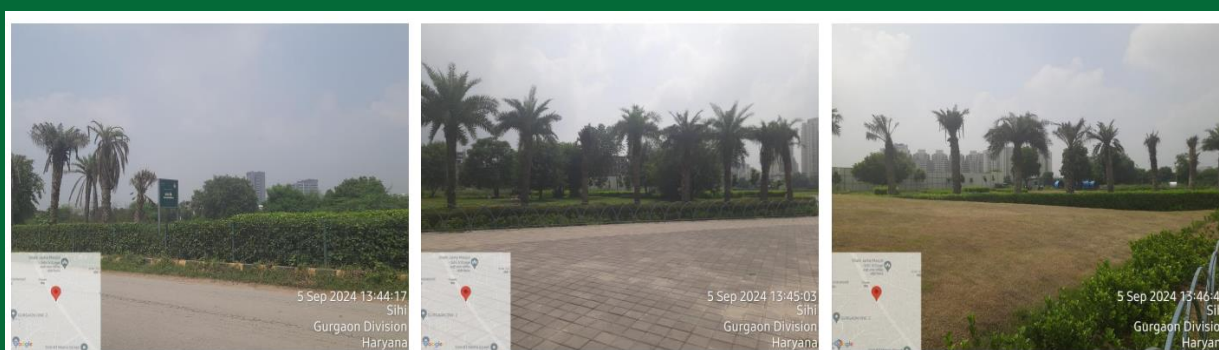
Pictures taken before the intervention in Sector 93-94

Source: DLF Foundation

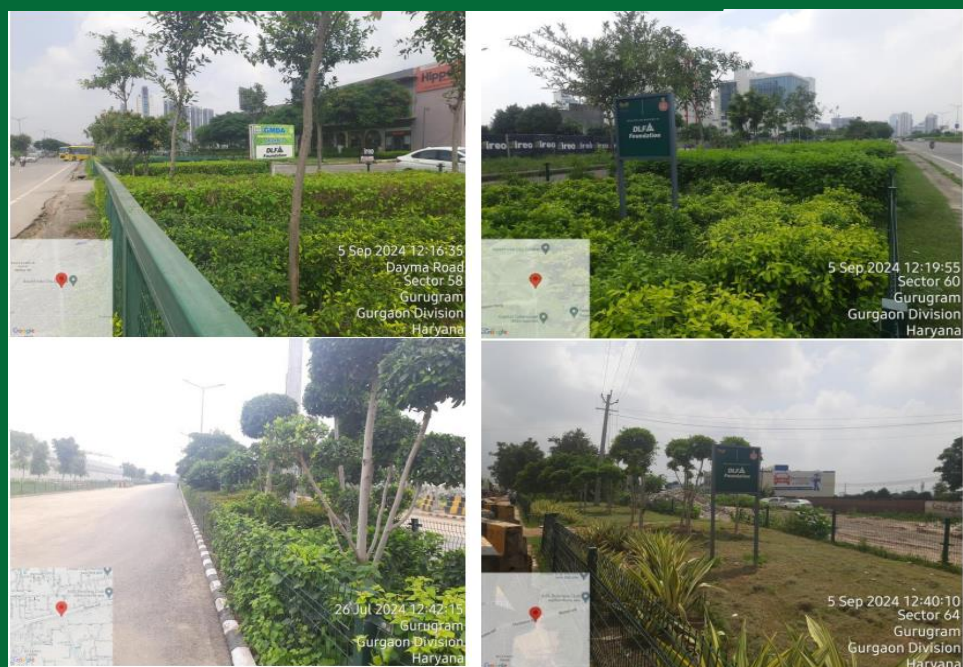Pictures taken after the intervention in Sector 93-94

Pictures taken before the intervention in AIT Chowk to Medawas

Pictures taken after the intervention in AIT Chowk to Medawas

Pictures taken before the intervention in sector 91-92

Pictures taken after the intervention in sector 91-92

Source: DLF Foundation

Adoption and Greening of Two Public Parks in GK-I, Delhi

Source: DLF Foundation
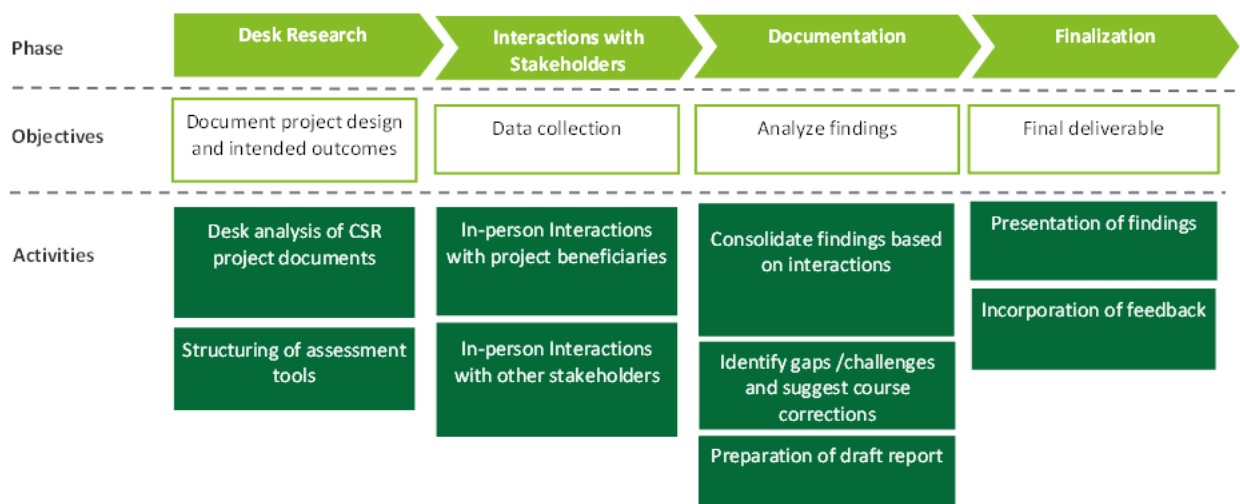
Approach and Methodology

Deloitte used a mixed research design to conduct the assessment, with research questions framed along the Development Assistance Committee (OECD, 1991) principles. The data collection tools sought to collect information from project documents, stakeholders and beneficiaries around key indicators adapted from the UNDP's Results Based Management framework. The assessment involved an analysis of qualitative and quantitative data using primary and secondary data sources.

The **results-based framework** was deployed to determine the project-specific inputs, processes, outputs, and outcomes/impact customized as per the project execution model and in consultation with implementing partners and available documentation. Data for the assessment was collected to answer the following research questions:

- Are the CSR initiatives either relevant to the community's needs/aspirations or aligned with the developmental priorities of the region?
- What were the intended or planned outcomes of the initiatives? Are the program's results in line with the anticipated outcomes?
- How have the CSR initiatives impacted beneficiaries and other relevant stakeholders? Explore changes in the physical, economic, and socio-cultural environments.
- How do the beneficiaries and other stakeholders perceive the CSR initiatives undertaken?
- Are the activities ensuring long-term solutions to the developmental issues of the region? What elements have been built into the project design that will ensure sustainability of results.
- Has there been a disruption in impact due to remote program execution? Are there any potential strategies that could be deployed to combat this disruption?

Report development approach

The impact assessment of the CSR initiatives was executed in a phased manner. The four main phases are outlined below.

Common Results Framework

The Common Results Indicators developed along UNDP's Results Based Framework for monitoring were used as the basis for the programmatic review. Both primary and secondary project related data were reviewed to gain a holistic understanding of the implementation model and outcomes.

Inputs	Processes	Outputs	Outcomes
- Grant utilized - Project staff deployed - Capacity building and training to staff - Partnership with partner organizations	- Awareness generation - Identification of landscapes - Government approvals - Landscape Design development with Horticulture experts - Vendor Finalization - Plantation activities - Maintenance of the plants and shrubs	- No. of acres reached through green covers - No. of tress planted - No. of parks developed - No. of waste management activities conducted - No. of dustbins installed	- Enhanced biodiversity - Improved air quality and climate regulation - Increased green spaces - Improved ecosystem services - Enhanced local environmental health.

Common Results Framework

Desk-based research

In addition to the stakeholder interactions through Key Informant Interviews with the Project staff as well as the DLF Foundation management, the following project related documents were reviewed:

- Memorandum of Understanding for the project year 2022-2023 with GMDA and SDMC
- Grant Utilization reports

Description of sample

A stakeholder mapping exercise, based on the desk review, was conducted to identify the range of interactions that would be required to document multiple perspectives about impact. The documentation of multi-stakeholder interactions was critical to validating findings through triangulation. The stakeholder mapping for the Greening Cities project is presented below:

Primary stakeholders:

- Roadside Vendors
- Pedestrians
- Security Guards
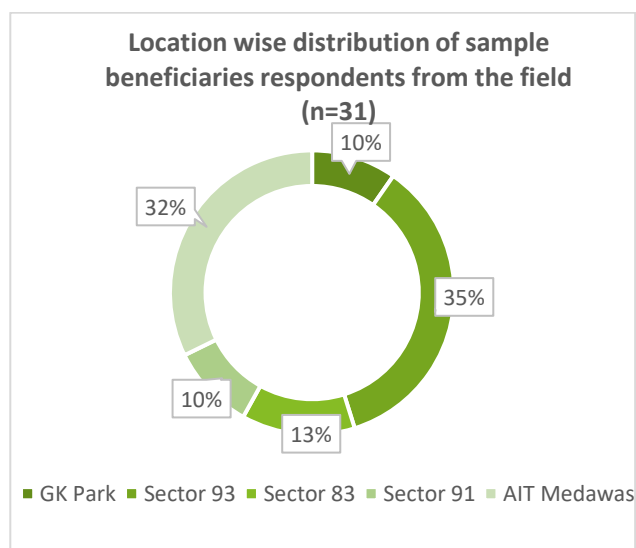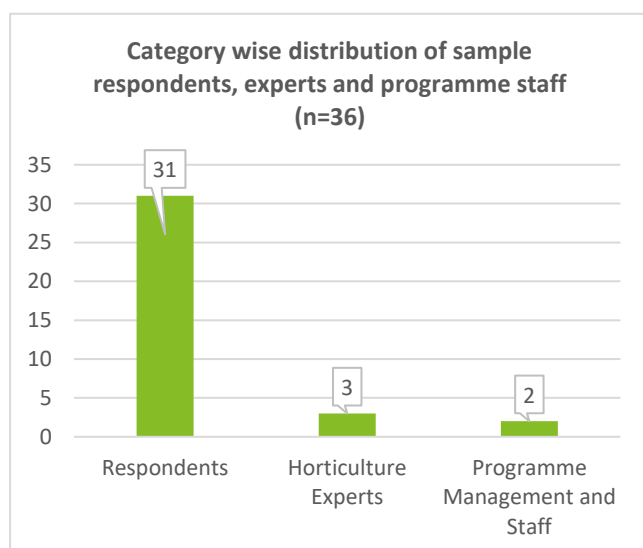- Shop owners

Secondary stakeholders:

- Project implementation staff

Sampling plan

A multi-stage mixed methodology was adopted to identify the sample of respondents for the study. The final set of the respondents, given the wide spread of beneficiaries across locations, was selected purposively. A snapshot of the sample covered is given below:

Project location	Sample covered	Type of sampling
• Gurugram- Public Green Belt Sector 84, Public Green Belt Sector 93-94, Public Green Belt AIT Chowk to Medawas (Sector 63), Public Green Belt Sector 91-92, GK Park	• Pedestrians: 12 • Security Guards: 8 • Street Vendors: 7 • Joggers: 4 • Programme management and staff: 5	• Purposive

Stakeholder type	Sample covered	Type of sampling
• Pedestrians (12)	• Public Green Belt Sector 84: 2 • Public Green Belt Sector 93-94: 4 • Public Green Belt AIT Chowk to Medawas (Sector 63): 4 • Public Green Belt Sector 91-92: 2	• Purposive
• Security Guards (8)	• Public Green Belt Sector 84: 2 • Public Green Belt Sector 93-94: 4 • Public Green Belt AIT Chowk to Medawas (Sector 63): 1 • Public Green Belt Sector 91-92: 1	• Purposive
• Street Vendors (7)	• Public Green Belt Sector 93-94: 2 • Public Green Belt AIT Chowk to Medawas (Sector 63): 5	• Purposive
• Joggers (4)	• Public Green Belt Sector 93-94: 1 • GK Park: 3	• Purposive
• Programme Management staff	• Gurugram: 5	• Purposive

A sample of beneficiaries including programme staff was selected for the purpose of the assessment. The intervention type and location-wise distribution for the 31 beneficiary respondents, 3 experts and 2 program management staff, is shared below:

Category wise distribution of sample respondents, experts and programme staff (n=36)

Location wise distribution of sample beneficiaries respondents from the field (n=31)

Study tools

A range of participatory tools were customized to meet the objectives of the assessment. The table below presents a snapshot of the tools used during various stakeholder interactions during the assessment.

Stakeholder	Key points covered	Study tools employed
Direct beneficiaries/ respondents	- Nature of support provided - Feedback on the project - Perceived social impact (green spaces increased, awareness regarding environment increases, better air quality)	FGD, survey, case study
Indirect beneficiaries/ respondents	- Feedback on the project - Perception of impact - Gap areas and needs that could be potentially bridged by CSR support	KII, survey, FGD
Project management/ field team	- Program implementation - Program monitoring	KII, FGD

Limitations

No apparent limitations.
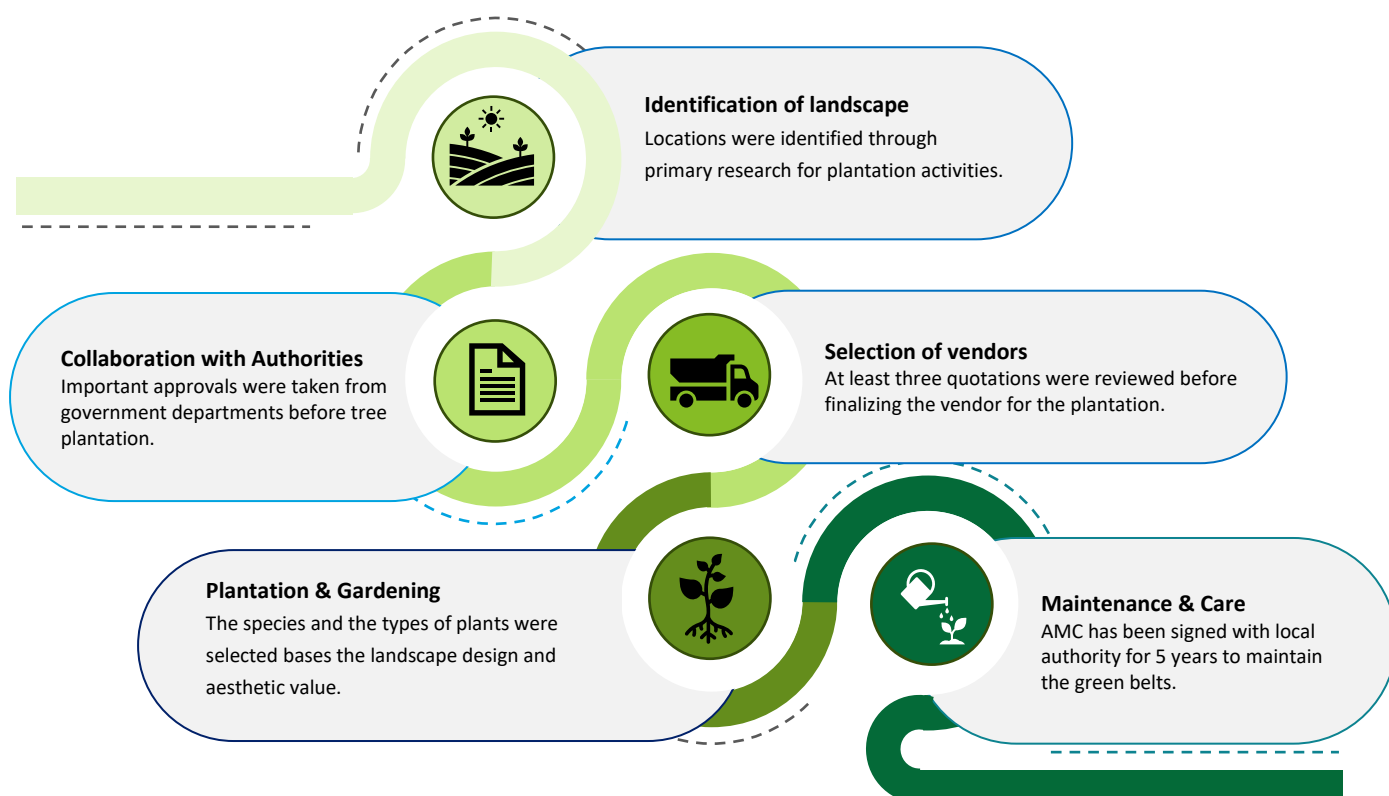
Project Coverage

51,558 sq m
Green Belt Development

409,890
Trees/Plants were planted

8 Acres
Park area developed into Model Park with regular maintenance

Description of beneficiaries from general public

- Local Residents- Residents living near the development who accessed the enhanced green spaces, such as parks, gardens, and tree-lined streets, which contributed to their physical and mental well-being.
- Children and Families- Families and children benefit from safe, well-maintained parks and recreational spaces, offering them a place to play and learn about nature.
- Elderly and Disabled People- Thoughtfully designed green spaces with accessible paths, benches, and shade areas allow elderly and people with disabilities to enjoy the outdoors comfortably and safely.
- Local Businesses- Businesses near green spaces, such as cafes, shops, and markets, potentially benefited from increased customer foot traffic.
- Government and Urban Planner- The development of green spaces helps cities become more resilient, livable, and attractive, which aligns with urban planning goals for sustainable cities.

Project Model

The collaboration between DLF Foundation and the GMDA is an important step in transforming **Gurugram** into a more sustainable, greener city. By developing green belts across major public roads, the project contributed to environmental health and enriched the lives of the public by creating better, healthier, and more aesthetically pleasing spaces.

Identification of landscape
Locations were identified through primary research for plantation activities.

Collaboration with Authorities
Important approvals were taken from government departments before tree plantation.

Selection of vendors
At least three quotations were reviewed before finalizing the vendor for the plantation.

Plantation & Gardening
The species and the types of plants were selected bases the landscape design and aesthetic value.

Maintenance & Care
AMC has been signed with local authority for 5 years to maintain the green belts.

Inputs

1. **Awareness Generation:**
   - Communication channels such as print media, social media platforms, public events, etc.
   - Marketing materials such as brochures, websites and advertisements
   - Public relations team for outreach
2. **Identification of Landscapes:**
   - Survey tools leveraging GPS and mapping software, such as Google map.
   - Geographic and environmental data test/survey reports for soil quality, climate, and topography
3. **Government Approvals:**
   - Documentation required for approval (plans, proposals, environmental impact assessments)
   - Government liaison or legal expert for navigating approval processes
4. **Landscape Design Development with Horticulture Experts:**
   - Design software such as AutoCAD, SketchUp, etc. used for optimal landscape planning.
   - Horticulturists or landscape architects for expertise
5. **Vendor Finalization:**
   - List of potential vendors for plant supply, tools, and landscaping services.
   - Contract templates and agreements.

6. **Plantation Activities:**
    *   Plants, seeds, shrubs, and trees for planting.
    *   Labor for planting (landscapers, gardeners, etc.) in selected areas/sites
    *   Gardening tools such as shovels and irrigation system
    *   Fencing, water tanks, civil work for dividers
7. **Maintenance of Plants and Shrubs:**
    *   Maintenance tools such as watering systems, pruning shears and input fertilizers.
    *   Maintenance team for ongoing care
    *   Deployment of security team.

Process

Awareness Generation:
*   Launched awareness campaigns via media, social media, and community outreach.
*   Held public events or informational sessions to inform the community about the project.
*   Collected feedback to understand local needs and concerns regarding the landscape project.

Identification of Landscapes:
*   Performed site assessments using surveys and geographic tools.
*   Identified areas that needed landscaping and assessed the environmental and community impact.
*   Created a list of preferred locations based on ecological, aesthetic, and functional criteria.

Government Approvals:
*   Prepared and submitted required documentation to obtain necessary government approvals.
*   Ensured compliance with local laws, environmental regulations, and urban planning standards.
*   Followed up with government authorities to resolve any issues and obtain final approvals.

Landscape Design Development with Horticulture Experts:
*   Collaborated with landscape designers and horticulturists to create the landscape design.
*   Considered factors such as local climate, water conservation, soil conditions, and aesthetic preferences.
*   Finalized the design and ensured it aligned with the project's sustainability and functional goals.

Vendor Finalization:
*   Issued a request for proposals (RFP) to select vendors for planting, landscaping services, and materials.
*   Evaluated vendors based on experience, capability, pricing, and quality of plants or services.
*   Finalized contracts and established timelines for the landscaping activities.

Plantation Activities:
*   Began planting activities according to the finalized design and seasonal schedule.
*   Ensured proper soil preparation and planting techniques for healthy growth.
*   Installed irrigation systems or other necessary infrastructure for plant care.
*   Civil work was completed for dividers in the green belt area.
*   Fencing and grills were installed for the protection of the plants.

Maintenance of Plants and Shrubs:
*   Implemented a maintenance schedule that included watering, weeding, pruning, and fertilization.
*   Regularly assessed plant health and adjusted care as needed (e.g., pest management, disease control).
*   Ensured that the landscape remained visually appealing and functional for the long term.
*   Security team appointed at various locations to safeguard the fences installed in the green belt.

Strategic differentiators

Priority for eco-friendly practices with native plants, water-efficient systems, and low-carbon design to reduce environmental impact.

Spatial design that served diverse functions from recreation to wellness, social gatherings and other activities engaging community use.

Offers a blueprint that can be replicated in other regions or urban spaces, promoting broader impact.

Developed in collaboration with horticulturists and environmental specialists, ensuring cutting-edge, science-backed landscaping techniques.

Impact Created

An analysis of survey responses and the content analysis of narratives recorded during field interactions with multiple sample stakeholders including pedestrians, street vendors and DLF programme & management staff are presented below. The impact discussed is specific to the model used in the delivery of interventions.

Key Findings

Increased Green Cover [3]

- **Increase in green cover percentage in the adopted**- The DLF Foundation, in collaboration with the Gurugram Metropolitan Development Authority, has successfully adopted and developed green belts across major public roads in Gurugram, contributing to a greener and more sustainable city. Through the implementation of earthwork, fencing, and extensive plantation along **key stretches in Sectors 84, 91-92, 93-94, and from AIT Chowk to Medawas (Sector 63)**, the project has enhanced the city's environmental landscape. These efforts are to improve air quality and promote biodiversity that shall enable a cleaner, healthier environment for the residents of Gurugram. This initiative reflects DLF Foundation's ongoing commitment to sustainable urban development.

Sr.No.	Project	Area (Sqm) FY 2022-23
1	Public Green Belt Sector 84	14,894
2	Public Green Belt Sector 93/94	8,000
3	Public Green Belt Act Chowk to Medawas (Sector 63)	28,664
4	Public Green Belt Sector 91/92	Earthwork and Fencing work in FY 2022-23
5	Great Kailash two public parks	8 acres
5	Total	51,558 + 8 acres

- **Improved soil conservation**- The DLF Foundation's green belt development initiative in Gurugram has made significant strides toward creating a more sustainable urban environment. Plantation activities, such as planting trees along streets, and creating green spaces, helped in **capturing and slowing down** rainwater, reducing surface runoff and flooding. Plantations, such as tree-lined streets, green streetscapes, and permeable pavements, have create green spaces that reduce the coverage of impervious materials and increase soil exposure to rainwater, promoting better infiltration and minimizing erosion.

- **Upkeep and retaining of green belts**- The DLF Foundation has emphasized the importance of fencing in maintaining and preserving green belts. By installing fences and grills, they have ensured the upkeep and safety of the developed green spaces. This protective measure has significantly contributed to the **sustainability of the plants**, helping to create a more secure and enduring environment for the green belt.

- The installation of rainwater harvesting (RWH) pits has significantly addressed various environmental concerns. Feedback from residents indicates that the previously persistent issue of waterlogging in the area has been resolved due to these RWH systems. The effective management of rainwater has alleviated flooding problems, creating a more comfortable and safer living environment. Additionally, these upgrades contribute to cleaner and greener surroundings, supporting environmental sustainability and fostering an eco-friendlier community.

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[3] Project Proposal Green Cities- AIT Chowk to Medawas, Sector 84, Sector 91-92 and 93-94 (as shared by DLF Foundation).

Improvement in soft landscape

Increased community perception of beautification through greening activities

- The DLF Foundation's green belt development initiative in Gurugram has enhanced the city's environmental landscape and **positively impacted the well-being** of residents.
- **Out of 31 respondents, 19 agreed** that they have observed a significant improvement in their area. It has helped to transform the environment, fostering a cleaner, greener, and more serene space.
- The project in Gurugram has **brought transformative change to previously barren and dusty areas.**

Enhanced environmental awareness

Increased level of environmental awareness created near intervention areas

- **100% of the sample respondents** confirmed their understanding that the environment directly impacts health.
- This heightened awareness has been particularly noticeable in the areas surrounding the intervention, where residents have **become more conscious** of the importance of green spaces in promoting physical and mental well-being.
- DLF Foundation's green belt development project in Gurugram has gone beyond enhancing the landscape, with a strong focus on **raising environmental awareness**.

Quality of green spaces and maintenance

- The DLF Foundation's green belt development project in Gurugram has received overwhelmingly positive feedback from the community. A recent survey revealed that **61%** of respondents rated the quality of the newly developed green spaces as **Excellent**, while **29%** rated it **good**, and **10%** rated it **satisfactory**.
- Residents have reported that the green spaces are well-maintained, with regular watering and consistent efforts from workers to ensure the plants remain vibrant and healthy.
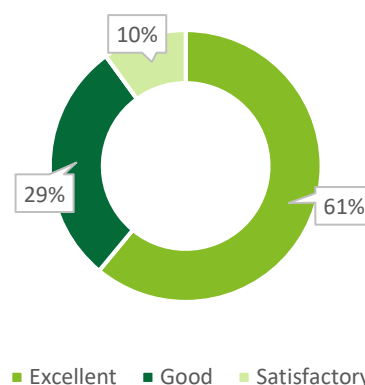
Improvements in mental well-being (n=31)

39%

61%

■ Significant   ■ Moderate
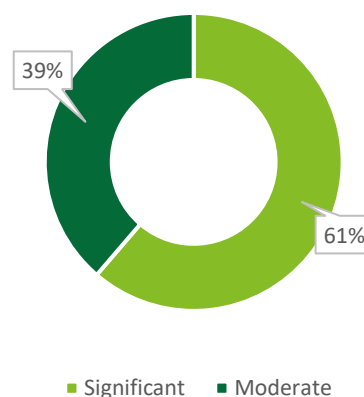
100% Awareness about connection between environmental quality and health (n=31)

Rating provided for improvement in the quality of green spaces (n=31)

10%

29%

61%

■ Excellent   ■ Good   ■ Satisfactory

Availability of clean and green spaces for better health

The development of the 2 parks in GK, Delhi has proven to be an invaluable addition to the community, with 100% of joggers confirming that it provides a dedicated and accessible space for exercise. This well-maintained environment has not only enhanced their fitness routines but also created a safe and clean area for children to play. The park has become a hub for physical activity, offering a peaceful retreat where individuals of all ages can enjoy outdoor pursuits, fostering a sense of well-being and connection within the community.

Challenges in Maintenance

- One of the key issues faced is **damage to barricades, grills and fencing around the plants** due to accidents and grazing cattle. These incidents have occasionally hindered the protection of the newly planted saplings and flowerbeds.
- Repairs to the damaged structures often take **one to two months** to complete, which temporarily affects the overall integrity of the green spaces.
- Despite this challenge, the team remained committed to restoring and maintaining the areas, ensuring that the long-term benefits of the project continue to thrive.

Stories from field

Stakeholder quotes

"Every time I look at the greenery around me, it's like I'm taking a deep breath of fresh air for my soul. It's amazing how much better I feel when I'm surrounded by nature."

- Sunil, Pedestrian, Sector 84, Gurugram

"I never imagined this barren; uneven space could turn into something so beautiful. The greenery has brought a whole new energy here, and now it feels welcoming and peaceful. I feel so much more positive being here."

- Balbir, Security Guard, Sector 91, Gurugram

"I've noticed that the tree shade is a huge draw for customers in the summer. It creates a cool, inviting space where people can hang out and stay longer, which brings a lot of business our way. It's a natural way to keep everyone comfortable."

- Hakim, Street Vendor, Sector 91, Gurugram

"I remember when this area was nothing but dust and rough terrain. Now, seeing it covered in greenery, it feels like a totally different place. The transformation is inspiring, and it's amazing to see how much nature can change a space."

- Priyanka, Pedestrian, Sector 94, Gurugram

Case studies

Case Study: The Jogger's Experience at the Local Park

A frequent jogger, Sarah, shares how her daily runs at the GK park have significantly improved her mental and physical well-being. Initially, Sarah jogged as part of a fitness routine, but over time, she noticed an unexpected shift in how she felt during and after her runs. The serene environment of the park, filled with lush greenery and calming natural sounds, helped reduce her stress and anxiety levels. Sarah explained that every time she runs through the park, it's like her mind clears, and she feels more connected to herself. The physical benefits were clear—improved stamina, better cardiovascular health—but the emotional uplift was equally significant. Sarah's case demonstrates the powerful impact of nature on mental health and how regular outdoor exercise in green spaces can enhance both physical fitness and emotional well-being. This experience has led her to advocate for more green spaces in urban areas to support the overall health of local communities.

Case Study: The Impact of Green Cover on Dust Reduction in Residential Areas

Jasbir, a long-time resident of sector 93 neighborhood, shares his experience of how the introduction of green cover along local roads has drastically improved the air quality and reduced dust pollution in the area. Before the planting of trees and shrubs, Jasbir recalls the constant issue of dust settling on surfaces and creating respiratory discomfort, particularly during the dry season. The roads would be clouded with dust, affecting visibility and cleanliness. However, since the DLF initiated planting rows of trees, hedges, and shrubs along the streets—the dust levels have significantly decreased. Jasbir noticed a cleaner environment almost immediately, with less dust accumulating on his porch and in his home. He attributes this to the natural barriers created by the green cover, which help trap dust particles and prevent them from spreading. In addition, the trees have provided much-needed shade and cooler temperatures, further enhancing the quality of life. Jasbir's experience highlights the positive environmental impact of green spaces in urban planning, showing how even small-scale green initiatives can play a key role in improving air quality and public health.

Conclusion and way forward

This SWOT analysis highlights the project's strong community involvement, sustainability efforts, and expert-driven design, while noting challenges such as cost, complexity, and external risks and environmental changes.

Strengths

- **Sustainability focus:** Emphasizes eco-friendly practices such as using native plants, water-efficient irrigation, and energy-saving technologies, enhancing environmental sustainability.
- **Expert-driven approach:** Collaborates with top-tier horticulturists, landscape architects, and environmental scientists, ensuring high-quality and scientifically backed landscaping solutions.
- **Multifunctional spaces:** Offers diverse spaces that serve various purposes (recreation, socializing, wellness), making it more appealing to a broader audience.
- **Cultural relevance**: Incorporates local cultural elements and uses climate-appropriate plants, creating a landscape that is both meaningful and suited to the environment.

Weaknesses

- **Maintenance requirements**: While designed for sustainability, the project may still require regular monitoring and adaptive management to ensure long-term health and functionality.

Opportunities

- **Expansion and replication**: The project can serve as a model for other cities or regions, creating potential for replication and scaling in other urban or rural areas.
- **Partnerships and funding**: Opportunities for collaboration with governmental bodies, environmental organizations, and private sector investors, potentially securing additional funding and resources.
- **Growing demand for Green Spaces**: With increasing awareness about environmental sustainability and mental health benefits, there is rising demand for well-designed public green spaces.
- **Tourism potential**: Unique and culturally relevant landscaping designs could attract tourists and boost local economies, particularly if the area incorporates eco-tourism elements.

Threats

- **Damage due to accidents and grazing Cattle:** Barricades and grills around plants are vulnerable to damage due to accidents and grazing cattle, which could undermine the protection of saplings and flowerbeds.
- **Delayed repairs:** The time-consuming repair process (one to two months) for damaged structures can temporarily affect the integrity and appearance of the green spaces, potentially reducing public satisfaction.

Glimpses from the field

As observed during Deloitte field visit for the impact assessment study

The green cover established under project as observed during the Deloitte field visit.

Source: Deloitte

Glimpses from the field

Deloitte.

Impact assessment of two Projects for Animal Welfare
DLF Ltd
February 2025

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Executive Summary

Project title	1. Supporting an Animal Shelter in partnership with ACGS 2. Establishing a Veterinary Facility in Delhi
Implementing partners	• DLF Foundation • Lal Chand Public Charitable Trust
Project overview	Under the Animal Welfare Project, the company supported the establishment of a new facility for small animals in Delhi by the CGS Charitable Trust and supporting in creation of the new veterinary facilities. The company also supported the cause of stray animals in partnership with the NGO "All India Creatures Great and Small" which is running and managing an animal shelter for supporting stray animals in Haryana.[1]
Project period	FY 2022 – 2023
Contribution amount	INR 1.68 cr [2]
Project location	1. Tehsil and Dist., Pawta Road, Village Selakhari PO Dhauj, Selakhari, Faridabad, Haryana 121004 (ACGS) 2. CGS Veterinary facility for Dogs & Cats, Sarojini Nagar, New Delhi
Direct Beneficiaries	Stray animals and abandoned pets left for adoption
Problem statement	Despite the growing need for comprehensive veterinary care and awareness about animal welfare, the Gurugram and Delhi NCR regions face significant challenges in ensuring quality treatment, preventive healthcare, and rescue services for pets and stray animals. Faridabad, as per the 20th Livestock Census by the Department of Animal Husbandry and Dairying, Haryana, has a significant population of 1,72,342 stray animals, including cows, buffaloes, monkeys, dogs, and cats. Many of these animals are injured, abused, or suffering from diseases and old age, and are left on the streets without care. This poses a risk to both the animals, who face accidents, and to humans, who may experience harm due to stray animal attacks or damage to property.[1] There is an urgent need for organizations to step forward and address the welfare of these animals, reducing the potential for human-animal conflict and ensuring their well-being.
SDG alignment	

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[1] Project Proposal for ACGS and CGS (DLF Foundation)

[2] Project details provided by DLF Foundation

Summary of Findings

A comprehensive account of Deloitte's observations and results from the impact assessment of the DLF supported projects within the OECD DAC framework parameters.

Parameter	Rationale	Score
Relevance	• The project significantly contributed to the well-being of animals, by offering them medical care, shelter, and preventive treatments, thereby improving their quality of life.	🟢
Coherence	• The shelter and care centre are being run by adhering to relevant protocols required for animal care centres. • All the staff at the centres were trained and attended a refresher course by international veterinarians during the programme tenure.	🟢
Effectiveness	• Medical aid and shelter provided to **7,980 animals** in the form of **6,143 free IPDs; 1,083 free OPDs; 340 free animal surgeries; 309 free X-Rays and 105 animals provided with USG (Ultrasound).**[3] • A total of **274 animals** were added to the ACGS Shelter during the last year. • A total of **48 animals** were treated at the CGS veterinary facility centre.[3]	🟢
Efficiency	• The ACGS Centre is well equipped with an IPD room for dogs, an X-Ray room with an ultrasonographic machine, an OT room, an OPD room and separate sections for each type of animal including dogs, cats, horses, buffaloes, cows, monkeys, geese, emus, birds, and rabbits. • The animals are provided with food and fodder of high quality, some of which is grown within the centre. • The CGS Veterinary facility has OT, in-house laboratory with provision for multiple tests, free birth control and vaccination for stray dogs and cats; OPD for dogs and cats; X-ray and ultrasound facilities; physiotherapy services; pharmacy and daycare facilities for and dogs.	🟢
Impact	The survey based impact findings are: • **100% of surveyed vets and para vets** believed they were well-trained for the job. • **100% of the stakeholders** reported their technical skills improved after joining the centre. • **100% of the respondents** reported that the centre provided quality care to animals.	🟢
Sustainability	• The ACGS centre is currently dependent on funds and grants from external sources. The centre in the future may consider moving towards making a plan of action on how to become self-sustaining. • The CGS Veterinary facility is currently self-sustainable due to provision of paid services being provided to privately owned cats and dogs.	🟠

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[3] Impact Assessment Project FY 2022-23 as shared by DLF Foundation

[3] Document with information about CGS Veterinary facility as shared by DLF Foundation

Recommendations for the way forward:

The assessment conducted by the Deloitte team has highlighted opportunity areas to enhance the grant's effectiveness and maximize impact. These recommendations are for the ACGS Centre based on the field visit conducted by Deloitte. These will be presented as recommendations in the table in two aspects:

| Recommendation	Description
OT for big animals including horses, cows and buffaloes (applicable to ACGS only):	• Consider building a room with a large operating table, advanced anesthesia systems suitable for larger animals, and hoists or slings to assist with safe animal positioning.
In-patient department (IPD) for cats (applicable to ACGS only):	• Consider IPD for dedicated care of Cats, who are the second most vulnerable group accessing the centre, ensuring a higher quality of treatment and comfort for them. • Include individual, well-ventilated enclosures equipped with soft bedding, litter boxes, and space for movement to ensure hygiene and disease prevention, the facility should maintain isolation units for cats suffering from contagious conditions.
Treatment processes and separate treatment area for fatal diseases like distemper in dogs (applicable to ACGS only):	• For distemper in dogs, a dedicated treatment area is crucial to ensure safety and effective care. • Prepare isolation units with individual enclosures, advanced air filtration, and separate entry/exit points to minimize cross-contamination. Special equipment such as veterinary tools, antiviral disinfectants, and PPE for staff, the space should prioritize both medical treatment and nutritional support for infected dogs.
Long-term sustainability of the centre (applicable to ACGS only):	• DLF Foundation may consider creating a plan of Action for ACGS to move towards self-sustainability by setting up a fee structure for treatment/consultation OPD of pets brought by private individuals who may access and pay for services that can offset costs for rescue animals.

A dog patient awaiting checkup of stomach infection in the OPD room at ACGS, Faridabad

X-ray facility at ACGS, Faridabad

Storage for Medicine & essential Supplies at ACGS,
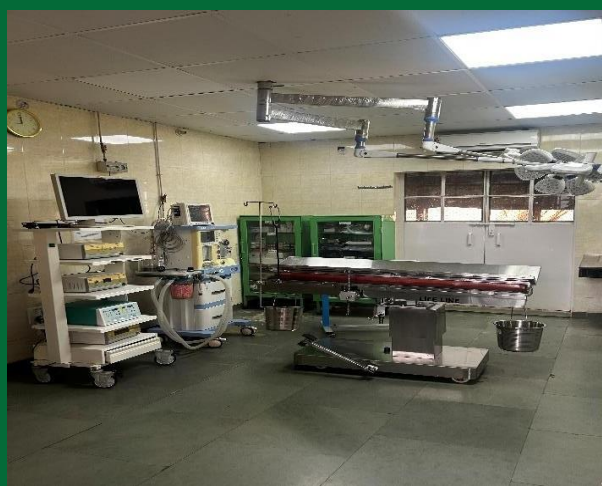
Operation theatre for Animals at ACGS, Faridabad

Source: Deloitte
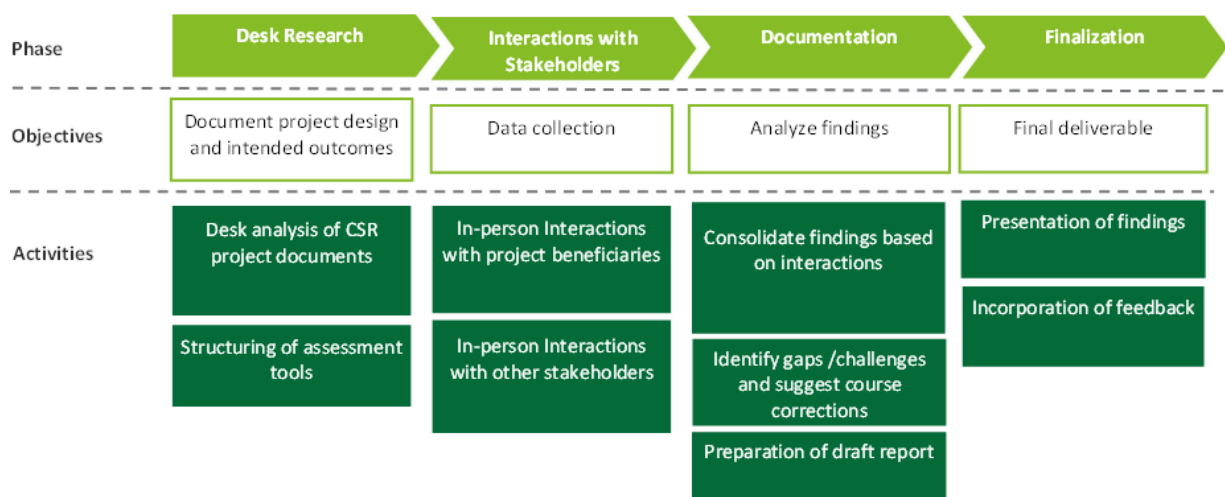
Approach and Methodology

Deloitte used a mixed research design to conduct the assessment, with research questions framed along the Development Assistance Committee (OECD, 1991) principles. The data collection tools sought to collect information from project documents, stakeholders and beneficiaries around key indicators adapted from the UNDP's Results Based Management framework. The assessment involved an analysis of qualitative and quantitative data using primary and secondary data sources.

The **results-based framework** was deployed to determine the project-specific inputs, processes, outputs, and outcomes/impact customized as per the project execution model and in consultation with implementing partners and available documentation. Data for the assessment was collected to answer the following research questions:

- Are the CSR initiatives either relevant to the community's needs/aspirations or aligned with the developmental priorities of the region?
- What were the intended or planned outcomes of the initiatives? Are the program's results in line with the anticipated outcomes?
- How have the CSR initiatives impacted beneficiaries and other relevant stakeholders? Explore changes in the physical, economic, and socio-cultural environments.
- How do the beneficiaries and other stakeholders perceive the CSR initiatives undertaken?
- Are the activities ensuring long-term solutions to the developmental issues of the region? What elements have been built into the project design that will ensure sustainability of results.
- Has there been a disruption in impact due to remote program execution? Are there any potential strategies that could be deployed to combat this disruption?

Report development approach

The impact assessment study of the CSR initiatives was executed in a phased manner. The four main phases are outlined below.

Common Results Framework

The Common Results Indicators developed along UNDP's Results Based Framework for monitoring were used as the basis for the programmatic review. Both primary and secondary project related data were reviewed to gain a holistic understanding of the implementation model and outcomes.

Inputs	Processes	Outputs	Outcomes
• Grant utilized • Project staff deployed • Capacity building and training to staff • Partnership with partner organizations	• Developing of the centres • Onboarding and training of staff members including vets, para vets and volunteers • Setting up separate sections for each type of animal • Setting up ties with vendors for food, medicines, and other equipment • Leveraging government schemes for treatment of big animals including cows, buffaloes, and horses	• No. of animals being treated • No. of animals being rescued • No. of animals being vaccinated	• Increase in the overall wellbeing of injured and stray animals • Increase in stray animals being treated in nearby areas of the centre

Common Results Framework

Desk-based research

In addition to the stakeholder interactions through Key informant interviews with the Project staff, the following project related documents were reviewed:
- Memorandum of Understanding for the project between DLF Foundation and CGS Charitable Trust
- Memorandum of Understanding for the project Lal Chand Public Charitable Trust and ACGS
- CGS Veterinary facility project status report
- ACGS project status report
- Impact assessment reports of ACGS and CGS for FY 2022-23
- Grant Utilization reports

Description of sample

A stakeholder mapping exercise, based on the desk review, was conducted to identify the range of interactions that would be required to document multiple perspectives about impact. The documentation of multi-stakeholder interactions was critical to validating findings through triangulation. The stakeholder mapping to empower project is presented below:

Primary stakeholders:

- Animal caretakers
- Veterinarians

Secondary stakeholders

- Residents and local community members

Sampling plan

A multi-stage mixed methodology was adopted to identify the sample of respondents for the study. The final set of the respondents, given the wide spread of beneficiaries across locations, was selected purposively. For the purpose of this impact assessment, the Deloitte team visited the ACGS Centre in Faridabad and conducted a virtual call with the CGS Veterinary facility team considering the number of animal beneficiaries covered. A snapshot of the sample covered on field is given as below:

Sampling Details

Project location	Sample covered	Type of sampling
• ACGS Centre, Village Sikhari, P.O Dhauj, Faridabad 121004 • CGS Veterinary facility (virtual interaction)	• 2 Veterinarians • 2 Para veterinarians • 2 Volunteers • 2 Management staff members • 1 Veterinary • 1 Management staff member • 1 Centre caretaker	• Purposive

Stakeholder type	Sample covered	Type of sampling
• Veterinarians	• 2 (ACGS), 1 (CGS)	• Purposive
• Para veterinarians	• 2 (ACGS)	• Purposive
• Volunteers	• 2 (ACGS)	• Purposive
• Management staff members	• 2 (ACGS), 2 (CGS)	• Convenience

Study tools

A range of participatory tools were customized to meet the objectives of the assessment. The table below presents a snapshot of the tools used during various stakeholder interactions during the assessment.

Stakeholder	Key Points covered	Study tools deployed
• **Direct beneficiaries/ respondents**	• Nature of support provided • Feedback on the project • Perceived social impact (Reduced animal human conflict, Shelter to stray animals)	FGD, survey, case study
• **Indirect beneficiaries/ respondents**	• Feedback on the project • Perception of impact • Gap areas and needs that could be potentially bridged by CSR support	KII, survey, FGD
• **Administrative Team/Field Team**	• Program implementation • Program monitoring	KII, FGD

A sample of beneficiaries including administrative team was selected for the purpose of the assessment. The intervention type and location-wise distribution for the 11 respondents are shared below:

Stakeholder demographic on the project (N=11)

Legend: Vets | Para Vets | Volunteers | Administrative
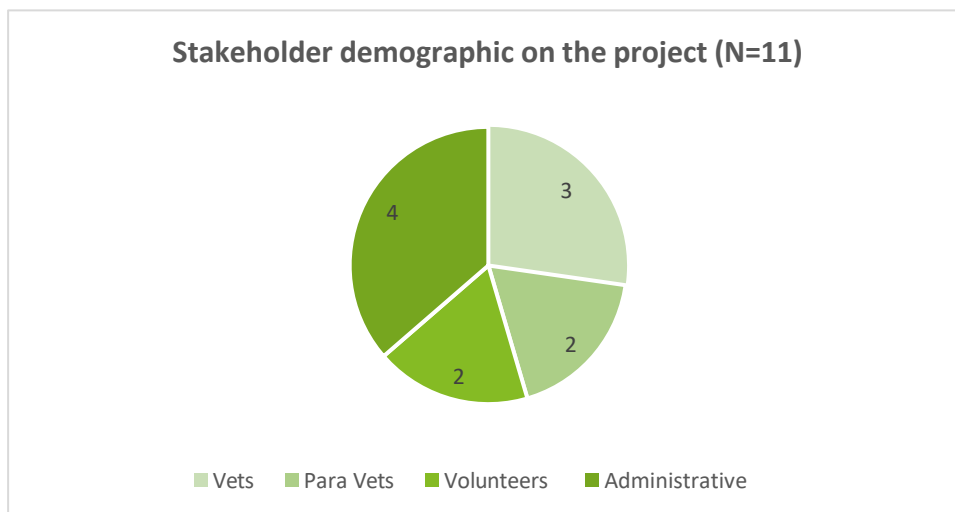
Limitations

- Considering the nature of the project, all interactions were done with stakeholders connected with animal care services.
- Assessing the well-being of animals was challenging, however, improvement in health was evaluated through proxies like behavior (wagging tails, normal activity/movements), health improvements and habitat quality.

Project Coverage

Coverage Snapshot

Trained staff members
27 staff members including vets, para vets and volunteers providing care to animals.

Clean and hygienic sections for each type of animal
10 types of animals are provided with a safe and nurturing environment.

Provision of quality medical equipment
All animals are provided with the necessary vaccines and medicines.

Provision of quality food
To ensure proper nourishment of animal inmates, good quality food is procured and grown at the centre.

Description of beneficiaries

In Faridabad the 7,980 animal beneficiaries of the CSR project include 6,143 in-patient and 1,083 out-patient animals. Animal beneficiaries include Dogs, Cats, Birds, Monkeys, Emus, Geese, Cows, Buffaloes, Horses, and Rabbits.

- **Dogs and Cats**: These animals often live in urban environments without shelter, food, or medical care. The NGO provides them with essential services, including food, medical treatment, vaccinations, spaying/ neutering, and rehabilitation. They are rescued from neglect, abuse, and dangerous street conditions, and some may be rehabilitated for adoption.
- **Cows and Livestock**: animals suffering malnutrition, injury, or abandonment are treated at the centre.
- **Urban Bird species**: Urban birds, including pigeons, crows, sparrows, and even migratory species, who face challenges like habitat loss, food scarcity, and injury from collisions with buildings or vehicles, are supported by the centre.
- **Monkeys**: In urban areas such as Gurugram, monkeys and Langurs can cause both ecological and human-wildlife conflict. They are rehabilitated by the centre through staff efforts in linking with wild-life conservation experts.
- **Horses, Geese, Emus, Rabbits**: Provided with medical care and rehabilitation tailored to their specific needs, ensuring a better quality of life.

In Delhi, 48 Cats and Dogs were covered by CGS Veterinary facility.

Project Model

As observed on field, the animal care project aimed to establish a comprehensive and sustainable model for the welfare of stray animals in Faridabad, Haryana, through a partnership between **All Creatures Great and Small (ACGS) and Lal Chand Public Charitable Trust**. The sanctuary served as a safe and secure place for injured, abused, and vulnerable stray animals, offering them medical care, rehabilitation, and a compassionate environment.

Developing the Centre
Design and build a facility tailored to animal needs with proper space and safety.

Setting Up Animal & Food Sections
Created separate areas for shelter & food cultivation for animal species to meet their specific needs.

Staff Onboarding and Training
Recruited and trained vets, para-vets, and volunteers for quality care and treatment.

Vendor Tie-Ups for Supplies
Established reliable vendor relationships for food, medicines, and equipment with local partnerships.

Leveraging Government Schemes
Use government programs for funding and support in treating large animals.

Inputs

1. **Financial Support:**
   - Funding provided by DLF Assets Ltd and DLF Ltd to cover operational expenses, infrastructure, and healthcare services.
2. **Expertise and Experience:**
   - ACGS and CGS, with their proven track record in animal welfare, leading the on-ground implementation.
3. **Human Resources:**
   - Trained veterinary staff, caregivers, and operational managers ensuring proper care and management of the sanctuary.
4. **Infrastructure:**
   - Existing facilities of the animal sanctuary in Faridabad, including enclosures, medical facilities, and rehabilitation areas.
5. **Supplies and Equipment:**
   - Medicines, surgical tools, animal feed, and transportation for emergency rescue and outreach programs.

Process

1. **Rescue and Rehabilitation:**
   - Immediate medical care is provided to address injuries, illnesses, or malnourishment of rescued animals.
   - Rehabilitation programs are tailored to help animals recover physically and emotionally.
2. **Centre Management:**
   - Animals are housed and tested in species-appropriate enclosures with adequate food, water, and shelter.
   - Special provisions are made for elderly or disabled animals to ensure their comfort.
   - Regular veterinary check-ups and preventive care are conducted.

3. **Healthcare:**
   • Vaccination, sterilization, and birth control drives are conducted to control stray animal populations and prevent diseases.
4. **Monitoring and Evaluation:**
   • Regular assessments are conducted to ensure the quality of care and measure the project's impact.
   • Reporting mechanisms are established to document the number of animals cared for and the services provided.

Strategic differentiators

24x7 care provided to the animals with the staff members staying at the centre.

Special trainings provided to the vets and para vets by international doctors.

Food and fodder for the animals grown at the centre ensured provision of high-quality food for animals.

Quality of medical equipment at par with best private and government hospital equipment.

Impact Created through DLF CSR grant

In FY 2022-23, DLF Foundation collaborated with All Creatures Great and Small (ACGS) and CGS Veterinary facility to provide medical aid, shelter, and rescue services to stray and injured animals. This partnership facilitated access to healthcare and a safe living environment for animals in need.

Medical Aid and Shelter at ACGS:
- ACGS provided treatment and care to **7,980 animals**.
- **6,143 animals** received in-patient treatments (IPDs), while **1,083 animals** were treated through out-patient consultations (OPDs).

- Medical interventions included **340 animal surgeries, 309 X-rays, and 105 ultrasounds (USG)** to support the diagnosis and treatment of various conditions.

Preventive Healthcare at ACGS:
- Dogs were treated with **Bravecto twice a year** to manage ticks and fleas.
- Deworming doses were provided to improve the health of animals under care.

Rescue Operations at ACGS:

- Rescue efforts added **274 animals to the ACGS shelte**r during the year, offering them access to care and rehabilitation.

Preventive Healthcare at CGS:
- **3,500 stray dogs** provided with free vaccination, reducing mortality rates of dogs in surrounding areas and enhancing the overall wellbeing of the entire community.
- A **separate IPD for cats** has helped provide treatment and special care to the second most vulnerable stray animal species.
- Free nurturing of stray dogs has helped with keeping a check on the population of stray dogs in the nearby areas.

Medical Aid at CGS:
- **48 animals** treated at the CGS veterinary facility in Delhi.
- Free samples of Bravecto medication provided to stray dogs to prevent the outbreak of the deadly infection amongst stray dogs.

Quantified usage of medical facilities by number of animals in FY 2022-23 at ACGS
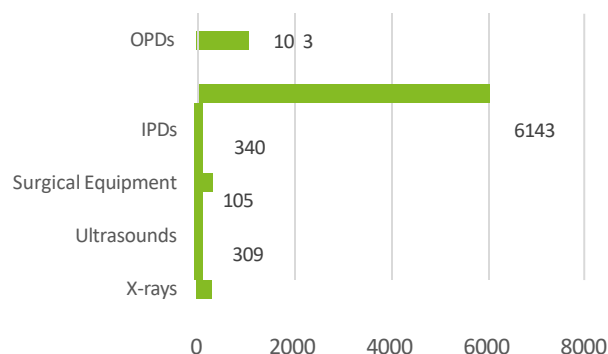
Key Findings

Increase in treatment of stray, injured and abandoned animals

- The data reflects a year-on-year increase in the number of animals treated, indicating the shelter's growing role as a resource for animal welfare in the region.
- Regular health check-ups, timely medical interventions, and emergency care along with quality veterinary services have also contributed to higher recovery rates for animals brought to the shelter.

Increase in recovery of severely fractured dogs

- Specialized orthopedic care, including surgeries and rehabilitation, has led to higher recovery rates for severely fractured dogs.
- Access to advanced equipment and dedicated veterinary teams ensures improved outcomes.

Improvement in behavior of people towards stray and abandoned animals

- Awareness programs and community engagement have fostered better public attitudes towards animals.

Perceived Challenges

- **Resource constraints due to high volume of abandoned animals at ACGS**
  A significant number of animals are abandoned outside the shelter, creating difficulty in providing diagnostics and adequate care to all. This influx strains the shelter's resources, including space, staff, and medical supplies, impacting overall service delivery. However, no animal is left unattended.
- **Resistance from nearby Villagers for ACGS**
  The shelter occasionally faces opposition from villagers in the surrounding areas, stemming from misconceptions or conflicts over the shelter's activities. DLF Foundation may consider a connect programme to overcome the perceived resistance that may hinder operations or limit community collaboration for animal welfare.

Stories from field

Stakeholder quotes

"The availability and motivation of doctors in this centre is unparalleled."

- Vinayak, Volunteer, ACGS Centre, Village Selakhari, P.O Dhauj, Faridabad

"The centre has some of the best medical equipment in the city."

-Rishita, Volunteer, ACGS Centre, Village Sikhari, P.O Dhauj, Faridabad

"The availability of free vaccination for dogs has significantly improved the health of stary dogs in nearby areas."

-Vikash, Associate Director, CGS Veterinary facility, Sarojini Nagar, South Delhi

Stories from field

Case studies

Case Study: Recovery of an Injured Dog

A dog patient with leg injury being prepared for undergoing operation at ACGS Centre, Source: Deloitte

A severely injured dog from Noida was brought to the shelter with two fractures in his back legs and in his backbone. The veterinary team quickly examined him and performed surgery to fix the fractures.

After the operation, the dog was given proper care, including a special diet for 15 days to help him heal faster. The team also gave him regular medicines and therapy to support his recovery.

Although he is still unable to fully use his back legs, the dog has started moving around using three legs enabling him to be mobile. His recovery shows the dedication of the shelter to helping injured animals recover and live better lives.

Case Study: Enhancing the Lives of Stray Dogs and Cats at CGS Veterinary facility
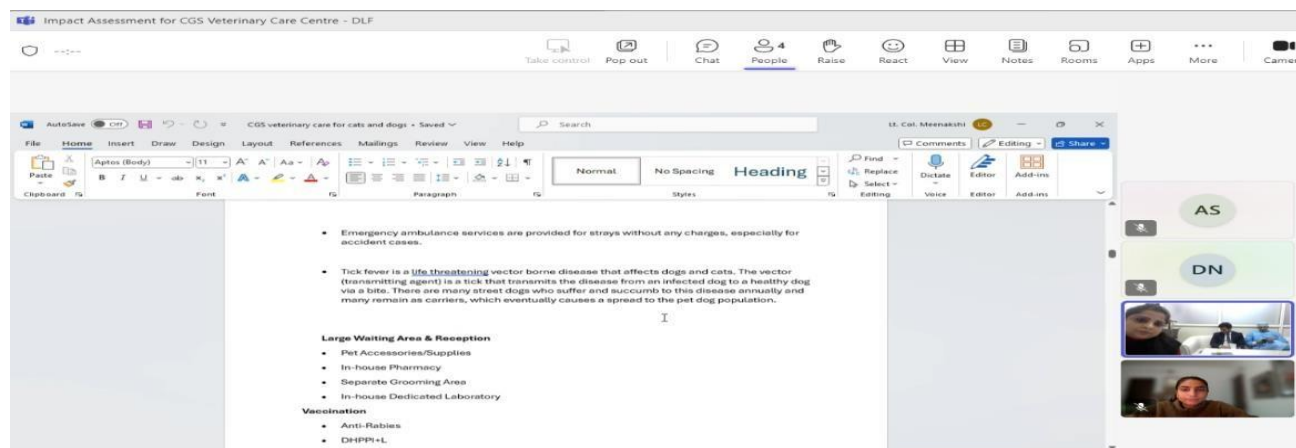
Deloitte team's online interaction with the CGS Care management team for the impact assessment study.

At CGS Veterinary facility, Dr. Vikash mentioned how they have successfully reduced the mortality rate of stray dogs through regular rabies vaccinations and subsidized access to Bravecto, a crucial medication costing INR 2,000 per dose.

By providing comprehensive care, including treatments for injuries and illnesses, the centre ensures quality services for stray cats and dogs. This initiative has improved animal welfare and enhanced public health by preventing rabies cases. Through DLF's CSR funding support, the centre continues to transform the lives of countless stray animals, offering them a chance at better health and wellbeing.

Conclusion and way forward

The SWOT analysis provides a comprehensive overview of the Project's key strengths, challenges, growth opportunities, and potential threats. It highlights areas for improvement and strategic development to enhance the sanctuary's impact on animal welfare.

Strengths

- **Comprehensive Services:** The centre provides extensive medical aid and care, including surgeries, X-rays, ultrasounds, and dedicated facilities for various animal species.
- **Trained Staff:** All staff receive both initial and refresher training from international veterinarians, ensuring high-quality animal care.
- **Well-equipped Infrastructure:** Facilities include IPD and OPD rooms, a surgical theater, and species-specific enclosures, making it capable of addressing diverse animal welfare needs.

Weaknesses

- **Resource Constraints at the ACGS centre:** High volume of abandoned animals leads to strain on resources such as space, staff, and medical supplies.
- **Sustainability Challenges at the ACGS centre:** The centre is heavily reliant on external funding with no clear plan for financial self-sustainability.

Opportunities

- **Community Engagement:** Conducting more awareness programs can improve public attitudes and foster better cooperation with local communities.
- **Expansion of Services:** Developing specialized facilities like an OT for large animals and IPDs for cats can enhance service delivery.
- **Revenue Generation:** Introducing a fee structure for OPD services for private pets can create a steady income stream to reduce dependence on grants.

Threats

- **Dependence on funding for the ACGS centre:** Sole reliance on external grants poses risks to the continuity of operations if funding diminishes.
- **Spread of contagious diseases at the ACGS centre**: absence of dedicated treatment areas for diseases like distemper may lead to cross-contamination among animals in case of an outbreak.

Glimpses from the field

As observed during Deloitte field visit for the impact assessment study ACGS

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Animals kept in isolation for 7 days post rescue

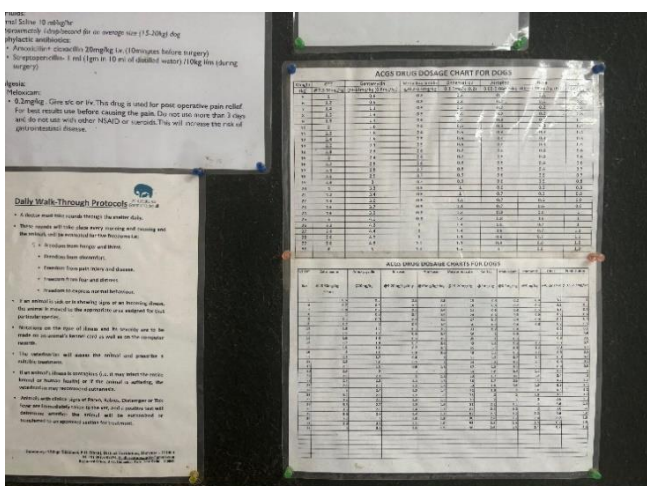*Deloitte team interacting with the head of ACGS*

A separate section for blind dogs

Agriculture land for growing food for animals

Food bowl area for feeding of dogs.

Documentation reviewed by Deloitte team at ACGS centre

CGS Veterinary Facility in Delhi

Source: DLF Foundation

Deloitte.

Impact assessment of Project- Saving lives through Safer Roads
DLF Ltd

February 2025

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Executive Summary

Project title	**Saving lives through Safer Roads**
Implementing partner	DLF Foundation
Project overview	A Pedestrian Walkway and cycling path constructed in principle approval with the Government along the major traffic junction in Sector 42/54 as a part of the 'Saving Lives through Safer Roads' Project.
	The said public pedestrian walkway and cycling path built with a focus on reducing Accidents and providing Safe Access for Disabled and Elderly.
	The Pedestrian Walkway and cycling path nearly 1,600 mtrs. (both ways) long and includes green belts and rainwater harvesting running alongside the paths.[1]
Project period	FY 2022 – 2023
Contribution amount	INR 3.47[2]
Project location	Pedestrian walkway at the junction of Sector 42/54 towards Faridabad Road, Gurugram
Direct Beneficiaries	General Public
Problem statement	Gurugram has one of the highest road accident rates in Haryana, with nearly three fatalities occurring every two days. In 2022, the city saw 256 fatalities, of which many involved pedestrians navigating busy roads without adequate infrastructure. The lack of proper pedestrian walkways, crossovers, and safe crossings on high-traffic routes placed lives at risk.[1]
	Thereby this project aimed to address the safety gaps by developing essential pedestrian walkways to reduce accidents and ensure safer movement for the public.
SDG alignment	

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[1] Project proposal: Saving lives through safer roads (DLF Foundation)

[2] Details shared by DLF Foundation

Summary of Findings

A comprehensive account of Deloitte's observations and results from the impact assessment of the Project areas within the OECD-DAC framework parameters.

Parameter	Rationale	Score
Relevance	• Addressing increasing road safety concerns due to high accident rates in Gurugram. Aimed at making roads safer for pedestrians and cyclists, especially at high-risk intersections.	🟢
Coherence	• The project integrates with existing city infrastructure to enhance connectivity and ensure pedestrian and cyclist safety. • Strong collaboration with Gurugram Metropolitan Development Authority (GMDA) and other local authorities to ensure compliance with regulations, secure necessary approvals, and align with urban mobility plans.	🟢
Effectiveness	• 1,600 mtrs. (both ways) of pedestrian walkway and cycle track developed along the junction of Sector 42/54 towards Faridabad Road. • Central verge and side plantation, along with rainwater harvesting (RWH) pits.[3]	🟢
Efficiency	• Regular audits and progress tracking of key performance indicators (e.g., project progress data & documentation) to ensure project efficiency. • Integration of Rainwater Harvesting (RWH) and tree plantation along the walkway ensures environmental sustainability alongside safety infrastructure. • Collaboration with local authorities for timely approvals and seamless execution.	🟢
Impact	The project was effective in completing the construction of walkway and cycle lane in span of 2 years but the main impact to increase road safety has been assessed. The impact findings are as under: • **87% of respondents reported** a noticeable reduction in traffic congestion after the installation of new pedestrian walkways and cycle tracks. • **100% of the respondents confirmed** that the newly developed pedestrian infrastructure is safe for specially-abled individuals. • **100% of the respondents believe that** the project has improved their overall wellbeing and safety. • **100% respondents admitted** that the walkways & cycle paths were being well maintained.	🟢
Sustainability	• Periodic evaluation of infrastructure to adapt to evolving traffic conditions and needs, ensuring long-term viability and safety of the facilities.	🟠

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[3] Impact Assessment Project FY 2022-23

Recommendations for the way forward:

The assessment conducted by the Deloitte team has highlighted opportunity areas to enhance the grant's effectiveness and maximize impact. These are tabulated as recommendations below:

Recommendation	Description
Mitigating Damage to Infrastructure	• Promote awareness campaigns to encourage public participation in maintaining and protecting road infrastructure. • Monitor the roads regularly to ensure damage control is done effectively and timely. • Develop streamlined processes with local authorities for quick repair approvals after accidents.
Addressing Safety Violations on Footpaths	• Provision of road signs.
Increase Community Engagement	• Organize regular community events to promote pedestrian safety and infrastructure use. • Launch local awareness campaigns to educate residents on the benefits of walking and cycling.
Making the walkways inclusive	• Focus on creating additional accessible features like ramps and tactile paving for visually impaired individuals. • Ensure continuous evaluation of pedestrian infrastructure to meet evolving accessibility standard.

Pedestrian Walkways, Cycle Track & RWH Sector 42-43 and 53-54 towards Faridabad Road: Before Pictures

Walkway: Left Side

Walkway: Right Side

Rainwater Harvesting Pits

Pedestrian Walkways, Cycle Track & RWH Sector 42-43 and 53-54 towards Faridabad Road: After Pictures

Walkway: left side

Central Verge

Rainwater Harvesting Pits

Source: DLF Foundation

Approach and Methodology

Deloitte used a mixed research design to conduct the assessment, with research questions framed along the Development Assistance Committee (OECD, 1991) principles. The data collection tools sought to collect information from project documents, stakeholders and beneficiaries around key indicators adapted from the UNDP's Results Based Management framework. The assessment involved an analysis of qualitative and quantitative data using primary and secondary data sources.
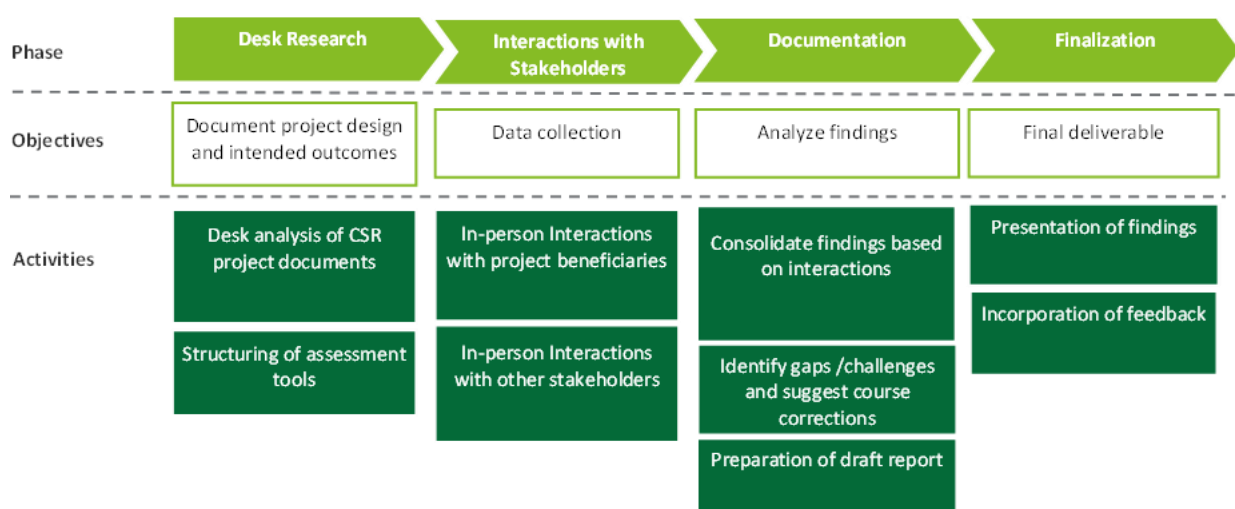
The **results-based framework** was deployed to determine the project-specific inputs, processes, outputs, and outcomes/impact customized as per the project execution model and in consultation with implementing partners and available documentation.

Data for the assessment was collected to answer the following research questions:

- Are the CSR initiatives either relevant to the community's needs/aspirations or aligned with the developmental priorities of the region?
- What were the intended or planned outcomes of the initiatives? Are the program's results in line with the anticipated outcomes?
- How have the CSR initiatives impacted beneficiaries and other relevant stakeholders? Explore changes in the physical, economic, and socio-cultural environments.
- How do the beneficiaries and other stakeholders perceive the CSR initiatives undertaken?
- Are the activities ensuring long-term solutions to the developmental issues of the region? What elements have been built into the project design that will ensure sustainability of results.
- Has there been a disruption in impact due to remote program execution? Are there any potential strategies that could be deployed to combat this disruption?

Report development approach

The impact assessment of the CSR initiatives was executed in a phased manner. The four main phases are outlined below.

Phase	Desk Research	Interactions with Stakeholders	Documentation	Finalization
Objectives	Document project design and intended outcomes	Data collection	Analyze findings	Final deliverable
Activities	Desk analysis of CSR project documents	In-person Interactions with project beneficiaries	Consolidate findings based on interactions	Presentation of findings
	Structuring of assessment tools	In-person Interactions with other stakeholders	Identify gaps /challenges and suggest course corrections	Incorporation of feedback
			Preparation of draft report	

Common Results Framework

The Common Results Indicators developed along UNDP's Results Based Framework for monitoring were used as the basis for the programmatic review. Both primary and secondary project related data were reviewed to gain a holistic understanding of the implementation model and outcomes.

Inputs	Processes	Outputs	Outcomes
• Grant utilized • Project staff deployed • Capacity building and training to staff • Partnership with partner organizations	• Awareness on road safety • Collaboration with government authorities for approvals • Design development with urban planning and horticulture experts • Construction of Infrastructure • Regular monitoring and evaluation	• No. of awareness campaigns held • No. of kms of cycle track and pedestrian walkway built • No. of RWH pits and trees planted • No. of pedestrian crossings installed • No. of progress reports submitted	• Increased public awareness of road safety and pedestrian rights • Reduced pedestrian accidents in high-risk areas • Improved environmental sustainability and stormwater management • Enhanced pedestrian and cyclist safety • Evidence-based improvements for ongoing road safety measures

Common Results Framework

Desk-based research

In addition to the stakeholder interactions through key informant interviews (KII) with the Project staff as well as the DLF Foundation team, the following project related documents were reviewed:

- Approval form GMDA
- Grant Utilization reports

Description of sample
A stakeholder mapping exercise, based on the desk review, was conducted to identify the range of interactions that would be required to document multiple perspectives about impact. The documentation of multi-stakeholder interactions was critical to validating findings through triangulation. The stakeholder mapping for the project is presented below:

Primary stakeholders:

- Pedestrians
- Cyclists
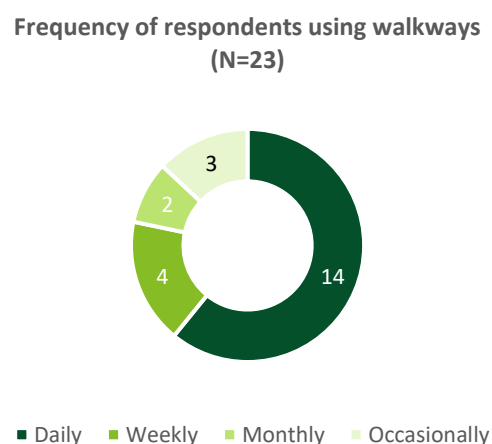- Commuters/Vehicle Owners
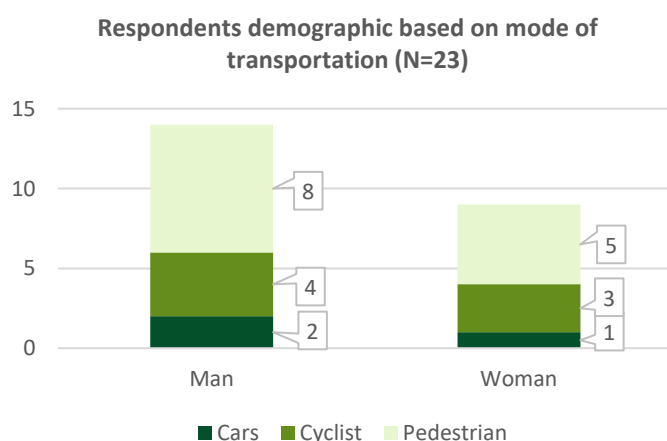- Local Vendors

Secondary stakeholders:

- Administrative team

Sampling Details

Project location	Sample covered	Type of sampling
• Pedestrian walkway at the junction of Sector 42/54 towards Faridabad Road, Gurugram.	• Pedestrians: 13 • Cyclists: 7 • Car drivers: 3 • General Public: 7 FGD	• Purposive

Stakeholder type	Sample covered	Type of sampling
• Pedestrians	• Pedestrian walkway at the junction of Sector 42/54 towards Faridabad Road, Gurugram: 8 • Pedestrian walkway at the junction of Sector 41, Gurugram: 5	• Purposive
• Cyclists	• Pedestrian walkway at the junction of Sector 42/54 towards Faridabad Road, Gurugram: 5 • Pedestrian walkway at Sector 24-26 Gurugram: 2	• Purposive
• Commuters/Vehicle Owners	• Pedestrian walkway at the junction of Sector 42/54 towards Faridabad Road, Gurugram: 2 • Pedestrian walkway at Sector 31, Faridabad: 1	• Purposive

To complete the Impact Assessment study, Deloitte conducted a transect walk from the Sector 43 roundabout to the 800-meter stretch, with layout guidance from the DLF team.

A sample of beneficiaries including programme staff was selected for the purpose of the assessment. The intervention type and location-wise distribution for the 23 respondents, is shared below:

Respondents demographic based on mode of transportation (N=23)

Man: Pedestrian 8, Cyclist 4, Cars 2
Woman: Pedestrian 5, Cyclist 3, Cars 1

■ Cars ■ Cyclist ■ Pedestrian

Frequency of respondents using walkways (N=23)

Daily 14, Weekly 4, Monthly 2, Occasionally 3

■ Daily ■ Weekly ■ Monthly ■ Occasionally

Study tools

A range of participatory tools were customized to meet the objectives of the assessment. The table below presents a snapshot of the tools used during various stakeholder interactions during the assessment.

Stakeholder	Key points covered	Study tools employed
Direct beneficiaries/ respondents	• Nature of support provided • Feedback on the project Perceived social impact (Reduced traffic flow, increased safety & awareness)	FGD, survey, case study
Indirect beneficiaries/ respondents	• Feedback on the project • Perception of impact Gap areas and needs that could be potentially bridged by CSR support	KII, survey, FGD

Limitations

• The project's impact may not be immediately visible. It could take months or years to see a measurable reduction in accidents or improvements in pedestrian behavior, as road safety changes often require a gradual shift in public behavior, acceptance, and usage of safe-infrastructure.
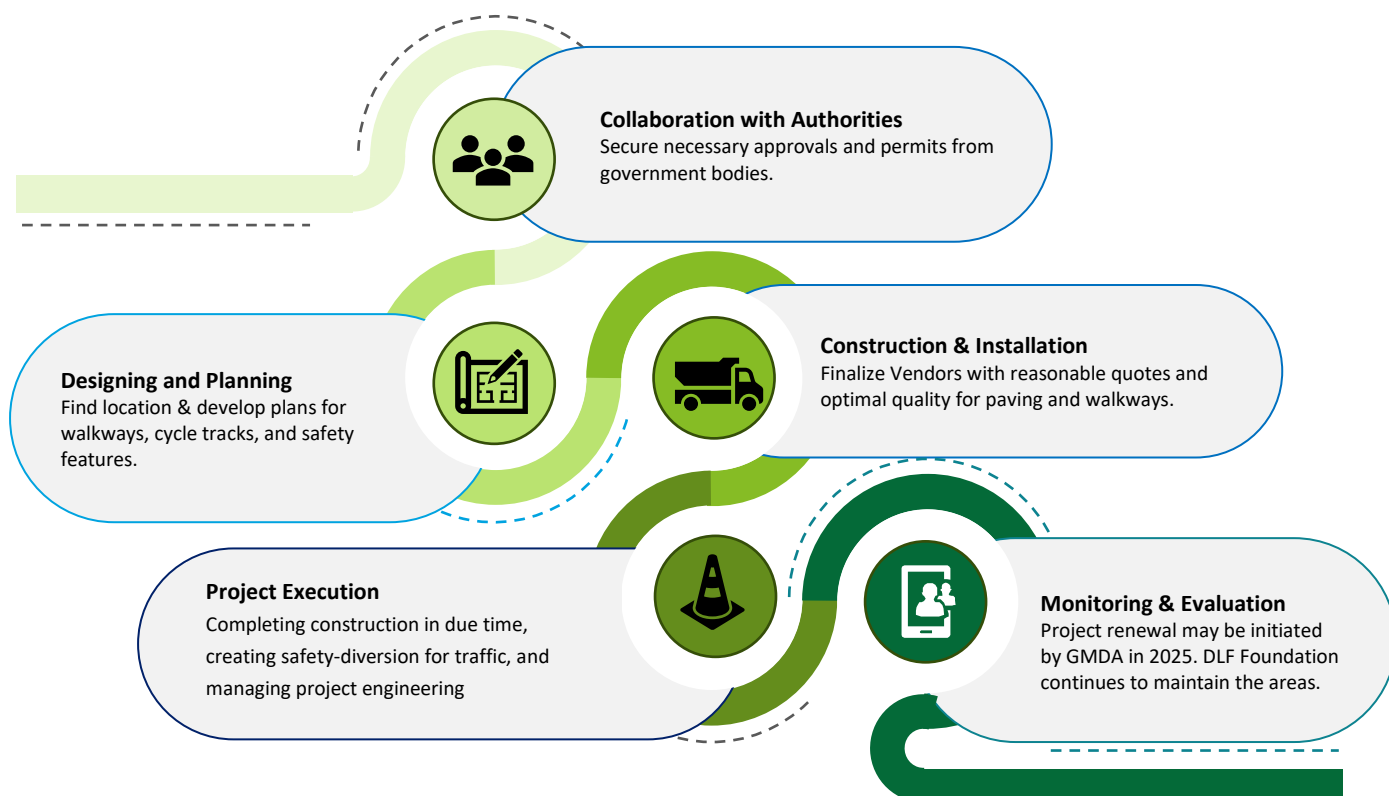
Project Coverage

Coverage Snapshot

1,600 mtrs
of pedestrian walkways and cycle tracks.

Rainwater harvesting pits
have been developed alongside some of the roads.

Tree Plantations
along the roads and walkways have been done and are being well-maintained.

Ramps for people with disability
To ensure proper accessibility and inclusivity, providing equal benefits.

Description of intended public beneficiaries

- **Pedestrians and Cyclists** - Individuals who walked and cycled along the roads benefited from safer, well-designed walkways and dedicated cycle tracks, making their travel more secure and convenient.
- **Commuters** - Daily travellers who used the roads experienced improved traffic flow, reduced accidents, and a more organized transportation system, enhancing their overall travel experience.
- **Differently abled people** - Accessible walkways, ramps, and crossings designed with their needs in mind made it easier and safer for people with disabilities to move around the city.
- **Residents** - Locals living near the upgraded roads benefited from improved safety, reduced traffic-related risks, and better overall infrastructure that enhanced their quality of life.
- **Government Authorities** - Local authorities benefited from enhanced road safety and more efficient traffic management systems, aiding in long-term urban planning and infrastructure development goals.

Project Model

The project aimed to enhance road safety and promote sustainable transportation in Gurugram by developing pedestrian walkways, cycle tracks, and improving overall infrastructure at key junctions. With a focus on safety, inclusion, and reducing vehicle dependency, the project has led to increment in foot traffic, a safer environment for pedestrians, and some reduction in vehicular congestion. It has provided residents with accessible, well-designed pathways, encouraging walking and cycling, while also ensuring that differently abled individuals could navigate the area safely.

Collaboration with Authorities
Secure necessary approvals and permits from government bodies.

Designing and Planning
Find location & develop plans for walkways, cycle tracks, and safety features.

Construction & Installation
Finalize Vendors with reasonable quotes and optimal quality for paving and walkways.

Project Execution
Completing construction in due time, creating safety-diversion for traffic, and managing project engineering

Monitoring & Evaluation
Project renewal may be initiated by GMDA in 2025. DLF Foundation continues to maintain the areas.

Inputs

1. **Land Assessment and Surveys:**
   - Topographical survey of the area.
   - Traffic volume studies to assess pedestrian and cyclist demand.
2. **Stakeholder Engagement:**
   - Compliance with local, national, or international road safety and accessibility standards.
   - Design standards for walkway width, cycling lane dimensions, and safety measures.
3. **Vendor Finalization:**
   - List of potential vendors for construction and installation of walkways, cycle tracks, signage.
   - Contracts for construction and safety equipment supply.
4. **Budget and Funding**
   - Estimation of costs for construction, labor, and maintenance.
   - Securing funding from public or private sources.

Process

1. **Identification of Critical Areas:**
   - Conduct site surveys using GPS, traffic data, and mapping software to assess accident-prone areas.
   - Collaborate with local authorities and traffic experts to identify key roads and junctions needing safety improvements.
   - Prioritize locations based on accident history, traffic volume, and pedestrian activity.
2. **Government Approvals:**
   - Prepare necessary documents, including safety plans, environmental impact assessments, and design proposals.
   - Submit documentation to government bodies to secure approvals and ensure compliance with local regulations.
   - A formal letter to the government seeking the necessary approvals for the project's execution.
   - Follow up with authorities to address any concerns and obtain final approval for project execution.
3. **Infrastructure Design Development:**
   - Collaboration with urban planners and traffic safety experts to develop the design for walkways, cycle tracks, and traffic signage.
   - Ensuring that the design considers factors such as road safety, accessibility for specially-abled individuals, and sustainable infrastructure.
   - Finalizing the design, ensuring alignment with safety standards, government guidelines, and the project's long-term goals.
4. **Procurement Process:**
   - Issue a request for proposals (RFP) to select contractors for construction and installation of road safety infrastructure.
   - Evaluate vendors based on their experience, capability, pricing, and quality of work.
   - Obtain third-party quotations to ensure competitive pricing and transparency in vendor selection.
   - Finalize contracts with selected vendors and establish project timelines for construction and installation.
5. **Construction & Installation:**
   - Begin construction of rainwater harvesting pits, walkways, cycle tracks, and installation of traffic signage according to the approved design.
   - Ensure proper traffic management and minimize disruption to the community during the construction process.
   - Set up infrastructure for rainwater harvesting and safety features, such as pedestrian crossings, guardrails, and traffic signals.
   - The execution of different components such as road markings, signage, and guardrails will follow the finalized design plan.
6. **Monitoring & Evaluation:**
   - Implement a monitoring system to track the effectiveness of the installed infrastructure, using traffic and accident data.
   - Conduct surveys with commuters, pedestrians, and residents to evaluate safety improvements.
   - Adjust and optimize the infrastructure based on feedback and performance data to continuously improve road safety.

7. **Project Completion & Maintenance:**
   • Upon project completion, assess the outcome and ensure all infrastructure is in place as per the design.
   • A maintenance period of 3 years will be undertaken to ensure the infrastructure remains in good condition, with regular checks and minor repairs.
   • After the initial 3-year maintenance period, the project will undergo renewal and oversight by the government, ensuring long-term sustainability and safety.

Strategic differentiators

Using comprehensive data to finalize project location for maximum impact.	Rainwater harvesting pits alongside the roads have been developed.
Alignment with the DLF Foundation's CSR strategy	Promotes healthier lifestyles by increasing pedestrian activity and reducing vehicle reliance.

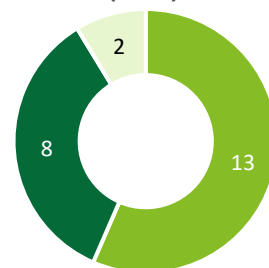# Impact created through DLF Foundation's CSR grant

An analysis of survey responses and the content analysis of narratives recorded during field interactions with multiple sample stakeholders including pedestrians, cyclists and DLF programme & management staff are presented below. The impact discussed is specific to the model used in the delivery of interventions.

Key Findings

Reduced Traffic Flow (Survey Results)

Respondents' belief on the impact of the project in reducing vehicle reliance (n=23)

- **87% of respondents reported a noticeable reduction in traffic congestion.** This significant improvement indicates that the project successfully alleviated congestion by promoting alternative modes of transport, such as walking and cycling. As more locals choose these options over driving, fewer cars are on the road, leading to a smoother flow of traffic and shorter travel duration.
- The new design clearly separates lanes for pedestrians, cyclists, and vehicles, reducing conflicts and improving safety for all road users.
- Additionally, safer intersections have played a key role in managing traffic. By optimizing signal timings and redesigning high-traffic intersections, the project minimized delays and congestion, allowing traffic to move more efficiently.

Accessibility for Specially-Abled Individuals (Survey Results)

- **100% of the respondents confirmed that the newly developed pedestrian infrastructure was safe for specially-abled individuals.** The addition of ramps, & accessible walkways has significantly improved the safety and ease of movement for differently abled individuals. This highlights the project's commitment to inclusivity, ensuring that all members of the community, regardless of physical ability, can navigate public spaces comfortably and safely.

Increased overall-wellbeing and safety (Survey Results)

100% respondents admit that the walkways & cycle paths were well maintained (n=23)

- **100% of the respondents believe that the project has improved their overall wellbeing and infrastructure.** The development of dedicated walkways and cycle paths has played a key role in creating a safer environment for both pedestrians and commuters. These changes have made it easier for people to navigate the area without the constant concern of vehicle traffic, encouraging more individuals to choose walking or cycling as their preferred modes of transport.
- This shift has also led to an increase in foot traffic, contributing to a healthier lifestyle as residents now have greater access to outdoor spaces.
- Overall, the improved safety features have made the urban space more user-friendly, fostering a sense of security and well-being within the community.

Environmental Sustainability and Beautification (Survey Results)

- **The incorporation of a central verge, side plantations, and rainwater harvesting (RWH) pits transformed the aesthetic appeal of the area and bolstered environmental sustainability efforts.** The green spaces and side plantations have helped beautify the neighborhood, adding lush greenery that enhances the quality of life for residents.

- Additionally, the installation of rainwater harvesting (RWH) pits has played a crucial role in addressing environmental concerns. According to feedback from the respondents, the **previously persistent waterlogging issue in the area has been resolved** following the construction of these RWH systems.
  The efficient management of rainwater has alleviated flooding problems, ensuring a more comfortable and safer living environment. Furthermore, these upgrades contribute to cleaner, greener surroundings, supporting environmental sustainability while promoting an eco-friendlier community.

Challenges in Implementation

- A lack of awareness about the importance of road safety and proper use of footpaths and cycle lanes may result in pedestrians and cyclists not adhering to the designated paths, leading to accidents, injuries, and congestion.
- Street vendors or temporary construction may encroach on footpaths or cycle lanes, narrowing or blocking them, forcing pedestrians and cyclists into dangerous areas or into proximity with vehicles.
- Improper parking of vehicles, especially along or near the cycle lanes and footpaths, can obstruct safe passage for pedestrians and cyclists. This may force them to use the road, which is more dangerous and increases the risk of accidents.
- Lack of clear and consistent signage or road markings for both pedestrians and cyclists can lead to confusion, leading to accidents, especially in high-traffic areas or near intersections.

Stories from field

Stakeholder quotes

"The greenery has not only made the area more pleasant to look at but also brought a sense of calm to the streets."

-Rahul, Pedestrian, Sector 23, Gurugram

"Accidents on the road have reduced, and now more people are walking safely, enjoying the clean, green spaces."

-Manish, Cyclist, Chamelia

"This project has opened up valuable employment opportunities for locals, helping the community thrive."

-Sudha, Pedestrian, DLF Phase 3, Gurugram

"Tree guards protect young trees which contributes to preserving the beauty and health of our green spaces."

-Varun, Pedestrian, Sector 43, Gurugram

Stories from field

Case studies

Case Study: How Green Spaces Transformed a Community and Created New Opportunities

A Watchman in Sector 43, Gurugram being interviewed during Deloitte field visit.

Ramesh, the watchman, had worked in Sector 43, Gurugram for years, witnessing its evolution from a dusty, congested area to a thriving, green space. The new pedestrian walkways and cycle tracks, part of an urban mobility project, were lined with trees and plants, transforming the environment. As he made his rounds each morning, Ramesh noticed the peace that had settled over the area—the air felt fresher, and the constant noise from traffic had been reduced. Even more, the greenery had created job opportunities for locals, including some of his neighbours, who now worked as gardeners, caring for the new plants. The shift was not just physical but emotional, too. Ramesh saw how the changes had connected people to nature and brought a sense of pride in the community. The peaceful environment had changed his own outlook, reminding him of the importance of harmony with nature.

Case Study: Ravi's Role in Revitalizing the Neighbourhood

A Gardner working alongside the Sector 43 footpath, Gurugram as observed during Deloitte field visit.

Ravi, a local gardener, had seen his neighbourhood change over time. What used to be dusty roads and empty spaces were now filled with trees and plants, thanks to a new project that added pedestrian walkways and cycle tracks. Ravi was one of the locals hired to take care of the greenery. As he worked, he noticed how the area felt quieter and fresher, with people walking and cycling more. His work has provided him with a steady income source and made him feel proud to be part of the improvement of Gurugram city. The greenery brought him closer to nature, and Ravi felt a deeper connection to the city as he believes he has helped maintain the newly transformed space. He was happy to see children playing on the walkways and families enjoying the open spaces. The project had brought a sense of pride to the area, and Ravi was glad to see his work contribute to the overall positive change.

Conclusion and way forward

The SWOT analysis outlines the key strengths, weaknesses, opportunities, and threats associated with the Road Safety project. It provides insights into the impact on safety, accessibility, and traffic flow, while also identifying areas for improvement and potential challenges.

Strengths

- Improved pedestrian safety with the development of walkways and cycle tracks.
- Enhanced traffic flow and reduced congestion in key areas.
- Inclusivity with features catering to specially-abled individuals, making public spaces more accessible.
- Positive community feedback, with respondents reporting increased well-being and infrastructure improvements.

Weaknesses

- Limited public awareness about the full benefits of the project.
- Potential challenges in comprehensive maintenance and regular monitoring of the walkways and cycle paths.
- Need for more widespread adoption of the infrastructure, especially for cycling.

Opportunities

- Expansion of the pedestrian and cycle network to other key areas in Gurugram.
- Collaboration with local businesses and schools to increase engagement and promote active transport.
- Integration of smart technology for traffic and infrastructure monitoring to improve efficiency.
- Potential for government partnerships to enhance funding and support for future phases.

Threats

- Risk of infrastructure damage due to increasing vehicular traffic, vandalism, or weather conditions.
- Accidents causing breakages delay repairs due to the lengthy approval process with local authorities.
- Reckless cycling and motorbikes driving on footpaths threaten pedestrian safety, disrupt spaces, and violate regulations.
- External factors like changes in urban planning or future construction projects that may affect the developed infrastructure.

Glimpses from the field

As observed during Deloitte field visit for the impact assessment study.

Pathway with plantation near Sector 43 juncture
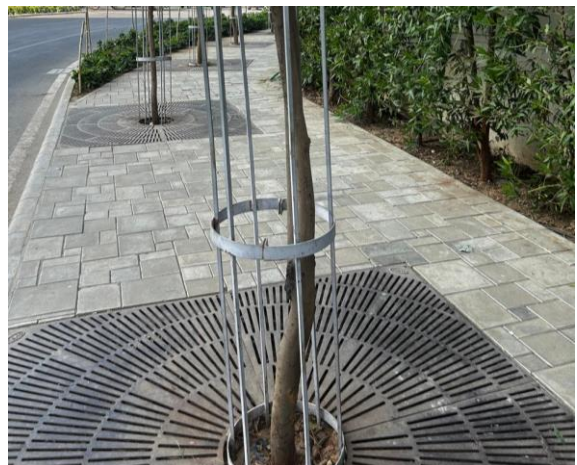

Cycle pathways on sector 42

A gardener planting saplings alongside walkway

Rainwater Harvesting Pits

Traffic Congestion around the corners

Tree guard around recently planted trees

Deloitte.