Paryavaran Saathi: Young Leaders for Climate Action

A Blueprint for Climate Change Education in Delhi NCR's Waste Picker Communities for empowering young leaders

Fostering Knowledge, Action, and Advocacy for a Sustainable Future

chintan
environmental research and action group

NEW DELHI || 2025

Paryavaran Saathi: Young Leaders for Climate Action

A Blueprint for Climate Change Education in Delhi NCR's Waste Picker Communities for empowering young leaders

Fostering Knowledge, Action, and Advocacy for a Sustainable Future

chintan
environmental research and action group

NEW DELHI || 2025

About Chintan Environmental Research and Action Group

Chintan is a non-profit organization that works in the areas of circularity and waste, air pollution and climate change. Using collaborations with diverse stakeholders and evidence-based action, Chintan applies its Lives-Livelihoods-Leadership framework to seek environmental solutions that simultaneously address inequity and poverty, especially for women and children, who are at the centre of its work.

About this Report

This report is grounded in the lived experiences and transformative journeys of over 500 children from the waste picker communities of Bhalswa and Bhopura in Delhi NCR. It draws on insights from a year-long, community-based education initiative led by CHINTAN, designed and implemented in partnership with local educators, families, and young participants. The program was developed in response to the urgent need for localized, hands-on, and action-oriented climate education for marginalized children who are exposed to overlapping risks of climate vulnerability, pollution, and waste-related hazards. The findings and recommendations presented herein reflect the voices of students who not only learned about climate change, but actively shaped and led solutions through awareness campaigns, capstone projects, and climate advocacy. It is hoped that this report will inform future efforts to institutionalize inclusive and context-specific climate education, especially in communities most vulnerable to the climate crisis.

Team

Ashima Gulati, Bharati Chaturvedi

Acknowledgements

We extend our sincere gratitude to the students of the Bhalswa and Bhopura Learning Centres, whose curiosity and determination brought this program to life. We thank the dedicated teachers and facilitators for their mentorship and commitment to real-world impact. We are also grateful to the families for supporting the children's participation and encouraging change at home. Lastly, we acknowledge community members and partners who amplified student voices.

Table of Contents

C-14, Second Floor, Block C, Lajpat Nagar III, Lajpat Nagar, New Delhi, Delhi 110024
Email: info@chintan-india.org
Website: www.chintan-india.org

Executive Summary

In the waste picker communities of Bhalswa and Bhopura, **children** grow up in some of the **most environmentally hazardous conditions in Delhi NCR areas**. **Bhalswa** is a landfill-adjacent community in Delhi where many residents are engaged in informal waste work. **Bhopura** lies on the outskirts of Delhi in Uttar Pradesh and is home to several families involved in waste collection and segregation. The daily lives of the children are shaped by the toxic air from burning waste, the relentless heat radiating off landfill slopes, and the uncertainty of water shortages. These young individuals are not just witnessing climate change; they are living its harshest realities. Yet, they have few tools to adapt, protect themselves, or advocate for change. The **Paryavaran Saathi: Young Leaders for Climate Action program** was designed with this urgent need in mind-not simply as an education initiative, but **as a resilience-building intervention, equipping children with the knowledge and skills to navigate, and adapt to the adverse impacts of climate change**.

The program was implemented by **CHINTAN Environmental Research and Action Group** in their learning centres located at Bhalswa and Bhopura. **Spanning 41 weeks, the program followed a structured three-pillar approach focusing on awareness, action, and advocacy**. The **awareness** pillar introduced fundamental climate change concepts through interactive, experiential learning tailored to the students' lived realities. The **action** pillar encouraged students to engage in hands-on projects such as climate storytelling, composting, awareness campaigns, fostering a sense of agency in addressing local environmental issues. The **advocacy** component equipped students with public speaking and leadership skills, enabling them to participate in policy discussions, community dialogues, and climate roundtables, ensuring that their voices were included in decision-making spaces.

The impact of the program was measured through a **baseline and endline Knowledge, Attitudes, and Practices (KAP) survey**. The **baseline assessment** revealed that **58.21% of students had never heard of climate change**, and **80.74% lacked awareness of how climate change affected their communities**. Only **8.97% of students could explain climate change**, and **84.90% were unaware of any adaptation strategies**. By the **end of the program**, significant progress had been made. The proportion of students who could **confidently explain climate change rose to 56.97%**, and **awareness of climate change causes increased from 6.12% at baseline to 58.82% at endline**. Similarly, **awareness of climate adaptation strategies** saw a major shift, with **4.82% at baseline rising to 50.32% at endline**, demonstrating a newfound understanding of ways to cope with extreme weather, air pollution, and other environmental stressors. **Engagement in climate action increased from 20.57% to 70.28%**, with students reporting to actively participate in waste reduction, composting, and local advocacy efforts. Furthermore, **over 50 students took on leadership roles**, engaging in debates, storytelling, and environmental action groups, demonstrating increased confidence in public speaking and climate advocacy. **At baseline, 47% of students believed they were too young to take climate action**, but by the **endline**, this number had **dropped significantly to 19.50%**,

Executive Summary

showing an increased belief in their ability to contribute. However, strengthening climate resilience in vulnerable communities is not without challenges. Many students had **limited access to digital tools** (**52.63% by the endline**) restricting their ability to engage with climate education beyond in-person sessions. **Household responsibilities and economic pressures** often led to **irregular attendance**, as some students (**over 40% as reported in the endline**) contributed to family livelihoods through waste picking. **Environmental and health risks**, such as air pollution and landfill fires, created additional barriers to outdoor activities. **Teacher training** also emerged as a crucial factor, as facilitators required continuous capacity-building to effectively simplify climate concepts and use interactive teaching methods. Furthermore, **community perceptions** posed a challenge, as climate-friendly practices like waste segregation were often deprioritized due to socio-economic hardships.

The **program's implementation** provided **valuable lessons**. **Hands-on and localized** learning approaches significantly enhanced engagement, as students connected climate science to their everyday lives. Experiential learning activities such as the **Waste Segregation Relay, Climate Storytelling, and Youth Parliament** played a pivotal role in making climate concepts relatable and actionable. **Family and community involvement** played a key role in ensuring long-term behaviour change, reinforcing climate-friendly practices at the household level. **Leadership training** emerged as a vital component, enabling students to articulate their concerns and propose solutions in public forums. **Strategic partnerships with policymakers and environmental organizations** expanded opportunities for student participation in broader climate action initiatives.

Moving forward, **scaling the program** to more communities by adapting to the different community needs is essential to expanding its reach and impact. **Strengthening parental engagement** through structured workshops will help integrate climate action into daily life. **Developing a hybrid learning model, incorporating digital and low-tech solutions,** will make climate education more accessible, particularly for students with limited internet access. Establishing **long-term mentorship and leadership pathways through climate clubs and networking opportunities** will ensure sustained youth engagement. **Enhancing teacher training** through continuous professional development and peer-learning networks will further improve instructional quality. Additionally, **integrating climate education into formal school curricula** will institutionalize climate literacy and ensure that all students, particularly those from marginalized backgrounds, receive structured and action-oriented climate education.

The **program** thus provides a structured approach to **equipping children in vulnerable communities** with the knowledge and skills to respond to climate challenges. **Refining and expanding this initiative can help more students** develop the capacity to engage in community-driven climate solutionsand contribute to broader sustainability efforts.

Introduction & Background

CLIMATE CHALLENGES FOR CHILDREN IN WASTE PICKER COMMUNITIES:

Children in **Delhi NCR's waste picker communities, particularly in Bhalswa and Bhopura,** grow up in some of the most environmentally hazardous conditions. **Bhalswa is a landfill-adjacent community in Delhi** where many residents are engaged in informal waste work. **Bhopura lies on the outskirts of Delhi in Uttar Pradesh** and is home to several families involved in waste collection and segregation.Living near landfills, polluted water bodies, and air pollution hotspots, they are **among the most vulnerable to climate change**. Their families rely on waste collection, sorting, and recycling as their primary source of income, often living in **informal settlements near landfills** where they are directly exposed to **toxic fumes, unclean water, and unsafe housing conditions**.

Unlike children in affluent neighbourhoods, **their daily lives are directly impacted by rising temperatures, toxic air, and poor sanitation**, yet they have **little to no access** to climate education, adaptive solutions, or opportunities to voice their concerns. According to a **United Nations (2016),** children from marginalized communities face higher exposure to **air pollution, waterborne diseases, and climate-induced displacement**, reducing their ability to access education and secure healthy futures. In Delhi NCR areas, where waste picker families are already struggling with hazardous living conditions, climate change further intensifies:

- **Heatwaves & Rising Temperatures** – Delhi NCR's heatwaves have increased in frequency and intensity, with temperatures exceeding 45°C. Children staying outdoors or in tin-roofed shelters face severe dehydration, exhaustion, and long-term health impacts.

- **Air Pollution & Landfill Fires** – Delhi's air quality ranks among the worst in the world, and waste picker children are constantly exposed to toxic fumes from burning waste, leading to chronic respiratory diseases.
- **Contaminated water sources** that increase exposure to waterborne diseases.
- **Increased risks of displacement** due to unsafe living conditions.

NEED FOR CLIMATE EDUCATION IN WASTE PICKER COMMUNITIES:

Children from marginalized communities are among the most affected by climate change but the least equipped to respond to it. They often have **little awareness of how climate change affects their lives or how they can take action to protect their future**. Mainstream climate discussions rarely include their perspectives, and formal education systems lack structured climate curricula designed for underprivileged communities. The lack of climate education in waste picker communities creates a dangerous cycle of vulnerability, where children are unable to:

- Recognize environmental risks or connect them to climate change.

Introduction & Background

- Build adaptive capacity and resilience to climate change impacts to protect themselves and their families.
- Advocate for climate solutions at the local and national level.

The absence of structured climate education means that these children grow up without understanding how climate change affects their health, safety, and future. Many experience **growing anxiety** around rising temperatures, extreme rainfall, fearing not only the loss of personal belongings in floods, but also the disruption of daily routines and loss of family income due to heat-related work interruptions. Since their families often rely on waste management as a livelihood, **sustainability is rarely seen as an immediate priority**, making it essential to introduce climate education in a way that is both accessible and action-driven.

A localized and practical climate education program can help children:

- **Develop problem-solving skills** to address climate issues affecting their communities.
- **Understand** how climate change impacts their health, education, and security.
- **Take leadership roles** in local climate action efforts.

By ensuring that climate education is not just theoretical but linked to daily life, children can become informed, resilient, and proactive in building solutions for their own communities. Therefore, to address this gap in climate awareness and action-oriented learning leaving children and their families unprepared to adapt to environmental risks or advocate for change, the **Paryavaran Saathi: Young Leaders for Climate Action Program** was designed to empower children in Bhalswa and Bhopura waste picker communities with the knowledge, skills, and leadership tools to become active climate changemakers.

BASELINE ASSESSMENT:

Before launching the program, a **Baseline Knowledge, Attitudes, and Practices (KAP) Assessment** was conducted with **457 children from Bhalswa and Bhopura landfill communities** to understand students' existing climate awareness, behaviours, and challenges.

This assessment provided insights into the gaps in environmental education and climate resilience among children in waste picker communities. Key Findings from the Baseline Assessment:

- **Limited Understanding of Climate Change** – 58.21% of students had never heard of climate change, and only 8.97% could explain it.
- **Confusion About Causes** – 78.34% of students did not know what causes climate change, with only 41.36% identifying waste burning as a major contributor.
- **Low Awareness of Climate Impacts** – 80.74% of students had no knowledge of how climate change affected their communities, and only 5.26% could confidently explain it.

Introduction & Background

- **Lack of Climate Action Knowledge –** 80.31% of students did not know how to reduce their climate impact, and 84.90% had no awareness of adaptation strategies.
- **Minimal Participation in Climate Action –** 58.64% of students had never engaged in any climate-related activity, while only 20.57% reported taking action.
- **Perception of Powerlessness** – 47% of students believed they were too young to take action, and 20.57% believed that only governments and rich people could address climate change.
- **Exposure to Pollution but No Solutions** – While 70.46% of students identified air pollution as a major problem in Delhi NCR, only 17.29% linked it to energy use or waste burning.
- **Emotional Responses to Climate Change** – 22.32% of students reported feeling sad about climate change, while 15.10% felt fear or anxiety, but 33.70% felt they did not have enough information to react.
- **Desire to Learn More** – Despite these gaps, 96.28% of students wanted to be informed about climate change and environmental issues.

These findings highlighted the **urgent need** for a climate education program that:

- Makes climate education accessible and relevant to the realities of waste picker children.
- Equips students with practical, hands-on solutions for adaptation and mitigation.
- Builds leadership skills so students can advocate for change in their communities.

For more details on the Baseline Assessment, see Appendix.

PROGRAM INTRODUCTION:

To address the gaps and challenges identifiedin the Baseline Assessment, the Paryavaran Saathi: Young Leaders for Climate Action program was designed as a structured, action-driven climate education initiative tailored for **children from waste picker communities in Bhalswa and Bhopura,** where **CHINTAN** has been running Learning Centres. The students who registered for this non-formal climate education program were already part of CHINTAN's ecosystem, ensuring familiarity with the learning model and continuity in engagement.

The program catered to **children aged 10-18 years**, most of whom live **near landfill sites and highly polluted areas**, making them directly vulnerable to climate risks. Their parents work primarily as waste pickers, recyclers, or informal sector laborers, facing daily exposure to environmental hazards. Many students are enrolled in formal schools but lack access to structured climate education.

This program was tailored to their realities, ensuring practical, engaging, and community-driven climate education that could empower them with knowledge, action, and leadership skills. The program also sought to bridge the knowledge and engagement gap, ensuring that children not only understood climate change but also **applied their learning to real-world problems in their communities**.

Program Design

The **Paryavaran Saathi: Young Leaders for Climate Action** program was designed to be highly interactive, experiential, and rooted in the lived realities of children in waste picker communities.

Unlike traditional education models, it emphasized:

- **Hands-on learning** – Students engaged in experiments, role-playing, and real-world observations to break down complex climate concepts into relatable, easy-to-understand lessons.
- **Community-based engagement** – Encouraging students to apply their learning through action projects, addressing local environmental challenges such as waste management, air pollution, and heatwave preparedness.
- **Leadership development –** Training students in public speaking, problem-solving, and advocacy, empowering them to raise their voices in local and national climate discussions.

The program was delivered over 41 weeks, with a structured curriculum divided into three core pillars:

AWARENESS

- Climate Science Made Simple – Storytelling, experiments, and interactive learning.
- Linking Climate to Daily Life – Air pollution, heatwaves, and waste impact.
- Encouraging Critical Thinking – Question-based learning and discussions.

Building Climate Knowledge & Understanding

ACTION

- Problem-Solving & Innovation – Identifying local issues and designing solutions.
- Community-Based Projects – Waste segregation, air quality, and tree plantations.
- Real-World Application – Implementing measurable impact projects.

Applying Knowledge through Hands-On Solutions

ADVOCACY

- Building Leadership Skills – Public speaking, and climate storytelling.
- Community Engagement – Awareness campaigns and local initiatives.
- Policy & Stakeholder Interaction – Climate forums, youth events, and Climate Panchayat.

Raising Voices & Driving Change

Program Design

Through 41 weeks of structured learning, interactive activities, and real-world application, the program sought to empower **children as key agents of change in climate action**, helping them not just survive but lead efforts for a sustainable future. Instead of simply providing climate knowledge, the program ensured that students internalized environmental challenges, developed practical solutions, and built leadership skills to advocate for change.

The **goal** was to create young climate leaders who could:

- **Recognize** environmental risks in their communities. Through scientific observations, discussions, and real-life case studies, they developed a deeper understanding of how climate change affects their health, education, and daily lives
- **Implement** local solutions such as waste segregation, air pollution awareness, and heatwave preparedness. Students became problem-solvers and sustainability advocates in their homes and neighbourhoods.
- **Engage** with policymakers and climate networks to ensure that their voices are included in larger climate discussions.

PARTNERSHIPS & STAKEHOLDERS:

This initiative was led by **CHINTAN Environmental Research and Action Group,** with collaboration from:

- **Teachers & Facilitators** – Trained weekly to deliver climate education in a simple and interactive manner.
- **Waste Picker Families** – Engaged to support household-level sustainable practices.
- **Local Authorities & NGOs** – Provided policy insights and connections to climate networks. helping students participate in climate forums and leadership training.

By focusing on **hyper-local environmental challenges**, this program ensured that climate education was not just theoretical but actionable, leading to **real impact in both children's lives and their communities**.

PROGRAM TIMELINE: FROM BASELINE TO ENDLINE:

To track the effectiveness of the **Paryavaran Saathi: Young Leaders for Climate Action program**, a structured timeline was followed, beginning with a Baseline Assessment, followed by 41 weeks of structured learning, and concluding with an Endline Assessment to measure impact:

- **Baseline Assessment (Nov 2023)** – Conducted over a week to evaluate students' existing knowledge, attitudes, and practices related to climate change, pollution, and sustainability.
- **Program Implementation (Dec 2023 - Oct 2024)** – A 41-week structured climate education initiative focused on awareness, action, and advocacy, empowering students to become climate leaders.
- **Endline Assessment (Oct - Nov 2024)** – Conducted over 5 weeks to evaluate knowledge gains, behavior shifts, and the impact of climate action projects, assessing students' transformation into active changemakers.

Pillar 1: Awareness:

Building Climate Knowledge & Understanding

OBJECTIVE:

The **Awareness** pillar of the **Paryavaran Saathi: Young Leaders for Climate Action program** was designed to i**ntroduce students to climate science, environmental challenges, and sustainable solutions** in a way that is relatable, engaging, and applicable to their daily lives.

Many children in waste picker communities were unaware of climate change or how it directly affected them. The **Baseline Assessment** conducted with 457 students from Bhalswa and Bhopura revealed that:

- **58.21% of students** had **never heard of climate change**, and only 8.97% could explain it.
- **78.34% of students did not know what causes climate change**, with only 41.36% identifying waste burning as a major contributor.
- **80.74% had no awareness** of how climate change **impacts their local communities**, and only 5.26% could confidently explain its effects.

These findings highlighted a **critical gap in environmental awareness**, emphasizing the urgent need for climate education to help children understand how climate change affects their daily lives and the long-term sustainability of their communities. By the end of this phase, students were expected to:

- Understand core climate science concepts such as the greenhouse effect, pollution, adaptation, and mitigation.
- Recognize environmental risks in their communities, such as waste mismanagement, air pollution, and extreme weather events.
- Develop adaptive capacity and adopt simple daily actions for climate resilience.

IMPLEMENTATION DESIGN:

- **Classroom Structure & Student Grouping:** The program was conducted through **weekly** sessions with students at **CHINTAN Learning Centres in Bhalswa and Bhopura**. Each location had **two trained teachers**, with **each teacher facilitating five groups of students**. Group sizes ranged from **10-20 students per group**, depending on the size and capacity of the learning center. This small-group approach ensured personalized attention, encouraged active participation, and allowed teachers to adapt lessons to different learning levels.

- **Teacher Training & Preparation:** Before conducting each class, teachers attended a **weekly training session** at CHINTAN's offices to review **lesson objectives, interactive teaching methods, and facilitation strategies**. These sessions helped teachers gain clarity on climate concepts, practice engagement techniques, and adapt lessons to the students' lived realities.

Pillar 1: Awareness:

Building Climate Knowledge & Understanding

To ensure structured and engaging lesson delivery, teachers received a comprehensive resource package each week, including:

1. Detailed lesson plans with step-by-step instructions.
2. Activity worksheets & classwork exercises for students.
3. Discussion prompts & storytelling guides to encourage participation.
4. PowerPoint presentations & visual aids for concept reinforcement.

- **Classroom Implementation**: Sessions were delivered at CHINTAN Learning Centres in Bhalswa and Bhopura, where teachers guided students using interactive learning methods. Lessons were designed to be hands-on, participatory, and reflective, incorporating:

1. Storytelling & role-playing to simplify climate science.
2. Experiments & demonstrations to reinforce scientific concepts.
3. Observation-based learning connecting climate issues to their surroundings.
4. Encouraging Critical Thinking & Discussion – Students were given real-world scenarios to analyze, allowing them to connect climate knowledge to their lived experiences.

- **Continuous Feedback & Curriculum Adaptation:** To ensure ongoing improvement and responsiveness to student needs, a continuous feedback system was implemented throughout the program. After each session, teachers provided weekly feedback on student engagement, comprehension, and any learning challenges faced during lessons. This allowed for real-time assessment of what was working well and what needed improvement. A WhatsApp group was created with all teachers, enabling

💡 **Spotlight: Waste Segregation Relay Game**

Objective: To teach the importance of waste segregation and zero waste practices.
What Was Done: Students sorted different types of waste into wet, dry, and hazardous categories through a fast-paced game.
Impact: Encouraged practical learning of proper waste disposal, making it a fun yet impactful experience.

Pillar 1: Awareness:

Building Climate Knowledge & Understanding

efficient communication, quick resolution of doubts, and real-time sharing of insights and best practices. This platform facilitated **collaborative problem-solving** and ensured that teachers had ongoing support from the program team and their peers.

Based on teacher feedback, lesson plans, classroom activities, and engagement strategies were **refined regularly to enhance clarity, accessibility, and relevance**. This iterative approach allowed the program to **adapt to student learning needs**, ensuring a more interactive and impactful learning experience.

SNAPSHOT: TOPICS COVERED UNDER AWARENESS:

The program provided a structured and immersive climate education experience, covering **key environmental, climate, and sustainability topics**. Students began by understanding basic environmental concepts, including the **interdependence of living and non-living things, weather patterns, climate variability, and the greenhouse effect**, helping them connect scientific concepts to their lived realities. They then explored h**uman-induced climate change**, learning how fossil fuel use, deforestation, and waste mismanagement contribute to **global warming** and how their communities are **directly impacted** by pollution, landfill fires, and extreme heat.

The curriculum addressed **waste and pollution management,** emphasizing air quality, water conservation, plastic reduction, and zero-waste practices, while also introducing **mitigation strategies** relevant to waste picker communities. Students explored **waste segregation, composting organic waste, reducing plastic dependency, and adopting low-emission cooking alternatives** such as improved cookstoves to reduce GHG emissions. The program also focused on **adaptation strategies**, particularly in the context of **waste picker communities**, where families face rising temperatures, water contamination, and poor infrastructure. Students explored **disaster preparedness**, improving water security, and climate-resilient farming, discussing how l**ocal initiatives like rainwater harvesting, community tree plantations, and heatwave preparedness campaigns** could help their communities adapt to environmental changes. The program further covered **youth-led climate action, environmental laws, and global climate commitments**, ensuring students could engage in community-based solutions and climate advocacy. **For a detailed breakdown of topics covered, see Appendix.**

Pillar 1: Awareness:

Building Climate Knowledge & Understanding

SPOTLIGHT: KEY ACTIVITIES CONDUCTED UNDER AWARENESS

To reinforce climate learning, the program incorporated experiential activities, ensuring that students could apply their knowledge through hands-on experiences. Below are few key activities that had a significant impact on student learning:

💡 Spotlight: Paper Bag Making & Plastic Reduction Awareness

Objective: To promote plastic-free alternatives and encourage students to reduce plastic waste in their communities.
What Was Done: Students learned about plastic pollution and its impact on the environment, and made paper bags using old newspapers, reinforcing the idea of reusing waste materials.

Impact: Encouraged them to advocate for plastic-free alternatives in their homes and local markets.

💡 Spotlight: Hands-On Composting Activity

Objective: To teach students how composting reduces waste and enriches soil, promoting zero-waste practices.
What Was Done: Students segregated biodegradable waste, created mini composting pits using organic materials, and observed the decomposition process over time

Impact: Encouraged students to adopt composting at home, reducing organic waste in landfills and reinforcing waste-to-resource approaches in their communities.

Pillar 2: Action:

Applying Knowledge Through Hands-On Solutions

OBJECTIVE:

The **Action** pillar of the **Paryavaran Saathi: Young Leaders for Climate Action program** was designed to move **beyond awareness** and enable students to **actively engage in climate solutions.** This phase focused on **practical applications of climate knowledge**, allowing students to identify local environmental challenges, design interventions, and **implement sustainable solutions in their communities**.

The **Baseline Assessment** revealed a critical gap in climate action and participation among children in waste picker communities, highlighting the need for hands-on learning opportunities:

- **80.31% of students had no knowledge of climate action strategies** and how to reduce the causes of climate change.
- **84.90% of students were unaware of adaptation measures,** leaving them vulnerable to extreme weather events and environmental hazards.
- **58.64% of students reported that neither they nor their families had taken any action to address climate change**, while only 20.57% had engaged in any environmental initiative.
- **47% of students believed they were too young to take action,** indicating a lack of empowerment and confidence in their ability to contribute to solutions.

These findings emphasized the need for structured, hands-on projects where students could apply their learning, gain confidence, and drive real change in their communities.

By the end of this phase, students were expected to:

- **Develop problem-solving skills** by identifying climate and environmental issues in their communities.
- **Implement practical climate action projects**, such as waste segregation, composting, and climate awareness campaigns.
- **Engage in teamwork, project planning, and leadership,** ensuring long-term community impact.

The capstone projects served as the **practical application of the knowledge gained in the Awareness phase,** empowering students to become **agents of change** in their communities.

IMPLEMENTATION DESIGN:

The Action pillar followed a structured approach that enabled students to translate knowledge into impactful environmental solutions:

- **Problem Identification & Project Selection:** Students were guided to identify key climate issues affecting their communities, including waste mismanagement, landfill fires, heat stress, and lack of green spaces. **A total of 18 student groups were created**, each focusing on a specific climate action

Pillar 2: Action:

Applying Knowledge Through Hands-On Solutions

project aligned with local challenges.

- **Capstone Project Development & Execution**: Students developed step-by-step action plans, setting clear goals, timelines, and impact measures for their projects. Each group executed their projects through campaigns, digital storytelling, creative arts, and on-the-ground initiatives to drive community engagement and awareness.

- **Mentorship, Guidance & Reflection:** Teachers provided guidance, resources, and troubleshooting support throughout project execution. Students shared their progress and learnings, refining their projects based on peer and mentor feedback. After completing their projects, students analyzed their impact, discussed challenges, and proposed future improvements.

CAPSTONE PROJECTS: STUDENT-LED CLIMATE ACTION INITIATIVES:

Each of the 18 student groups designed and implemented a unique capstone project aimed at addressing specific climate challenges in their communities. These projects allowed students to apply their learning, engage with the community, and drive climate awareness and action. Below is a snapshot of the projects along with video documentation links:

PROJECT 1: LIFE IN A LANDFILL – AWARENESS VIDEO

This **2-minute-long digital campaign** showcased the **daily struggles of a child living in a landfill,** highlighting **waste mismanagement, air pollution, and climate change**. Through **visual storytelling**, the video aimed to **sensitize viewers to the harsh realities** faced by waste picker communities and **advocate for better waste segregation and management practices.**
📌 **Watch Here**: Video Link

Pillar 2: Action:

Applying Knowledge Through Hands-On Solutions

PROJECT 2: WASTE2WEALTH – UPCYCLED HANDMADE PRODUCTS

Students created **diaries from waste paper, wall hangings from discarded materials, pen stands and plant holders from repurposed waste**, demonstrating how waste can be transformed into useful products. The project promoted upcycling as a **sustainable practice**, encouraging creativity in waste management and circular economy thinking.

📌 **Watch Here:** Video Link

PROJECT 3: DOOR-TO-DOOR CLIMATE AWARENESS DRIVE

Students conducted **door-to-door counseling sessions in their communities**, educating families about the **dangers of landfill burning, air pollution, and climate change**. They distributed informational pamphlets, engaged in **one-on-one discussions** and encouraged local action to reduce pollution and improve air quality.

📌 Watch Here: Video Link

PROJECT 4: CLIMATE STORYBOOK – WRITTEN & ILLUSTRATED BY STUDENTS

Students wrote and illustrated a Hindi storybook on climate change, using storytelling to educate others on environmental issues. The book, "परिवर्तन का एक बीज: भलस्वा लैंडफिल के लिए प्रकृति की लड़ाई" (A Seed of Change: Prakriti's Fight for Bhalswa Landfill), follows the journey of Prakriti, a young girl who discovers the dangers of the Bhalswa landfill and takes action to create change. Through her efforts, the story highlights waste segregation, composting, and community-led environmental solutions in a relatable and engaging way.

📌 **Read Here:** Story Link
📌 **Watch Here**: Video Link

Pillar 2: Action:

Applying Knowledge Through Hands-On Solutions

PROJECT 5: CLIMATE CHANGE POETRY COLLECTION

Students expressed their understanding of climate change through **poetry**, compiling a **collection of illustrated poems on environmental degradation, pollution, and hope for a sustainable future**. This project encouraged creative expression as a tool for advocacy and awareness.

📌 **Read Here**: Poem Link

📌 **Watch Here:** Video Link

PROJECT 6: NUKKAD NATAK – STREET PLAY ON AIR POLLUTION

Students performed a **Nukkad Natak (street play)** in local communities, highlighting the **impact of air pollution, its sources, and actionable solutions**. This i**nteractive, theatrical approach** helped engage a wider audience, making **complex climate issues easy to understand** and inspiring collective action.

📌 **Watch Here**: Video Link

PROJECT 7: INFORMATIVE CLIMATE ACTION VIDEOS

Students created engaging educational videos on various topics, such as 7 Steps to Take for Climate Action – A practical guide for individuals to adopt sustainable habits; How to Compost at Home – A step-by-step tutorial encouraging waste reduction through composting. These videos were shared with community members and local schools, making climate action accessible and easy to implement.

📌 **Watch Here**: Video Link 1, 2, 3

Pillar 2: Action:

Applying Knowledge Through Hands-On Solutions

PROJECT 8: YOUTH PARLIAMENT ON CLIMATE POLICY

Students organized mock Youth Parliaments, debating policies on urban green spaces and waste segregation penalties. The two key resolutions proposed were Mandating 10% of urban land for parks and gardens in cities with over 1 million population; and Enhancing penalties for improper waste segregation, increasing fines to INR 10,000 per violation. Through this exercise, students developed public speaking skills, policy awareness, and advocacy techniques.

📌 **Watch Here:** Video Link 1 and 2

Some drawings made by kids during the action phase:

Pillar 3: Advocacy:

Raising Voices & Driving Change

OBJECTIVE:

The **Advocacy** pillar of the **Paryavaran Saathi: Young Leaders for Climate Action program** was designed to empower students to r**epresent their communities and advocate for climate action at key decision-making platforms.** This phase ensured that students could **voice their concerns, present solutions, and engage with policymakers at local, national, and global levels**.

The **Baseline Assessment** highlighted that students **lacked confidence and opportunities** to participate in climate advocacy:

- **47% of students believed they were too young to take action**, indicating a need for leadership training and empowerment.
- **Only 5.26% of students could confidently explain how climate change affects their communities**, limiting their ability to communicate their lived experiences.
- **Less than 10% had ever participated in climate discussions**, showing that advocacy platforms were either unavailable or inaccessible.

These findings underscored the need to **equip students with public speaking, leadership, and policy engagement skills**, ensuring that their voices were represented in local governance, youth climate networks, and community decision-making spaces.

By the end of this phase, students were expected to:

- **Develop confidence in public speaking and climate storytelling**, ensuring they could effectively communicate their concerns and solutions.
- **Engage with local and national platforms**, participating in discussions on waste management, pollution, and community-led climate action.
- **Represent their communities in climate forums**, ensuring that the voices of waste picker children were included in decision-making.

IMPLEMENTATION DESIGN:

The Advocacy pillar followed a **structured approach** to ensure students **gained the skills, experience, and confidence** to participate in **climate discussions and policymaking efforts.**

- **Building Advocacy & Communication Skills**: Students participated in debates, storytelling exercises, and youth parliament simulations, building confidence in expressing their views on environmental issues. Students were trained to document their experiences through writing, photography, and short videos, using social media and other platforms to share their climate concerns and solutions.
- **Engagement with Policy & Governance**: Students were given opportunities to interact

Pillar 3: Advocacy:

Raising Voices & Driving Change

to interact with policymakers, environmentalists, and climate organizations through roundtable discussions and public forums. Selected students attended CHINTAN's **Climate Panchayat, Youth Parliaments, and Pre-COP28 training sessions**, ensuring waste picker communities were represented in **climate policy spaces**.

- **Leadership Development & Community Advocacy:** Students were trained in leadership, negotiation, and community organizing, preparing them to lead local environmental campaigns. Students mentored their family and community members, helping expand the reach of climate education in their communities.

ADVOCACY IN ACTION: STUDENT ENGAGEMENT IN KEY CLIMATE PLATFORMS:

The **final phase** of the Paryavaran Saathi: Young Leaders for Climate Action program focused on empowering students to represent their communities at **key decision-making platforms**. Through local discussions, national youth dialogues, and global climate forums, students voiced their concerns, presented solutions, and engaged with policymakers and stakeholders.

📌 **Local Climate Advocacy & Awareness**:

- Select students participated in a local session organized by CHINTAN (September 2024), where they discussed the impact of heatwaves on waste pickers and proposed local solutions.
- Students documented their experiences of living near the Bhalswa landfill, capturing their concerns about climate change and community-led solutions.

📌 **National & Global Climate Representation**

- The documentation made by students was showcased at **LCOY India 2024,** ensuring that the lived realities of waste picker children were highlighted in climate discussions.
- Their insights contributed to the **Global Youth Statement at COP28**, amplifying the voices of marginalized communities at the international climate policy level.

Pillar 3: Advocacy:

Raising Voices & Driving Change

- Students participated in the **Pre-COP28 Youth Training Program by Pratyek Organisation**, engaging in digital learning sessions on climate governance and advocacy.
- Select students were chosen as part of the **Top 100 Youth Champions** for further training, a process that is still ongoing.

📌**National Roundtable Discussions & Climate Leadership:**

- Students were invited to a **national roundtable organized** by CHINTAN in November 2024, where they raised their concerns about climate justice and the need for greater youth participation in decision-making.

📌**CHINTAN's Climate Panchayat & Recognition of Young Leaders:**

- The program culminated in the **Climate Panchayat,** organized by CHINTAN in December 2024, where students showcased their work, capstone projects, and advocacy efforts.
- The event featured **key stakeholders, including policymakers, environmental experts, and community leader**s, who

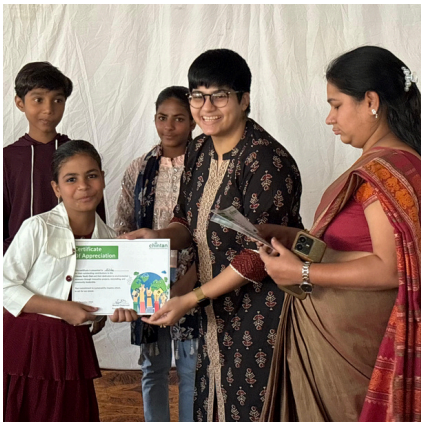
Pillar 3: Advocacy:

Raising Voices & Driving Change

engaged with students and discussed solutions.

- The **Top 10 Young Climate Leaders from the program** were recognized and awarded, ensuring continued motivation and leadership development among the students.







Monitoring & Evaluation

The **Monitoring & Evaluation framework** of the **Paryavaran Saathi: Young Leaders for Climate Actionprogram** was designed to track **student participation, assess learning outcomes, and measure behavioural shifts**. The program used **attendance records, teacher assessments, student feedback, and pre- and post-program evaluations** to evaluate its effectiveness.

ATTENDANCE & ENGAGEMENT TRACKING:

To ensure consistent participation and learning progress, a structured attendance and engagement tracking systemwas implemented.

1 Weekly Attendance Monitoring:

- Teachers recorded **weekly student attendance** at CHINTAN Learning Centres in Bhalswa and Bhopura through an **online attendance tracker**.
- A total of **563 students were enrolled** in the program across CHINTAN Learning Centres in Bhalswa and Bhopura.
- **47.25% of students (266 students)** attended **at least 50% of the sessions (41 weeks)**, indicating moderate to high engagement.
- **16.2% of students (91 students)** attended **80% or more of the sessions**, qualifying as highly engaged participants.
- Students who missed multiple sessions were followed up with to understand barriers to participation.
- **Barriers to attendance reported by students and teachers** included household responsibilities, school commitments, relocation and seasonal factors like extreme weather conditions.

2 Engagement & Participation Tracking

Student engagement was assessed based on class participation, involvement in discussions, and contributions to capstone projects.

- **Class Participation:**
  1. **129 students (22.9%) demonstrated high engagement,** scoring 16+ out of 20 in participation marks. This was a qualitative assessment made by the teachers.
  2. **168 students (29.8%) showed moderate engagement**, scoring between 10-15 out of 20. This was a qualitative assessment made by the teachers.

- **Contributions in Capstone Projects:**
  1. **18 student groups participated in climate action projects**, ranging from waste management campaigns to climate storytelling.
  2. Teachers **monitored progress through weekly reflections**, ensuring projects were student-led and community-driven.
  3. **133 students (23.6%) made high contributions**, scoring 25+ out of 30, actively leading and implementing climate solutions.
  4. **185 students (32.9%) contributed moderately**, scoring between 15-24 out of 30.

3 Routine Assessments & Final Quiz Performance

To track learning outcomes, students participated in **routine tests throughout the program, followed by a final quiz** at the end of the program.

Monitoring & Evaluation

- **49 students (8.7%) scored 80% or more** (24+ marks/30), demonstrating strong comprehension of climate concepts.
- **163 students (28.9%) scored between 60-79%** (18-23 marks/30), indicating a solid grasp of the subject.
- **91 students (16.2%) scored between 40-59%** (12-17 marks/30), showing basic understanding with room for improvement.

The routine assessments and quizzes played a crucial role in reinforcing key climate education concepts and tracking students' progress over time.

ENDLINE FINDINGS:

To evaluate the impact of the **Paryavaran Saathi: Young Leaders for Climate Action program**, an endline assessment was conducted with **323 students** using the same Knowledge, Attitudes, and Practices (KAP) survey used for the Baseline Assessment. This assessment **measured students' understanding of climate change, adoption of sustainable behaviours, and confidence in climate action, comparing findings with the baseline assessment.**

Based on students' responses, the following **key insights** highlight **significant improvements in climate literacy, behaviour change, and leadership engagement**. For further details on the endline assessment, refer **Appendix**.

1 Improved Climate Change Awareness

- At **baseline, 58.21% of students had no knowledge of climate change**. In the **endline**, this figure dropped to **8.98%,** showing a significant reduction in climate ignorance.
- The proportion of **students who had heard about climate change multiple times and could explain it well** increased from **8.97% in the baseline to 56.97% in the endline**.
- **Understanding of climate change causes** improved significantly: only 6.12% of students could explain the causes at baseline, whereas **58.82% could do so at endline.**
- **Awareness of human-induced climate change increased from 40.92% to 79.26%,** while students who attributed it solely to natural factors declined from 24.29% to 10.53%.

2 Recognizing Climate Change Impacts

Students also demonstrated a better understanding of how climate change affects their surroundings:

- Awareness of **rising temperatures** increased from **21.66% to 82.97%**.
- Understanding of **rainfall pattern changes** improved from **15.75% to 54.49%**.
- Awareness of **biodiversity loss** grew from **23.41% to 57.59%**.
- Recognition of **flooding** as a climate impact doubled from **15.54% to 33.44%**
- **Additionally, 92.57% of students in the endline** believed **climate change was affecting their community**, compared to 54.92% in the baseline.

Monitoring & Evaluation

3 Adoption of Sustainable Practices

Students advocated significant shifts in daily behaviours that support climate resilience:

- **Waste segregation at home** increased from 21% (baseline) to 76% (endline).
- **Composting** organic waste rose from 9.8% to 62%.
- **Use of reusable bags and reduction in plastic** usage improved from 18% to 74%.

More students engaged in community climate action, with **70.28% reporting that they or their families had taken action,** compared to just 20.57% at baseline. Furthermore, **uncertainty about how to take climate action dropped to zero:** whereas in the baseline, 26.26% of students had selected 'Don't Know,' this figure dropped to 0% in the endline.

4 Student Confidence & Leadership Growth

The program empowered students to take initiative in **climate advocacy and build leadership skills**:

- **At baseline, 47% of students believed they were too young to take climate action**. By the endline, this number dropped to **19.50%**, indicating increased confidence in their ability to contribute.

- **Over 50 students took on leadership roles in their communities**, participating in debates, storytelling, and environmental action groups.

Students also developed a stronger belief in systemic change:

- **Recognition of the government's role in climate action increased**, with **66.25% of students** believing the government was taking action, up from 49.89% in the baseline.
- **Expectations for systemic action on climate change strengthened**, with students increasingly holding businesses, industries, and developed nations accountable.

STUDENT & TEACHER FEEDBACK:

To ensure continuous program improvement, structured feedback was collected from both students and teachers, highlighting program strengths, challenges, and recommendations for future implementation.

1 Student Reflections on Program Effectiveness

With the endline assesment, the students were also asked to give feedback about the program. The following insights are based on the student feedback responses, providing a detailed evaluation of the program's effectiveness:

- Program engagement and effectiveness: **97.52% of students** rated the program engagement as **high (4 or 5 out of 5)**. Further, **94.74% of students** found c**apstone projects highly effective (4 or 5 out of 5)** in applying their learning. Students appreciated the interactive activities, real-life case studies, and hands-on capstone projects, which helped them apply their knowledge in

Monitoring & Evaluation

meaningful ways. Additionally, **99.69% of students said they would recommend the program to others.** 98.2% found the program engaging and impactful, stating it made climate science easier to understand and apply.

"*I learned a lot about different types of pollution, and the capstone project helped me apply what I learned in my community.*" – **Student response**

- **Improved Climate Literacy and Awareness**: **97.21% of students** rated their **understanding of climate action & sustainability as high** (4 or 5 out of 5). Further, **92.88% of students reported high confidence** (4 or 5 out of 5) in **discussing climate change** and its related issues. After participating in the program, students reported **feeling better equipped to talk about climate issues, linking them to local environmental challenges**.

"*Earlier, I had only heard about climate change but didn't fully understand it. Now, I can explain how our daily actions impact the environment and what we can do to protect it.*" – **Student response**

- **Behavioural Shifts: Taking Climate Action**: **Over 75% of students** reported practicing waste segregation and reducing plastic use at home. Additionally, **70% of students stated they influenced their family members to adopt sustainable habits**, such as using reusable bags, conserving water, and composting organic waste.

"*I have started separating dry and wet waste at home and taught my younger brother how to do it too!*" – **Student response**

- **Leadership and Advocacy Growth:** Students reported feeling empowered to lead discussions on climate action, showing increased confidence in mobilizing others for environmental change. At **baseline, 47% of students believed** they were **too young to take climate action**, but by the **endline**, this number had **dropped significantly to 19.50%**, showing an increased belief in their ability to contribute. **Over 50 students took on leadership roles in their communities**, participating in debates, storytelling, and environmental action groups.

"I *feel more confident in speaking about climate change. I even spoke in front of my school about what we can do to help!*" – **Student response**

- **To have a detailed analysis, refer Appendix.**

2 Teacher Reflections on Program Effectiveness

The following insights are based on the teacher feedback responses, providing a detailed evaluation of the program's effectiveness:

- **Overall Program Quality and Effectiveness: 100% of teachers felt supported** by the program team throughout the program, and rated **Overall Program Quality Rating: 5 out of 5 and Effectiveness in Engaging Students: 4.75 out of 5**. Teachers highlighted that the interactive teaching approach, real-world examples, and capstone projects significantly

Monitoring & Evaluation

enhanced student engagement and understanding.

"The program made climate education engaging and relatable. Students now confidently discuss climate change and its effects on their community." – **Teacher response**

- **Satisfaction with Teaching Materials and Lesson Plans:** The **lesson plans, weekly training sessions, and teaching resources** were well-received: **Satisfaction with Weekly Lesson Plans: 4.75 out of 5; Confidence in Guiding Students Through Capstone Projects: 4.75 out of 5. 75% of teachers found the lesson plans easy to follow** and implement. **75% of teachers rated the weekly PPTs as highly effective** in explaining climate concepts. Additionally, **100% of teachers felt that the weekly training sessions prepared them well for lessons**.

"*The lesson plans were clear and practical, making it easy to explain complex topics. The capstone projects allowed students to apply their learning in real-world scenarios.*" – **Teacher response**

- **Behavioural Shift and Personal Impact:** The program **influenced not just students but also teachers**, leading to personal and professional changes. **100% of teachers reported feeling supported** throughout the program. **75% of teachers reported implementing sustainable lifestyle changes**, such as waste segregation and reducing plastic use at home. **All teachers expressed increased confidence** in discussing climate change topics, enabling them to integrate these discussions into other subject areas.

"*After this program, I started implementing waste management at home and encouraged my students to do the same.*" – **Teacher response**

Climate Champions & Success Stories

The **Paryavaran Saathi: Young Leaders for Climate Action program** was designed to not only educate students on climate change but also **empower them as changemakers in their communities**. This section highlights the **Top 10 Climate Leaders**, selected through a **structured evaluation system**, and **showcases student-led climate action initiatives beyond the program.**

RECOGNITION OF CLIMATE CHAMPIONS:

A **Climate Champion Marking Matrix** (Total 100 Marks) was used to **assess student performance across multiple dimensions**, ensuring a **holistic and fair evaluation of engagement, leadership, and impact**.

The marking criteria were distributed as follows:

- **Attendance (20 Marks) –** Students were evaluated based on their regularity and consistency in attending program sessions.
- **Engagement (20 Marks) –** This component assessed active participation in discussions, questioning, and enthusiasm in group and class activities.
- **Contribution in Capstone Project (30 Marks) –** Students were marked based on their initiative, teamwork, leadership, and quality of input during capstone projects
- **Final Quiz (30 Marks)** – Students were awarded marks based on their final quiz performance, which tested their understanding of climate science, sustainability, and problem-solving. The marks were recorded as per the instructions given on the test paper.

This **structured and transparent evaluation system** ensured that students were recognized not just for academic excellence but for their active leadership, teamwork, and real-world impact in climate action.

TOP 10 CLIMATE LEADERS:

The names of the top **10 young climate leaders** who excelled across all evaluation criteria and emerged as young climate leaders are provided in the **appendix**.

In recognition of their exceptional contribution, leadership, and advocacy, these students were felicitated at the **Climate Panchayat.**

"*I started teaching my younger siblings about climate change and encouraged my neighbors to separate waste properly. Now, even my family is involved in waste management!*" – **Deepika, Climate Champion**

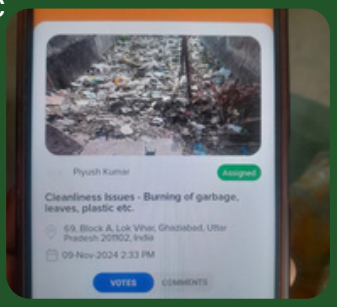
SUCCESS STORIES: BEYOND THE PROGRAM:

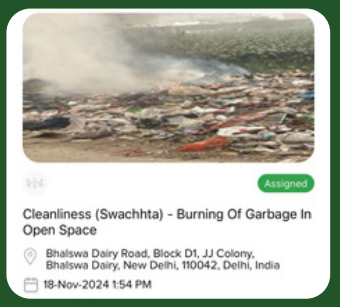
Beyond excelling in the program, some students initiated climate action beyond the classroom on their own, influencing their families, schools, and communities.

Climate Champions & Success Stories

💡 Spotlight: Holding Authorities Accountable Using Digital Tools

What Was Done: Students used MCD 311 and Ghaziabad 311 apps to report unlawf waste burning and open dumping in public spaces. They filed complaints, tracked responses, and followed up with local authorities to ensure action was taken. Their persistence has led to visible improvements in waste management in their communities.





💡 Spotlight: Reduce household waste and promote sustainable alternatives

What Was Done: Students started composting kitchen waste at home, reducing organic waste sent to landfills. To curb plastic use, they distributed cloth bags to neighbors, encouraging plastic-free shopping. Their initiative hopes to inspire many families to adopt sustainable habits, reinforcing the impact of small, collective actions

💡 Spotlight: Spread climate awareness and mobilize community action.

What Was Done: Students took on the role of climate educators, organizing awareness drives, and storytelling sessions to educate their communities on waste management, air pollution, and climate change. Their advocacy hopes to motivated more residents to take responsibility, creating a ripple effect in environmental stewardship

Challenges, Reflections, and the Way Forward

CHALLENGES:

The implementation of the **Paryavaran Saathi: Young Leaders for Climate Action program** faced several key challenges that impacted its reach, effectiveness, and sustainability:

- **Limited Access to Resources** – Many students in waste picker communities **lacked access to digital tools, learning materials, and safe spaces for continued education.** Though **over 85% of the students in the baseline** reported to **have access to a smartphone** in their houses, yet **over 70% of the students reported to not use/have access to internet for learning about climate change**. The absence of adequate infrastructure made it **difficult to supplement climate education** with online resources, multimedia content, or interactive learning platforms, **restricting engagement beyond in-person sessions**.
- **Low Initial Climate Awareness** – The **baseline assessment** revealed a critical knowledge gap, with **58% of students never having heard of climate change and 81% unaware of its direct impact on their communities**. Overcoming this required additional efforts in simplifying complex climate science concepts, breaking them down into localized examples, and ensuring **repeated exposure to reinforce learning**.
- **Household Responsibilities and Economic Pressures** – A significant number of students assisted their families in waste picking (**around 40% as reported in the baseline assessment),** or household chores, reducing the time available for attending sessions and participating in climate action projects. Balancing education with other commitments remained a challenge for many families, leading to irregular attendance.
- **Environmental and Health Risks** – Extra precautions were necessary to execute outdoor climate projects and activities to ensure student safety in highly polluted areas like Bhalswa and Bhopura. In some cases, **planned activities had to be modified to mitigate significant health risks**, including landfill fires, toxic fumes, and waterborne diseases.
- **Teacher Training and Capacity Building** – While facilitators displayed commitment and enthusiasm, **many required additional training to effectively simplify climate concepts, facilitate discussions, and use interactive teaching methods**. The need for continuous professional development and peer-learning platforms became evident over the course of the program.
- **Community Perceptions and Adoption Barriers** – Climate action was often deprioritized in communities facing immediate socio-economic hardships. **Some families viewed climate-friendly practices, such as waste segregation, as additional burdens rather than essential habits.** Changing deep-seated behaviours and mindsets required continuous engagement and the demonstration of tangible benefits.
- **Sustaining Engagement Post-Program** – One of the key challenges was ensuring that students continued their climate action journey beyond the structured program.

Challenges, Reflections, and the Way Forward

Though **99.69% of students in the endline have reported to continue their journey with climate action,** without consistent reinforcement, opportunities for advocacy, and mentorship, there is a risk of declining participation once formal sessions ended.

- **Limited Support for Mental Health and Climate Anxiety** – While the program successfully addressed knowledge gaps and built climate leadership, one area that remained unaddressed was the e**motional and psychological impact of climate change on students**. Many children expressed feelings of **fear, helplessness, and anxiety** related to rising temperatures, extreme weather events, and the uncertainty of their environment. However, **the program lacked structured support systems or trained mental health professionals** to help students process these emotions. Without safe spaces to discuss and navigate their climate-related anxieties, students may internalize stress that can affect both their learning and well-being.

REFLECTIONS AND LESSONS LEARNED:

The implementation of the **Paryavaran Saathi program** provided valuable insights into effective climate education for marginalized communities. Key takeaways from the program emphasize the importance of **interactive learning, community engagement, and leadership development** in fostering sustained climate action among students.

- **Contextualized and Hands-On Learning Enhances Impact** – **Teaching climate change** through real-life experiences, such as waste segregation at home or analyzing local pollution sources, made the subject more tangible and relevant to students. This approach deepened understanding and encouraged long-term behaviour change.
- **Experiential Learning Drives Participation** – Activities like the **Waste Segregation Relay, Climate Storytelling, and Youth Parliament** were effective in driving student engagement. Practical, problem-solving exercises reinforced theoretical knowledge and empowered students to apply what they learned in their communities.
- Family and Community Engagement Strengthens Outcomes – Climate-friendly practices were more likely to be adopted when parents and community members were involved. **Conducting awareness sessions through door to door counselling, Nukkad Natak, and other campaigns for families** encouraged to increase uptake of waste segregation, composting, and sustainable living habits at the household level. Additionally, involving family members with activities and discussions also aimed to strengthen the family experiences with sustainable practices.
- **Leadership Training Empowers Lasting Change** – Students who participated in advocacy platforms, such as **Climate Panchayat**, **demonstrated greater confidence in speaking about climate issues**. **Around 67% of the students in the endline reported to be confident about discussing about climate issues**. Equipping youth with leadership and public speaking skills ensured

Challenges, Reflections, and the Way Forward

they could effectively communicate their concerns and propose solutions in local governance spaces.

- **Regular Teacher Support is Essential** – Providing structured lesson plans, interactive teaching resources, and ongoing training sessions for educators **helped improve the delivery of climate education**. **100% of the teachers reported** that the **weekly training sessions supported them to prepare effectively for the sessions**. Teachers who felt confident in their knowledge and pedagogy were more successful in engaging students and driving discussions.
- **Strategic Partnerships Expand Reach** – Collaboration with policymakers, environmental organizations, and advocacy groups provided students with opportunities to present their work at larger climate forums. **These partnerships created pathways for youth engagement in broader climate action initiatives beyond the program**.

WAY FORWARD:

As the **Paryavaran Saathi program** has concluded, it is essential to **build upon its achievements and address key challenges to ensure long-term impact**. While the program has made significant strides in climate education for Bhalswa and Bhopura communities, **scaling alone** is not enough. To ensure long-term impact, the program must evolve by refining its approach based on community needs. **Strengthening climate education in marginalized communities requires a multi-faceted approach that includes expanding reach, deepening engagement, and embedding sustainable practices to enhance adaptive capacity and resilience to the adverse impacts of climate change**. It requires both expansion and innovation, **ensuring that young climate leaders are not only learning but also leading tangible climate action**.The following strategic actions will help scale the program, enhance its effectiveness, and ensure that young climate leaders continue to drive change:

- **Scaling the Program to More Communities by adapting curriculum** – Expanding the initiative to additional waste picker settlements, urban slums, and underprivileged schools will amplify its impact and reach a greater number of young climate leaders. However, it is essential to continuously refine the curriculum based on community needs as well as feedback from students, teachers, and families to ensure lessons are more interactive, accessible, and locally relevant. This includes simplifying complex climate concepts, integrating real-world applications, and adopting creative teaching methodologies that sustain student engagement and drive meaningful action.
- **Creating an Inclusive and Hybrid Climate Learning Model** – While over 85% of students reported having access to a smartphone at home, limited internet availability (with over 70% unable to use it for learning) remains a significant **barrier**. To bridge this gap, a hybrid learning approach is essential: combining digital resources like open-access toolkits , and educational videos with low-tech solutions such as localized learning hubs. This ensures that students who lack

Challenges, Reflections, and the Way Forward

consistent internet access can still further engage with climate education through alternative and community-driven learning methods, making climate knowledge more inclusive, adaptable, and impactful.

- **Strengthening Parental and Community Involvement** – Introducing structured workshops for parents, local leaders, and waste-picker communities will reinforce the importance of climate action at the household and community level. **Encouraging intergenerational learning can help bridge gaps in environmental awareness and make communities enhance their collective adaptive capacity and build resilience to the adverse impacts of climate change.**
- **Establishing Long-Term Leadership Pathways** – Creating **mentorship programs, climate clubs, and networking opportunities for students who graduate from the program** will help sustain their engagement in climate action. Connecting them with youth-led climate organizations can provide avenues for continued activism and leadership.
- **Enhancing Teacher Training and Peer Learning Networks –** Regular professional development workshops, a repository of best-practices, and online forums for teacher collaboration will strengthen the program's instructional quality.
- **Creating a Student-Led Climate Action Model –** Encouraging students to take ownership of local projects, such as neighbourhood waste segregation campaigns, community tree plantations, and heatwave preparedness drives, ensuring sustained action beyond the program.
- **Leveraging Policy Engagement and Institutional Support** – Working with **local governments to secure institutional recognition** for the program and advocating for dedicated resources for climate education in vulnerable communities can help sustain and expand its impact. **Ensuring that students from marginalized backgrounds have a platform to contribute to climate policy discussions locally** will further empower them as change-makers.
- **Building Emotional Resilience Through Mental Health Support**- As climate change becomes an everyday reality for children in vulnerable communities, it is equally important to address the emotional toll it takes. To strengthen the impact of climate education, future iterations of the program should **integrate components that support emotional resilience**. This includes involving **trained mental health professionals, creating safe spaces for students to express their fears, and incorporating activities that promote emotional well-being**. Addressing climate anxiety through structured psychosocial support can help students not only cope with their realities but also sustain long-term engagement in climate action with confidence and hope.
- **Integrating Climate Education into Formal School Curricula** – **Partnering with schools and education boards** to incorporate structured climate modules into mainstream education can ensure that **climate literacy is not limited to non-formal programs but becomes a part of standard learning**.

Appendix

1. BASELINE ASSESSMENT FINDINGS:

A **Baseline Knowledge, Attitudes, and Practices (KAP) Assessment was conducted in November 2023 with 457 children from Bhalswa and Bhopura landfill communities** to evaluate their existing climate awareness, behaviours, and challenges. A comprehensive and full-scale analysis of the baseline data has been completed. **To read the detailed findings, refer to the report.**

2. ENDLINE ASSESSMENT FINDINGS:

An **Endline Knowledge, Attitudes, and Practices (KAP) Assessment was conducted from October – November 2024 with 323 students from Bhalswa and Bhopura landfill communities** to measure changes in climate awareness, behaviours, and engagement following the program. A detailed analysis of the endline data has been completed. **To explore the findings, refer to the report.**

3. PILLAR 1- AWARENESS (CONTENT OVERVIEW)

The program covered a structured set of topics **designed to build climate awareness, foster action, and develop advocacy skills** among students. Each topic was categorized based on its focus area, ensuring a progressive learning experiencethat connected theory with practical applications. The table next page outlines the key topics covered with a brief description of what was taught:

Pillar 1- Awareness (Content overview)

Category	Topic	Details Covered
Understanding Climate & Environment	Understanding the Environment	Components of the environment (living & non-living), interdependence, importance of nature.
	Weather, Seasons, and Climate	Difference between weather, seasons, and climate; impact of changing climate on daily life.
	Greenhouse Effect & Global Warming	How greenhouse gases trap heat, their natural role, and connection to global warming.
Causes of Climate Change	Natural and Human-Induced Climate Change	Role of fossil fuels, deforestation, industrial emissions, and agriculture in climate change.
	Waste & Climate Change	How waste mismanagement, landfill fires, and open dumping contribute to climate change.
Effects of Climate Change	Impacts on the Environment	Rising temperatures, extreme weather, biodiversity loss, desertification, and natural disasters.
	Impacts on Human Lives	Food & water crises, displacement, climate migration, livelihood challenges, and health risks.
	Impacts on Local Communities in Delhi NCR	Waste picker communities facing heat stress, landfill fires, worsening air quality, and disease spread.
	Climate justice- Contributors v. vulnerable communities	
Waste & Pollution Management	Air Pollution & Climate Change	Delhi's AQI levels, urban heat islands, health risks, and strategies for clean air.
	Water & Soil Pollution	Industrial waste, plastic pollution, chemical contamination, and their effects on health & agriculture.
	Plastic Pollution & Reduction	Impact on oceans, wildlife, and human health, solutions for reducing single-use plastics.
	Waste Management & Zero Waste	5Rs (Refuse, Reduce, Reuse, Recycle, Rot), composting, waste-to-wealth initiatives.
Mitigation	Renewable Energy & Sustainable Cities	Difference between renewable & non-renewable energy, energy conservation, sustainable urbanization.
	Energy Conservation Strategies	Using LED bulbs, efficient appliances, solar panels, public transport, and reducing fossil fuel use.
	Sustainable Buildings & Infrastructure	Eco-friendly urban planning, green buildings, smart cities, and reducing urban heat islands.

	Stakeholders in Climate Action	Role of governments, businesses, individuals, and local communities in addressing climate change.
	Carbon Footprint Reduction	How individuals and communities can track and reduce their emissions.
	Climate Action at Household Level	Reducing waste, conserving water, using less plastic, growing local food.
Adaptation	Community-based Adaptation Strategies	How communities adapt to floods, droughts, and extreme heat.
	Heatwave & Disaster Preparedness	Strategies for surviving extreme heat, early warning systems, and building resilience.
	Improving Water Security	Rainwater harvesting, improving water storage, fixing leaks, and groundwater recharge.
Community-level solutions	Sustainable Practices & Local Action	Tree plantation, improving waste disposal, and reducing pollution locally.
	Role of Youth in Climate Solutions	How young leaders are driving climate action through advocacy, innovation, and social movements.
Laws, Policies & Global Commitments	Environmental Laws & Policies	Overview of Indian environmental laws, governance, and policy enforcement.
	Sustainable Development Goals (SDGs)	Focus on SDG 13 (Climate Action), SDG 11 (Sustainable Cities), SDG 12 (Responsible Consumption), SDG 6 (Water & Sanitation).
	National and International Agreements	Indian policies like National Action Plan on Climate Change (NAPCC), Paris Agreement, COP discussions.
Youth & Leadership Models	Young Climate Leaders & Role Models	Examples of youth-led climate action projects in India.
	Green Skills & Career Opportunities	Skills for sustainability (leadership, innovation, problem-solving) and green jobs.
Taking Action (Pillar 2)	Capstone Project Preparation	Identifying climate issues, setting goals, research, planning, execution, and community engagement.

Appendix

4. TOP 10 YOUNG CLIMATE LEADERS

The **Paryavaran Saathi: Young Leaders for Climate Action program** aimed not just to build awareness but to **nurture student leadership in climate action**. To recognize those who demonstrated exceptional engagement, initiative, and impact, a structured **Climate Champion Marking Matrix** was used, evaluating students on a**ttendance, participation, capstone contributions, and quiz performance**. The top 10 students, selected through this process, were felicitated at the Climate Panchayat for their leadership and commitment. The next page lists their names and key details.

Top 10 Young Climate Leaders

#	Name of the student	Location	Standard / Grade
1	Deepika	Bhalswa	7th
2	Aasmeen	Bhalswa	7th
3	Sabahatnur	Bhalswa	7th
4	Prabhat	Bhalswa	7th
5	Sonali Kumari	Bhopura	5th
6	Arpita	Bhopura	8th
7	Sneha	Bhopura	10th
8	Riya	Bhopura	10th
9	Nisha	Bhopura	11th
10	Sahil Verma	Bhopura	7th

Appendix

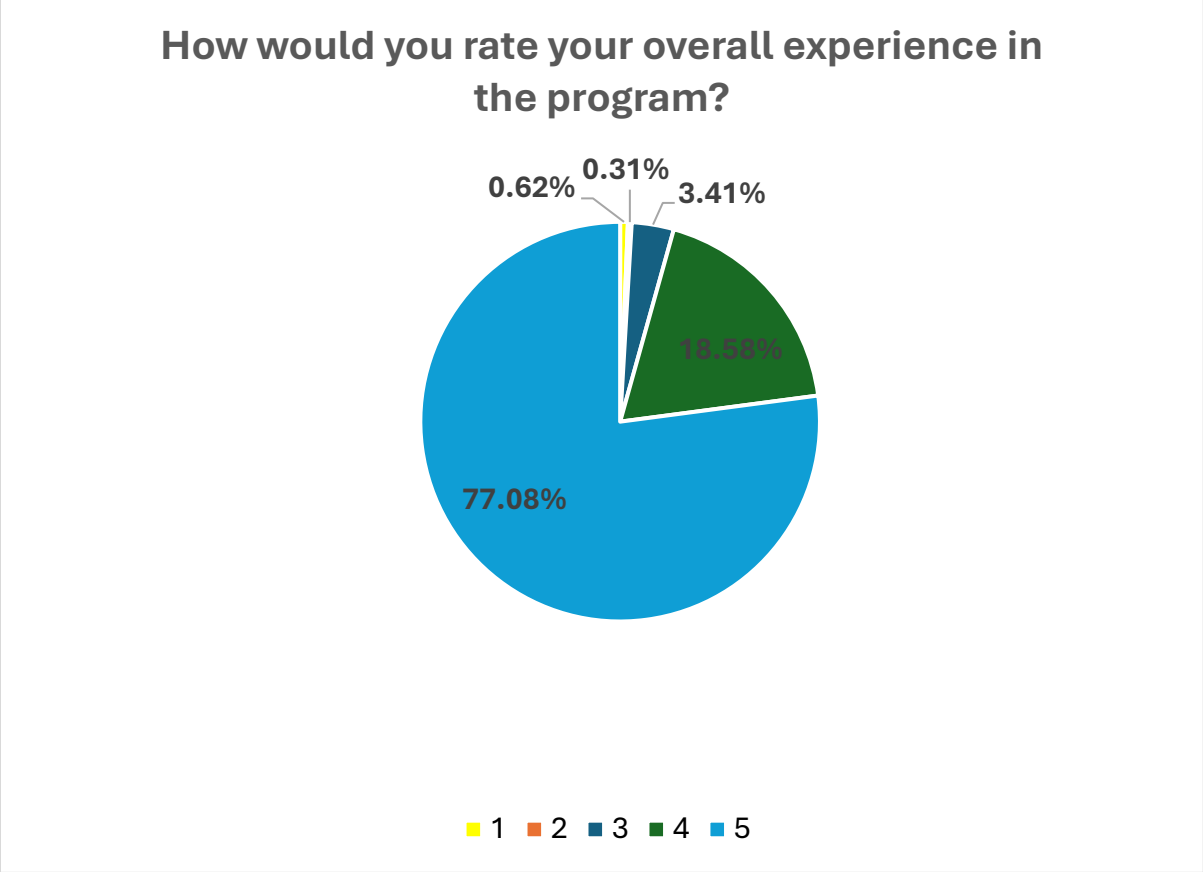
5. STUDENTS' FEEDBACK ON THE PROGRAM

As part of the **Endline Knowledge, Attitudes, and Practices (KAP) Assessment, student feedback on the program** was collected from 323 students in Bhalswa and Bhopura landfill communities. The feedback on the next page provides insights into students' experiences, engagement, and the impact of the program on their climate awareness and actions.

STUDENTS' FEEDBACK ON THE PROGRAM – FINDINGS

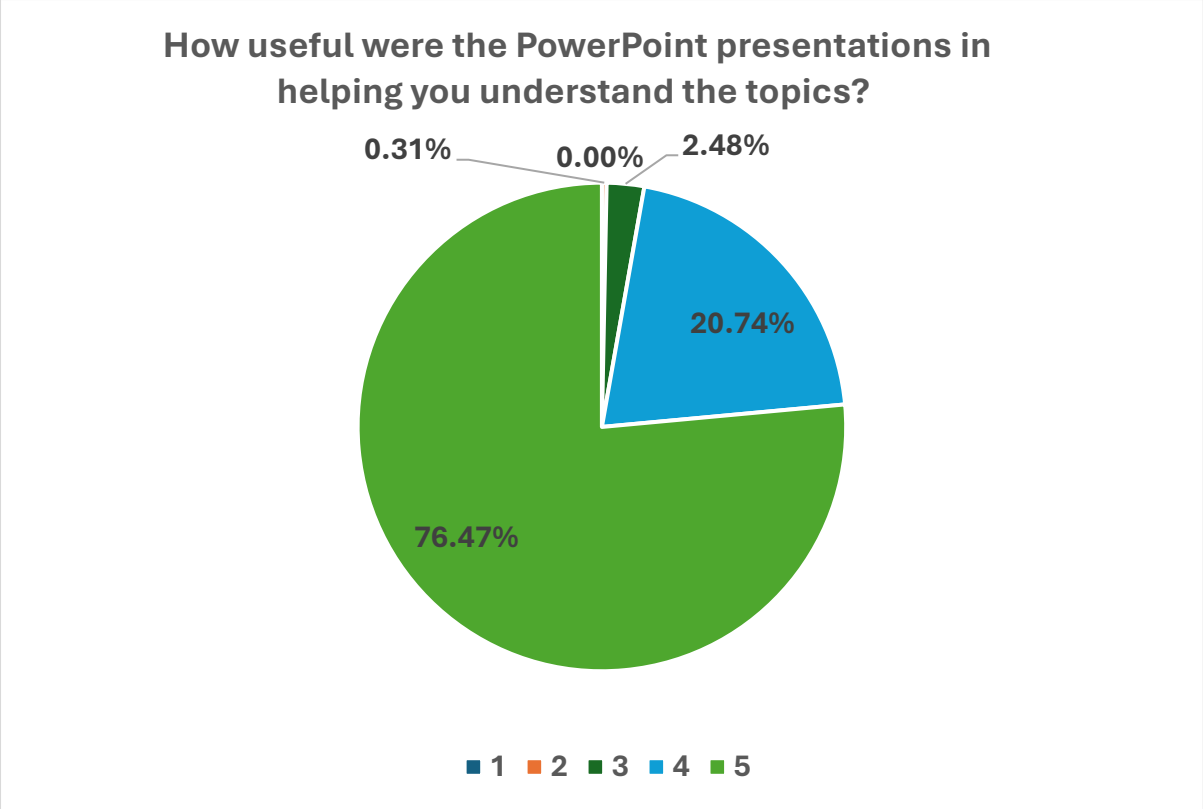
1. Student Feedback on Overall Program Experience

The majority of students had a positive experience in the program, with **77.08% (249 out of 323)** rating it as **excellent (5)** and **18.58% (60 students)** rating it as **very good (4)**. A smaller group, **3.41% (11 students),** gave a **neutral (3)** rating, while **0.62% (2 students)** and **0.31% (1 student)** rated their experience as **poor (1) or below average (2), respectively**. Overall, **95.66% of students rated the program positively**, indicating that most students found it engaging and useful.



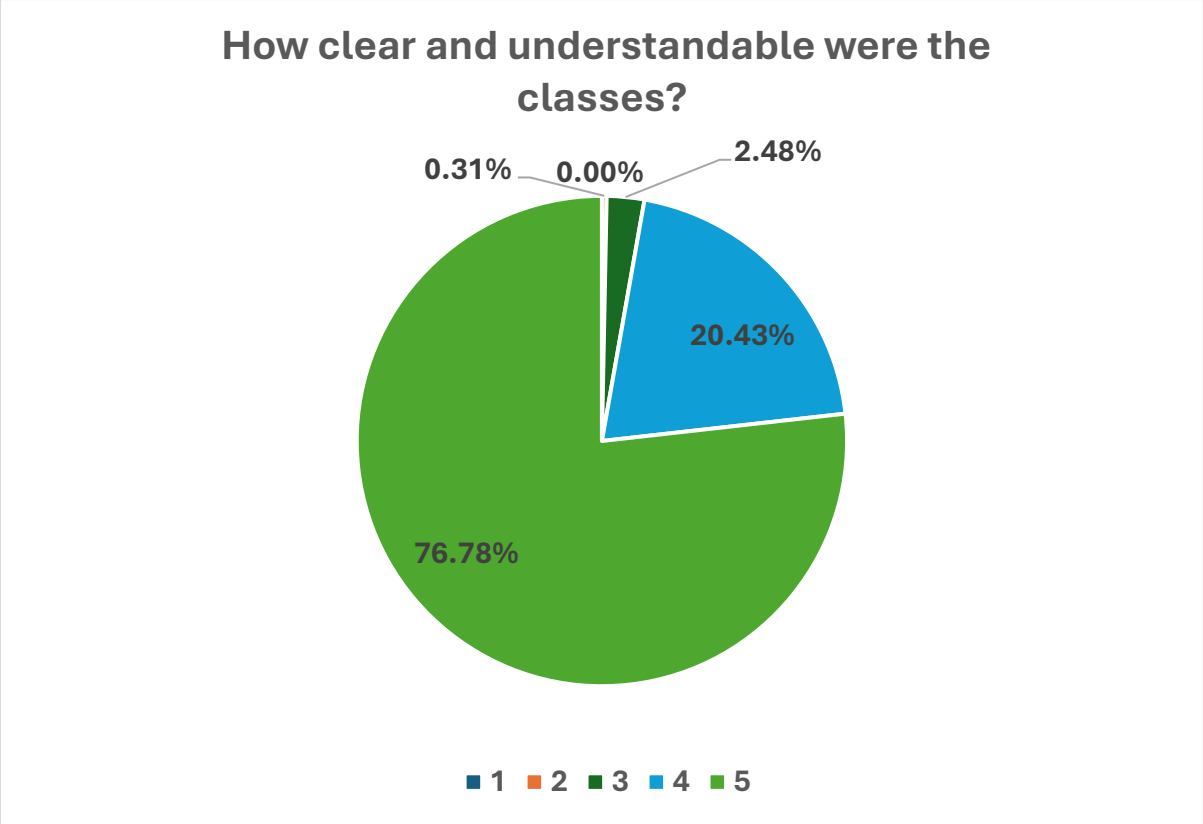
2. **Student Feedback on Overall Program Experience**

Out of the **323 total respondents**, **76.47% (247 respondents)** rated the presentations as highly useful (rating 5), while **20.74% (67 respondents)** found them moderately useful (rating 4). A smaller proportion, **2.48% (8 respondents)**, gave a neutral rating (rating 3), indicating that the presentations were somewhat helpful but could be improved. Very few participants, **0.31% (1 respondent)**, rated them as minimally useful (rating 2), and none rated them as not useful at all (rating 1). These results indicate that the PowerPoint presentations were largely effective in aiding understanding, with over **97% of respondents** finding them useful to some degree.



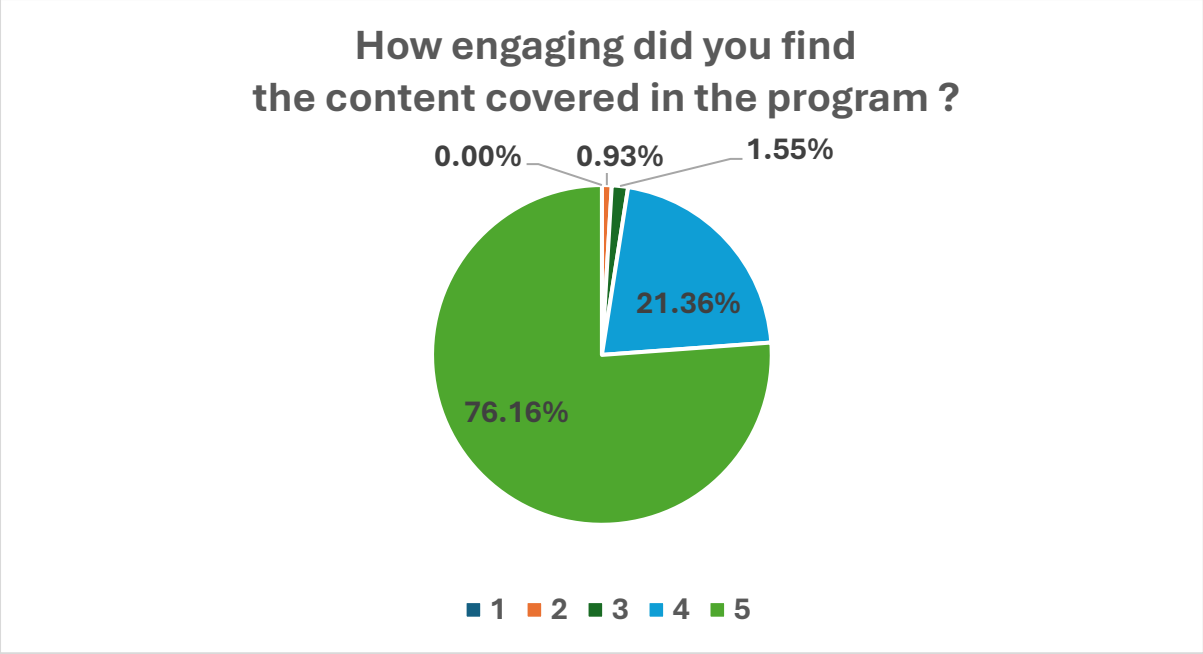
3. Clarity and Understandability of Classes

Out of **323 total respondents**, the majority, **76.78% (248 respondents)**, rated the classes as very clear and understandable (rating 5). Additionally, **20.43% (66 respondents)** found them moderately clear (rating 4), while **2.48% (8 respondents)** gave a neutral rating (rating 3), suggesting room for improvement. Only **0.31% (1 respondent)** rated the classes as slightly unclear (rating 2), and no participants rated them as completely unclear (rating 1). These findings indicate that the classes were well-structured and effectively communicated, with over **97% of respondents** perceiving them as clear and understandable.



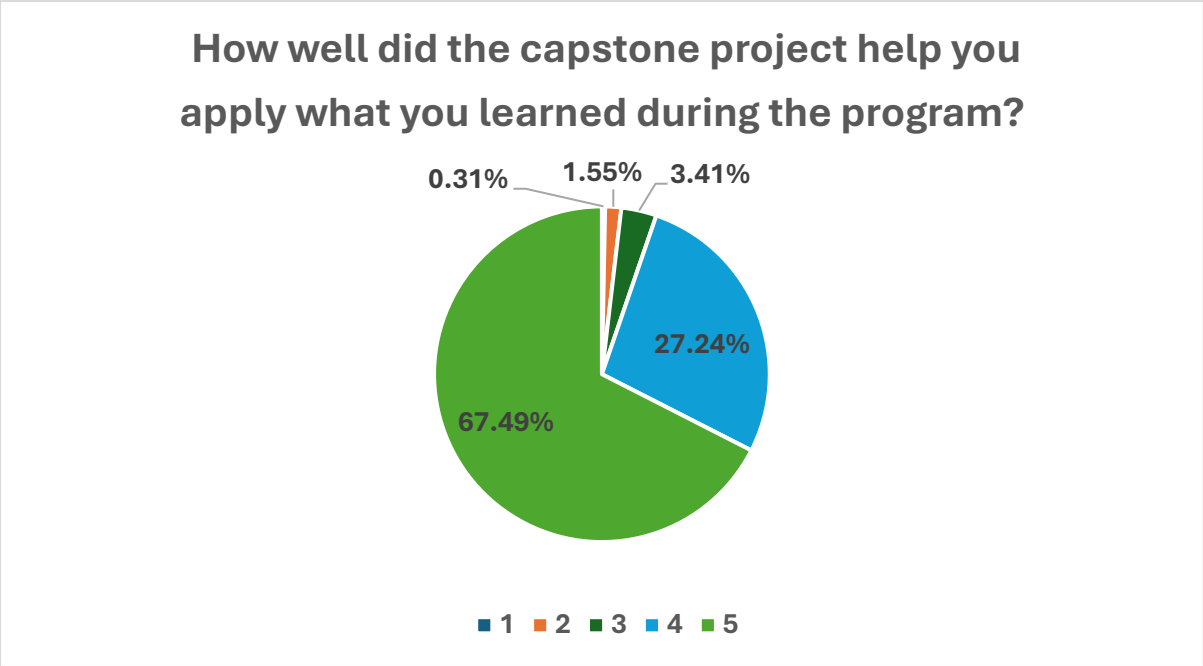
4. Engagement with Program Content

Among the **323 total respondents**, the majority, **76.16% (246 respondents)**, found the content highly engaging (rating 5), while **21.36% (69 respondents)** rated it as moderately engaging (rating 4). A small proportion, **1.55% (5 respondents)**, gave a neutral rating (rating 3), and **0.93% (3 respondents)** found the content slightly engaging (rating 2). Notably, no participants rated the content as not engaging at all (rating 1). These results indicate that the program content was well-received, with over **97% of respondents** finding it engaging to some degree.



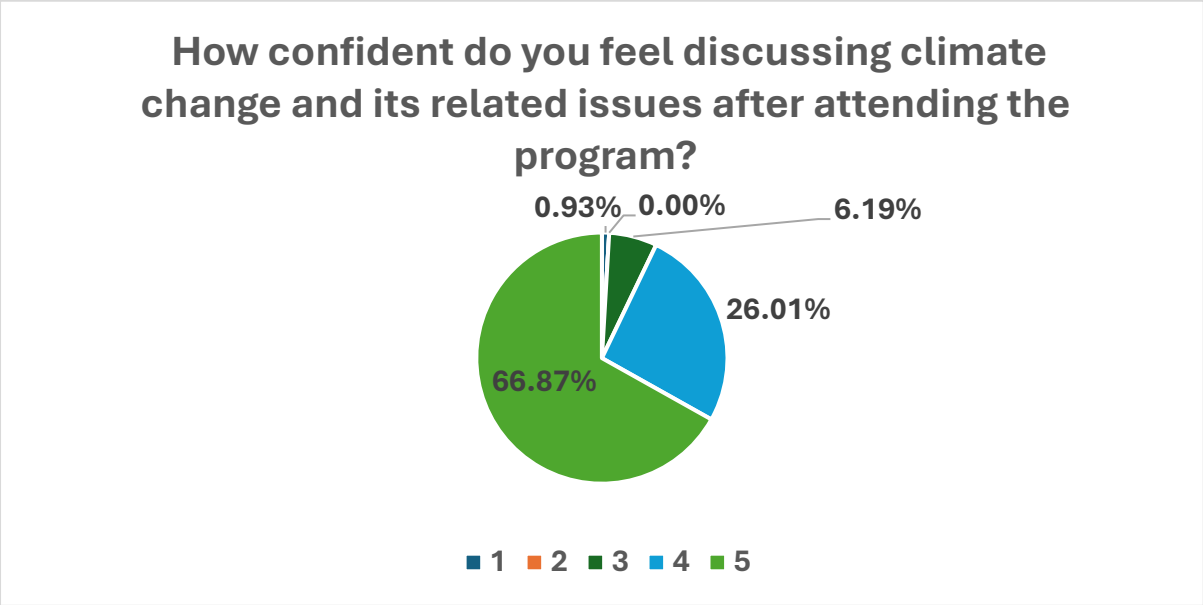
5. Effectiveness of the Capstone Project in Applying Learning

Out of **323 total respondents**, the majority, **67.49% (218 respondents)**, found it highly effective (rating 5), while **27.24% (88 respondents)** rated it as moderately effective (rating 4). A smaller proportion, **3.41% (11 respondents)**, gave a neutral rating (rating 3), indicating that the project had some impact but could be improved. Additionally, **1.55% (5 respondents)** found it slightly effective (rating 2), and only **0.31% (1 respondent)** felt it was not effective at all (rating 1). These findings suggest that the capstone project was a valuable component of the program, with over **94% of respondents** stating that it effectively helped them apply their learning.



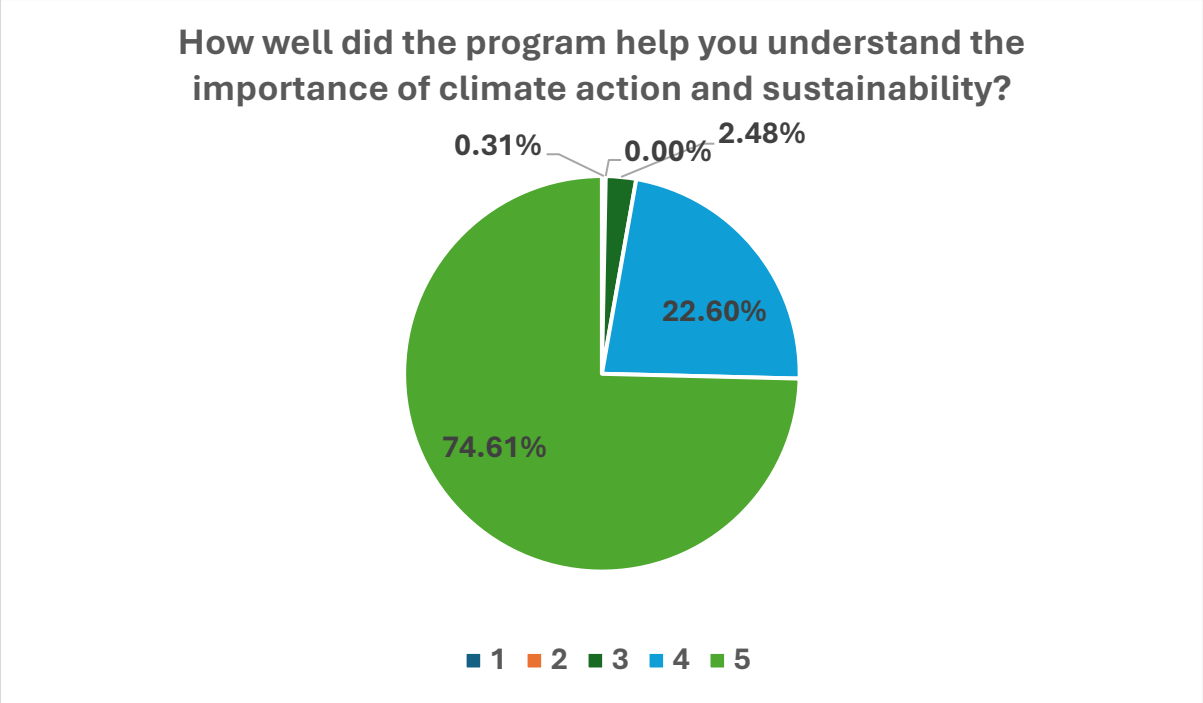
6. Confidence in Discussing Climate Change and Related Issues

Among the **323 total respondents**, the majority, **66.87% (216 respondents)**, reported feeling highly confident (rating 5), while **26.01% (84 respondents)** felt moderately confident (rating 4). A smaller group, **6.19% (20 respondents)**, gave a neutral rating (rating 3), indicating they felt somewhat confident but required further reinforcement. Notably, **0.93% (3 respondents)** rated their confidence at the lowest level (rating 1), while no participants selected rating 2. These results suggest that the program significantly improved participants' ability to discuss climate change, with over **92% of respondents** expressing confidence in engaging with the topic.



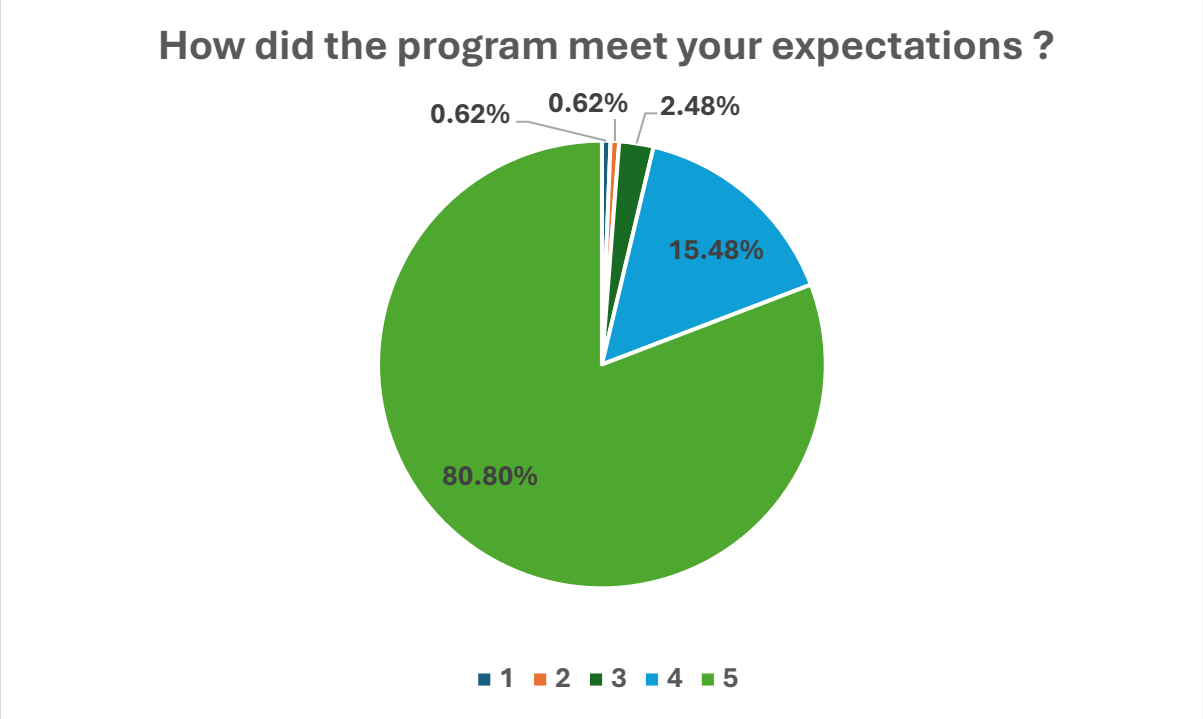
7. Understanding the Importance of Climate Action and Sustainability

Out of **323 total respondents**, the majority, **74.61% (241 respondents)**, found the program highly effective in enhancing their understanding (rating 5), while **22.60% (73 respondents)** rated it as moderately effective (rating 4). A smaller proportion, **2.48% (8 respondents)**, gave a neutral rating (rating 3), indicating some level of understanding but with room for improvement. Only **0.31% (1 respondent)** rated the program as not effective at all (rating 1), and no respondents selected rating 2. These results indicate that the program was highly successful in increasing awareness and comprehension of climate action and sustainability, with over **97% of participants** recognizing its effectiveness.



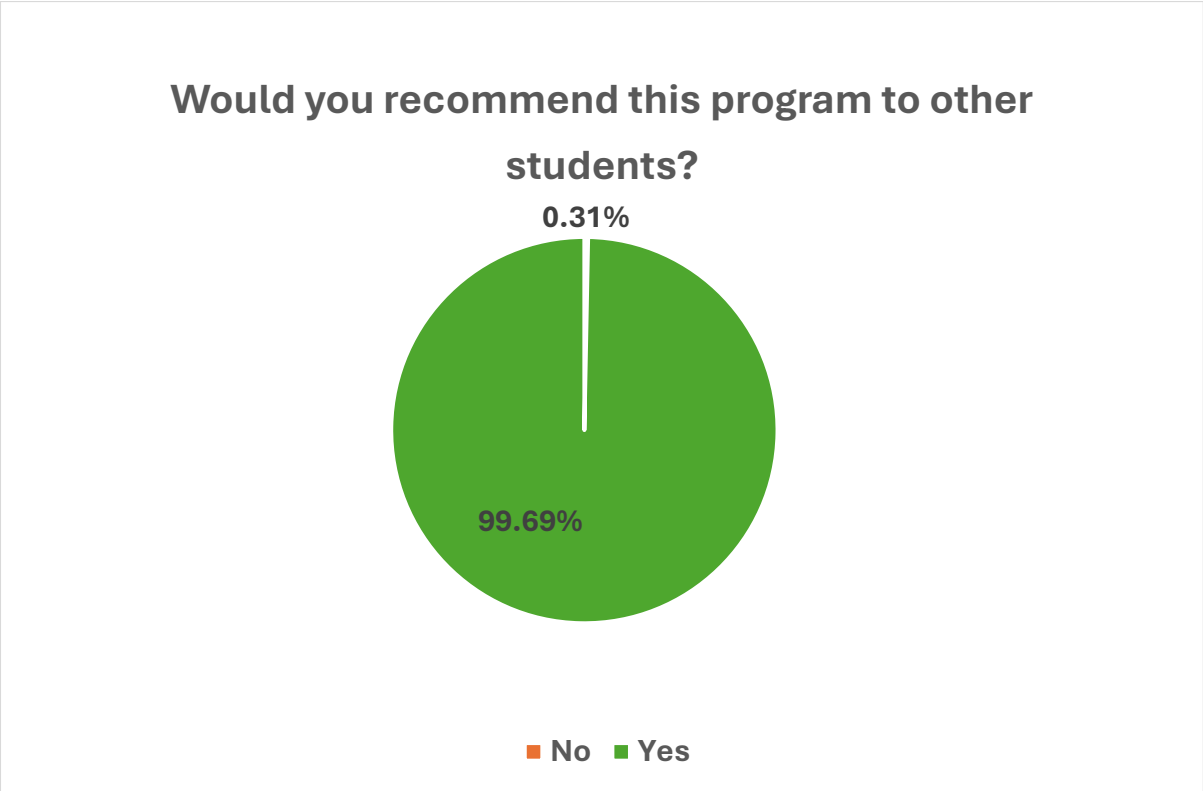
8. Program Satisfaction and Meeting Expectations

Among the **323 total respondents**, an overwhelming majority, **80.80% (261 respondents)**, reported that the program exceeded or fully met their expectations (rating 5). Additionally, **15.48% (50 respondents**) found the program largely met their expectations (rating 4), while **2.48% (8 respondents**) gave a neutral rating (rating 3), suggesting some aspects met their expectations while others could be improved. A very small proportion, **0.62% (2 respondents**), rated the program below expectations (ratings 1 and 2). These findings indicate that the program was highly successful in delivering on its objectives, with over **96% of participants** feeling that it met or exceeded their expectations.

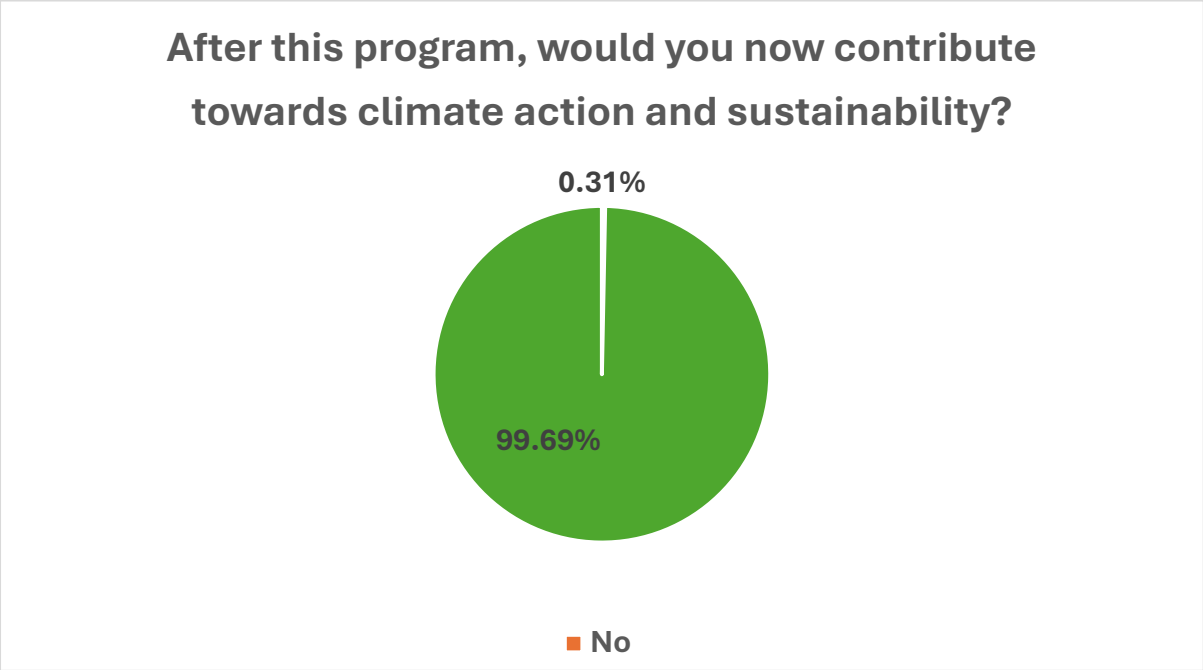


9. Willingness to Recommend the Program

Out of **323 total respondents**, an overwhelming **99.69% (322 respondents)** answered *Yes*, indicating strong endorsement of the program. Only **0.31% (1 respondent)** selected *No*. These results highlight the program's effectiveness and positive impact, with nearly all participants finding it valuable enough to recommend to their peers.

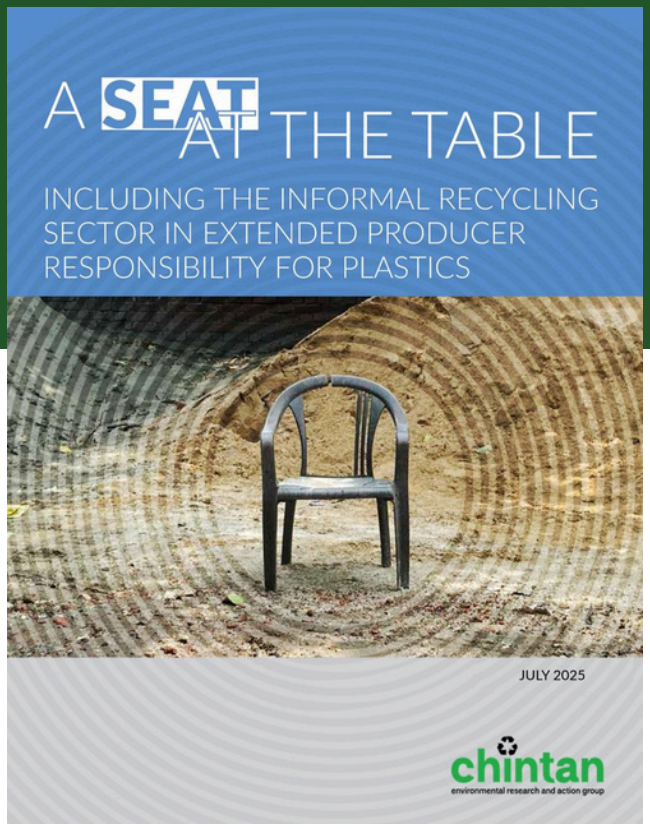


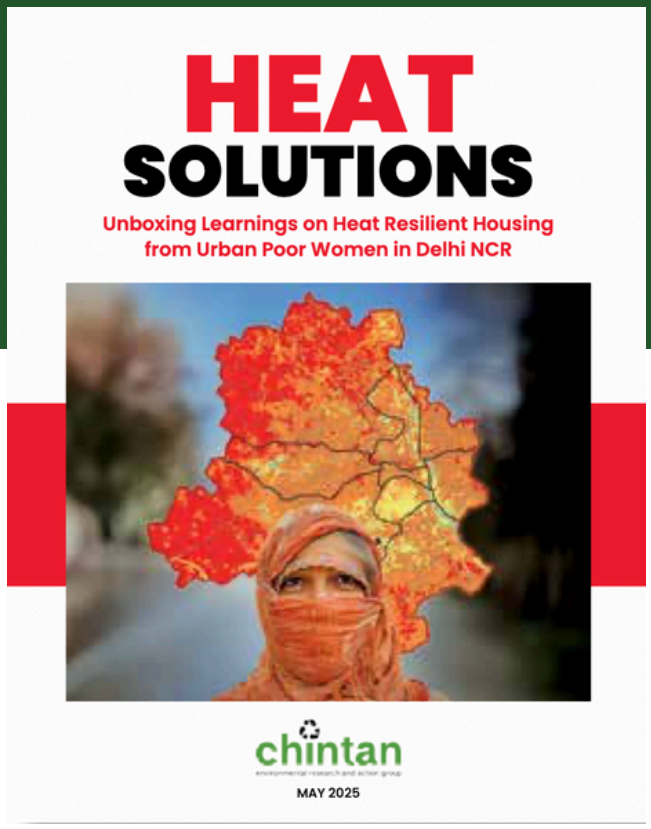
10. Commitment to Climate Action and Sustainability
Out of **323 total respondents**, an overwhelming **99.69% (322 respondents)** answered *Yes*, demonstrating a strong commitment to taking action. Only **0.31% (1 respondent)** selected *No*. These findings indicate that the program successfully motivated participants to engage in climate action and sustainability efforts.



Enjoy other publications from Chintan on the areas we work on :
air pollution, circular economy and climate change. Learn about what justice means for women and children, particularly the most marginalised, as you browse our reports, comics, fliers and films.

EVERYTHING ON:
www.chintan-india.org





Reach out to us at
info@chintan-india.org

chintan
environmental research and action group