



# CENTRE FOR ENVIRONMENT EDUCATION

Annual Report  
**2022 - 2023**

**CEE**

Centre for Environment Education

### **Front Cover Photo**

CEE runs school programmes in different cities where the students are taught environmental sustainability. The teacher shows the students biodiversity on their campus in Rachna School, Ahmedabad.

# **Annual Report**

## **2022 – 2023**

**CEE**

---

Centre for Environment Education





## Table of Contents

<b>1. Education for Children</b>	<b>9</b>
1.1 Planet Discovery Centre	9
1.2 Paryavaran Mitra Programme	9
Earthian	10
Eco-Schools India Programme	12
Generation for Climate ActionN (GenCAN) Initiative	13
ACCU – CEE Collaboration for Exchange Programmes	14
Environmental Education Partnership with UNICEF	15
Handprint CARE	16
Strengthening the Eco Club in Government Schools of Alwar	17
1.3 CEE - ABB India Foundation	17
1.4 'Greening Minds'- Nature Conservation Education Programme	18
1.5 'ECOZONE' - Learning with Nature	19
1.6 Mainstreaming Climate and Environment Education in Maharashtra	20
1.7 Harit Swachhagrahi	20
1.8 Project Rochak Education	21
1.9 Project Prajita Education - Strengthening education in the time of pandemic	22
<b>2. Education for Youth</b>	<b>23</b>
2.1 Young Reporters for Environment (YRE)	23
2.2 Tide Turners Plastic Challenge (TTPC)	25
Phase 4	25
Phase 5	26
2.3 Partnership to Strengthen and Develop Youth Climate Leaders in Maharashtra	26
2.4 Maharashtra Youth for Climate Action (MYCA)	26
<b>3. Higher Education</b>	<b>28</b>
3.1 Climate Smart Agriculture Courses	28
3.2 SDG Handprint Lab	29
3.3 Publication and Workshops on Systems Thinking	29
3.4 Regional Centres of Expertise (RCE) Lucknow	30
3.5 Managing Social Projects	30
3.6. Journal of Education for Sustainable Development	30

3.7 CEE Academy: Transformative Learning for Sustainable Development .....	30
India-Australia E-learning Exchange Course - Sustainability and Climate Resilient Farming.....	31
Handprint CARE Certificate Course.....	31
Courses under Development .....	32
<b>4. Experiencing Nature .....</b>	<b>32</b>
4.1 Sundarvan: A Nature Discovery Centre .....	32
4.2 CEE Nature Camps.....	33
<b>5. EE through Interpretation.....</b>	<b>33</b>
5.1 Shivamogga Smart City Ltd (SSCL), Karnataka .....	33
5.2 Environmental Planning and Coordination Organisation (EPCO), Bhopal.....	34
5.3 Pench Tiger Reserve Conservation Foundation (PTCRF), Nagpur.....	34
<b>6. Coastal and Marine Programme.....</b>	<b>34</b>
6.1 Blue Flag India.....	34
Study on Blue Flag Beaches as Climate and Sustainability Education Sites in India .....	35
<b>7. Climate Change .....</b>	<b>35</b>
7.1 EPAM India.....	35
Earth Day 2022.....	36
Think Blue, Go Green: Marine Litter .....	36
Beach Clean-up Drive.....	36
World Ozone Day .....	37
National Wildlife Week .....	37
World Wetland Day.....	37
7.2 Strengthening Multi-stakeholder Approaches for Effective Implementation of Karnataka State Action Plan on Climate Change (KSAPCC) .....	37
7.3 Scaling-up and Strengthening Climate and Environmental Education Access to Children and Youth in Karnataka .....	38
7.4 Advancing Teacher Education for Climate Change Education through Collaboration among Asian Centers of Excellence on Education for Sustainable Development (ATECCE) .....	39
7.5 National Consultation and Workshop on ‘Integrating Climate Change Education in School Ecosystem in India’ under the ICC project of GIZ and MoEFCC.....	40
7.6 Local Conference of Youth India 2022 .....	40
7.7 MOVERS Programme – 2022 Implementation in India.....	41
7.8 Workshop on Climate Resilience and Women’s Cooperatives.....	41

7.9 One-day Stakeholder Consultation Strategic Roadmap to Amplify Climate Change Agenda across the State.....	42
<b>8. Environment Management.....</b>	<b>42</b>
8.1 UNEP - Roadmap for a Sustainable Textile Hub in India.....	42
8.2 Approaches for Circularity in Textile and Apparel Sector in India .....	43
<b>9. Sustainable Rural Development.....</b>	<b>44</b>
9.1 Climate Smart Agro-advisories.....	44
9.2 Green and Socially Sound Recovery in the Farm and Rural Sector in Maharashtra .....	44
9.3 Climate Action in the Rural Economy .....	46
9.4 CARE Project.....	47
9.5 Baseline Study and Need Assessment on Creating a Model of Eco-Village.....	48
9.6 Review and Study of Green Projects in Nagpur .....	49
9.7 Project Srujal.....	49
9.8 Jalnidhi Project Phase 2 .....	50
9.9 People's Biodiversity Register (PBR) .....	51
9.10 Jal JEEVAN Mission L-3 Training.....	52
9.11 Project Aarohan .....	52
9.12 Education and Employable Skills (E&E Skills).....	53
9.13 Conducting a Study for the Development of a Research Paper on the National Education Policy-2020 .....	54
9.14 Child Friendly Schools: Developing a Model School at Halol as a Demonstration Centre for Sustainable Child Friendly Schools.....	55
9.15 Vasundhara - Rejuvenation and Development of Lachhras Lake .....	56
9.16 Farmer Producer Organisations in Rajkot and Amreli Districts .....	57
9.17 Pond Rejuvenation of Bedarapalli Lake, Hosur, Tamil Nadu .....	58
9.18 Watershed Development Project .....	58
9.19 Sahyog Project, Gandhidham, Kutch .....	60
<b>10. Urban Development.....</b>	<b>60</b>
10.1 Urban Ocean for Municipal Waste Management.....	60
10.2 Urban Air Quality .....	62
School Air Quality Education and AQI Flags Awareness Programme - An Air Quality Health Risk Communication in Pune.....	62
10.3 Urban Mobility and Road Safety .....	64

Advocacy for Strengthening Road Safety Legislation at the National Level and in the States of Gujarat and Maharashtra.....	64
10.4 Nature Awareness at Pashan Lake, Pune.....	66
10.5 Safer Roads for Safer Childhood (SRSC).....	67
10.6 Amdavadma .....	68
10.7 Natural Resource Defense Council (NRDC).....	69
<b>11. Water and Sanitation .....</b>	<b>69</b>
11.1 Strengthening WASH and EDUCATION in Municipal Schools of Ahmedabad .....	69
<b>12. Waste Management .....</b>	<b>70</b>
12.1 Rural & Urban Landscape Free of Dry & Plastic Waste.....	70
12.2 Integrated Paper and Plastic Waste Management at Kagaznagar .....	72
Achievements.....	73
12.3 CEE HCL Project on Solid Waste Management in NOIDA - Phase IV.....	74
12.4 Urja Chetana .....	79
12.5 Plastic Cleanup Drive.....	80
<b>13. Biodiversity Conservation .....</b>	<b>80</b>
13.1 Communication, Education and Public Awareness (CEPA) under Maharashtra Gene Bank Programme .....	80
13.2 International Day for Biodiversity 2022 .....	80
13.3 Community Centric Ecosystems Approaches for Conservation and Green Economy .....	81
13.4 Development of Wildlife Management Plan for the Bhagwan Mahaveer National Park and Wildlife Sanctuary .....	81
13.5 Mangrove Conservation Education for Students and Executives.....	81
<b>14. Training, Capacity Building and Networking .....</b>	<b>81</b>
14.1 Eco-Club Training Programme on Water, Waste Management, Biodiversity at Alwar with Support of Plan India .....	81
14.2 Facilitating WASH and SLWM in KGBVs of Jharkhand .....	82
14.3 Observation Audit in Allahadi Art School.....	82
14.4 Training and Capacity Building of CSR team in Monitoring and Evaluation .....	83
14.5 Trainings in Climate Change.....	83
14.6 India-Australia E-learning Exchange Course - Sustainability and Climate Resilient Farming .....	83
14.7 Handprint CARE Certificate Course.....	83
14.8 Courses under-development .....	84



<b>15. Material Development and Publications .....</b>	<b>84</b>
15.1 Parampara.....	84
<b>16. Institutional Development and Support .....</b>	<b>84</b>
<b>17. Events .....</b>	<b>85</b>
17.1 Celebration of Global Handwashing Day .....	85
17.2 Celebration of World Environment Day.....	85
17.3 International Mountain Day 2022 .....	86
17.4 Roadmap for a Sustainable Textile Hub in India .....	86
17.5 Youth Leadership Workshop.....	86
17.6 Employee Session at IREDA.....	86
17.7 Wetskills India Programme in West Bengal .....	87
17.8 Panel Discussion on Sustainability and Biodiversity .....	87
17.9 Webinar on Environment Education.....	88
17.10 Wildlife Week Celebration .....	88
17.11 Manohar Parrikar Vignan Mahotsav .....	88
<b>18. Facilitating, Networking and Participation.....</b>	<b>89</b>
18.1 Facilitating.....	89
Paryavaran Edutech .....	89
CEE Nature Shop .....	89
CEE HAAT - A Farmers Market .....	89
18.2 Networking and Participation .....	90
Shri Kartikeya V. Sarabhai .....	90
Ms. Preeti R. Kanaujia .....	90
Mr. Neeraj Pal .....	90
Mr. Vipin Verma .....	90
Mr. Satish Awate.....	90
Ms. Reema Banerjee .....	91
Dr. Janki Shah .....	92
<b>19. CEE Offices .....</b>	<b>92</b>
Regional Offices .....	92
<b>20. CEE Governing Council .....</b>	<b>94</b>

# 1. Education for Children

## 1.1 Planet Discovery Centre

CEE's Planet Discovery Centre (PDC) is the first nature-based early learning programme in Ahmedabad, and is offered from the CEE Ahmedabad campus. It caters to the early learning needs of children aged two to eight years. This unique integrated curriculum engages young minds in the exploration of nature and the world around them. Accordingly, this nature-based environment education programme is built around different themes through the year along with language and numeracy skills. The Centre is affiliated to the North American Association of Environment Education (NAAEE) and Nature Start Alliance.

In the year 2022-23, a team of eight facilitators and environmental educators guided over 120 kids in the nature-based learning processes. The children visited Sundarvan, the Aquatic Gallery in Science City and Gram Bharti village as part of their educational field trips. Besides, Young Naturalists Programmes were conducted to bring together toddlers and their parents and involve them in nature-based learning opportunities.

The Planet Parent Partnership of the Centre draws on the expertise of parents and engages them wholeheartedly in the programme. As part of this, parents offered and conducted sessions on Health and Nutrition, Book Reading, Storytelling, Dental and Eye Check-up, Yoga, Videography, Photography, Field Trips, Sports Day and more. The annual day, called Joy of Learning Fest, was conceptualised, curated and put together by an enthusiastic and creative team of parents and was followed by a night camp that included staying in tents in the wilderness.



## 1.2 Paryavaran Mitra Programme

The Paryavaran Mitra programme is a national level initiative of CEE which was launched in 2010 in partnership with the Ministry of Environment, Forest and Climate Change, Government of India. It is a

nationwide initiative to create a network of young leaders from schools across the country, who have the awareness, knowledge, commitment, and potential to meet the challenges of sustainable development in their own spheres of influence. The Paryavaran Mitra (PM) programme primarily seeks to reach students from class 6 – 8 or in the age group 11-15 years.

The programme was initiated in 2008-09 with a national level campaign on Climate Change Education and evolved into a flagship school programme that brings together CEE's experience of three decades in Environmental Education (EE) and Education for Sustainable Development (ESD).

The programme involves students in problem solving by engaging them in action projects. In Project Based Learning (PBL), action project/s is an extensive task undertaken by a group of students to apply or illustrate classroom learning. While these action projects taken up by students may or may not lead to immediate or significant situational improvement, they would definitely lay the foundation for sustained efforts through learning outcomes in the form of knowledge, disposition, competencies and behaviour. They help extend the boundary of education from mere information to real life experience.

As part of the PM programme, resource materials to carry out action projects are provided to the schools, focusing on local environmental issues in the five themes of the programme, viz., Water & Sanitation, Biodiversity & Greening, Energy, Waste Management and Culture & Heritage. Participating schools took up project activities in their campuses with the enthusiastic involvement of the students and submitted their learning and achievements in the form of reports to CEE. The Paryavaran Mitra website and social media pages highlighted the unique and ongoing actions and initiatives taken by schools, teachers and students. The Paryavaran Saathi WhatsApp number has been set up to help schools by providing answers to queries and sharing information with them, which was extensively used by the participants.

## **Earthian**

'Earthian' is a nationwide initiative by Wipro Foundation to deepen sustainability education within schools and colleges across the country. Through a chosen theme, the programme aims to engage teams of students and faculties from schools in a set of activities to understand water, biodiversity and waste in their local context and explore sustainability linkages.

Wipro and CEE joined hands in 2013-14 to work together through the Earthian initiative of Wipro Foundation and the Paryavaran Mitra initiative of CEE. The collaboration aims to promote and strengthen environment education and sustainability education across schools in Bihar, Gujarat, Rajasthan, Uttar Pradesh and West Bengal. CEE has also reached out to schools in other states - Uttarakhand, Maharashtra, Punjab, Delhi, Haryana, Telangana, Tamil Nadu and Jammu & Kashmir - through its PM school network.

In 2022-23, as part of the initiative, a total of 30 teacher training workshops were organised in which five were conducted in online mode and the other 25 as face to face workshops in different locations. Over 1,585 teachers were trained from the project states along with 90 teachers from 13 other states and Union Territories (UTs).

### **State wise activities**

**Bihar and Uttar Pradesh:** CEE's office based in Lucknow coordinates programmes and initiatives in the northern states. The existing network of schools under the projects Paryavaran Mitra, Dolphin Conservation Education, Children's Forest, Clean Ganga Programme and Eco Club initiatives were used for publicising the programme. Letters and announcements about the programme were also sent to the officials from the education department, eco club master trainers, teachers and principals.

**Gujarat:** In Gujarat, two teams worked on reaching out to schools in the state. The team from Sundarvan Nature Discovery Centre, based in Ahmedabad, reached out to schools in the city and nearby districts while a second team involved in the Eco-Schools programme reached out and worked with schools in Jamnagar district.

**Rajasthan:** As in earlier years, the CEE team based in Jaipur contacted the school networks in the state to announce the programme, which included schools in the Kasturba Gandhi Balika Vidyalaya, Eco Club programme, National Green Corps and Paryavaran Mitra projects. The State Nodal Agency of the Eco Club programme - Bharat Scouts and Guides – sent directives to all the Eco Club school teachers to participate in the training.

CEE utilised its network of existing school programmes for promoting initiatives of project based learning in schools through the Paryavaran Mitra - Earthian 2022 Programme. Under the programme, capacity building workshops were organised at three locations in Rajasthan, namely, Alwar, Jaipur and Sikar. The online mode of teacher training workshop was adopted to reach out to the remaining districts of the state. The objective of these workshops was to develop in teachers an understanding of the themes of biodiversity, water and waste and their linkages with sustainable development. Around 450 teachers participated in these workshops. Five schools were felicitated at the national and regional levels with Earthian Puraskar for their work towards education for sustainable development.



*Paryavaran Mitra– Earthian 2022 Programme in Rajasthan*



**West Bengal:** In West Bengal, CEE continued its partnership with the local organisation *Paribesh Unnayan Parishad* (PUPA), which was instrumental in reaching out to the local schools and implementing the programme with dedicated support to schools from Kolkata, Sagar Islands and other districts of the state. Local volunteers involved in science-based programmes also helped in reaching out to schools in the state. A series of online workshops were conducted in different zones with the support of various institutions and schools.

#### **Other States**

As the programme was being implemented through online mode, the Paryavaran Mitra schools in other states of the country also showed interest in being part of the programme this year. Schools from over six states, one Union Territory (UT) and the National Capital Territory of Delhi (NCT) took part in the training and have also submitted their reports.

An award ceremony was organised in Bangalore in February 2024 where the winning schools participated in a two day event. Schools were felicitated with Earthian awards, certificates and resources. All schools who participated in the programme were provided certificates of participation.



*A glimpse from the award ceremony of the Wipro earthian Awards 2022*

### **Eco-Schools India Programme**

Eco-Schools is a sustainable school campus and educational programme run by the Foundation for Environmental Education (FEE). Currently, the Eco-Schools programme is being implemented in 81

countries across the globe. CEE is the national operator for the Eco-Schools Programme in India. The programme aims to spread awareness about sustainable development and environmental issues, starting with classroom engagement and expanding to the community by engaging the next generation in action-based learning.

In India, the programme was launched in 2014-15 with the aim to provide young people a sense of accomplishment from participating in their schools' environmental management policies, eventually leading to certification and conferring of the prestigious "Green Flag" award.

The programme follows a seven-step pedagogical process for its implementation and to bring about behavioural changes: this consists of Explore, Discover, Think, Act and Share. The programme has helped teachers make connections between the five themes it focuses on and the Sustainable Development Goals, thereby emphasising the importance of working on the SDGs. The programme is open to a wide diversity of schools including those following state boards, national and international curriculum.

### **Outreach and Activities**

Eco-Schools India is being implemented in more than 230 schools in 18 states. More than 3,000 teachers are part of the network with participation of over 45,000 students. Eco-Schools India has collaboration and partnerships with 10 national and five international organisations.

The enrolled schools are provided access to resource materials and review sheets to carry out action projects focusing on local environmental issues related to five themes - Biodiversity, Waste, Energy, Healthy living and Water. The programme encourages schools to qualitatively enhance their learning through project-based methods. So far, 40 schools in India have been awarded the International Green Flag Certification and 68 schools have been received the Handprint Flag Award.



### **Generation for Climate ActionN (GenCAN) Initiative**

In August 2022, HCL Foundation and CEE initiated a climate change and sustainability education programme which aims at promoting and improving climate literacy and action in schools. As part of the

initiative, young students along with their teachers will be engaged in local level climate action leadership by using transformative pedagogy. The initiative has been branded as 'Generation for Climate Action' (GenCAN).

As part of the initiative, the CEE team has developed a climate change education booklet for teachers, a website, a school carbon footprint calculator and promotional materials.

### **ACCU – CEE Collaboration for Exchange Programmes**

CEE has worked with Asia-Pacific Cultural Centre for UNESCO (ACCU) Japan on several projects covering varied themes including Intangible Cultural Heritage, Contemporary Culture, Education for All (EFA), and Education for Sustainable Development (ESD). ACCU implements cooperative activities in Asia and the Pacific region and its approaches include capacity building, materials development and networking.



*ACCU - CEE India Japan Teacher Exchange 2022*

### **Online MUN Bridge Conference Students Exchange**

In the year 2022, ACCU organised the Asia-Pacific Model United Nations (MUN) online conference for high school students of five countries - Japan, Mongolia, Korea, Thailand and India - to develop in the next generation the ability to work in diverse societies through interactions and studying together through pairing of Japanese and other Asian students.

As implementation partner for India, CEE selected four students to participate in this exchange programme. Exchange of ideas, working on policy presentation and then presentation by the students in the Model United Nations followed by discussion, enabled a group of 32 students from five countries to improve their skills, raise awareness and build confidence.

### **Teachers Exchange Programme**

The international exchange programme between India and Japan: The 'Invitation Programme for Teachers from India' was started in 2016 in close cooperation between the Ministry of Human Resource Development of India (MHRD) [now Ministry of Education (MoE)], CEE and the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT).

This year, the 7<sup>th</sup> Invitation Programme for Teachers from India was organised virtually from November 6-27, 2022, as part of the 'International Programme for Primary and Secondary Teachers'. The theme was 'Learning to live together' for a peaceful and sustainable society where cultural diversity is duly respected. The ACCU invited 15 teachers and education officials to the online programme with an aim to provide them with opportunities for online lectures, virtual school visits and dialogue with teachers and students in Japan. The participating teachers were selected from different regions of India, giving priority to those who were actively participating in CEE's school education programme nationally.

Through this programme, teachers in India and Japan deepened their understanding of each other's countries by learning from one another, disseminated their learning in their respective educational contexts and fostered sustainable international exchange after the programme. The programme helped strengthen friendship and mutual understanding between India and Japan, contributing to the realisation of a peaceful and sustainable world. CEE facilitated a session on Overview of the Education System in India and conducted a few sessions during the programme.

### **Environmental Education Partnership with UNICEF**

As part of CEE's partnership with the United Nations Children's Fund (UNICEF) to support Environmental Education related activities, five different components have been identified for implementation. This programme started in November 2022 with educational resources and documents being developed for the national and state-level interventions to be undertaken in Jharkhand, focusing on Solid and Liquid Waste Management (SLWM).

#### **Garbage Free Schools Campaign**

CEE developed a draft campaign strategy on Garbage Free Schools based on its experience of working with schools on waste management.

#### **Compendium of Best Practices**

A questionnaire was developed to collate information and was shared with all UNICEF offices to enable them to nominate schools for documentation of their best practices. The nominations were reviewed and over 30 schools were shortlisted for further documentation visits.

#### **Sujalam Campaign**

The *Sujalam* campaign, launched in 2021 by the Ministry of Jal Shakti for greywater management, aims to promote groundwater conservation by reducing and managing wastewater generation. CEE, with the support of UNICEF, initiated the development of resources for schools to guide them to join the



campaign.

### **Development of Online Module for Capacity Building for Catch the Rain Campaign**

As part of the National Water Mission's (NWM) campaign "Catch the Rain", with the tagline "Catch the rain, where it falls, when it falls", CEE developed an online module in 2021 which was hosted on the DIKSHA portal of the National Council of Educational Research and Training (NCERT), Ministry of Education.

The module was transadapted in Hindi and updated as per the feedback received from NCERT. This national-level module in English and Hindi was made available to teachers, school heads and master trainers as part of their Continuous Professional Development course.

### **SLWM in KGBVs**

CEE initiated a project office in Ranchi for the implementation of the SLWM project activities in Jharkhand. For the pilot study, five Kasturba Gandhi Balika Vidyalaya (KGBVs) were nominated by Jharkhand Education Project Council (JEPC) from five districts across Jharkhand. The CEE team visited these schools and conducted a detailed study of the solid and liquid waste management situation and submitted a Detailed Project Report (DPR).



*(Left) CEE team interacting with KGBV warden for SLWM study*



*(Right) Presenting the SLWM Implementation Plan*

## **Handprint CARE**

CEE hosts the International Handprint Network which promotes initiatives and develops ESD programmes related to Handprint. Handprint CARE is a four-country initiative which is supported by Engagement Global, Germany. The collaboration involved partners from Rhodes University, South Africa; Universidad Veracruzana, México; Universitat Duisburg-Essen, Germany; NCERT, India; and CEE, India.

Handprint CARE is an ethics-led action learning approach for learners to engage with Sustainable Development Goals (SDGs) in the whole school and to participate in societal change for a sustainable future. It has been developed around a curriculum centered on sharing real life stories of change to

engage local matters of concern like biodiversity, water, lifestyle and climate change in ESD. It is focused on working with the SDGs and developing ESD competencies needed to recognise concerns, assess value and act for the common good within school subject disciplines.

### **Development of Educational Resources**

Under the initiative, a core expert group finalised the educational resources for teacher educators and teachers of primary schools on SDGs. The educational resource includes a teacher education handbook and a set of web resources including exemplars, picture stories, videos and others. The resources are designed so that they can be adapted to align with the curriculum taught in the specific grade levels.

### **Launch and Pilot of Handprint CARE Pedagogy**

Training modules were developed for pilot testing the Handprint CARE pedagogy with teachers, principals, teacher trainers and educators. A three-day virtual certificate course was conducted in September 2022 by CEE Academy, to share the approach and to invite participants to the pilot run of the methodology of 'SDG as a tool for learning' in the context of the National Education Policy (NEP) 2020. In all, 110 teachers participated in this online workshop that concluded with the global launch of Handprint CARE resources. Based on the data analysis and feedback from the pilot study, a research paper has also been developed.

### **International ESD Seminar**

A two-day international evaluation seminar for Handprint CARE and Systems Thinking was organised in November at Ahmedabad on the occasion of Global Handprint Day, wherein 51 teachers, educators, practitioners and authors of the pedagogy participated and shared their feedback on using Handprint CARE pedagogy and Systems Thinking in their classroom.

## **Strengthening the Eco Club in Government Schools of Alwar**

With the purpose of strengthening Eco Clubs, Plan India joined hands with CEE to build the capacity of teachers and orient eco club students in 24 schools of Alwar district in Rajasthan. The orientation workshops were conducted in November-December 2022 focusing on using environmental education approaches on themes like Water, Waste Management, Biodiversity and Climate Change. CEE guided students and teachers in the development of a three-month action plan for the eco club during the academic session. Around 625 participants benefited from these orientation workshops. Every school received an Environment Education Kit to help teachers in-charge to understand the various nature-based activities.

### **1.3 CEE - ABB India Foundation**

The Paryavaran Mitra programme is a nationwide initiative to create environmental awareness among the people by involving school students in activities and action projects on environment related issues. CEE and Asea Brown Boveri (ABB) India Foundation are conducting this programme for 98 schools in Nelamangala Taluk in Karnataka.

As a part of this project, a Teachers Orientation Programme was organised on September 28-29, 2022. Teachers from the 98 schools were oriented on the six themes of Paryavaran Mitra through conducting various activities. These activities were designed to prepare students to face the challenges of environmental sustainability in their sphere of influence in a rapidly changing world, by engaging them in Handprint actions in their schools and surroundings.

As part of this, a Teacher's Handbook and Student's Activity Book were launched by Shri Mahadev, DYPC Bangalore Rural District; Shri Shivakumar, BRC, Nelamagala Taluk; Ms Dhenuka Srinivasan, Environment and Sustainability Affairs Manager, Corporate Office, ABB India; Shri Srinivas Babu, Administration Head, ABB India and Ms. Rejini Simpson, Regional Coordinator, CEE.

As part of the training, activity books were distributed to the students in the three clusters and the teachers reported on the number and nature of activities conducted in schools each month. Through the Paryavaran Mitra programme, the team enlisted 92 schools, trained 95 teachers and reached out to over 2,000 students in Nelamangala Taluk.



(Left) CEE Team Initial Visit to ABB Office, Nelamangala Town



(Right) Students doing activity in school

#### 1.4 'Greening Minds'- Nature Conservation Education Programme

Environmental Education (EE) is now a fundamental component of the school curriculum, with students often acquiring EE principles within the four walls of the classroom without any field exposure. To counter this, an initiative titled 'Greening Minds'- Nature Conservation Education Programme was implemented for the fifth grade students in six government schools in Mysore, as a collaboration between TVS Motor Company, Mysore, and CEE. The aim was to sensitise teachers and students towards environment security and conservation as well as creating an educational chain linking Teacher-Child-Parent-Community on Study of Biodiversity, which was the theme of the year.

The path of learning began with a Teachers Orientation Programme that aimed to pique students' interest in the vast biodiversity around them using the Teacher's Manual provided at the programme. The targeted 110 students from these schools were invited to a Student Orientation Programme where they were provided similar materials and a Student's Activity Book. To model how to learn from nature, teachers and students visited the rich biodiversity and wildlife in TVS campus.

The outreach programme that was subsequently conducted, strengthened the learning related to basic

characteristics, behaviour and habitat of mammals, birds, reptiles, amphibians, fishes and insects. Educational walks were conducted around the school campus to identify the different types of species and their importance. This was aimed to develop awareness in them about neglected species and the need for conservation. In order to showcase their learning and comprehension developed during the outreach programme activities, an exhibition of their work like charts and models was held during the annual event. Overall, the participation and pre and post assessment analysis illustrated the effectiveness of the programme which aroused creativity, curiosity and conservation attributes in the young minds.



### 1.5 'ECOZONE' - Learning with Nature

CEE and Toyota Kirloskar Motor (TKM) are working towards promoting TKM's vision of developing environment awareness in schools. For this, CEE initiated 'Ecozone', a state-of-the-art educational park which provides experiential learning for students on varied environmental issues of the time. The park houses 17 theme parks, each of which focuses on issues like climate change, biodiversity conservation, waste management, energy, water management and others.

The project area is spread over 25 acres alongside a 500 KW Solar Park and a Rainwater Harvesting Pond (Capacity 26,000m<sup>3</sup>). The aim is to nurture environmentally conscious children and leverage their awareness for a greener future.

Every individual visiting the park would be exposed to a cyclic process wherein, the individual a) experiences the phenomenon or understands the concern related to various environmental aspects; which leads them to b) identify and reflect on their day-to-day activities; which then c) ignite their minds to conceptualise and analyse available solutions; finally leading them to d) implementing the solutions that would ultimately lead them to a sustainable lifestyle.

During 2022-23, 86 schools were covered in the programme, with 10,050 students being trained on various environmental issues of the time. In all, students from 54 out of the 61 target schools have successfully completed 351 projects.





*(Left) 208 projects related to Value Theme submitted by the students*

*(Right) 54 projects related to Water Theme submitted by the students*

## 1.6 Mainstreaming Climate and Environment Education in Maharashtra

“The climate crisis is a child rights issue” – this was the premise of an initiative to mainstream joyful learning on climate and environment education in Maharashtra in 2022-23 by UNICEF and CEE in partnership with the Government of Maharashtra School Education Department and the State Council of Educational Research and Training (SCERT), Maharashtra. The project was implemented in nine climate vulnerable districts of Maharashtra: Palghar, Pune, Solapur, Nashik, Ahmednagar, Aurangabad, Amravati, Gadchiroli and Gondia. The aim was to engage students in learning and taking action on climate change, with special reference to water, waste, energy and biodiversity. This was achieved by training 342 master trainers, who further trained 9,248 teachers. Over 70 lighthouse schools were identified, and several activities from the handbook were implemented with support from partner Non-Governmental Organisations (NGOs) in each district. The initiative reached about 45% of the Zilla Parishad schools in these nine districts.

A teachers’ Handbook was prepared with content and activities that had a constructivist approach, to enable teachers and students to explore environmental practices in their own schools and communities. This handbook was based on the Maji Vasundhara curriculum which was developed by CEE and other resource persons with support from the Department of Environment and Climate Change, Government of Maharashtra; Regional Centre for Urban and Environmental Studies (RCUES) Mumbai, and UNICEF Mumbai.

## 1.7 Harit Swachhagrahi

Pune Harit Swachhagrahi Shala programme was implemented in Pune by CEE in partnership with the Pune Municipal Corporation (PMC) in 2022-23. This programme is a subset of the larger programme ‘School and Nature based Environment Education in Pune’ (SNEEP) supported by Alleima India Private Limited. The programme was launched in August 2022 with teacher orientation workshops where 529 teachers participated. In consultation with the Education and Solid Waste Management Departments of PMC, a teachers’ kit was developed, which had thematic posters, school activity calendar, Swachhagrahi wall material, cognitive reminder stickers, and a slide deck. Over 500 school principals attended the meetings and online teacher orientation sessions.

Swachhagrahi Dals of students were set up in 320 schools, with a total of 4,700 students involved in

these students committees. Of these students, 48% were girls and 52% were boys. A Swachhagrahi Wall with the posters and students' observations was prepared in 344 schools. Considering the number of schools enrolled, , the programme reached out to over 1.5 lakh students in Pune.

## 1.8 Project Rochak Education

The objective of this project initiated in Ahmedabad is to enhance the grade-level learning of the students of classes 3, 4 and 5, in Mathematics, Language and Environment Education by:

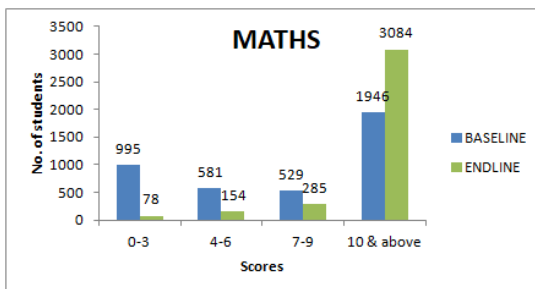
- Creating a child-centric learning environment in schools with the active engagement of different stakeholders;
- Strengthening the teaching of the subjects in schools through capacity building of 75 teachers and ensuring that desired learning outcomes are achieved;
- Creating effective teaching learning materials to ensure quality learning outputs among children with the help of proper mechanism and processes.

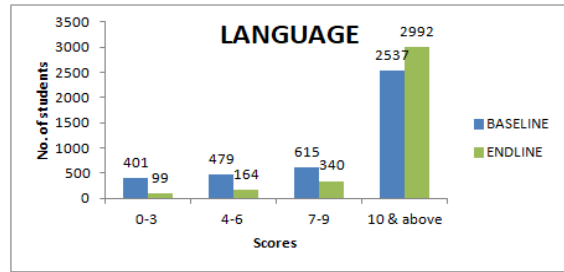
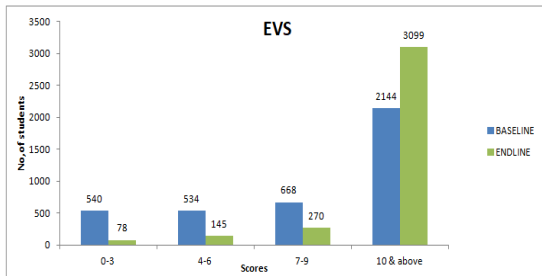
During the year 2022-23, the team carried out Siksha Mitra meetings and trainings, Ahmedabad Municipal Corporation (AMC) teacher training, remedial sessions, community engagement activities, baseline and endline assessment, diagnostic assessments and setting up training labs.

The activities led to:

- 4,000 students from the target classes being benefited from the remedial sessions on the subjects
- 80% students cleared for their age-appropriate basic competencies
- Improved performance of 2,500 students ensuring increased school attendance and active participation
- 100% improvement in basic literacy and numeracy skills among the students
- 70% improvement in community and parent participation towards education of their ward, fostering a collaborative approach to learning, and creating a positive and engaging educational environment.

To further aid the learning process, learning labs were set up in 25 schools and an orientation session was conducted on the benefits and usage of maths and science kits. The team carried out four diagnostic assessments among the students in the target group. Capacity building and training sessions were conducted on pedagogy for teaching math, environment education and Gujarati language, covering 75 teachers.



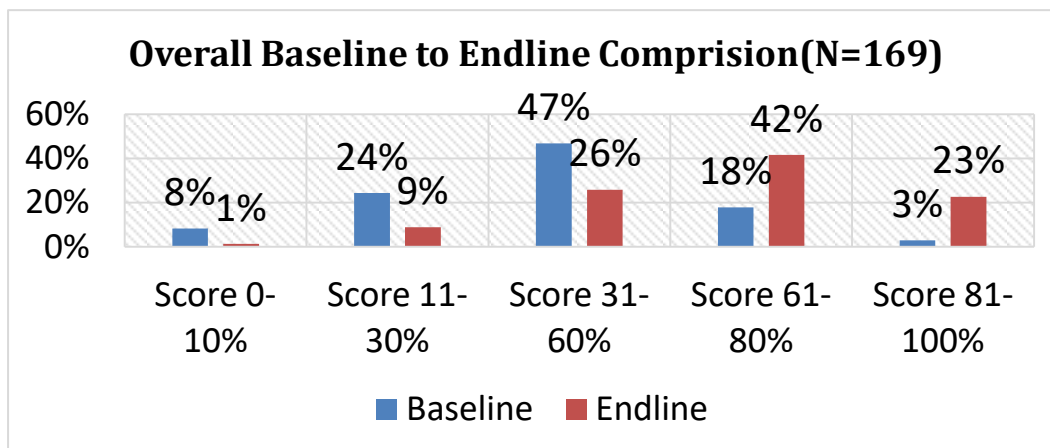


### 1.9 Project Prajita Education - Strengthening education in the time of pandemic

The COVID-19 pandemic created serious learning challenges for students, especially in the lower income families and communities where access to digital technologies was limited. Project Prajita Education worked towards creating a model for bridging this digital divide which was hampering the learning of children, especially in poor communities. For this purpose, the project created digital learning centres at the community level, with the CEE team proposing to work in five neighbourhoods to create such model digital learning resource corners. The project benefitted about 2,500 children.



From January 2022 to August 2022, the project team could bring about an impact on nearly 500 regular students in terms of basic competencies in reading, writing and counting as well as an outreach to around 60 children who were drop-outs.



## 2. Education for Youth

CEE's youth programmes involve young people in developing environmental awareness and action by providing opportunities for participation in several activities and campaigns. Youth participation is built into many of CEE's initiatives enabling them to take leadership roles in influencing change.

The South Asia Youth Environment Network (SAYEN) has built a partnership in the South Asian region with youth organisations as well as with young people who lead their own organisations and programmes in their respective countries who are a resource pool for the network. As a part of SAYEN, CEE responds to requests from organisations and colleges to be a partner in initiatives aiming to create awareness on sustainability issues among youth and the community. Partnerships with the student cultural fests in institutions like IIT Bombay, IIT Kanpur, IIT Kharagpur and IIT Roorkee have been ongoing for over nine years, with the focus on making them Green Fests.

### 2.1 Young Reporters for Environment (YRE)

YRE is an award-winning global initiative, coordinated by FEE (Foundation for Environmental Education), and active in over 45 countries involving around 3,60,000 youth. CEE is the national operator of YRE and provides a platform to the Indian youth for creative communication on environmental issues. The Litter Less Campaign, an initiative of FEE supported by Mars Wrigley, focusing on waste and litter is also offered through YRE in India.

During the year 2022-23, measures were taken to strengthen the programme so as to enhance the participation of youth and to improve engagement with them. This resulted in the participation of 50,000 students and youth and 180 mentor teachers.

Five students from ISCE-22 (International Conference on Sustainability Education) held independent journalistic responsibility and covered the entire event, preparing press notes for all the events, and interviewing national and international delegates, and officers from the ministry.

In 2022-23, YRE also introduced Mentorship Programmes, where they worked with school teachers to train students to become young reporters for the environment. As a result of this, YRE is currently working with more than 1,500 students in around 250 schools along with 12 universities across India who are being trained under YRE.

Moreover, in the months of October to December, photography and videography workshops were organised in order to encourage and promote the young enthusiasts. These workshops sought to enhance their skills thereby enabling them to make a better impact on environmental issues through their activities.





### **Outreach and engagement tools**

The programme team updated the communication material used for dissemination of the programme information among schools and colleges.

Lesson plans developed as a part of the Litter Less Campaign were provided to the schools and institutes to help them carry out action projects focusing on local environmental issues related to the themes of pollution, biodiversity loss and climate change, the three focus areas of FEE's 2030 GAIA Strategy.

### **Achievements**

In 2022-23, YRE India received two international prizes in YRE International Competition 2023 and LLC Plus Grant, namely, the 2<sup>nd</sup> prize in photography and 3<sup>rd</sup> prize in videography.

As part of FEE Litter Less Plus Circular Economy School Grant, two schools, one in Jamnagar and one in Lucknow, received 500 Euro each as an award grant.

### **Collaboration**

YRE (Scouts and Guides) has spread its reach to various states of India including Uttar Pradesh, Rajasthan, and Odisha where around 60 schools hosting Scouts and Guides, along with their teachers and regional coordinators, were registered and trained under the Litter Less Campaign.

YRE worked with many prominent youth groups like Sattvic Soul Foundation, Earthaat Foundation and Green Gathering. Youth from engineering and medical colleges, IIT, arts and design schools, and other sectors joined Sattvic Soul Foundation of Odisha in plogging and beach cleanup initiatives under the Litter Less campaign of YRE. The Green Gathering, a youth group of Ahmedabad, partnered in an initiative conducting awareness campaigns and tree plantation drives, and holding multiple seminars for college students under LLC and waste management. Moreover, collaboration with Earthaat Foundation provided YRE with an opportunity to work with the students of City Montessori School, Lucknow.

Apart from these youth groups, YRE India also collaborated with Indian Institutes of Technology (Kanpur, Bombay and Kharagpur) for implementation of YRE.



## **Research**

Under the YRE Litter Less Campaign, an Intern carried out research on Cigarette Butt Litter and Its Impact. This research was presented during the Parul University Expo 2023 where it helped raise awareness about the harmful effects of cigarette filters through a poster presentation to the jury and other students and staff members.

## **2.2 Tide Turners Plastic Challenge (TTPC)**

Focusing on the role of young people as leaders in the fight against plastic pollution, the United Nations Environment Programme (UNEP) introduced a global campaign called the Tide Turners Plastic Challenge. The campaign educated young people about the dangers of single-use plastic (SUP), while equipping them with a basic understanding of advocacy, and motivating them to put their knowledge into action in their communities.

## **Phase 4**

Year 2022 was the fourth phase of the campaign in India. CEE and World Wide Fund for Nature (WWF) jointly designed and developed knowledge and training resources for the youth. The activities in these resources aimed to educate students, educators and individuals on plastic pollution, marine litter and SUPs, besides environment education in general.

CEE, with inputs from WWF, developed two sets of training modules for conducting online training and on-ground training. Four Master Trainers Training workshops were conducted jointly by CEE and WWF - for Bihar Scouts coordinators, NCC officers in two locations (Maharashtra and Madhya Pradesh) and Bombay Municipal Corporation, which covered over 1,500 Master Trainers in all.

A total of 34 training sessions were conducted for 10,862 Master Trainers, teachers, Scouts coordinators, trainers and youth. Out of these, 11 online national and state-level trainings were conducted which were attended by 5,425 teachers and trainers from schools and colleges. The state-level workshops were conducted in Hindi, Gujarati and Marathi languages. In all, 23 in-person TTPC trainings were conducted for 5,437 trainers and teachers from urban and rural target groups covering the states of Gujarat, Maharashtra, Bihar, Orissa and Delhi. Out of these 23 workshops, CEE guided and supported Bihar Scouts and Guides for conducting face-to-face district-level workshops.

CEE provided continuous follow-up and guidance to Master Trainers in Bihar and other TTPC schools and colleges for conducting the challenge activities of the project. Regular meetings were held to guide master trainers and state-in-charge personnel for the implementation of the campaign. A National Youth Summit was organised on August 30, 2022, in which over 500 individuals participated. Summing up, Phase 4 achieved better and wider inclusion of youth and citizens of India, advocating and acting on the cause of plastic pollution and single-use plastics.



*(Left) TTC clean up Bihar Vaishali*



*(Right) Students appearing in Plastic Literacy Test*

## Phase 5

Looking at the success of the past four phases, UNEP has joined hands with CEE and WWF to initiate Phase 5 from January 2023 to March 2025. As a part of the initiation of this phase, CEE and WWF reviewed the entire content and challenge strategy.

### 2.3 Partnership to Strengthen and Develop Youth Climate Leaders in Maharashtra

CEE Central partnered with UNICEF to strengthen and develop Youth Climate Leaders in Maharashtra. From June 2022 to March 2023, this programme was implemented in four climate vulnerable districts of Maharashtra, namely, Osmanabad, Ratnagiri, Sindhudurg and Mumbai. The activities included:

- Workshops in the four climate vulnerable districts of the state
- State workshop for youth and interactions with policy makers
- Support for youth from Maharashtra to participate in LCOY (Local Conference of Youth) 2022
- Development of MYCA (Maharashtra Youth for Climate Action) as a platform for youth
- Development of an online course on Youth Leadership for Climate Action  
<https://www.mahayouthnet.in/>

### 2.4 Maharashtra Youth for Climate Action (MYCA)

In partnership with UNICEF Maharashtra, an initiative to engage youth in the 15-29 age group was taken up in June 2022, initially in four climate vulnerable districts of Maharashtra (Osmanabad, Ratnagiri, Sindhudurg, Mumbai).



*MYCA workshop at Osmanabad*

A survey was first conducted to identify the concerns of youth with regard to climate change and any actions taken up by youth on this. A need for structured engagement emerged through this survey. Workshops were conducted in the selected districts to discuss with youth climate change and its impacts; linkages with other sectors such as water, energy, waste management and biodiversity; and also to build capacity of youth participants for local climate action.

A youth platform Maha Youth for Climate Action has been established for them to access knowledge, effect exchanges, collaborate for climate action on the field, and advocate for climate policy. As part of the activities of MYCA, a state-level climate conference was organised in January 2023, where about 60 youth participated representing various districts in the state. The participants drafted a youth statement about climate change policy for the state and presented it to policy makers.

UNICEF and CEE also offered a three-month MYCA fellowship to five youth to work on their own concepts/ideas at the local level.

In March 2023, a self-paced online course on Youth Leadership for Climate Action was launched as part of the MYCA platform, in partnership with the Department of Higher and Technical Education, UNICEF, Advanced Center for Water Resources Development and Management (ACWADAM) and CEE. The topics include: Climate Change, Water Conservation, Solid Waste Management, Energy Management and Biodiversity Conservation. The courses, endorsed by the Department of Higher and Technical Education of Government of Maharashtra, are available in English and Marathi free of cost.

Currently, the MYCA network has more than 300 youth members across the state.





*MYCA workshop at Mumbai*

## 3. Higher Education

### 3.1 Climate Smart Agriculture Courses

Five courses on Climate Smart Agriculture of three weeks duration each were developed and piloted in collaboration with Mahatma Phule Krishi Vidyapeeth (MPKV), Maharashtra, and with support from GIZ, between December 2020 and June 2022. They are as follows:

- Soil Management for Climate Smart Agriculture
- Weather Based Agromet Advisory Services Through ICT
- Application of Remote Sensing (RS) and Geographic Information System (GIS) in Natural Resources Management
- Climate Smart Watershed Management
- Land-use Planning (LUP) for Climate Smart Agriculture

The courses were developed by adopting a co-creation process that involved MPKV scientists, external

experts and CEE team (for learning design). The courses were piloted between April 2021 and May 2022, after which a review and improvements were undertaken to finalise them. The courses were officially handed over to MPKV for implementation in November 2022.

### 3.2 SDG Handprint Lab

SDG Handprint Lab is an initiative offered by CEE to increase youth participation in achieving the UN Sustainable Development Goals (SDGs) at the local level. The programme challenges the students to understand the goals and targets in a selected geographic area and think of solutions and Handprint actions that could lead to achieving those goals. The concept of Handprint, which emerged from one of CEE's programmes, is the symbol for positive and tangible actions taken towards sustainability. Exploring the themes of the SDGs is an excellent way to get the students to link their education and skills with real life problems in the wider community and environment.

**Padmabhushan Dr Vasantdada Patil (PVP) College of Architecture (Maharashtra):** The SDG Handprint Lab was offered as an elective course for masters' students at the PVP College of Architecture, Pune, from April to June 2022. Sixteen students attended the course which introduced to the SDGs and the 2030 Agenda. After identifying the SDG targets related to the topics they were interested in, students worked in groups to explore the status of the topic in one location in Pune. They conducted observational studies, surveys and interviews to explore their topics, and then identified and implemented an action contributing to the target. The students selected targets 5.2, 15.4, 6B and 11.7, and the change projects included holding discussions for a women's support group and leadership in the community, designing a plan to improve access at a public garden, conducting activities for children on water and sanitation, and tree plantation with the community in the selected ward.

**Nirma University and Charusat University (Gujarat):** During the reporting year, the programme was conducted in two universities, namely, Nirma University - Ahmedabad and Charusat University - Anand. At Nirma University, the programme was offered to 250 final year students of the Institute of Management. At Charusat University, over 20 students took up the programme virtually. This year, the exploration and Handprint action were undertaken in the slums in Ahmedabad with the help of CEE West.

### 3.3 Publication and Workshops on Systems Thinking

'Systems Thinking' is among the key competences identified by UNESCO for individuals to contribute to sustainable development. With financial support from Engagement Global, Bonn, Germany, under its ESD Expert-Net initiative, a teacher's resource was developed and published in November 2022 by CEE, to support teachers in adopting systems thinking approaches as a key element of Education for Sustainable Development (ESD), and to motivate students to actively participate in the implementation of solution strategies. The resource is titled *Ten Steps Towards Systems Thinking: An Education for Sustainable Development Manual for Teachers, Educators, and Facilitators*, and is authored by Thomas Hoffmann, Dr Sanskriti Menon, Wendy Morel, Thamsanqa Nkosi and Nicola Pape. The authors are members of the ESD Expert-Net.

Workshops introducing the book and the methodology of systems thinking were conducted in November



2022 in Pune and Ahmedabad, with over 50 participants including teachers, independent educators, community workers and staff of NGOs attending.

### 3.4 Regional Centres of Expertise (RCE) Lucknow

RCE Lucknow, in partnership with eight organisations, established a network of RCE on ESD in Lucknow. The key areas of RCE Lucknow were focused on biodiversity conservation and school education programmes. The target groups for these activities are students, teachers, NGOs, communities, youth and others. CEE North, as the nodal point for RCE Lucknow, initiated the ESD activities with its RCE partners in the region, which included:

- School events based on various environment related themes were organised where students and teachers from schools in Lucknow participated.
- Biodiversity focused ESD initiatives were undertaken in Uttar Pradesh with the help of formal education institutions like the University of Lucknow, and non-formal education institutions like the UP State Biodiversity Board, Education and Forest Departments, schools, scientific institutions and others.
- CEE North (as the nodal point for RCE Lucknow) and University of Lucknow partnered with Western Sydney University to conduct an online students' exchange programme between Australia and India.

### 3.5 Managing Social Projects

CEE supports the MBA programme of the Institute of Management, Nirma University, Ahmedabad, to facilitate their Managing Social Projects programme in which over 70 second year MBA students participated. The students were organised into seven groups and were engaged in surveying the knowledge and prevalence of Sustainable Traditional Practices in their neighbourhoods. The student groups reached out to over 700 households and submitted the reports of their findings to CEE.

### 3.6. Journal of Education for Sustainable Development

Journal of Education for Sustainable Development (JESD) is a peer reviewed, international academic journal published by SAGE and managed and edited by CEE. It provides a platform for presenting research, debating ideas and showcasing success stories in the emergent and multidisciplinary field of ESD.

During the current year, one issue of JESD was published with research articles from across the globe and on varied subjects.

### 3.7 CEE Academy: Transformative Learning for Sustainable Development

The CEE Academy has been set up with the purpose of offering courses that provide knowledge, tools and skills for transformative learning to educators and teachers, practitioners across sectors – rural, urban, corporates, decision-makers and young people - to deal with the triple planetary crisis humanity

faces. CEE brings to the Academy its rich experience and expertise in Environmental Education and training, across sectors and stakeholders, and through partners.

The 2030 Agenda and the Sustainable Development Goals (SDGs) call for a transformative learning approach that enables change in mindsets and builds capacities, skills, tools and resources for teachers, educators and facilitators. The CEE Academy courses address these critical areas for capacity building.

### **Objectives**

- Provide sustainability orientation to various sectors with a view to fostering values towards active citizenship
- Facilitate development of skills for transformative learning, critical thinking, ethical decision making and understanding the interlinkages among SDGs
- Introduce cutting edge sustainability practice, approaches and pedagogy through a repository of local to global examples

The Academy offers courses online, in-person and in hybrid mode. Courses are also offered in partnership with universities and institutions in India and internationally. Faculty from CEE, its alumni, and partner organisations have enriched the courses that are being planned and offered through the Academy.

During the current reporting period, the Academy conducted review and planning activities to incorporate lessons learnt from the experience of the first year.

The courses offered during this period included:

### **India-Australia E-learning Exchange Course - Sustainability and Climate Resilient Farming**

CEE North, as RCE Lucknow, developed the virtual exchange course under the CEE Academy, in collaboration with Western Sydney University (WSU), Australia (RCE Greater Western Sydney). The course was offered in collaboration with the University of Lucknow, India, during July 5 – August 23, 2022. The programme provided an opportunity for the 20 student participants to engage in an online global learning experience, taking a deeper look at farming practices and conservation systems in Australia and India, through a sustainability lens. The virtual exchange of over an eight week period through live and self-led learning activities included research projects, expert sessions and cultural exchange.

### **Handprint CARE Certificate Course**

A three day online certificate course was conducted in September 2022 for pilot-testing the Handprint CARE pedagogy with teachers and teacher educators in India.

## Courses under Development

CEE has undertaken a project, CARE, to document and disseminate good practice examples in climate change mitigation and adaptation in the sectors of agriculture, fisheries, eco-tourism, poultry and goatery, in Maharashtra, Gujarat and Bihar. Capacity building needs have been identified among the Farmers Producer Organisations that already exist or are getting set up. Courses focusing on four themes - collectivisation models and process, climate smart technologies in the sectors under study, entrepreneurship for eco-tourism, and using CARE Framework to initiate sustainable development work in the rural sector - are being developed.

## 4. Experiencing Nature

### 4.1 Sundarvan: A Nature Discovery Centre

Sundarvan, created in 1978, is recognised as a Mini Zoo by the Central Zoo Authority of India. It is popular for its snake rescue and snake awareness programmes. In the year 2022-23, Sundarvan received 89,374 visitors, including 27,144 children and 62,230 adults; and about 16,613 students and 212 teachers from 141 schools.

The Reptile Awareness Programme at Sundarvan covers general information about reptiles, snake diversity, morphological characteristics, venomous and non-venomous snakes, precautions to avoid snake bites, treatment, making of anti-venom, myths and facts, and importance of conservation. The training and awareness programme was organised for Torrent Power Ltd, IIT Gandhinagar and Suryam Repose Houses, to name a few. Over 345 people from the corporate and educational institutes attended the programme.

Similar to Reptile Awareness is the Snake Awareness Programme, which was organised for Arihant Homoeopathic Medical College and Research Institutions, Department of Forensic Science at Shri Swaminarayan University, Kotak Mahindra Bank, Ankur International School, Mahatma Gandhi International School, Sharda Mandir School and for many local visitors. Over 500 people attended this programme.

In addition, Sundarvan organises night camps for children in summers and winters. This year, over 300 children participated in the camps.

In 2022-23, Gajera Global School from Surat, Kenalily School, SKUM School and Planet Discovery Centre from Ahmedabad organised visits to Sundarvan. Activities like bird feeding, nature trail, snake awareness and species diversity were conducted for them where they learned about the importance of urban biodiversity. Training programmes, photography competitions, cleanliness drives, Green Birthday celebrations were some of the other activities organised at the facility.



## 4.2 CEE Nature Camps

CEE Ahmedabad Campus organised 'Nature Connect,' an overnight camp for children in the age group of 6-12 years for destinations across India. Many prominent schools and other educational institutions are part of the clientele for the Nature Camps division, for whom annual camps are being organised. In pursuit of spreading the concept of sustainable camping to the masses, the camping division also offered many offbeat places both in Gujarat and outside, creatively weaving nature-based activities taking into account the local biodiversity of that place. Other developing areas are 'Green Birthdays' and 'Special Event Batches' by environmentally conscious parents, where Environment Education (EE) is reaching a new group of participants who attend such events on invitation.

In 2022-23, the team organised over 60 camps and with over 1,800 participants attending them. Efforts are on to scale up, making nature camping a pan India activity, involving all regional offices and other CEE networks.

# 5. EE through Interpretation

CEE developed a variety of interpretative work including exhibitions, stall designs, posters, products, publications and video films, during the current reporting year.

## 5.1 Shivamogga Smart City Ltd (SSCL), Karnataka

A Memorandum of Understanding was signed between SSCL and CEE in December 2019 for the development of a Nature Interpretation Centre and Science Park. Work is progressing on this project.

The project consists of photo-text panels, dioramas with life-size and scale models, interactive panels, augmented reality and outdoor signage, which will not only disseminate information about the city, its environment and its biodiversity to the people, but also educate them about the importance of its conservation. The Science Park aims to develop a sense of scientific enquiry in the visitors through interactive exhibits as well showcase the richness of India's scientific heritage.

The project is in progress and the fabrication of outdoor interpretation has started. The content for the photo-text panels has been completed and most of the dioramas are ready to be installed, pending completion of the buildings.

### 5.2 Environmental Planning and Coordination Organisation (EPCO), Bhopal

CEE successfully completed the setting up of 'Jal Tarang', the Bhoj Wetland Interpretation Centre at Bhopal during the current year.

### 5.3 Pench Tiger Reserve Conservation Foundation (PTCRF), Nagpur

CEE has undertaken the work of converting the community hall in PTCRF into a Tribal Museum, highlighting local tribal culture and climate friendly and sustainable lifestyles. This was executed through photo-text panels, 3D diorama and display systems focusing on tribal kingdoms, livelihoods, climate friendly practices, tribal cultural festivals, while also covering current day scenarios and issues.

## 6. Coastal and Marine Programme

### 6.1 Blue Flag India

In 2022-23, CEE-SSUD (Society for Sustainable Urban Development) continued as India's National Operator for the prestigious International Blue Flag Beach eco-label programme initiated by FEE. The CEE team closely collaborated with district administrations and beach management committees to ensure strict adherence to the Blue Flag criteria. One of the programme's key achievements was the successful conservation of beach biodiversity, particularly dune vegetation, through nature-based solutions like nurturing sand binders and native flora. Blue Flag sites are evolving as educational place based sites, hosting various environmental activities. In 2022-23, FEE International awarded the Blue Flag to ten beach sites in India: Shivrajpur (Gujarat), Ghoghla (Diu), Eco Beach (Kasargod, Kerala), Padubidri (Karnataka), Kappad (Kerala), Eden (Puducherry), Kovalam (Tamil Nadu), Rushikonda (Andhra Pradesh), Golden (Odisha) and Radhanagar (Andaman). Furthermore, pilot beach sites are in development in Karnataka, Kerala and Odisha.





## Study on Blue Flag Beaches as Climate and Sustainability Education Sites in India

In partnership with the University of Saskatchewan, Canada, CEE conducted a case study under the Monitoring and Evaluating Climate Communication and Education (MECCE) project titled 'Blue Flag Beaches as Climate and Sustainability Education Sites in India.' The study's goal was to raise awareness and education on sustainability and climate change, focusing on beach ecosystems and coastal communities.

The study involved designing and conducting capacity building workshops and onsite training for approximately eight to ten beach managers from seven beach sites across the east and west coasts of India. These activities aimed to transform beaches into educational spaces and engage diverse audiences in climate and coastal conservation. Research methods included field studies at Kovalam Beach in Kerala, literature reviews, and stakeholder consultations and trial runs. The educational activities facilitated by the beach educators were evaluated. They engaged with varied groups ranging from beach staff, local residents, school children, NCC cadets, research students and outreach education collaborations with academic and research institutions. The findings highlighted the importance of integrating sustainability and climate education into beach experiences, curating beach spaces as place based learning sites. It recommended the development of blended learning courses, in alignment with India's new education policy, and promoting sustainability, climate action and community engagement.



## 7. Climate Change

### 7.1 EPAM India

CEE and EPAM India are conducting the Climate Change Warrior programme, which includes a series of webinars followed by action projects. This programme aims to prepare the Climate Change Warriors of EPAM (environmentally responsible warriors). In this regard, EPAM has developed a carbon footprint calculator through which one can calculate individual carbon emissions while, on the other hand, CEE

has developed the global Handprint network/Handprint action which helps one explore various ways an individual can contribute to reduce their carbon footprint.

As a part of this project, a series of webinar sessions were organised for the EPAM employees, each of which started with a quiz on its respective topic. At the end of each webinar, employees had to commit to take individual Handprint actions. All the webinar sessions were completed with the support and cooperation of EPAM India team. After the sessions, a feedback form was distributed among the participants to collect their opinions and identify areas for improvement in the way conduct of the programme.

## **Earth Day 2022**

On the occasion of Earth Day 2022, a webinar was conducted for EPAM India employees to educate them on the importance of Earth Day and how simple efforts can make the world a better place for everyone. Mr. Vrijulal M V, Project Coordinator, CEE South, conducted an informative session on the importance and significance of Earth Day.

## **Think Blue, Go Green: Marine Litter**

On July 15, 2022, the webinar for EPAM India employees dealt with marine litter, plastic as a product and its impact, and simple efforts they can take to change the situation. Ms. Meena A S, Programme Officer, CEE Ahmedabad, conducted a session on 'Plastic – The Challenges for a Miracle Product'.

## **Beach Clean-up Drive**

As part of the webinar sessions, a 'Beach Clean-up Drive' was held at Besant Nagar Beach, Chennai, for the employees of EPAM Chennai office, on July 30, 2022. In all, 42 participants covered a 550 metre stretch and collected 171 kg of waste of which 68.3 kg was glass and metal, 54.6 kg was plastic, and 48.1 kg was foam and rubber.



## **World Ozone Day**

On September 6, 2022, the webinar was on the importance of Ozone Day. Ms. Meena A S, Programme Officer, CEE Ahmedabad, delivered a session on 'Lessons from how we protected the ozone layer'.

## **National Wildlife Week**

On the occasion of National Wildlife Week 2022, a webinar was organised on October 7, 2022, for EPAM employees to learn more about the significance of Wildlife Week and to create awareness on the importance of wildlife conservation. Mr. Vrijulal M V, Programme Coordinator, CEE South, gave a very insightful presentation on 'Biodiversity for Life'.

## **World Wetland Day**

On February 2, 2023, World Wetland Day, the webinar was on the importance of wetlands. Dr. H S Gupta, IFS (Retd), gave a detailed presentation on the importance of wetlands and explained conservation measures being taken to save the wetlands.

## **7.2 Strengthening Multi-stakeholder Approaches for Effective Implementation of Karnataka State Action Plan on Climate Change (KSAPCC)**

CEE, along with Hans Seidel Foundation (HSS), Germany, is working on a study for 'Strengthening multi-stakeholder approaches for effective implementation of Karnataka State Action Plan on Climate Change (KSAPCC)', with a view to facilitating policy as well as implementation level efficiency of the KSAPCC within integrated water resource management and sustainable agriculture sector, along with enabling partnerships for capacity building within the climate change theme for enhanced support for climate action.

As part of this study, CEE conducted a qualitative study on KSAPCC to strengthen the efficacy of its implementation in 2021. Based on the recommendations from this study, a policy brief was developed with a focus on sustainable agriculture and water use efficiency, which suggests a solution to strengthen the localisation of the KSAPCC. The study was unveiled in the 'State Level Stakeholder Workshop' held on June 24, 2022, at the Indian Institute of Management, Bangalore.

A 'HSS-CEE Stakeholder Consultatio' was organised on October 28, 2022, at the Environmental Management & Policy Research Institute (EMPRI), Bangalore, where experts from different fields related to education, water and agriculture were invited to provide their inputs on the preliminary findings of this study, mainly collated through surveys.



*Stakeholder consultation with experts*

In order to increase the effectiveness of the KSAPCC with specific focus on Sustainable Agriculture and Integrated Water Resource Management by reflecting on the possible linkages that could bring consonance between the National Policy and the State Policy, while at the same time finding existing sectoral linkages for implementation of the policy, the team conducted a qualitative study, soliciting inputs from state government officials and other stakeholders including representatives from water and agriculture departments, non-governmental organisations, and knowledge partners. This helped the team to derive lessons in the form of recommendations for the design of interventions aimed at enhancing capacity and educating the public. A total of 10 key informant interviews with experts from different institutions, departments and organisations were conducted during the month of August to October 2022.

Based on the inputs from the study on the KSAPCC, a report was developed with an aim to launch the KSAPCC study findings and also develop recommendations for 'Mainstreaming climate change resilience and stakeholder's engagement in water and agriculture sectors'. The study was unveiled during the National Level Workshop held on November 10, 2022. About 62 participants attended the workshop and gained knowledge about tackling climate change issues through adaptation and mitigation strategies.

The above activities were part of the 2<sup>nd</sup> phase of the project. From January 2023, the 3<sup>rd</sup> phase of the project has been started with the initiation of background work.

### 7.3 Scaling-up and Strengthening Climate and Environmental Education Access to Children and Youth in Karnataka

CEE has undertaken the project titled 'Scaling-Up and Strengthening Climate and Environmental Education Access to Children and Youth in India', in collaboration with the Government of Karnataka and with the support of UNICEF. The project aims to reach out to school and college networks and provide



stakeholders with access to the information base and training related to climate and environmental education in both urban and rural areas. Furthermore, attempts are being made to institutionalise 'climate and environmental education' and make it available to future generations of learners and champions.

As a part of the project, the Terms of Reference (TOR) for the curriculum-based need assessment were developed and the preliminary need assessment report was submitted. During December 2022 – February 2023, two training of trainers programmes with a total of 80 master trainers and seven faculty training programmes with a total of 350 faculty trainers were conducted on Climate and Environment Education. Along with this, 15,000 students were provided orientation on Climate and Environment Education programmes at different colleges and universities in Karnataka.

The CEE project team successfully established a Central Training Support Unit (CTSU), which has been instrumental in ensuring the success of the project. The project team also successfully developed and deployed a Training Management Information System (TMIS). The TMIS serves as an essential tool for monitoring and managing the training of master trainers and faculty members involved in educating students on climate and environment education. The project developed manuals for faculty members and a Facilitator's Manual for faculty training and uploaded them on the Training Management Information System (TMIS), including four PowerPoint presentations.

#### 7.4 Advancing Teacher Education for Climate Change Education through Collaboration among Asian Centers of Excellence on Education for Sustainable Development (ATECCE)

Recognising the critical role of teacher education in addressing climate change, Asia-Pacific Cultural Centre of UNESCO (APCCU) launched a project in March 2021, titled 'Advancing Teacher Education for Climate Change Education through Collaboration among Asian Centers of Excellence on Education for Sustainable Development' (ATECCE). CEE being a Centre for Excellence in ESD in India, APCCU partnered with CEE for undertaking a study in the country under this project. This project is being conducted in partnership with UNESCO Bangkok and UNESCO Beijing, supported by the Japan Society for the Promotion of Science, and aims to establish a framework for Climate Change Education (CCE) teacher training in Asia, develop a dissemination guide, and actively integrate CCE into teacher education programmes. The ATECCE project engages in active discussion for providing suitable recommendations and proposing effective strategies to empower teachers in delivering climate action education.

Under Phase 2 of the project in 2022-23, CEE has developed a national module framework for Teachers' Training for Climate Change Education in schools in India, primarily focusing on middle school and Level 1 of secondary stage teachers.



## 7.5 National Consultation and Workshop on 'Integrating Climate Change Education in School Ecosystem in India' under the ICCC project of GIZ and MoEFCC

The ICCC Project (supporting Institutionalisation of Capacities on Climate Change Studies and Actions - a bilateral technical cooperation project between MoEFCC, GoI and the German Federal Ministry BMU implemented by GIZ India) partnered with Vikram A Sarabhai Community Science Centre (VASCSC) and CEE to conduct a stakeholders' workshop, and a national consultation with sector experts and decision makers to understand the framework and recommendations on integrating climate change education in middle school (Grade 6 to 8) in India.

Accordingly, two national level events were organised by CEE during the last quarter of 2022 on the topic of 'Integrating Climate Change Education in the School Ecosystem in India' with support from GIZ India and MoEFCC, GoI.

First, a Stakeholders Workshop was organised at Ahmedabad by CEE, in partnership with VASCSC on October 19, 2022. A range of stakeholders from policy makers, government authorities, researchers, educators to various implementing agencies working in the field of climate change education from across the country were invited and participated in the deliberations on four key aspects of climate change education - core topics on climate change (content), methods and approaches to climate change education (pedagogy), learning spaces and teachers' training. A draft recommendation report was developed out of this workshop.

Subsequently, a National Consultation was held at New Delhi on December 22, 2022, by CEE India with the support of GIZ India. The draft recommendations gathered through the workshop were presented to key stakeholders including decision-makers at the national level and a way forward was deliberated for the integration of climate change education at the middle school level in India. On the basis of this National Consultation, the Final Recommendation Report has been prepared by CEE and submitted to the funding agencies for onward integration.

## 7.6 Local Conference of Youth India 2022

The Conference of Youth (COY), organised by YOUNGO, serves to raise awareness of climate change issues in youth globally and empower them to actively engage in international climate policy within the UNFCCC framework. In 2022, local COY events (LCOYs) emerged, offering youth worldwide the opportunity to join the climate action movement and share their concerns and ideas with global COY and UNFCCC's COP delegates.

LCOY India, hosted jointly by CEE, Enact Earth Foundation and Brahma Kumaris, had a specific focus on the theme 'Youth for Adaptation and Loss and Damage'. The event was held in a workshop mode spanning three days – September 23-25, 2022 - at the Brahma Kumaris' facility in Nadiad, with participation from over 100 youths from across the country.

The agenda aimed to develop the delegates' knowledge and context over the first two days to facilitate meaningful discussions around the theme. LCOY India's objectives encompassed enhancing youth's

understanding of climate change and sustainable development, empowering them to contribute to climate action locally, nationally and internationally, providing a platform for peer exchange, and amplifying their voices. The key outcomes and recommendations from LCOY India discussions were integrated into the official youth statement, shared at the global COY and later submitted to UNFCCC COP.

### 7.7 MOVERS Programme – 2022 Implementation in India

The Movers Programme is a regional movement of Youth Volunteers to develop awareness on Sustainable Development Goals, entrepreneurial mindsets and 21<sup>st</sup> Century Skills among youths by conducting localised trainings at grassroots level. Using a training-of-trainer approach, the programme works with community partners to target the hard-to-reach youth groups in countries across the world. This youth engagement and empowerment programme is developed by the Youth Co:Lab initiative, co-created by UNDP and Citi Foundation in 2017. Youth Co:Lab is the largest youth-led movement for social and environmental entrepreneurship in the Asia-Pacific.

Under the aegis of this programme, CEE partnered with Vencap United in September 2022, to implement a target of engaging and empowering 4,500 youths across India by February 2023 and in the process, created a network of youth volunteers capable of understanding, explaining and mobilising actions towards SDGs and climate actions in their own communities. The implementation was undertaken by the Climate Change Group in partnership with CEE North.

The themes on which the workshops were conducted by CEE for training and engaging with youths were: Introduction to SDGs, Climate Actions, Nature and Biodiversity, and Quality Education. The team underwent on-boarding calls and Movers Trainings themselves to understand the entire programme well and learn the approach and methods used to deliver the trainings to youths to create the desired impact.

For implementing this programme, CEE reached out to diverse sets of youths across the country, from different social and educational backgrounds. Through a total of 26 workshops, CEE trained, engaged and empowered 4,564 youths across 13 cities in 10 states of India. In the process, it partnered with 19 different organisations – including seven schools, six universities and colleges, four institutes and two organisations. The youths trained by CEE on Movers Programme included students of senior secondary school, college and university students studying science, technology, pharmacy, dentistry, nursing, etc., representatives of NGOs working on social and community development, pre-service teacher trainees, as well as young in-service teachers.

### 7.8 Workshop on Climate Resilience and Women's Cooperatives

A one-day workshop on Climate Resilience and Women's Cooperatives was organised on February 7, 2023, for women members of cooperatives set up by SEWA Federation in Ahmedabad. About 50 women leaders participated in the programme.

## 7.9 One-day Stakeholder Consultation Strategic Roadmap to Amplify Climate Change Agenda across the State

The Climate Change Department of the Government of Gujarat, UNICEF Gandhinagar, IIT Gandhinagar and CEE Ahmedabad jointly organised a one-day stakeholder consultation aimed to develop communication strategy for climate change awareness. Dr. Janki Shah moderated the workshop in which experts from government, academia and civil society organisations participated along with officials from CCD and UNICEF.

# 8. Environment Management

## 8.1 UNEP - Roadmap for a Sustainable Textile Hub in India

The United Nations Environment Programme (UNEP), India Country Office, in consultation with the Ministry of Textiles, Government of India, conceptualised a study on minimising the negative environmental impacts of textile hubs in India, with the aim of developing a 'Roadmap for a Sustainable Textile Hub in India'. UNEP collaborated with CEE Ahmedabad to conduct this study.

Surat, the textile city of Gujarat, was recommended for this pilot study. The report examines the gaps associated with textile manufacturing, specifically in the weaving and processing sector units and the existing common infrastructures. Further, the report outlines the actions to be taken based on the identified gaps and recommendations to ensure the transformation of the Surat Textile Cluster into a Sustainable Textile Hub.

Under the aegis of this initiative, environmental and social hotspots and gaps were identified in the Surat cluster and a roadmap titled Roadmap 2030 was developed. This roadmap presents actions to be undertaken by stakeholders to bridge the gaps, along with a timeline and action plan.

This study is one of the first that applies a cluster-based method to identify textile manufacturing bottlenecks and help stakeholders identify solutions. Over 25 facilities in the Surat textile cluster were visited, and more than 50 manufacturers, associations, traders, Common Effluent Treatment Facility (CETP) management, academicians, consultants and workers were interviewed in depth. It also addresses the missing linkages and shows how cost affects the implementation of eco-friendly solutions with examples.



## 8.2 Approaches for Circularity in Textile and Apparel Sector in India

To strengthen the capacities of the Indian textile and apparel industry to impart and implement circular approaches, a joint project 'Approaches for Circular Textiles and Apparel Industry in India' was conceived between Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), GmbH and Aditya Birla Fashion and Retail Ltd. (ABFRL) under BMZ's public-private partnership programme (DeveloPPP.de). CEE is the implementation partner for the project.

The project aims to strengthen Circular Economy mechanisms throughout the textile value chain, develop circular business practices guidelines, harmonise textile clusters and create a Circular Economy ecosystem in India's textile and apparel sector. It will allow the sector to achieve its SDG goals and aid in competing with international textile hubs across the globe.

The intended development impact of this project is a contribution to a less wasteful, less polluting textile and apparel industry. The project follows a four-fold approach to introduce and strengthen the circular business practices in ABFRL and the textile and apparel industry:

- Reducing the use of harmful substances through material innovation
- Increasing textile-to-textile recycling
- Alternatives to plastic packaging
- Traceability through the different demonstration projects

The focus is also on building and strengthening capacities in various areas including (i) use of sustainable materials, (ii) recycling, (iii) use of renewable resources and inputs in production, and (iv) implementation of internationally applicable social and working conditions within textile supply chains.

## 9. Sustainable Rural Development

### 9.1 Climate Smart Agro-advisories

A project to develop a compendium of agriculture advisories focused on sustainable soil management was taken up with support from GIZ New Delhi, as part of its ProSoil initiative. The advisory compendiums were prepared in collaboration with three state agriculture universities.

These advisories were developed with a national advisory group of senior scientists and other experts on soil, agronomy, meteorology, etc. along with the CEE team. The university expert groups helped in the identification of important crops, local soil conditions and priority issues, keeping in mind the extent of area under the selected crops. The advisory group also provided the technical material to be disseminated after conversion into easy to understand advisories for the use of farmers and extension workers.

Name of University	Districts	Languages	No of advisories
Jawaharlal Nehru Krishi Vishva Vidyalyay, Madhya Pradesh	Balaghat, Mandla	Hindi, English	72 (8 crops + sustainable soil management)
Mahatma Phule Krishi Vidyapeeth, Maharashtra	Ahmednagar, Dhule	Marathi, English	89 (11 crops + sustainable soil management)
Panjabrao Deshmukh Krishi Vidyapeeth, Maharashtra	Amravati, Yavatmal	Marathi, English	53 (6 crops + sustainable soil management)

### 9.2 Green and Socially Sound Recovery in the Farm and Rural Sector in Maharashtra

‘Green and Socially Sound Recovery in the Farm and Rural Sector’ is a study project supported by New Venture Fund, Washington, and implemented in Maharashtra, Bihar and Gujarat. The objectives were to study the impact of the COVID-19 pandemic-induced economic slowdown on the rural economy sector; the sources and quantum of Greenhouse Gases (GHG) emissions in the agriculture production system of selected crops and other rural economic service sectors; and to propose sustainable and socially sound solutions for the rural economy sector and rural industrialisation.

In Maharashtra, the study was conducted in Pune, Aurangabad and Ahmednagar districts where GHG emissions along the value chain of tomato, custard apple, bajara, tourism, inland fishery, wild honey, and free-range goat and chicken rearing were studied. The study found that the indirect emissions from the use of electricity for irrigation, application of synthetic fertilisers and transportation from farm to market were the main contributors to GHG emissions in agriculture. The study proposed measures like conducting recharge zone studies of watersheds at the village level, watershed development, promoting



the use of solar pumps, establishing soil testing labs at the village level, encouraging the scientific application of synthetic fertilisers, promoting the use of organic fertilisers and greening of farm to market transportation. The mitigation strategy also included promoting farmers' interest groups or farmers' producer companies in order to foster the processing of the harvested produce with a view to reducing the wastages at the farmgate and increase the share of farmers in the total profit.

A study of the wild honey value chain found that the communities involved in the collection, like the Katkari, and their livelihoods are vulnerable to various factors related to environmental, social and market forces. Based on the study, recommendations for further work include promoting sustainable harvesting of wild honey and supporting the communities to take up other sources of livelihoods such as beekeeping of *Apis cerana* (indigenous domesticated wild honey), fishery and collection and sale of minor forest produce. Similarly, a study of bajara-centric agriculture by the Bhil tribes in the drought-prone areas of Aurangabad found that conservation of local resilient varieties of bajara, value addition to fishery, and free range goat and chicken rearing would strengthen community livelihoods.



*Sorting and grading of tomatoes in village: Salawade, Bhor, Pune*



*Wild Honey Harvesting in the village: Fofasandi, Akole, Ahmadnagar*

### 9.3 Climate Action in the Rural Economy

Climate Action in the Rural Economy (CARE) is a consecutive next step of the ‘Green and Socially Sound Recovery’ project supported by New Venture Fund, Washington. It includes preparing DPRs (detailed project reports) to set up renewable energy systems, processing units, marketing links and appropriate institutional structures. The objectives of the project are to evolve a framework for CARE, continue site-based green recovery initiatives, develop communication materials and training modules for different actors, and foster collaborative, multi-stakeholder transformative approaches.

Under this project, the CARE framework which encompasses linkages of carbon, climate variability, resilience, natural resource base, livelihoods, inclusivity, institutions, technologies, multi-stakeholder and multi-scalar ecosystem transitions is being developed. The field-based activities conducted as part of the project include: an exposure visit of tour operators group to Mangalajodi Ecotourism, Odisha; training programme for custard apple and tomato farmers on Farmer Producer Company (FPC) registration and governance, and their exposure visit to Sahyadri Farms, Nashik; exposure visit of fishers to the fish seed market in Naihati, West Bengal and sustainable fishing in Gondia, Maharashtra; training of fishery group on low cost sustainable cage structures for fish seeds; exposure visit of wild honey harvesters to Manghar, Mahabaleshwar (India’s first honey village).





*Exposure visit of fisher group to village: Arjuni Morgaon, Gondia*

Apart from this, Information, Education & Communication (IEC) material on the impact of climate change on agriculture and other rural economy sectors; mitigation and adaptation strategies to combat climate change; agro-product processing technologies; manual for various stakeholders to calculate GHG emission in agriculture etc. are being developed. CEE is supporting the farmers/fishers/honey harvesters' collectivization, and the process of FPC registration of four clusters has been initiated.

#### 9.4 CARE Project

**Bihar:** As part of COMREC (Green Recovery in Rural Value Chains) project activities, CEE North identified six farm-based commodities, namely, litchi, lac bangle, banana, litchi honey, fisheries and dairy, in Muzaffarpur and Vaishali districts. A research study and baseline survey was conducted on the value chains of all the products, with the specific aim of identifying GHG emissions at the production, harvesting, processing, packaging, transportation and marketing levels. The study also identified the gaps and challenges to plan and recommend project interventions. To further build on the study and baseline findings, the CEE team conducted field visits and meetings with the farmers and producers of each commodity, in order to find areas that require action, ways to support them in reducing the GHG emissions at each level, and greening their production systems and practices.

In May 2022, a field visit was organised to understand the gaps which were identified during the previous survey and also interview and interact with the whole value chain operators in each commodity - owner, farmer, worker - to understand problems related to production, sale, market reach and other aspects, with a view to develop further action plans to reduce carbon emission. The team visited the Litchi Research Institute in Muzaffarpur and held a meeting with the director. The team also identified the scope of collectivisation, exposure visits and demonstrations during the visit.

In November 2022, representatives from CEE Central and RPG (Rural Programmes Group) group visited the project location along with the CEE North team to understand which format of collective will be suitable for the farmers of Bihar. After a long discussion on the producers' need and context, a collectivisation process was initiated among the farmers of each commodity. For the collectivisation of the producers, meetings were conducted with district level officials at ATMA (Agricultural Technology Management Agency), Horticulture, Fisheries departments and the National Research Centre for Litchi. Farmers meetings were also organised to initiate the collectivisation process. Collectives of banana producers and fish farmers were registered under the ATMA Vaishali in Vaishali district. In Muzaffarpur district, the collective of fisher folk in Saraiya block was registered under the ATMA Muzaffarpur.

In December 2022, an exposure visit of fishermen groups from Jandaha and Sariya clusters was organised at Kash Fisheries located in Bariariya village, Sangrampur block, East Champaran, Bihar, to build the capacity of fish farmers on fish hatchery setups. Members of fishery groups interacted with the hatchery operator and were educated on hatchery setups, cost involved and overall process of hatching production. Similarly, an exposure visit of banana farmers of Lalganj cluster in Vaishali district was organised at Taruwar Agro Industries Ltd., Hajipur, Vaishali, to understand the utilisation of farm residue of banana, and the potential to earn from such residue by extracting fibre from banana stem.

Field demonstrations related to intercropping and vermicomposting were held for the banana farmers of Lalganj cluster in November-December 2022. Seeds for intercropping of spinach, kusum beetroot, onion and carom seeds were provided to the selected banana farmers. Farmers sowed these seeds in six-month old banana orchards derived good results in terms of production. To solve the issue of banana farm residue management, vermicomposting was introduced with four banana farmers using the residue along with cow dung for the composting process. From four beds (bed size 10'x3'), farmers could get 15 quintals of vermicompost which was then used in their fields.

For developing a broad understanding of banana farm residue management, an exposure visit of five banana farmers was undertaken to Navsari Agricultural University in Gujarat in February 2023. They also got an opportunity to witness a demonstration of fibre and pseudo stem sap extraction and overall processing at Happy Faces Foundation in Vadodara district. Farmers also visited a FPO to the formation and functioning of FPOs.

## 9.5 Baseline Study and Need Assessment on Creating a Model of Eco-Village

CEE North took up a research study as part of 'From Local to Global - Creating a Model for Eco-Villages', a Public-Private Partnership project between GIZ and HUL (Hindustan Unilever Ltd.). The project focuses on designing an integrated developmental approach in Sumerpur block of Hamirpur district, by adopting an overarching development framework to create water positive, zero waste and carbon neutral

communities and thereby contributing to the Sustainable Development Goals (SDGs).

The team conducted a baseline survey and a need assessment exercise for two sites in Hamirpur district in Uttar Pradesh, taking into consideration the three components of the project for environmental sustainability. The study aimed to gather data to understand the needs of the community, to obtain an overall scenario of shared water resources, waste management related challenges and risks aligned with it, and the extent of its impact on carbon emissions, including further scope to work with a need-based approach. For conducting the survey and meetings in a given time frame, CEE selected and oriented 12 local youth volunteers from nearby villages.

CEE conducted the baseline survey in the two gram panchayats of Sumerpur block in Hamirpur District, namely, Banki and Inghota. In Banki gram panchayat, 801 households with a population of 4,590, and in Inghota gram panchayat 1,912 households with a population of 10,388, were covered during this study. This was undertaken in close cooperation with the local communities. A baseline and need assessment report was prepared capturing the information gathered through stakeholder mapping, interaction with local governance, household and village survey, Focused Group Discussions (FGDs), consultation meetings on water, waste and energy uses.

The field study was completed within 60 days, starting with the design of the survey tool to field study and data analysis. Recommendations emerging from the baseline study and the need assessment exercise and other related information were incorporated in a detailed report which was submitted to GIZ. This report will act as a guiding document to develop the site specific strategy and interventions across all three themes under the proposed project.

## 9.6 Review and Study of Green Projects in Nagpur

'The Green Project' (TGP) is a joint initiative of Nagpur Zilla Parishad supported by UNICEF Maharashtra, and SACRED, Aurangabad who is the technical partner. This was implemented in seven locations of Nagpur district, addressing the water security during lean period and energy conservation. An inspection survey was conducted by CEE for the Green Project where the interventions aim to recharge the groundwater levels, and the water can be further utilised for daily purposes by lifting through a solar-operated pump. This is based on the learning from the interventions undertaken by Nagpur Zilla Parishad in the last two to three years which were characterised by COVID and other hazards like heat waves. CEE team visited four sites in December for inspection of the green projects. Based on the observations and discussions held at the sites, a report was submitted to UNICEF.

## 9.7 Project Srujal

Srujal was implemented in 11 villages of Sanand, Bavla and Dholka talukas of Ahmedabad district. The project was funded by Baxter Pharmaceuticals India Private Limited. The duration of the project was June 2022 to March 2023.

### **Activities and milestones achieved**



- Drinking water facilities for 10.56 lakh litres were made available through project infrastructure (nine ESR [elevated surface reservoir], one cattle trough, one ground level container (GLC)).
- Groundwater recharge from seven recharge borewells installed in the project village with the capacity to recharge around 45.211 crore litre water every year and thereby improve the water level.
- Rainwater facilities were made available through Rooftop Rain Water Harvesting (RRWH) (one community RRWH, three schools RRWH, and 80 household RRWH), with a combined capacity of 15.96 lakh litres of rainwater that will be stored and used by the community for drinking purposes. In Motada village, individual RRWH will lead to a savings of Rs. 3,600 per year per household. In the case of the three school based RRWH, around 900 students and teachers will be able to access this facility. Through this project, 6000 small and marginalised families will benefit by getting access to drinking water facilities.
- Subsequent to the project infrastructure work undertaken, the Panchayat has contributed Rs.13.77 lakh across the project village for expanding the infrastructure and providing access to more drinking water facilities.
- The project has resulted in a reduction in energy consumption to the tune of Rs. 9.63 lakh/per year across nine villages. Before the three ESR became functional, the panchayat motor used to run 14 to 15 hours daily, but five to six hours reduction in usage has been observed after the installation.
- About 800 taps have been distributed and fitted in households. Increased awareness about water quality has been achieved through IEC materials, street play, children's rally, school activities, home visits, meetings, events and trainings. As a result, people have begun to check water quality at the Panchayat office using the TDS (total dissolved solids) meter provided.



*(Left) Jal-Samvad workshop at CEE and (Right) Recharge Borewell*

## 9.8 Jalnidhi Project Phase 2

The Phase 2 of Jalnidhi project, supported by Alleima India Private Limited, was implemented in five villages in Mehsana (Ghumasan, Chandarda, Rajpur, Vadavi, Borisana) during August 2022 to March 2023.

### **Activities and milestones achieved:**

- **Water Conservation:** Construction of community RRWHS, education, advocacy and capacity building for management and conservation of water at the local level were carried out.
- **Education:** The project focused on providing digital literacy, awareness of environmental issues, and provision of science equipment to students/teachers and youth. To improve access to schooling, linkages with NIOS (National Institute of Open Schooling) were created.
- **Women Empowerment and Skills:** Skill-based training (sewing and beauty parlour), capacity building and formation of new SHGs.
- **Waste Management:** Plastic waste management, training, and educational activities with community and schools, besides recycling of single-use plastic.



*(Left) Beauty Parlour Class and (Right) Sewing Class*

## 9.9 People's Biodiversity Register (PBR)

The PBR project was executed in 30 villages of Rajkot, Botad and Jamnagar districts, in partnership with Gujarat Biodiversity Board – Gandhinagar during an 18-month period.

CEE has been selected as a technical support group by Gujarat Biodiversity Board, Gandhinagar, under the guidance of National Biodiversity Authority of India for conducting PBR projects in selected villages of different districts in Gujarat. CEE has developed 30 PBR's in Jamnagar, Botad and Rajkot districts.

### Activities and milestones achieved

- CEE conducted PRA (participatory rural appraisal) trainings in all the 30 project villages in coordination with the Biodiversity Management Committee (BMC) of each village. Subsequently, CEE conducted a thorough documentation of the biodiversity of all 30 villages along with soil type, water bodies and living conditions of the local people including livelihoods. Overall identification, awareness, documentation, management and conservation of local biodiversity of each village is covered in each PBR.
- During the data collection and survey, different activities were conducted with schools, aanganwadis and women of the villages to make them aware of their local biodiversity and to also to acquire and bring out the traditional knowledge related to different species.

- As part of this, people were also provided information regarding various species and their use in their livelihood/daily life. Activities were conducted in several schools, community groups and rural women's groups to raise awareness on conservation of native biodiversity.

### 9.10 Jal JEEVAN Mission L-3 Training

This two-day training (residential and non-residential) was conducted in Dwarka and Jamnagar, in partnership with the Ministry of Jal Shakti, New Delhi, and the State Water Management Committee.

#### **Activities and milestones achieved**

The training modules for this project are designed by the central/state government in coordination with different NGO's responsible for conducting the trainings at allocated locations. These NGO's are the KRCs (key resource centres). As a KRC, CEE has been allocated different districts of Gujarat in each financial year.

As a KRC, CEE was responsible for developing IEC materials, audio visual presentations and PPT (PowerPoint) presentations, and also conducting seminars for raising awareness and achieving the goals of Jal Jeevan Mission. The feedback and report of the training programme has been submitted to the central and state governments.

A total of 70 villages have been covered under this project over two financial years.

### 9.11 Project Aarohan

This project was implemented in Rajkot and Jamnagar in partnership with Apraava Energies Pvt. Ltd.

#### **Activities and milestones achieved**

- The project has made a positive impact on more than 30,000 beneficiaries across 24 villages.
- Water storage capacity of about 30 million litres of water has been created through water infrastructure works which includes water tank, pond deepening, cattle trough, borewell, pump house and pipeline network.
- 24 Farmers Clubs were formed/strengthened along with two FPOs (Farmer Producer Organisation) to act as umbrella organisations. These cover about 1250 farmers. The turnover of Mahidad FPO is Rs. 9,35,350 in 2023 while the cumulative turnover is about Rs. 31 lakh. The Halari Farmer Producer Company Ltd is in the development stage. Currently the project is promoting the SHGS and farmers to become shareholders of the FPOs.
- About 96 SHGs have been formed with 1025 women members. Of these, more than more than 500 members have been trained on value addition in enterprise development, more than 600 beneficiaries were covered in digital and financial literacy training, while around 140+ members were trained on leadership and managerial aspects as well as record keeping for SHGs. The cumulative saving of all the SHGs together is around Rs. 41 lakh while the savings of the current year is Rs. 9.14 lakh.

- About 51 livelihood based enterprises have been successfully initiated with acceptance by community members. These enterprises, which aid income enhancement through value addition, and various other micro-enterprises by women, are gaining momentum. Aided by marketing support, the micro-enterprises were able to generate an income of approximately Rs. 41,11,161.
- In the area of sustainable farming practices, farmers have adopted the use of bio-pesticides, jeevamrut, waste-decomposer, biodigester, etc. About 24 bacteria banks have been developed in the villages while 221 horticulture plots have also been developed as a crop diversification strategy under the sustainable agriculture initiative.
- 10 Gram Shiksha Kendras (GSKs) have already been established, which provide regular monthly activities in schools. These activities help raise environmental awareness among 800 children directly through remedial classes, while connecting with the community science centres cover more than 2400 students from 24 schools.
- About 354 needy and deserving students from the project villages have been connected to the CLP scholarship programme for pursuing college education.
- Six members of Aarohan project, including women, are part of the SAC (Scientific Advisory Committee) of KVKs (Krishi Vigyan Kendras) affiliated by Junagadh Krishi University - a matter of pride for the project.
- More than 2200 farmers, senior citizens and widows are now covered under various government schemes as part of the convergence with government schemes undertaken by the project. About 180 people are getting the benefit of widow pension scheme during this year through the efforts of Aarohan project.
- Proposals for two new watershed projects have been submitted to NABARD Jamnagar and their result is awaited.

## 9.12 Education and Employable Skills (E&E Skills)

This project was undertaken during August 2022 - March 2023, with the support of Lady Bamford Charitable Trust (LBCT).

### Activities and milestones achieved:

- The project has positively impacted over 9,000 beneficiaries in six villages.
- As per school data, the project has reached out to 80% of students for the Academic Support Class (ASC). This has helped achieve 82.75% pass results in Class 10 board exams for the year 2022-2023.
- 87% of students were enrolled in remedial classes across four villages of the project area. (114 enrolment out of 130 students surveyed)
- Four girls have registered with NIOS for completing 12<sup>th</sup> standard.
- Two girls participated in the national level Eklavya Quiz held in Jaipur, while five students have submitted their forms for the Eklavya+ Scholarship Programme.
- Under LBCT's sponsorship programme for vocational courses, four girls applied for a beauty parlour course and are currently attending the course.



- As a part of the waste management awareness programme, two types of dustbins (Wet and Dry) were distributed in 12 schools.
- Four VOs (Village Organisations), five Farmers' Interest Groups (FIGs), four Youth Clubs and 38 SHGs have been created in the project villages involving over 500 members, covering 404 women (in SHGs), 75 farmers (through FIGs) and 150 youth (members of Youth Clubs). Two out of four VOs have been provided with CIF (Community Investment Funds) of 12,60,000. Five SHG members have been appointed as Bank Sakhis through coordination with NRLM (National Rural Livelihood Mission).
- Ten livelihood enterprises have been successfully demonstrated leading to income enhancement through value addition, while various micro-enterprises by women are also gaining momentum. About 130 kg natural Holi colours were made by SHG Members in the year 2023. The project has been able to provide micro-finance support for women SHGs and budding entrepreneurs.
- Various activities which were part of the project generated livelihood opportunities for SHG members. More than Rs. 10,000 has been contributed by the project to SHG members. As a part of a CEE project, about 5000 plants were distributed in 15 villages near the project area with support from WWF. More than 4000 of the plants distributed in the project villages were provided by Halol Block Office under the quota for SHGs.
- 'Vikas Saptah' was celebrated in three project villages with activities like distribution of education and nutrition boxes in three primary schools, eye check-up camp, veterinary camp, Bhavai performance on Covid-19 awareness, kabaddi coaching and competition, hands-on science workshop in six villages, one-day livestock management training at Maswad VTC (Vocational Training Centre), vermicompost bed distribution to 20 farmers, army training and agricultural training with special reference to vermicompost.
- VTCs have been established at Maswad and Govindpuri, where Academic Support Classes, sewing classes and various training programmes for SHGs are being conducted.



*(Left) Students Science experiments and (Right) Value addition in horticulture – Exposure and training*

### 9.13 Conducting a Study for the Development of a Research Paper on the National Education Policy-2020

In order to understand the gaps in the implementation of NEP-2020 in rural areas of the country, a project was designed in partnership with Lady Bamford Charitable Trust (LBCT) which is the CSR arm of JCB. A survey of 81 schools in four locations (where JCB plants are situated) was carried out with the



purpose of assessing the readiness of the schools to implement NEP 2020, understanding the challenges in implementing NEP, and providing recommendations to smoothen the process of implementation in rural schools. The paper aims to help address the gaps and challenges identified through the survey with the help of NGOs, corporates and other stakeholders. The findings of the study conducted as part of the project are presented in the later part of the paper.

The study was conducted in 30 schools in Ballabgarh, Haryana; 15 schools in Halol and Vadodara, Gujarat; 11 schools in Jaipur, Rajasthan; and 25 schools in Pune, Maharashtra, during the period August 2022 to June 2023.

### **Key Activities**

The study utilised primary data collected through observations and structured questionnaires. It involved a thorough analysis of the NEP Policy Document and field studies using online surveys and on-ground observations. The data collection focused on gathering holistic information about schools, including student backgrounds, teacher details and infrastructure. Quantitative and qualitative data analysis was conducted to prepare a comprehensive report. State and national-level discussions with teachers and experts led to recommendations addressing identified gaps. The study concluded with summarising the findings and proposing recommendations for future action.

### **Key findings from the study highlight critical areas for improvement in education**

- Teachers' involvement in administrative tasks should be minimised to prioritise student learning. Investing in teacher training and peer-learning opportunities can enhance the quality of teaching and also address vacancies.
- Student involvement in Bal Sansad fosters leadership and accountability, aligning with the shift towards competency-based assessments recommended by NEP 2020.
- Infrastructure enhancements, including well-equipped facilities and digital resources, are crucial for student enrolment and overall well-being.
- Community engagement is essential for school support and motivation. Building a sense of ownership among community members is vital for sustained school improvement efforts.

## **9.14 Child Friendly Schools: Developing a Model School at Halol as a Demonstration Centre for Sustainable Child Friendly Schools**

### **Key Project Activities**

- Orientation and Visualization Workshop involving teachers, management, SMC (School Management Committee) and community members to assimilate ideas, draw guidelines and visualise the model CFS proposed
- Stakeholder engagements and community participation through meetings and workshops with parents, teachers, SMCs and other stakeholders
- LBCT staff training and workshops

- School and Resource Mapping to review existing infrastructure, school-based programmes and resources, to ensure that project intervention is not duplicative
- Engaging the service of an architect for the selected schools for making it child friendly, utilising available local resources
- Infrastructure development/modification with a focus on safety, health and nutrition

### 9.15 Vasundhara - Rejuvenation and Development of Lachhras Lake

LBCT and CEE have been working together in the village of Lachhras on a project named Vasundhara, Phase III of which concluded in September 2023. To recap, Phase I of the project focused on revival of water bodies and building capacities of village institutions to protect, develop and manage resources through a sustainable approach. Phase II of the project focused on development of the pond in the village and its surrounding area with the focus on accessibility and usability by the community.

#### **Project Impact**

The work done as a part of the project over three phases has had significant impact among the stakeholders.

- The deepening of the pond has significantly improved the recharge of irrigation borewells around the village, addressing previously low underground water tables. As a result, 10-15 farmers have reported availability of sufficient water supply for their crops. Additionally, the deepening activity has recharged the aquifer two-three times, increasing the water capacity to approximately 10 crore litres. These improvements benefit major crops in the area such as banana, sugarcane and cotton, all of which require large quantities of water. The enhanced water availability has directly improved crop irrigation and quality.
- A water committee of 11 members was formed under the project whose members are aware of the need for judicious use of this valuable resource. The committee is working on ways to reduce wastage of water and developing a mechanism to recharge water through percolation.
- Ten FIGs (Farmers Interest Groups) formed with 15 farmers each were registered in the ATMA (Agricultural Technology Management Agency) project for empowerment of farmers through improved agriculture practices, demonstrations plots, improved equipment and exposure visits for adoption of technologies. This initiative will provide regular handholding support to the farmers from departments and improve their agricultural knowledge, skills for enhancing productivity, value addition opportunities and help for finding better markets for their produce, eventually leading to an improved quality of life.
- Installation of gobar gas units under the Gobar Dhan Scheme has been helping in managing a major portion of solid waste – cattle dung and agricultural waste - in the village – leading to better environmental sanitation. The other benefits of this scheme are – reduction in vector-borne diseases and improved public health; improved household income through savings in reduced expenditure on LPG; availability of organic manure which enhances farm productivity;

employment and income generation opportunities for SHGs/farmers' groups; reduction in greenhouse gas emissions and therefore improved environmental sustainability.

- Building water troughs for cattle for their drinking needs has been beneficial as their dependence on the lake was reduced. As they are being used by most of the cattle in the village, cattle herders are also saved the trouble of finding water sources for them throughout the day.
- Developmental activities around the lake include a paved pathway, solar lights and railings. This has been attracting the village community for recreational and other purposes: the pathway is used for walking in the mornings and evenings. The benches and 'otla' around the trees are used by the elders in the village during the day time. Youth and working individuals visit the lake in the evening for recreational activities. Around 150-200 individuals access the lake and its facilities on a daily basis. Additionally, the solar street lights have increased its accessibility at night and improved the feeling of safety in women.
- The sustainability of the project has been ensured through involvement of the community throughout the process, leading to better understanding of issues and solutions to tackle them. This has also increased the feeling of ownership in community members towards the lake.
- Additionally, the work of strengthening the already existing SHGs in the village was taken as part of the project. Based on specific criteria, 10 SHGs with an average of 12 members each have been identified, and are being provided training on entrepreneurship development and financial literacy.

## 9.16 Farmer Producer Organisations in Rajkot and Amreli Districts

The purpose of forming FPOs is to collectivise farmers, especially small producers, at various levels ranging from input supply to marketing of produce. FPOs also foster technology penetration, improve productivity, enable improved access to inputs and services, and increase farmer incomes through strengthening their sustainable agriculture based interventions. NABARD (National Bank for Agriculture and Rural Development) has been partnering CEE in forming FPS in Rajkot and Amreli districts.

### Impact/Outcomes

- The initiative of FPOs in procuring agricultural produce directly from the farmers has resulted in several benefits to farmers, for example, reducing costs related to transportation of produce to the market as well as loading and unloading costs.
- Receiving cash payments based on fair market value by selling to FPOs has enabled farmers to procure inputs for the ensuing season in a timely manner and also to meet their other needs.
- Sukhbhadar FPO initiated the processing of groundnut into oil and packaging it. With CEE's support in marketing the oil, the FPO has been able to make a profit margin of Rs. 200 per package.

- Farmers have also shown interest selling produce and procuring agricultural inputs through the FPO which has improved the confidence and motivation of the FPO.
- All the five FPOs formed as a part of this project have benefited from three years of project support from NABARD and have obtained licenses for selling seed, fertilizer and pesticides, and thus have input supply business to their activities.
- The Project Monitoring and Review Committee (PMRC) reviewed the progress of the FPOs in December 2023 and has recommended the release of the final last instalment of funds of the project.
- Sukhbadar, Pragatisheel and Keri FPOs have accessed first instalment of BDA (Block Development Agency) which will enable them to raise the equity and apply for the second instalment of BDA at the earliest. Hingolgadh and Mahidad FPOs are working on fulfilling the criteria for BDA assistance so that they can apply for the first instalment.



*(Left) Estimate of production and (Right) Meeting with FPO members*

### 9.17 Pond Rejuvenation of Bedarapalli Lake, Hosur, Tamil Nadu

The main objective of this initiative, supported by the CSR funds of Alleima India Pvt. Ltd. is to improve the condition of water bodies, and restore and enhance the aqua biodiversity.

- To restore and develop the village resources by 'Ridge to Valley' watershed approach.
- Provide a buffer between urban residential and industrial segments to ameliorate climate and physical impacts such as noise.
- Promotion of improved sustainable agriculture practices keeping in mind the GHG (Greenhouse Gas) emissions by demonstration setup, soil testing and water testing.

The project has successfully restored one pond through pond deepening, desilting, bunding and maintenance activities.

### 9.18 Watershed Development Project

The Integrated Watershed Management System (IWMS) development project, implemented by CEE with support from National Bank for Agriculture and Rural Development (NABARD), was launched in 2019-2020 in the Vinchhiya and Jasdan blocks of Rajkot district, Gujarat. This project aimed to restore natural

resources and promote soil and water conservation to mitigate erosion. The region faced severe agrarian distress due to undulating terrain, erratic rainfall, excessive water extraction, and reduced surface and groundwater levels, leading to water scarcity. These conditions forced many farmers to work as daily wage labourers in nearby villages.

The project addressed issues such as low crop diversification, deforestation, and the cultivation of high-water-consuming crops like cotton, sugarcane and groundnuts, which exacerbated agrarian distress. The watershed development initiative focused on soil and moisture conservation through landscape-appropriate treatments to reduce soil erosion and increase moisture retention. Techniques used included continuous contour trenches, staggered contour trenches, stone bunds, field bunds, and small-scale water harvesting structures, as well as fodder and afforestation development.

This community-driven intervention involved village level committees in planning, execution and maintenance, thus ensuring farmer contributions and collection of maintenance funds. In the reporting year, soil conservation was achieved in about 100 hectares, with additional water conservation interventions such as pond desilting, gabions and check-dams. NABARD supported CEE in implementing five IWMS projects across 500 hectares in Vinchiya and Jasdan blocks.

#### **Watershed Project Details**

<b>S No</b>	<b>Name of Watershed Project</b>	<b>Block/District</b>	<b>Year of sanction</b>	<b>Year of completion</b>	<b>Stage of the Project</b>	<b>Total Area to be treated</b>
1	Goma Watershed	Vinchiya/Rajkot	March 22, 2021 (2020-2021)	2021-2025	CBP completed, FSR submitted, aproval awaited	914.14 ha
2	Barwala Watershed	Jasdan/Rajkot	Nov 8, 2021 (2021-2022)	2025-2026	CBP completed, FSR preparation under progress	1055.33ha
3	Ghelo Watershed	Vinchiya/Rajkot	July 20, 2022 (2021-2022)	2025-2026	CBP in progress	1140.99 ha

#### **Project Impact and Outcome**

- Village watershed committees formed in all the three watershed projects and their capacity strengthened by involving them in project planning, monitoring and implementation
- Increased moisture level in the treated area
- Reduced soil erosion due to continuous contour trench, staggered trench and field bunds construction



- Increase in water level observed in treated area
- Vegetative growth increased due to plantation and grass seeding undertaken as part of the project

### 9.19 Sahyog Project, Gandhidham, Kutch

#### Impact/Outcomes of Sahyog Project supported by Schmetz

- Ten SHGs with 10 women members each were created as part of the project. With project activities, the average monthly savings of each group is Rs. 100 to 200. Two SHGs have benefited from the government scheme Mahila Utkarsh Yojna, and received Rs. 1,00,000 each.
- Children's education: During the first assessment conducted in June 2021 as part of the project, it was found that 15 students performed below their class level. After joining the remedial class conducted at the Community Resource Centre, the last assessment conducted in February 2022 showed that 10 students have reached Std 3 and 5 levels, while five students have come up to Std 2 level.
- Twenty women were trained in sewing course, after which five women bought sewing machines on their own and have started tailoring work to support their family and increasing their family income.
- The committees formed in the project area have become active after receiving training in leadership and governance. Local committees now deal with local issues like a water, sanitation, light, etc.
- A waste management system has been developed in the area and now a municipality vehicle does the garbage collection (a dustbin system and garbage vehicle collection has been started in Vavajoda area for the first time).
- Household water storage problem has been solved through distribution of water tanks in 200 households of Vavajoda area.
- Around 350 people got vaccinated in two vaccination camps organised in August and November 2021.
- A child health camp and a general medical camp benefited around 200 people.
- Three SHGs were established during this project, all of which are active even after completion of the project period.

## 10. Urban Development

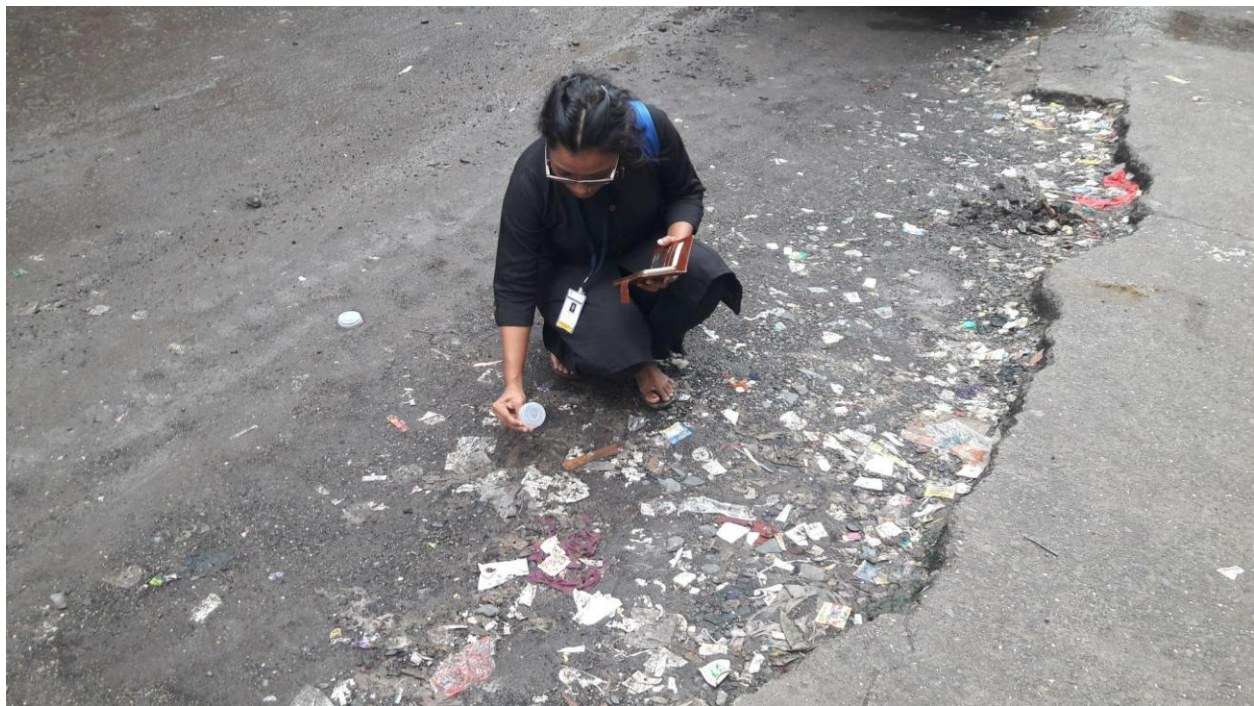
### 10.1 Urban Ocean for Municipal Waste Management

Urban Ocean is a global capacity building and accelerator programme that champions circular economy principles, builds awareness of ocean plastic, assesses waste management systems, and supports cities to develop projects that address the interrelated challenges of plastic waste and resilience. The

programme is coordinated by the Resilient Cities Network, the Ocean Conservancy and The Circulate Initiative, with technical support from University of Georgia (US), and implemented through interested city governments and with local implementing partners.

In India, it is being implemented in Surat, Pune and Mumbai with the respective local authorities and CEE as the local implementation partner, as well as in Chennai. The implementation of the programme involves:

- Coordination support on behalf of the Resilient Cities Network
- GAP assessment, Participatory Workshop
- Design project proposals, city profiles
- Accelerator summit stages of the Urban Ocean Programme



*Litter survey to understand leakage of waste into the environment*

A study has been undertaken by CEE over the last few months, using the Circularity Assessment Protocol (CAP), which is a standardised assessment protocol to collect community-level data on plastic usage, developed by the Circularity Informatics Lab at the University of Georgia. The study included litter transects, product assessments and stakeholder interactions, to gather information about municipal solid waste management in Surat and to identify various projects for implementation.

Since 2022, under Urban Ocean Surat and Mumbai, CEE has worked with the global partners, the Surat Municipal Corporation, Brihanmumbai Municipal Corporation and local stakeholders to assess the leakage of plastic and other waste materials into the environment, and to identify the opportunities to

reduce such pollution. A few major opportunities have been identified to strengthen waste management in Surat and Mumbai and transform the system over time.



*Focus discussion with the informal sector to understand their perspective*

## 10.2 Urban Air Quality

### **School Air Quality Education and AQI Flags Awareness Programme - An Air Quality Health Risk Communication in Pune**

CEE Urban has been working on Air Quality in Pune with the Pune Municipal Corporation (PMC) and the Natural Resource Defence Council (NRDC), USA. CEE, with NRDC, developed the Pune Air Information and Response (AIR) Plan for PMC in 2020 which is a health risk and advisory communication strategy for sensitive groups. It is an Air Quality Index (AQI) based early warning system using SAFAR - System of Air Quality and Weather Forecasting and Research, developed by Indian Institute of Tropical Meteorology (IITM), Pune, and Indian Meteorological Department (IMD). The project aimed to operationalise Pune AIR plan through outreach and communication for sensitive and vulnerable groups.



Children are particularly vulnerable to poor air quality due to their growing age and sensitive and developing physiological systems. There is a need to create awareness among children and their parents, teachers and caregivers about the importance of air quality, health impacts of bad air quality and measures for safeguard. CEE designed a School Air Quality Education and AQI Flags Awareness Programme with NRDC and PMC's environment and education departments. The AQI flags programme for schools aims to communicate AQI based air quality forecasts along with health advisories for children as a sensitive group to safeguard themselves.

CEE was responsible for preparing a module for school teachers, to help them build the perspective and understanding in students about air quality, and initiate local specific actions to help improve air quality in Pune through the engagement of school students. The module lays emphasis on enabling participatory approaches for Pune City Action Plan (CAP) on air quality prepared under the National Clean Air Programme (NCAP) as well as enhancing the role of communication and outreach in improving air quality.

The AQI flags are colour coded indicators of AQI based air quality, which are displayed in schools to show students, teachers and staff the air quality of that particular day. The AQI of the day and the forecast for the next day can be seen using the SAFAR-Air mobile app. The flags are accompanied by a set of posters that gives further information related to health advisories and precautions to be taken in case of bad air quality forecast.



*Set of AQI posters developed for communication on air quality health risk and precautions based on AQI forecast as part of the communication kit for schools*

The School Air Quality Education programme also aims to link air quality issues with their textbook and curriculum. It educates students about the sources of air pollution; health, economic and other impacts of air pollution; measures to control and mitigate air pollution; also covering the local scenario of air quality in Pune region; initiatives undertaken by the Environment Department, PMC under the Pune City Action Plan (CAP) to improve the air quality of Pune; and the actions that students can undertake to control and mitigate air pollution at the individual and community levels. Under this programme, a teacher from each participating school will be provided orientation to implement the educational

activities on air quality and AQI with students in the school. The educational activities will be focused on the sectoral actions to mitigate air quality and hands-on activities to scientifically understand the concept of air quality.

### 10.3 Urban Mobility and Road Safety

#### **Advocacy for Strengthening Road Safety Legislation at the National Level and in the States of Gujarat and Maharashtra**

CEE Urban undertook a project on Advocacy for Strengthening Road Safety Legislation at the national level and in the states of Gujarat and Maharashtra. The project aims to improve road safety through stronger legislation and enforceable policies, and their implementation at the state level. It focuses on improving the five key behavioural risk factors including speed, drink and drive, helmet, seat belt and child restraint systems (CRS) with multi-stakeholder involvement, and Safe Systems approach of elements like Safe Users, Safe Speed, Safe Vehicles, Safe Road Environment and Emergency Response. The project focuses on SDG targets 3.6 and 11.2 and the national commitment of reducing the road crash fatalities by half by the year 2030. It also emphasises on improving the safety of one of the largest vulnerable road users (VRUs) group in India: the children.

The project is supported by the Global Road Safety Partnership (GRSP) of the Bloomberg Philanthropy. As part of the project, the team organised meetings with government officials, held workshops on child road safety, wrote publications, and published news coverage to generate awareness on the project. The details are as under:

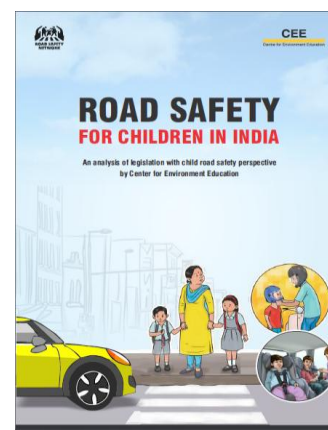
- Meetings and engagements were held during 2022-2023 with key stakeholders including Director - Road Safety, Ministry of Road Transport and Highways (MoRTH); representatives from the Ministry of Health and Family Welfare (MoH&FW), Bureau of Indian Standards (BIS), World Health Organisation (WHO), Transport Research and Injury Prevention (TRIP) Centre of the Indian Institute of Technology (IIT) Delhi, Indian Road Congress (IRC), National Crime Records Bureau (NCRB), Automotive Research Association of India (ARAI), National Institute of Design (NID), India Road Assessment Programme (IndiaRAP), National Institute of Mental Health and Neurosciences (NIMHANS), Gujarat Road Safety Authority (GRSA); Transport and Road Safety Department, Government of Rajasthan; Transport Department, Government of Assam and others. The focus of these engagements was advocacy for policy and legislative aspects related to child road safety.





*The National Dialogue on Road Safety for Children organised in New Delhi on 15th September 2023, by CEE in collaboration with Synergie*

- CEE organised a 'National Dialogue on Road Safety for Children' in New Delhi on September 15, 2022, in collaboration with Synergie, a GRSP grantee working on child road safety. The aim of the Dialogue was to raise the issue of road safety from the perspective of a child, and engage key stakeholders at the national level seeking their attention to look at it from a policy and legislative perspective, with the focus on two broad areas: safety of children on road and safety as vehicle occupant. It identified gaps in existing policies and legislation, sought views of key actors and stakeholder organisations on areas for improvement, enhanced understanding of the issues, and gathered updates on policy areas for strengthening. The event had two panel discussions: (i) 'Safer Roads for Children' to deliberate on safe school zones, safety near highways, safe commute to schools, safe road behaviour and safe speed in the context of children and (ii) 'Safety of Children as Vehicle Occupants' to deliberate on the use of helmets, seat belt/CRS and safety standards for children, and gaps in legislation. Case studies on CRS from Philippines by Daphne Marcello, ImagineLaw Inc; a campaign for Government and Policy Support for Implementation of Helmets for Children on two wheelers in Vietnam by Jimmy Tang, AIP Foundation; and Safe School Zone from Jorhat, Assam, India by Bijaylakshmi Borpuzari, CEE were also presented during the event.
- Wrote and published articles in newspapers on road safety and on the need to strengthen the implementation of road safety rules at the local level for improvement of road safety for VRUs.
- Carried out campaigns on social media on important occasions including World Day of Remembrance (WDR) for road traffic victims, Road Safety Week, Valentine's Day, Children's Day, National Safety Week, and others by posting messages around specific tasks for improving road safety for children and other VRUs.
- Anchored the Road Safety Network (RSN) Gujarat chapter for advocacy on road safety legislation implementation and is part of RSN Maharashtra. CEE also facilitated sessions on coalition building for GRSP Partners/grantees for collaborative advocacy for strengthening road safety governance in India.
- Facilitated media monitoring for news articles on road safety coverage in the cities/states where GRSP partners are working on road safety advocacy.
- Conducted an analysis of existing legislation from the child road safety perspective and mapped the provisions in the law and



sub-legislations related to the safety of children on road including Motor Vehicles Act (MVA) 1988, Motor Vehicles (Amendment) Act (MVAA) 2019, Driving Regulations 2017, rules for safety standards for children on motorised two wheelers, Central Motor Vehicles Rules (CMVR) 1989, state rules on school transport vehicles and Supreme Court directive on safety provisions for school transport vehicles, IRC guidelines for pedestrians and on Safe School Zone, standards for helmet and CRS. Based on this, a matrix of legislative framework on existing provisions and rules, with requirements and gaps for implementation of road safety rules was prepared. A handout on 'Road Safety for Children illustrating scenarios of child road safety in India, legislations and gaps, was also developed as part of the project.

- Conducted a session on the analysis of newspaper reportage on road safety and the need to improve the reportage by bringing in linkages with behavioural risk factors, legislation and gaps in enforcement, at a 'Workshop on Road Safety for Media Professionals', organised at Nagpur in collaboration with Parisar.
- Submitted joint letters to the Union Minister, MoRTH on various aspects of road safety legislation including the formation of an autonomous National Road Safety Board (NRSB), as per the provisions of MVAA 2019.
- Guided a students' group of SDG Handprint Lab course of PVPCoA, Pune, for undertaking handprint action on child road safety at a school zone in Pune. This included behavioural risk factors assessments like awareness on use of child helmet, CRS and speed limits, as well as interviewing stakeholders and conducting awareness sessions for caregivers, parents and teachers about child road safety.
- Conducted a workshop on 'ESD for Child Road Safety' in November 2022, at the International Seminar on Education for Sustainable Development (ESD), organised by CEE at Ahmedabad, Gujarat, and discussed about SDG targets for road safety, the issue of child road safety and the role of ESD in achieving the target. It explored using the ESD framework to firm up demand for improving child road safety as a commitment toward SDG targets for road safety. The approaches discussed were: to engage stakeholders including policy makers, influencers, implementers, caregivers, parents and teachers; and apply ESD methodologies as a driver for advocacy to strengthen child road safety policy and legislation. In this approach, ESD is a tool to engage users with policy makers to put forth a demand for making stronger policy and legislation and effeimprovement of safety for children on road, near schools and as vehicle occupants.

#### 10.4 Nature Awareness at Pashan Lake, Pune

Pune has been facing challenges of pollution, ecosystem degradation and climate change. The Ramnadi and Pashan Lake system was therefore selected as an opportunity for a locally contextualised environment education and action programme in western Pune, to bring awareness about these challenges to the people. While the earlier programmes were more nature focused, the new educational programmes are being developed to be in tune with climate action, plastics management and eco-restoration, all of which are now more critical than before. CEE is conducting this citizens' outreach and

action initiative, in collaboration with the PMC Environment Department and with support from Alleima. This programme is a subset of the larger programme 'School and Nature based EE in Pune' (SNEEP).

The approach of the project has been to build on the existing partnerships with schools, citizens groups, NGOs and government agencies to promote environment-friendly, sustainable development activities in Pune, especially focused on biodiversity and ecosystem restoration, climate action, sustainable water, and waste management.

The team organised nature trails, nature awareness workshops, orientation for students, Volunteer and Guide Orientation Programmes and others as part of the project. A Nature Educator Programme was also developed by CEE to train interested youth to support nature education activities and as a potential vocational course. Twelve students from Fergusson College took up this course between March and June 2023. They gained knowledge on topics like environment, biodiversity, citizens' participation, urban ecology, climate change, how to conduct a trail and effective topic delivery.



*(Left) Students from Fergusson College and (Right) Universal access orientation for students of architecture from Marathwada Mitra Mandal's College Of Architecture (MMCOA)*

### 10.5 Safer Roads for Safer Childhood (SRSC)

The aim of the project is to make the roads of Jorhat safer for children to commute to school. For this, the team prepared a School Road Safety Plan for all the project schools; identified two vulnerable junctions and provided infrastructure support to make them safer for children, engaged the youth in creating safe walkability and mobility; and scaled up SRSC in other cities.

The results of the project were:

- Five Safe School Zones were created through the involvement of school stakeholders and Road Safety Friends which can be used as models for other schools.
- Two vulnerable junctions were modified and made safer for children to commute to schools by providing speed humps, markings, guard rails over footpaths, signages, etc.
- A reduction of 5km/hr speed was achieved in both the junctions.
- Three road designs were selected and presented to the relevant departments to help them consider making those spaces safer.



- Engagements with colleges were undertaken to bring youth into road safety. About 40 NCC cadets have been provided training on road safety.
- Presented SRSC in International Conference platforms.



## 10.6 Amdavadma

The AmdaVadma project conducts various events like training, workshops and drives on three aspects: Greening, Traffic and Mobility, and Solid Waste Management. In 2022, CEE launched the 'Hariyalu Amdavad - A Citizens' initiative for Greener Ahmedabad' under Azadi ka Amrit Mahotsav, in collaboration with the Ahmedabad Municipal Corporation (AMC), Gujarat Forest Department, Gujarat Biodiversity Board and a consortium of organisations. The initiative aims to increase the green cover of the city and encourages citizens to participate and contribute towards greening Ahmedabad by undertaking plantation activities (especially in private spaces).

AmdaVadma intends to continue organising workshops to raise awareness and emphasise the importance of expanding the green cover of Ahmedabad City. The project plans to reach out to educational institutions, Eco Clubs, and nature conservation NGO's and enthusiasts within Ahmedabad, as well as at the national level, in order to unite them under the banner of 'AmdaVadma'.



## 10.7 Natural Resource Defense Council (NRDC)

CEE and the Natural Resource Defense Council (NRDC) have embarked on a commendable collaboration to tackle crucial environmental challenges in India. Each of the projects undertaken under this partnership aims to foster sustainability and mitigate climate change effects.

- Energy Conservation Building Code (ECBC),
- Air Quality Improvement, and
- Cool Roofs Initiative.

**Energy Conservation Building Code (ECBC):** ECBC lays emphasis on energy savings, thermal comfort and climate-responsive designs. This project actively supports national and international climate targets, including the 2030 Paris Agreement. Collaborating with the Government of Gujarat and the Department of Climate Change, CEE and NRDC are working to support the implementation of ECBC in Gujarat. Their efforts are dedicated to raising awareness of and educating stakeholders in the construction industry, by which to ensure the code's swift adoption and execution.

**Air Quality Improvement:** Air pollution is causing an alarming situation in Ahmedabad, designated as a non-attainment city under the National Clean Air Programme. Efforts to improve ambient air quality are already underway, but there is a pressing need to address industrial air pollution emissions in the city and its surrounding areas. To combat this issue, CEE and NRDC are conducting a feasibility study on community boilers, commencing with a pilot study in Vatva Industrial Estate.

**Cool Roofs Initiative:** The Cool Roofs Initiative is a proactive step towards sustainable living. It involves creating demonstration models and empowering local communities through education and engagement. The objective is to foster climate-resilient living environments, thereby contributing to a healthier planet as well as the well-being of its citizens. Currently, CEE and NRDC are in discussion with the civic authorities to undertake the project in Junagadh.

# 11. Water and Sanitation

## 11.1 Strengthening WASH and EDUCATION in Municipal Schools of Ahmedabad-Project Rochak Wash

The objective of this project was to ensure usable WASH facilities in municipal schools and their usage with awareness and BCC, thereby promoting better health and inculcating better hygiene practices in around 10,000 students from 25 schools and their families within Ahmedabad municipality.

The project period was October 2020 to September 2023. During 2022-23, the team formed Bal Sansads and WASH committees, delivered thematic sessions, organised community engagement activities and prepared baseline and endline reports.





## 12. Waste Management

### 12.1 Rural & Urban Landscape Free of Dry & Plastic Waste

HDFC Bank on November 24, 2021, sanctioned a project titled 'Rural & Urban Landscape Free of Dry & Plastic Waste' to CEE, for which the Memorandum of Understanding (MoU) was signed by Ms. Nusrat Pathan, Head CSR & ESG (Corporate Social Responsibility & Environmental, Social and Governances), HDFC Bank, and Shri Kartikeya V Sarabhai, Director, CEE on December 18, 2021.

In the year 2022-23, the project was implemented in six cities for which six project agreements were signed, namely, with Zila Parishad (ZP) - Ganjam, Jammu Municipal Corporation, CEO ZP and PR&RD Panchayati Raj & Rural Development) - Bastar, Bhubaneswar Municipal Corporation, Mahbubnagar Municipality, and Nirmal District Administration. The following activities were carried out during the year:

- A number of online and in-person meetings with HDFC Bank officials, RWPF (Rural WASH Partners' Forum) stakeholders and Ministry of Jal Shakti, Government of India;
- Workshops and trainings, and internal capacity building and review meetings for different stakeholders and knowledge partners;
- Over 160 village meetings organised in Bastar, (Chhattisgarh), Samastipur (Bihar) and Ganjam (Odisha), and 263 awareness camps in the project villages.

With constant efforts, the team sensitised 1,48,336 people in different cities and states. During 2022-23, the project impacted communities in the following ways:

- Communities are gaining confidence with regular interactions, meetings and capacity-building/training of the 16 Self Help Groups (SHGs) in Bastar (Jagdalpur). There is greater ownership of the project activities in 29 villages of Bastar district. With 30 e-rickshaws (valued at Rs. 90 lakh) having been given by the DRDA District Rural Development Agency), the waste is being collected and taken to the MRF (Materials Recovery Facility). Also, nearly 700-1,200 kgs of dry waste

comes daily from six urban SLRM (Solid and Liquid Resource Management) Centres and villages. The rates for purchase of over 21 different categories of waste have been agreed upon with the women SHGs at prices varying from Rs. 4/kg to 21/kg, with the cash being deposited directly into the accounts of SHGs.



- Through regular interactions, meetings and capacity-building and training of the 19 Self-Help Groups (SHGs) in the rural Ganjam district areas, the communities are gaining self-assurance. In 23 villages of Hinjlicut and three blocks related to it, the communities have taken ownership for the project. Eight rickshaws have been given by the PD DRDA (valued at more than Rs. 11 lakh) and the waste is being collected by the service provider as the MRF is under construction. The dry waste resource is being by the service provider at an average of Rs. 10-12/kg in more than 11 different categories. The amount was paid by cheque to the Panchayats. Besides this, nearly 300-700 kg of dry waste is collected daily from the local areas and small aggregators. The collection in villages is small, but a gradual change is emerging in both collection and segregation.
- The project has been able to leverage resources from different sources to the tune of Rs. 10,41,48,000. These have been leveraged from different sources like ULBs (Urban Local Bodies) for sheds, medical camps, e-rickshaws, meeting spaces, office space in their premises, service providers for vehicles, electricity and water charges, more safai mitras for collection and segregation, etc.
- In all, 35 workshops and trainings were organised which have had an impact on the systems and approach of the MRF and MRC. We have been approached by the Ministry of Housing and Urban Affairs (MOHUA) and Ministry of Environment, Forest and Climate Change (MOEFCC) to share experiences related to the processes and systems for establishing the MRFs, especially on their size, population served and standard operational guidelines (SOPs) to be followed. Over 21 different SOPs have been prepared related to accounts, monitoring and record-keeping, process-based systematic approach, MRF management, operations, safety, machinery installation, procurement practices, training, field reporting and operations with service providers.



## 12.2 Integrated Paper and Plastic Waste Management at Kagaznagar

The Sirpur Paper Mills (SPM) in association with CEE and with the support of Sparsh Foundation (a foundation of JK Papers Ltd) is implementing an integrated paper and plastic waste management project to promote agreed actions and hand holding participatory community-led interventions in Kagaznagar and 11 surrounding villages.

The project strategy is based on a multidimensional, interconnected and integrated approach for promoting better environmental education and participatory, process-oriented gender-based actions involving a range of stakeholders, on waste segregation, collection and cost-effective transportation, processing, and recovery and recycling of plastics and paper waste. The project has been developed under the guidance of Ms. Mamta Singhania, President & Director, Sparsh Social Foundation; Mr. Kapil Kaul, CEO, Sparsh Social Foundation, along with Mr. Prabhjot Sodhi, Senior Programme Director, CEE Delhi.

During 2022-23, the project carried out the following activities:

- Orientation meetings with officials of SPM, Municipal Council, National Rural Livelihood Mission/National Urban Livelihood Mission (NRLM/NULM), Gram Panchayats, School/College Volunteer Organizations (NSS – National Service Scheme), Mandal Education Officer (MEO), Mandal Parishad Development Officer (MPDO), and scrap dealers to understand the current context of plastic and dry waste management in the urban and rural areas.
- Conducted mass awareness campaigns like rallies with more than 800 school students and teachers, and a clean-up drive at the city bus stand area with more than 25 NSS volunteers.
- Conducted drawing/painting competition with more than 80 school students coming from five different schools of the city.

- Conducted an orientation session and played 'snake and ladder' game to give a message related to good and bad habits of waste management with more than 80 SHG members; and a shop to shop awareness campaign to sensitise and make people aware of the need to manage plastic waste responsibly, segregate waste at source, use eco-friendly alternatives to single-use plastics (SUPs) and other issues.
- Conducted workshops and trainings for sanitary staff, college students and SHG members on waste segregation and SUPs.
- Conducted a handprint activity where students, teachers and SHG members took pledges to follow good waste management practices.

## Achievements

### **Rural WASH Partners' Forum (RWPF)**

CEE is chosen by the Department of Drinking Water and Sanitation, Ministry of Jal Shakti as the National Thematic Lead for Plastic Waste Management under the Rural WASH Partners' Forum (RWPF), and, also as the State lead for the three states of Goa, Gujarat and Odisha to spearhead the initiatives across the entire WASH-related activities and interventions.

CEE is actively helping the mission directors to build and strengthen forward linkages with recyclers and other stakeholders. The team met Ms. Nilofar Shaikh, Assistant Commissioner regarding the roadmap of dry waste management on March 29, 2023. Meetings were also held with Shri Menino D'Souza (IAS, Secretary, Government of Goa), Shri Prasidh Naik (State Coordinator, Swachh Bharat Mission – Gramin SBM-G) and officials from Goa Waste Management Agency, on March 8-9, 2023.



*(Left) CEE team in discussion with Ms. Nilofar Shaikh, Assistant Commissioner, Commissionerate of Rural Development, Government of Gujarat*

*(Right) CEE Team in discussion with Shri Menino D'Souza (IAS), Secretary and Mr. Prasidh Naik, State Consultant and members from the Goa Rural Development Department*

As RWPF lead, CEE is also providing technical guidance and hand-holding support to local NGOs on Plastic Waste Management, working across various locations pan India. Some of the local partners include: CORE (Orissa), Human Matrix (Assam), RUDA (Jammu), Srishti Waste Management Services (Bastar), Navjagriti (Bihar), Ramky Foundation and ESREE Foundation.



### **Plastic Waste Inventorisation Study – Rajasthan Pollution Control Board (RSPCB)**

CEE signed an MOU with the Rajasthan State Pollution Control Board to undertake the inventorisation of plastics in Rajasthan in the month of February 2022. The project identified five clusters consisting of three locations in each cluster. These locations were identified on the basis of population, geographical and cultural diversity, and environmental fragility:

- Alwar - Bhiwadi and Neemrana
- Jodhpur - Barmer - Pali and Mt Abu
- Udaipur - Bhilwara and Ajmer
- Jaipur - Kota and Bharatpur
- Bikaner and Ganganagar

The study used various tools such as questionnaires for each of the stakeholders, besides survey methodologies, and process-, participative-, and gender-focused approaches. The four components of the study include:

- Municipal waste inventory analysis
- Analysis of the current status of waste management in the cities
- Analysis of plastic manufacturing, recycling (registered and unregistered) and co-processing units
- Stakeholder perception, awareness, knowledge and capacity assessment.



### **12.3 CEE HCL Project on Solid Waste Management in NOIDA - Phase IV**

The Clean Sectors Project of HCL Foundation was started in the year 2019 to develop and establish a sustainable solid waste management system in NOIDA city, in partnership with CEE. The aim was to enhance the stakeholders' competency and willingness in Solid Waste Management (SWM) through engagement and outreach. The primary stakeholders were workforce (waste collectors, sweepers and



gardeners), residents, domestic helps, shopkeepers, officials of Resident Welfare Associations (RWAs) and Apartment Owners Association (AOAs). The project addressed the issues related to managing solid waste by improving the existing systems, mainly on waste segregation at source, by conducting education and awareness campaigns for various stakeholders. It focused on improving and strengthening solid waste management practices in RWAs and high-rises of NOIDA city. Door to door awareness campaigns played an important role in achieving an improved status of source segregation in all the sectors. By the combined efforts of the Clean Sectors Project team and NOIDA Authority, the city was judged the cleanest city in Uttar Pradesh and fifth in the country among cities with 1,00,000 to one million population category in the Swachh Survekshan 2022. NOIDA also bagged the 'Best Self-Sustainable Medium City' award as it did not apply for or receive any additional aid from the state or centre for its sanitation programme.

HCL Foundation, through the Clean Sectors Project, aims to turn NOIDA into a clean and green city. Through the promotion of community participation and encouragement of behavioural change, HCL aims to promote safe, healthy and environmentally friendly practices towards SWM. Phase I, II and Phase III of the said project have already been completed. Phase IV of the CEE HCL Solid Waste Management Project was implemented during March 2022-March 2023.



The objectives of the Phase IV of SWM project were:

- To raise awareness of the best solid waste management (SWM) practices among stakeholders through door to door campaigns and assess the segregation of waste at source
- To organise stakeholder (workforce, maids, residents and volunteer, etc.) trainings and IEC-BCC events on various aspects of SWM
- Identification and elimination of Garbage Vulnerable Points (GVPs)
- Installation and continuous monitoring of horticulture composting solution as a measure to treat horticultural waste in partner sectors
- To initialise pilot projects for wet waste composting in selected RWAs/AOAs
- To run a campaign for transforming 20 markets in RWAs/AOAs of NOIDA city to 100% free from Single Use Plastic
- To implement or strengthen rain water conservation ideas in selected RWAs/AOAs

The team achieved the following targets after the completion of the Phase IV of the project:

- The project team conducted door to door awareness campaign in 95 sectors across NOIDA city. A total of 1,27,249 households were covered by the team during the project tenure (March 2022 to March 2023).
- Source segregation data were collected from waste collectors who collect the waste from their respective designated households. People who do not segregate the waste at source were mainly targeted in the door to door campaign. The team has been able to achieve the target of segregation of waste at source above 95% which has been certified by the respective RWAs and AOAs. The team has achieved 95% segregation of waste in 43 RWAs/AOAs and also received the certificates for the same.
- Stakeholders were trained on different aspects of solid waste management like waste collection, waste segregation, transportation, disposal of waste, recycling of waste and horticulture composting. About 157 trainings were conducted in which 8,889 stakeholders participated. The total outreach through different event celebrations like Workers Day, Environment Day, etc. was more than 2,912.

Stakeholder	Number of stakeholders trained
Residents	4,327
Workforce	665
Shopkeepers	519
Domestic help	4,059

- International Women's Day is celebrated worldwide on March 8 to recognise the efforts of women in making the world a better place to live. The project team celebrated Women's Day with the residents and women across the 34 different sectors of NOIDA. The 3,124 participants were especially trained on hygiene sanitary and waste management.



*Women's Day celebrated in Sector 71*

- Garbage Vulnerable Points were identified by the project team and the respective RWA's official or authorities were persuaded to get the site cleaned and to monitor it subsequently, to ensure that the said GVP is kept clean and not polluted later. In all, 40 GVPs under 21 different sectors were monitored by the team, of which seven GVPs were cleaned and maintained in the current phase of the project.
- In all, 86 horticulture composting units in 43 different sectors were monitored by the team, of which 56 were of portable composting grow bags, 20 permanent structures like pit or installed brick structures (10 composting units became dysfunctional or were demolished by the RWA/AOA due to various reasons such as maintainability, use of space for other purpose, etc). In the current phase, 68 grow bag based composting units were installed., from which a total of 17,671 kg of compost were harvested.
- As part of achieving 75% wet composting in selected sectors, grow bags were installed in Sector 75 Golf City to make compost from kitchen waste. About 760 kg of compost was produced from the waste harvested using the bags and almost 108 kg was distributed to the residents during the harvest as a token of motivation. This was the combined effort taken by more than 25 women in the sector who enthusiastically looked after the compost grow bag, collection of kitchen waste and further processing. The women's group who took this initiative were very happy and elated to see the positive results of their effort. They felt an inclusiveness through



their contribution to save nature while playing an active role in solid waste management in their sector, keeping their surroundings clean and combating climate change.

- Under the SUPF market campaign, the team identified 40 markets from different sectors of NOIDA, and conducted a baseline survey regarding the usage of single use plastics there. Through this baseline survey and interactions with the shopkeepers and residents, the team finalised 21 markets where training was to be conducted for making them free of SUPs. Trainings were conducted in these 21 markets of different sectors and they were continuously monitored by the team with the help of RWA/AOA and market associations. In support of Single Use Plastic Free (SUPF) market campaign, Clean NOIDA Volunteering Club conducted a SUPF Market Rally in sector 41 and 50 markets to spread awareness on SUP ban enforced by the Government of India, with more than 100 participants taking part in the rally. An online webinar was also conducted on SUP ban using the platform of Clean NOIDA Volunteering Club.
- A rain water harvesting system has been initiated in Sector 34 community centre, which has a catchment area of 400 sq metre. This installation will result in 2,24,000 litres of rain water being harvested. The rain water harvesting system in Sector 75 Golf City has been restored as part of the project intervention. The sector has nine towers, and the rain water catchment area of each tower is 8,000 square feet. There are seven water storing pits with the size of the biggest pit being 448 cubic feet with a capacity to store 12,685 litres of rain water at a time.

During the implementation, it was observed that there is a need to concentrate work on wet waste management, solid waste management and circular economy of reduce, reuse and recycling of waste. The future strategy for the area would be to work in a two-tier system where HCL will focus on working intensively in making model clusters where RWAs and residents are keen and cooperative, and have done remarkable work on waste management such as wet waste mechanism, rain water harvesting, stopping the use of SUP and horticultural composting.



*(Left) Kitchen waste composting in Sector 75 and (Right) SUPF Market training conducted in Sector 40*

## 12.4 Urja Chetana

CEE East is implementing Urja Chetana, an Environment Sustainability Education programme, supported by Calcutta Electric Supply Corporation Limited (CESC Ltd) as part of their CSR initiatives. The programme is implemented in nine selected schools in and around Kolkata. The objectives of the programme are to focus on increased awareness on energy conservation, waste management, water conservation and biodiversity, linking all the themes towards increased action on improving the environment scenario of the region. The activities are aimed to develop and improve the environmental skills and capacities of teachers and students on air pollution, waste, water, energy and biodiversity, thereby integrating them under the overall umbrella of climate change education.



The reporting period saw capacity building programmes on three broad topics (plastic waste management, air quality, greening and plantation) for planning and strategising the projects that the nine schools would be taking up. The capacity building sessions were attended by 898 students and 46 educators.

A refresher training was conducted for the students and teachers-in-charge of the Eco Clubs of three schools with 325 students and 29 educators participating. The subjects covered were plastic waste management, improved air quality, and biodiversity. In five schools, the existing rainwater harvesting systems were repaired and made functional: the installed tanks in each school were cleaned, the ball valve changed and new pipelines added, apart from other minor repair work. During the reporting period, capacity building messages and board installations were completed in nine schools. New vertical garden structures using two litre waste PET bottles were delivered to and installed in two schools, which used a drip watering system to avoid water stress and also enabled reuse of extra irrigated water. The organic urban farming is being undertaken using only coco pith and compost made by students at school.

Subsequent to the capacity building programmes conducted in the schools, the final revised and approved proposals were received from the nine project schools on the themes of Plastic Waste Management, Air Quality, and Greening and Plantation. The schools have initiated activities on these themes under the guidance of the teacher in charge and the CEE team.

Copies of the final reports from the nine schools were sent to the jury members, for review and selection of the winner. The annual felicitation event of Urja Chetana programme was conducted on March 9, 2023 at BITM (Birla Industrial and Technological Museum). About 69 students and 19 educators from the nine schools attended the felicitation event.



### 12.5 Plastic Cleanup Drive

In an effort to reduce the usage of Single Use Plastics (SUPs), the Maulana Hasrat Mohani Girls High School in Kolkata organised a plastic cleanup drive in Bijli Ghat, Kolkata, in January 2023 under the guidance of CEE East. With the help of numerous posters, poems and speeches, over 31 students and two teachers raised awareness of the need to utilise alternatives to SUPs. With the use of safety equipment and a litter catcher, the students were able to gather approximately 13 kg of plastic waste.



## 13. Biodiversity Conservation

### 13.1 Communication, Education and Public Awareness (CEPA) under Maharashtra Gene Bank Programme

Government of Maharashtra has issued a government resolution for the implementation of Maharashtra Gene Bank (MGB) as a continuous programme to integrate biodiversity conservation and sustainable utilisation approaches in different sectoral programmes with financial allocation for the first five years. CEE is a Thematic Lead agency for the CEPA programme and is contributing to the systems setting up at the Maharashtra State Biodiversity Board (MSBB) for the implementation of the programme. CEE has submitted a CEPA proposal to be undertaken under MGB and was invited to develop a proposal for indoor and outdoor interpretation of the MGB project - its thematic approaches, achievements and learnings - in an interactive way. The proposal was submitted to MSBB in March 2023.

### 13.2 International Day for Biodiversity 2022

CEE participated in the International Day for Biodiversity (IDB) celebrations organised by Maharashtra State Biodiversity Board at IISER (Indian Institute of Science Education and Research), Pune campus. CEE presented the key highlights and learning resources from the biodiversity education and awareness project under MGB from 2014-2020. The community members from Parala were felicitated at this event for developing the People's Biodiversity Register (PBR) and two teachers Ms. Deepali Khade and Ms. Aparna Chitalkar were felicitated for their exemplary work in biodiversity education.

### 13.3 Community Centric Ecosystems Approaches for Conservation and Green Economy

CEE Central is implementing value chain analysis and green economy pathways development under two projects supported by New Venture Fund, USA. These include natural resources in agriculture, forests and fishery sectors. The project is developing ecosystem approaches using communities' knowledge and practices towards assessment and sustainable utilisation planning, for:

- Wild honey collectors in Maharashtra including the north Western Ghats regions like Satpura and Vidarbha and eco-regions like Bastar
- Designing eco-tourism experience packages around sacred groves, wild edible and local communities' bio-cultural heritage
- Local varieties of millets, poultry and fishes
- Local varieties of banana in Bihar, viz, Muthwa, Chinia, Battisa, Malbhog, and Barsain.

These initiatives are helping to create institutional capacities in the areas of eco-restoration and sustainable economy.

### 13.4 Development of Wildlife Management Plan for the Bhagwan Mahaveer National Park and Wildlife Sanctuary

The Goa Forest Department entrusted the task of developing wildlife management plans for the Bhagwan Mahaveer National Park and Wildlife Sanctuary to the CEE Goa State Office. As part of the exercise, CEE Goa undertook field visits and discussions with field staff and senior officials of the Goa Forest Department and developed a draft proposal and submitted it to the office of the Chief Wildlife Warden.

### 13.5 Mangrove Conservation Education for Students and Executives

CEE, in association with the Goa Forest Department and Goa Waste Management Corporation (GWMC), organised mangrove conservation sessions and field visits to Dr. Salim Ali Bird Sanctuary in Chorao, Goa. In all, 250 students and 50 executives from GWMC, Goa Coastal Zone Management Authority (GCZMA) and Goa State Pollution Control Board attended the sessions. The participants were introduced to the world of mangroves, their ecological, economic and livelihood related importance.

## 14. Training, Capacity Building and Networking

### 14.1 Eco-Club Training Programme on Water, Waste Management, Biodiversity at Alwar with Support of Plan India

Under CEE's partnership with Plan India for the project 'Experience in Strengthening Capacities of Stakeholders – Eco-Club Children, Teachers and Community on Environment Education', Ms. Priyanka

Sinsinwar, CEE Rajasthan, facilitated capacity building programmes for schools in Ramgarh and Umrain blocks of Alwar. The programme aimed to develop 25 project schools as Model Eco Schools through their eco-clubs. Hands-on activity sessions were conducted with eco-club members and school management for basic understanding on the linkages of water, waste, biodiversity and energy with climate change, through school level workshops. Eco-clubs were also oriented on carrying out green audits and surveys, developing school-wise action plans and developing child-led actions for each school aligning with the respective school curriculum, and build capabilities of the eco-clubs to implement the actions.

## 14.2 Facilitating WASH and SLWM in KGBVs of Jharkhand

Jharkhand Education Project Council, in collaboration with UNICEF, is implementing a project on developing models of solid and liquid waste management within the Kasturba Gandhi Balika Vidyalayas (KGBVs). CEE is the technical partner of UNICEF in this project with the Education Department covering the entire cost of construction required by Operation and Maintenance. Sharing her experience of Project Prajwala in KGBVs of Rajasthan, Ms. Priyanka Sinsinwar facilitated baseline surveys in five Kasturba Gandhi Balika Vidyalayas (KGBVs) of Jharkhand. This included development of tools for data collection, participatory assessment of hardware for child friendliness, gender specific WASH infrastructure, observation of WASH systems and practices in the school, focus group discussions, WASH literacy test with students and KAP (Knowledge, Attitude and Practice) analysis. The findings of this study was compiled as school specific DPRs on solid waste management and liquid waste management.

## 14.3 Observation Audit in Allahadi Art School

A capacity building event with observatory audit and survey of SUPs at a gram panchayat area falling in Howrah district of West Bengal was conducted to mark Earth Day 2022. A total of 22 students of Allahadi Art School participated in the observation audit. The students were engaged in understanding the kind and approximate quantity of SUPs being generated or littered in the marketplace and around Rupnarayan River flowing in the region.



#### 14.4 Training and Capacity Building of CSR team in Monitoring and Evaluation

A two-day workshop on monitoring and evaluation for the team of U N Mehta Foundation, an initiative of Torrent Power, was organised on June 13-14, 2022 in Ahmedabad. The workshop aimed to orient the members and help them develop a Monitoring & Evaluation (M&E) plan for their CSR projects. The workshop had 16 participants from the foundation.

#### 14.5 Trainings in Climate Change

The Climate Change group undertook trainings for different internal groups.

- Training on 'Maharashtra Youths for Climate Action' to understand climate change and the role of youths.
- Supported the CEE South team in developing, reviewing and publishing studies under HSS funded project on 'Mainstreaming Climate Action into local-level planning in Karnataka' which included supporting a Policy Brief on NAPCC and KSAPCC, policy analysis and ground survey report highlighting the current status, and pathways for mainstreaming climate change resilience and stakeholders' engagement in water and agriculture sectors. Besides, preliminary support was also extended in developing Terms of Reference (ToR) for Need Assessment for the development of climate and environment curricula at the undergraduate level in Karnataka for UNICEF.
- Undertook training of the RPG team working on People's Biodiversity Register (PBR) on biodiversity conservation and sustainable development from local perspectives.
- Undertook training of SEWA officials and Women Federation Heads on 'Standing Tall against Climate Vulnerabilities – Women Collectives in Action'.

#### 14.6 India-Australia E-learning Exchange Course - Sustainability and Climate Resilient Farming

CEE North, as RCE Lucknow, developed the virtual exchange course under the CEE Academy, in collaboration with Western Sydney University (WSU), Australia - RCE Greater Western Sydney. The course was offered in collaboration with the University of Lucknow, India between July 5 - August 23, 2022. The course provided an opportunity for the 20 student participants to engage in an online global learning experience. The programme took a deeper look at farming practices and conservation systems in Australia and India, through a sustainability lens. The virtual exchange over an eight week period through live and self-led learning activities included research projects, expert sessions and cultural exchange.

#### 14.7 Handprint CARE Certificate Course

A three-day online certificate course was conducted in September 2022 for pilot testing the Handprint CARE pedagogy with teachers and teacher educators in India.



### 14.8 Courses under-development

CEE has undertaken a project, CARE, to document and disseminate good practice examples in climate change mitigation and adaptation in the sectors of agriculture, fisheries, eco-tourism, poultry and goatery, in Maharashtra, Gujarat and Bihar. Capacity building needs have been identified among the Farmers Producers Organisations that already exist or are being set up. Courses focusing on four themes are being developed. These include collectivisation models and process, climate smart technologies in the sectors under study, entrepreneurship for eco-tourism, and using CARE Framework to initiate sustainable development work in the rural sector.

## 15. Material Development and Publications

### 15.1 Parampara

On the lines of the 2015 Catalogue, 'Parampara - India's Culture of Sustainable Climate Friendly Practices', the Climate Change Department of Gujarat and CEE joined hands to prepare the publication 'Gujarat Ni Parampara - A Tradition of Climate Friendly Practices in the State'. The catalogue was launched by the Hon'ble Chief Minister of Gujarat Shri Bhupendrabhai Patel. The publication was initially designed only as a coffee table book but later on the department also asked CEE to produce the same catalogue as 11 small booklets - each chapter converted to one booklet - for wider dissemination.

## 16. Institutional Development and Support

As per the requirement of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013, CEE has an Internal Committee which has been constituted in accordance with the provisions of Section 4 of the said Act, to provide protection against sexual harassment of women at the workplace and for the prevention and redressal of complaints of sexual harassment and for matters connected therewith and incidental thereto.

During this year no complaint of Sexual Harassment was reported at CEE. CEE has included the brief introduction of the provisions of the above Act as part of its orientation programme for the new joiners. The Anti Sexual Harassment Policy of the Centre is in place in CEE.

# 17. Events

## 17.1 Celebration of Global Handwashing Day

For creating mass awareness and sharing the message of hand washing with soap for hand hygiene, CEE facilitated the celebration of Global Handwashing Day 2022. The celebration also included the schools from its other networks like Eco-Clubs from the National Green Corps and Paryavaran Mitra programme, Kasturba Gandhi Balika Awasiya Vidyalaya from Prajwala Programme, youth of Scouts and Guides network, besides community members through youth volunteers.

Participants organised hand washing with soap campaigns at their personal, school and community levels. This included an oath ceremony, hand washing drills, songs and skit on the need for hand washing, slogan writing, poster making activities and community stalls.

## 17.2 Celebration of World Environment Day

The CEE teams across India celebrated the World Environment Day in different ways to spread the message of a sustainable environment among different stakeholders.

- CEE, in collaboration with Jaipur District Administration and Rajasthan State Bharat Scouts and Guides, commemorated World Environment Day at Jaipur. This event supported the Jagrut Jaipur Abhiyan on creating mass awareness on the ban of single use plastic. A variety of activities were carried out like skit, poster making, slogan writing, best out of waste, and others on the key theme of plastic waste management through the concept of the four Rs - Refuse, Reduce, Reuse and Recycle - in a weeklong event.
- CEE Goa State Office in association with GSPCB observed World Environment Day 2022 by organising various events for different stakeholders including industries, government departments, schools etc. A quiz was conducted for the officers of various government departments and industries. Professor B. C. Choudhury was invited to give the keynote address at this function.
- CEE North conducted a series of events with children, village communities and youth members on the theme of 'Only One Earth' and also collaborated with the University of Lucknow on the No Plastic Bag Campaign. A painting competition was conducted on the theme after orientation and a screening of a short film.
  - On June 3, 2022 an event was organised for children, youth and community at the primary school campus of Saifalganj village, of Kakori block, Malihabad, Lucknow. Over 35 participants took part in the event, where they were briefed on plastic pollution. A clean-up drive was conducted at the campus after that through which 15 kg waste was collected and handed over to the Safai Mitra at the Gram Panchayat.
  - On June 4, 2022, an event was organised with the village community, youth and children of Majhgavan village in Itaunja block, Lucknow. As part of this, an awareness rally on the

harmful effects of the single use plastic was organised. A cleanup drive was also conducted at the village pond where participants collected 25 kg of plastic waste. The waste was then handed over to the Village Safai Mitra for safe disposal.

- On June 5, 2022, World Environment Day was celebrated with the residents of Sector 11, Indira Nagar Society in Lucknow. The team briefed the participants on the theme for the year, organised competitions and screened a film on the impacts of SUPs.

### 17.3 International Mountain Day 2022

December 11 is observed as 'International Mountain Day' (IMD) to create awareness about the importance of mountains to life, to highlight the opportunities and constraints in mountain development and to build alliances that will bring positive change to the mountain people and the environment around the world. The UN General Assembly has declared the year 2022 as the 'International Year of Sustainable Mountain Development', while the theme for the IMD 2022 was 'Women Move Mountains'. CEE, in collaboration with the Mountain Partnership, RCE Srinagar, Young Reporters for the Environment and Paryavaran Mitra, announced a Photo Story Competition for youth in schools and colleges and people engaged in the social and development sectors. Several online entries were received from the participants from different social and educational sectors like tour operators, mountaineers, NGOs, schools and colleges.

### 17.4 Roadmap for a Sustainable Textile Hub in India

Under the banner of the project, CEE, with the World Resource Institute (WRI) India and the Institute for Sustainable Communities (ISC) as knowledge partners, organised a Textile Innovation Mela on November 21, 2022, in Surat, Gujarat. The objective was to create synergies in order to assist the industry in adapting sustainable and circular approaches to production so as to achieve the goals laid out in the Roadmap 2030.

### 17.5 Youth Leadership Workshop

CEE East conducted a Youth Leadership Workshop in Bengali as part of the Tide Turners Plastic Challenge 2022 with 20 schools in Kolkata.

### 17.6 Employee Session at IREDA

A session for the employees of IREDA (Indian Renewable Energy Development Agency), a Miniratna-I PSU (Public sector Undertaking) and NBFC under the Ministry of New and Renewable Energy was conducted by CEE East on June 5, 2022 on climate change and waste management. The event was organised as part of the Swacchta Pakhwada activity of IREDA in conjunction with World Environment Day. Over 100 staff (technical, HR, Law, IT, F&A) attended the session.



### 17.7 Wetskills India Programme in West Bengal

CEE East facilitated the Wetskills India 2022 programme in West Bengal. CEE facilitated a field visit to the Sunderbans along with an experts' session in collaboration with LLRM (Lala Lajpat Rail Memorial Medical College). An expert talk and focused group discussion was conducted with the community members of Kultali village of Sunderbans who have been affected due to climate change impacts in the region.



### 17.8 Panel Discussion on Sustainability and Biodiversity

A panel discussion and dialogue was conducted by Mash Project Foundation on sustainability and biodiversity in the context of the textile sector. Ms. Reema Banerjee, Programme Director, CEE East, on behalf of CEE, shared the various approaches on end of life disposal of textile waste, fast fashion



concepts and the linkage to material literacy, in a way similar to the capacity building trainings CEE conducts in schools, community and with youth.

### 17.9 Webinar on Environment Education

A webinar was conducted to present the South Asian context of environmental education in schools on solid waste on June 8, 2022. Ms. Reema Banerjee shared successful experiences highlighting the impact and positive results on education: the quality of education, the methodology used to educate and the results obtained in changing the way of thinking and acting to strengthen the integrated management of solid waste in the region.

### 17.10 Wildlife Week Celebration

CEE Goa State Office in collaboration with Goa Forest Department organised various events including a field visit to Dr. Salim Ali Bird Sanctuary as part of its Wildlife Week celebrations.



### 17.11 Manohar Parrikar Vignan Mahotsav

Since 2019, the Department of Science, Technology and Waste Management, Government of Goa, celebrates December 13 as Manohar Parrikar Vignan Mahotsav. CEE Goa is a partner in this event as one of the scientific institutions involved and helps the department in identifying and facilitating speakers for the occasion. In the reporting year, 18 eminent scientists of international repute were invited and delivered talks benefitting more than 5,000 students.

# 18. Facilitating, Networking and Participation

## 18.1 Facilitating

### **Paryavaran Edutech**

Paryavaran Edutech was established by the Centre for Environment Education (CEE) as a Section 25 Company (currently Section 8 Company) under the Companies Act. Edutech is a not-for-profit company which disseminates publications and products developed and produced by CEE. The income generated by Paryavaran Edutech is utilised to generate programmes and activities in the field of Environmental Education for the benefit of the general community.

Paryavaran Edutech also undertakes the design and printing of brochures, booklets, greeting cards, as well as the development of customised products that promote conservation education and awareness. These products include calendars, T-shirts, seminar bags, notebooks/note pads and others with environmental messages.

### **CEE Nature Shop**

CEE Nature Shop is an initiative managed by Paryavaran Edutech and is located on CEE's lush green campus at Thaltej Tekra, Ahmedabad.

CEE Nature Shop seeks to provide a platform that enables the popularisation and sale of organic, natural, handicrafts and livelihood products developed by farmers and community organisations and agencies. The Nature Shop also promotes environmental education resource materials developed by CEE and other like-minded organisations working in this field.

The Nature Shop organises and handles the sale of such materials and maintains an inventory of the stocks on a regular basis.

### **CEE HAAT - A Farmers Market**

CEE Haat an initiative aimed to promote sustainable consumption and lifestyles among the general community while also creating awareness about climate change, 'Handprint action' and nature conservation. The Haat seeks to promote the concept of 'urban green' by bringing the urban consumer in touch with nature. It provides an entire range of natural, eco-friendly, organic and educational products under one roof. The Haat was inaugurated on December 14, 2019.

The Haat also serves as a platform for products developed by educational and livelihood focused programmes of community groups, partner NGOs and CEE's own programmes. It seeks to support farmers and small business entrepreneurs.

The CEE Haat offers an array of exciting activities and attractions for visitors of all ages. People can explore the farmer's market, filled with fresh, locally grown produce that nourishes both the body and the environment. They can discover the goodness of farm-fresh fruits, vegetables and other organic delights, brought in by farmers from Halvad, Mehsana, Anand and other places. Handcrafted items made with eco-friendly materials and natural skincare products are some of the attractions for those seeking sustainable alternatives and ethically sourced products.

The Haat also serves traditional Kathiyawadi delicacies. Home chefs too get a platform to showcase and sell their products, which include a variety of pickles, khakhra and other snacks. Special seasonal drinks are made available at the Haat, like takmariya sharbat, findla juice, variyali sharbat, aam panna in summer.

Currently, the Haat is hosted every Friday from 8 am to 2 pm.

## 18.2 Networking and Participation

### **Shri Kartikeya V. Sarabhai**

Shri Kartikeya V Sarabhai was invited as a speaker for the TEDxIIITA 2022 (April) edition to deliver a talk on 'Handprints for Sustainability' where he talked about sustainable development and its goals, the concept of Handprint and the need for individual and collective Handprint.

### **Ms. Preeti R. Kanaujia**

Ms. Preeti R. Kanaujia was invited as a panelist by Teachers Development Trust London for the Consultation on Sustainability and Climate Change Strategy for Teachers in July 2022.

### **Mr. Neeraj Pal**

Mr. Neeraj Pal represented CEE in the executive and steering committee under the State Compensatory Afforestation Fund Management and Planning Authority (CAMPA), Uttar Pradesh. As a member, he provided inputs in planning conservation education interventions in the state.

### **Mr. Vipin Verma**

Mr. Vipin Verma represented CEE in a State-level programme organised by the Department of Environment, Forests and Climate Change, Uttar Pradesh, at the Conference of Panchayats on Climate Change at Indira Gandhi Pratisthan.

### **Mr. Satish Awate**

Mr. Satish Awate, Programme Director, Biodiversity Conservation and Education, undertook the following lecture sessions/webinars:

- 'Bio-cultural Diversity and Sustainable Cities' for Masters' students of Tata Institute of Social Sciences (TISS) on October 8, 2022
- 'Understanding Climate Change', for Mass Communications and Journalism Departments of K Bahinabai Choudhary North Maharashtra University, Jalgaon on September 16, 2022 and Swami Ramanand Tirth Marathwada University, Nanded on September 19, 2022.
- Participated in the National Conclave on Soils in India organised by NITI Ayog and GIZ on December 5, 2022 at the A P Shinde Symposium Hall, Pusa, in New Delhi.

## Ms. Reema Banerjee

- Ms. Banerjee was empanelled as Technical Consultant- Healthcare Waste Management (HCWM) Expert and was awarded a contract to evaluate and suggest country wide solution for HCWM of primary health centres (PHCs) of the country of Azerbaijan. Ms. Banerjee assessed the present healthcare waste management situation of Azerbaijan by travelling to seven regions of the country, visiting remote medical and doctor points. The recommendations along with technical solution report was presented to the government of Azerbaijan in March 2023.



- CEE East team participated in the consultative workshop to support SBM-G in West Bengal on February 6, 2023 and discussed the possibility of joint planning and coordination.
- Ms. Banerjee was invited as one of the panelist for the event titled 'Women Leaders Investing in Our Earth' organised by the Public Diplomacy section of US Consulate, Kolkata, on the occasion of Earth Day 2022. She shared her thoughts on waste management focusing on the involvement of various stakeholders, specifically highlighting plastic waste management initiatives in urban and semi urban areas.
- On May 25, 2022, Ms. Banerjee spoke at RLG Systems India Pvt Ltd and Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH's virtual workshop on 'Hazardous Impacts of E-waste on Environment and Human Health'.
- Ms. Banerjee delivered a motivational talk on waste management at SN Bose Central Institute of Basic Sciences for their Swacchta Pakhwada campaign on May 10, 2022.



## **Dr. Janki Shah**

- Dr. Janki Shah was a panelist for the panel discussion on '*Wetlands: Action for People and Nature*' organised by Sphere Academy on February 2, 2023, on the occasion of World Wetlands Day.
- Dr. Shah was a speaker during the inaugural session on the World Environment Day workshop 'Youth for Climate - Elevating the voices of young people to protect the future of our planet' organised by UNICEF, Elixir Foundation, Earth Day Network and Gujarat Youth Forum, in collaboration with the Climate Change Department, Government of Gujarat and GEER Foundation.
- Conducted a session on ESD as part of the Faculty Induction Programme at Nirma University, Ahmedabad.
- Talked on 'Need for Water Security for WASH' and 'Climate Resilience' as part of a workshop on climate change resilience in WASH Solutions, organised by Fresh Water Action Network South Asia (Fansa), Gujarat Chapter, at Ahmedabad Management Association (AMA) on May 23, 2022.

## **19. CEE Offices**

### **CEE Head Office**

#### **Centre for Environment Education**

Thaltej Tekra, Ahmedabad 380 054

Gujarat, India

Phone: +91-79-26844700

E-mail: [cee@ceeindia.org](mailto:cee@ceeindia.org)

### **Regional Offices**

#### **CEE North**

##### **CEE Northern Regional Cell**

Sector 11, House No 80, Indira Nagar

Lucknow- 226 016, Uttar Pradesh

Phone: +91-522-2713998

E-mail: [ceenorth@ceeindia.org](mailto:ceenorth@ceeindia.org)

#### **CEE East**

##### **CEE Eastern Regional Cell**

Unit No 4, 2<sup>nd</sup> Floor, Tarini Rose

47 Buroshibtola

Kolkata-700038, West Bengal

E-mail: [ceekolkata@ceeindia.org](mailto:ceekolkata@ceeindia.org)

**CEE Central****CEE Central Regional Cell**

1&2 Pinewood Apartment,  
S. No 233/1/2, Vidhate Colony  
Ambedkar Chowk  
Aundh, Pune- 411 067  
Maharashtra, India  
Phone: +91-20-27298861/2  
E-mail: [ceecentral@ceeindia.org](mailto:ceecentral@ceeindia.org)

**CEE Northeast****CEE Northeastern Regional Cell**

K K Bhatta Road  
Chenikuthi, Guwahati- 781003  
Ph- +91-361-2667382  
Fax- +91-361-2665914  
E-mail: [ceenortheast@ceeindia.org](mailto:ceenortheast@ceeindia.org)

**CEE West****CEE West Regional Cell**

Thaltej Tekra, Ahmedabad 380 054,  
Gujarat, India.  
Phone: +91-79-26844700,  
E-mail: [ceewest@ceeindia.org](mailto:ceewest@ceeindia.org)

**CEE Delhi****CEE Delhi Office**

A-56, Ground Floor, South Ext Part 2  
New Delhi- 110 049  
Phone: +91-11-7017318302  
E-mail: [ceedelhi@ceeindia.org](mailto:ceedelhi@ceeindia.org)

**CEE South****CEE Southern Regional Cell**

5<sup>th</sup> Floor, "VANAVIKAS"  
Karnataka Forest Development  
Corporation Ltd  
18<sup>th</sup> Cross, Malleshwaram  
Bengaluru – 560 003, Karnataka  
Ph: 09003240690  
E-mail: [ceesouth@ceeindia.org](mailto:ceesouth@ceeindia.org)

## 20. CEE Governing Council

### **Chairman**

**Shri Ashok Khosla**

Development Alternatives

B-32, TARA Crescent,

Qutub Institutional Area

New Delhi- 110 016

### **Members**

**Nominees of the Ministry of Environment, Forest & Climate Change, Govt of India**

### **Secretary**

Government of India

Ministry of Environment, Forests & Climate Change

New Delhi- 110 003

### **Additional Secretary & Financial Advisor**

Government of India

Ministry of Environment, Forests & Climate Change

New Delhi- 110 003

**Nominees of Department of Forest and Environment Govt of Gujarat**

### **Additional Chief Secretary**

Government of Gujarat

Department of Forests & Environment

**Representative of Nehru Foundation for Development Ahmedabad- 380054**

### **Ms Indu Capoor**

B-102, Sansita Pratham, 28/A, Maharashtra Society,

Near Mithakhali Six Road, Beside Mangal School,

Navrangpura, Ahmedabad- 380 009

**Eminent persons in the fields of Environment, Education, Communication and Management**

### **Shri Ashoke Chatterjee**

B-1-002 Rushin Tower,

B/h Someshwar 2,

Satellite Road, Ahmedabad- 380 015

**Shri Prasad R Menon**

Independent Director-Axis Bank Ltd  
A3, Crosswinds, 8-2-317/1 Road Number 14,  
Banjara Hills, Hyderabad- 500 034

**Shri S K Mukherjee**

269, Sewalakalan (Majra)  
47, Lane 5, Ashwani Enclave  
Dehradun, Uttarakhand- 248 171

**Ms Kalpana Sharma**

Independent Journalist/Columnist  
11 D Malabar Apartments  
Off Nepean Road, Mumbai- 400 036

**Dr (Ms) Mahfuza Rahman**

No 202 Amity Apartment  
S K Bhuyan Road, Dighalipukhuri  
East Guwahati- 781 001

**Representative of Karmakshetra Educational Foundation (KEF)****Shri Tridip Suhrud**

Governing Council, Darpana Academy of Performing Arts  
Usmanpura, Ahmedabad- 380 014

**Ex-Officio members from associate institutions of NFD, Ahmedabad****Shri Dilip Surkar**

Director- VIKSAT and Executive Director- Vikram A Sarabhai Community Science Centre (VASCSC)  
Navrangpura, Ahmedabad- 380 009

**Ms Pallavi Patel**

Director  
Centre for Health Education, Training and Nutrition Awareness (CHETNA)  
B-Block, 3rd Floor, Supath-II,  
Opp Vadaj Bus Terminus,  
Ashram Road, Vadaj, Ahmedabad- 380 013

**Shri Kartikeya V Sarabhai**

Director  
Centre for Environment Education  
Ahmedabad- 380 054



**Shri D N Surati**

Secretary

Nehru Foundation for Development

Ahmedabad- 380 054



**Centre for Environment Education  
Thaltej Tekra, Ahmedabad 380 054**

(Registered under the Societies Registration Act, 1860)

Regd. No. GUJ/1043 (Ahmedabad)

(Also registered under the Foreign Contributions (Regulation) Act, 1976  
vide registration no. 041910044 with Ministry of Home Affairs, Government of India)

**FINANCIAL STATEMENTS  
2022 – 2023**

**SORAB S. ENGINEER & CO. (Regd.)**  
**CHARTERED ACCOUNTANTS**

TELEPHONE : +91 79 29700466  
FAX : +91 79 48006782  
EMAIL : sseahm@sseco.in  
sseahm@hotmail.com  
WEB : www.sseco.in



804, SAKAR-IX,  
BESIDES OLD RBI,  
ASHRAM ROAD,  
AHMEDABAD-380 009

**INDEPENDENT AUDITORS' REPORT**

**Report on the Audit of the Financial Statements**

**Opinion:**

We have audited the accompanying financial statements of **NEHRU FOUNDATION FOR DEVELOPMENT- CENTRE FOR ENVIRONMENT EDUCATION ("Society")**, which comprise the Balance Sheet as at March 31, 2023, and the Income and Expenditure Account for the year then ended and a summary of significant accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the financial statements give a true and fair view in conformity with the accounting principles generally accepted in India of the state of affairs of Society as at March 31, 2023 and its surplus for the year ended on that date.

We conducted our audit of the financial statements in accordance with the Standards on Auditing prescribed by the Institute of Chartered Accountants of India ("ICAI"). Our responsibilities under those Standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of Society in accordance with the Code of Ethics issued by the Institute of Chartered Accountants of India (ICAI) and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ICAI's Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

**Responsibilities of Management and Those Charged with Governance for the Financial Statements**

Management is responsible for the preparation of these financial statements that give a true and fair view of the financial position and financial performance of Society in accordance with the accounting principles generally accepted in India, including the applicable Accounting Standards. This responsibility also includes maintenance of adequate accounting records for safeguarding the assets of Society and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing Society's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate it or to cease operations, or has no realistic alternative but to do so.

The Management is responsible for overseeing Society's financial reporting process.

Head Office : 802, Sakar Centre, Free Press Journal Marg, Nariman Point, Mumbai-400 021.  
Telephone : +91 22 2282 4811, 2204 0861 • Email : sorabsengineer@yahoo.com, ssemum@sseco.in

Bengaluru Branch : Purva Sunflower Apartment, Flat No. D-1303, 13th Floor, No. 236/4, Magadi Road, Bengaluru-560023.  
Telephone : +91 9925879234 • Email : sseblr@sseco.in

Jamnagar Branch : Sagar-8, Kamdar Colony, Nr. Kamdar Colony Jain Derasar, Pethraj Raisi Marg, Jamnagar-361006.  
Telephone : +91 8980212412



### **Auditor's Responsibility**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal financial controls relevant to the audit in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing our opinion on the effectiveness of the internal financial controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on Society's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause Society to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Materiality is the magnitude of misstatements in the financial statements that, individually or in aggregate, makes it probable that the economic decisions of a reasonably knowledgeable user of the financial statements may be influenced. We consider quantitative materiality and qualitative factors in (i) planning the scope of our audit work and in evaluating the results of our work; and (ii) to evaluate the effect of any identified misstatements in the financial statements.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.



**SORAB S. ENGINEER & CO. (Regd.)**

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

**Report on Other Legal and Regulatory Requirements**

Further, we report that:

- a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.
- b) In our opinion, proper books of account as required by the Act have been kept by Society so far as it appears from our examination of those books.
- c) The Balance Sheet, the Statement of Income and Expenditure dealt with by this Report are in agreement with the relevant books of account.

For **Sorab S. Engineer & Co.**  
Firm Registration No. 110417W  
Chartered Accountants

*CA. Chokshi Shreyas B.*

**CA. Chokshi Shreyas B.**  
Partner  
Membership No. 100892  
UDIN: 23100892BGQIHM2621



Ahmedabad  
October 23, 2023

NEHRU FOUNDATION FOR DEVELOPMENT-CENTRE FOR ENVIRONMENT EDUCATION (SOCIETY)

Thaltej,  
Ahmedabad 380054

[A Society Registered under the Societies Registration Act, 1860 Registration No. GUJ/1043/Ahmedabad.]  
[Also Registered with the Ministry of Home Affairs, Government of India, New Delhi, under the Foreign Contribution (Regulation) Act, 1976.  
Registration No. 041910044 dated 2nd March, 1985.] [Designated Bank Account with State Bank of India, NDMB, 11, Parliament Street, New Delhi 110001 A/c No. 40137182929.]

SCHEDULE IV  
Income and Expenditure Account for the year ending on 31st March, 2023  
(See Rule 9(1))

Previous Year 2021-22 ₹	EXPENDITURE	₹	Current Year 2022-23 ₹	Previous Year 2021-22 ₹	INCOME	₹	Current Year 2022-23 ₹
	<b>EXPENDITURE ON OBJECTS OF THE SOCIETY</b>				<b>INTEREST EARNED</b>		
	On Programmes and Projects (Own activity as well as sponsored by Governmental and Non-governmental organisations)			23.11.524	On Savings Bank Accounts and Term Deposits with Nationalised and Scheduled Banks	28.33.091	
1.12.83.943	Own Projects & Programmes	1.40.08.051		1.64.675	Other Interest (income-tax refund & security Deposits)	-	
9.82.09.687	Out of Local Funding	16.28.50.523		24.76.199	Less: Interest allocated to Special Funds & Projects	28.33.091	
4.77.68.056	Out of Foreign Contribution	4.22.50.685		3.48.145		3.92.882	
15.72.41.686				21.28.051			24.40.209
3.83.42.047	Projects & Programme Expenses out of CSR Fund	13.59.71.278			<b>Projects &amp; Programme Income out of Grants from GOs/NGOs, CSR and own Activities inclusive of FC Projects</b>		
19.55.84.333			35.50.80.537		Own Projects & Programmes	67.47.443	
	<b>ESTABLISHMENT EXPENSES</b>			53.11.762	Out of Local Funding	16.28.50.523	
5.42.40.729	Salaries	4.72.48.342		9.82.09.687	Projects & Programmes out of CSR Fund	13.57.55.228	
12	Staff Salaries	12		3.75.30.641	Out of Foreign Contribution	4.22.50.685	
5.42.40.741	Remuneration to the Office Bearers		4.72.48.354	16.88.20.146			34.76.03.879
1.33.16.984	Administrative and other Expenses	1.49.40.256			<b>OTHER INCOME</b>		
	<b>Professional Fees:</b>			40.54.618	Donation	18.60.470	
60.000	Legal Fees	1.05.000		5.41.987	Educational Fees, Royalties and Other Contributions	3.28.947	
1.18.000	Audit Fees	1.47.500		6.10.06.747	Recoveries/Reimb. of Exps from Project/programmes	7.76.15.213	
1.34.94.984			1.51.92.756	14.72.949	Other Infrastructure usage Income including sale proceeds of Assets	47.75.652	
3.56.329	<b>DEPRECIATION</b>		13.32.971	6.70.76.301			8.45.80.262
	<b>AMOUNT TRANSFERRED TO RESERVE OR SPECIFIC FUND</b>			1.24.06.184	Excess of Expenditure over Income carried over to Balance Sheet	-	
7.54.305	Earmarked for Immovable/Movable Properties	20.88.880					
80.00.000	Earmarked Fund for Staff Terminal amount payable	50.00.000					
67.54.305			70.88.880				
-	Excess of Income over Expenditure carried over to Balance Sheet		86.80.872				
27.04.30.692	<b>TOTAL ....(₹)</b>		43.46.24.370	27.04.30.692	<b>TOTAL ....(₹)</b>		43.46.24.370

Notes on Accounts as per Schedule "B"

As per our report of Even Date

*K. N. Surati*  
D. N. Surati  
Chief Accounts Officer  
Date: 25th September 2023

*K. N. Surati*  
Kartikya V. Sarabhai  
Director

For Sorab S. Engineer & Co.  
Firm Registration No. 110417W  
Chartered Accountants  
*Sorab S. Engineer*  
C.A. Chokshi Shreyas B.  
Partner  
Membership No. 100892  
Place: Ahmedabad  
23 OCT 2023

NEHRU FOUNDATION FOR DEVELOPMENT-CENTRE FOR ENVIRONMENT EDUCATION (SOCIETY)

Thaltej,  
Ahmedabad - 380 054

[A Society Registered under the Societies Registration Act, 1860 Registration No. GUJ/1043/Ahmedabad.]  
[Also Registered with the Ministry of Home Affairs, Government of India, New Delhi, under the Foreign Contribution (Regulation) Act, 1976.  
Registration No. 041910044 dated 2nd March, 1985.] [Designated Bank Account with State Bank of India, NDMB, 11, Parliament Street, New Delhi 110001 A/c No. 40137182929.]

SCHEDULE III  
Balance Sheet as at 31st March, 2023  
(See Rules 9(1) and 11(2))

31/03/2022 ₹	FUNDS & LIABILITIES	₹	₹	31/03/2023 ₹	31/03/2022 ₹	ASSETS	₹	₹	31/03/2023 ₹
12.88.000	<b>CORPUS FUND</b>			12.88.000		<b>MOVABLE AND IMMOVABLE PROPERTIES</b>			
	Balance as per last Balance Sheet					Immovable Properties (At cost)			
	<b>OTHER EARMARKED FUNDS</b>				5.87.24.393	Buildings:			
2.31.36.407	Depreciation Fund	2.34.92.736		13.32.971	Balance as per Last Balance Sheet		5.87.24.393		
3.56.329	Balance as per last Balance Sheet					<b>Movable Properties (At cost)</b>			
2.34.92.736	Addition during the year	2.48.25.707		8.01.29.954	Office equipments, Vehicles, Library Books etc.	8.45.03.455			
				43.73.501	Balance as per last Balance Sheet	30.53.614			
	<b>ANY OTHER FUND</b>			8.45.03.455	Addition during the year	17.75.56.969			
17.60.19.925	Balance as per last Balance Sheet	18.63.93.326		-	Less: Written off/Disposed off/transferred during the year	11.05.234			
36.19.196	Addition during the year	9.64.734		16.42.834		8.64.51.739			
67.54.305	Interest Credited during the year	28.985		16.42.834	Vehicles on loan from Dy. Collector, Gulbarga for CHAMP Proj.		16.42.834		
18.63.93.325	Add: Transferred from Income & Expenditure A/c	19.44.76.925		-	Less: Liability for vehicle-Dy. Collector, Gulbarga for CHAMP Proj.				
	Less: Fund reduced by the cost of Assets written off/dissipated off/transferred during the year	11.05.234		19.33.71.891					
18.63.93.326			19.33.71.891		60.36.437	<b>DEPOSITS</b>			
	<b>GRANT BALANCES:</b>					For Services, Rent, Projects, etc.			
31.170	Ministry of Environment & Forests, Government of India, New Delhi			31.170		To Staff & Others (One year old Rs. 7817/-)			
7.64.94.144	Balance as per last Balance Sheet				44.165	<b>LOANS</b>			
24.29.666	Projects, Programmes, Workshops, Seminars etc.,	8.18.10.271				To Staff & Others (One year old Rs. 7817/-)			
6.96.39.160	Bank Overdraft (Secured against pledge of FDR as Collateral)	26.60.730			17.66.150	<b>ADVANCES</b>			
7.20.68.628	Axis Bank Ltd. Corporate Credit Branch Navrangpura			26.60.730		To Staff (One year old Rs. 619359/- Previous year Rs. 1279587/-)			
					1.38.71.146	To Suppliers and Contractors for Projects expenses			
6.67.50.516	<b>LIABILITIES</b>	4.66.63.949		20.89.73.243	3.88.759	(One year old Rs. 1000504/- Previous year Rs. 4332379/-)			
11.26.147	For Expenses	10.65.734			84.48.992	To Others (One year old Rs. 1034981/-)			
20.56.421	For Security Deposits	1.37.55.965			2.40.84.288				
1.70.85.757	Amount Payable to NGOs & others	14.74.87.595			49.18.968	<b>INCOME TAX DEDUCTED AT SOURCE (TDS) RECEIVABLE</b>			
12.70.18.841	For Others				6.89.390	<b>GST Recoverable</b>			
					3.55.49.123	<b>AMOUNT DUE/RECEIVABLE</b>			
					1.34.00.000	For Projects, Programmes, Workshops, Seminars etc.			
					3.88.759	Grant Receivable from MoEF (one year old)			
					4.93.37.882	FC Project Expenses Receivable			
					8.21.56.430	<b>CASH AND BANK BALANCES:</b>			
						As per Schedule "A"			
					16.36.83.817	<b>INCOME &amp; EXPENDITURE ACCOUNT</b>			
					1.24.07.518	Balance as per last balance sheet			
					17.62.91.735	Transferred from Income & expenditure A/c during the year			
48.67.87.043	<b>TOTAL ....(₹)</b>		52.29.60.812	48.67.87.043	<b>TOTAL ....(₹)</b>				52.29.60.812

Notes on Accounts as per Schedule "B"  
The above Balance Sheet to the best of our belief contains a true account of the funds and liabilities and of the property and assets of the Society.

As per our report of Even Date

*K. N. Surati*  
D. N. Surati  
Chief Accounts Officer  
Date: 25th September 2023

*K. N. Surati*  
Kartikya V. Sarabhai  
Director

For Sorab S. Engineer & Co.  
Firm Registration No. 110417W  
Chartered Accountants  
*Sorab S. Engineer*  
C.A. Chokshi Shreyas B.  
Partner  
Membership No. 100892  
Place: Ahmedabad  
23 OCT 2023

**SCHEDULE "B"**

**NOTES ATTACHED TO AND FORMING PART OF THE ACCOUNTS FOR THE YEAR 2022-23**

**1 Significant Accounting Policies followed:**

- 1.1 The accounts are maintained on accrual system of accounting subject to following exceptions.
- a. The amount advanced to various Governmental and Non-Governmental agencies for projects and programmes activities are shown under the head "Amount due/Receivable for Project expenses" and the same will be adjusted in the books on receipt of the statements of accounts from respective agencies.
- b. Liabilities in respect of employees' benefits such as gratuity, leave encashment, etc., are accounted for as and when paid.
- c. Advances given to employees for travel, for project expenses and are accounted for as and when bills for respective expenses are submitted by concerned employees.

**1.2 Use of Estimates**

The preparation of financial statements in conformity with Generally Accepted Accounting Principles in India requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent liabilities on the date of the financial statements. Actual results may differ from those estimates. Any revision to accounting estimates is recognized prospectively in current and future

**1.3 Fixed Assets**

Fixed Assets are stated at cost. Cost means purchase price and / or erection / commissioning charges of fixed assets and other charges directly attributable to the cost of fixed assets.

**1.4 Depreciation:**

The Society has started providing for depreciation on assets from the financial year 2003-04 based on the directions given by the Centre's Finance Committee based on the recommendation of Indian Audit & Accounts

Depreciation is calculated on Straight Line method on Society's Own Assets and Assets acquired out of MoEF Grant except on Building. The depreciation is accumulated under the head Depreciation Fund.

Asset	Rate (%)
Furniture and Equipment	10.00
Computer & Peripherals	20.00
Vehicle	20.00
Library Books	10.00

Depreciation on additions has been provided for the full year irrespective of date of acquisition.

Depreciation provision has not been made on assets acquired out of Projects/Programme Funding.

.....2

Page.....2

**SCHEDULE "B"**

**NOTES ATTACHED TO AND FORMING PART OF THE ACCOUNTS FOR THE YEAR 2022-23**

**1.5 Investments**

Long-term investments are carried at cost less any other than temporary diminution in value, determined separately for each individual investment. Current investments are carried at lower of cost and fair value.

**1.6 Inventories**

Inventories are valued at lower of Cost or net realizable value.

The consumable stores and spares are charged to expenses at the point of their purchases.

- 2 The Society's buildings are constructed on the land of Nehru Foundation for Development.
- 3 Debit/Credit balances of parties are subject to confirmations. Necessary adjustment, if any, will be made in the accounts on settlement of the respective accounts.
- 4 Corresponding figures of the previous year have been regrouped to make them comparable with figures of current year, wherever necessary.

As per our report of Even Date

For Sorab S. Engineer & Co.  
Firm Registration No. 110417W  
Chartered Accountants

C.A. Chokshi Shreyas B.  
Partner  
Membership No. 100892  
Place: Ahmedabad  
Date: 23 OCT 2023

D. N. Surati  
Chief Accounts Officer  
Date: 25th September 2023

Kartikya V. Sarabhai  
Director





NEHRU FOUNDATION FOR DEVELOPMENT-CENTRE FOR ENVIRONMENT EDUCATION (SOCIETY)

SCHEDULE 'A' ATTACHED TO AND FORMING PART OF THE BALANCE SHEET AS AT 31st MARCH, 2023		Thaltej, Ahmedabad: 380 054, Amount (in ₹)	
TOTAL	Sr. No.	Account No.	TOTAL
31.03.2022			31.03.2023
<b>A. CURRENT ACCOUNTS</b>			
In the name of Nehru Foundation for Development-Centre for Environment Education with:			
1,14,064	1	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad	645000152
6,69,324	2	ICICI Bank Ltd. Pune	7305001057
36,739	3	ICICI Bank Ltd. Hyderabad	805002152
	4	ICICI Bank Ltd. Bangalore	625205013670
4,77,316	5	Central Bank of India, S.M.Road Branch, Ahmedabad.	1100053053
43,195	6	Bank of India - Gultarga (CHAMP)	8793
45,955	7	Bank of India - Gultarga (CHAMP) 848520110000406	848520110000406
65,431	8	State Bank of India, Bangalore	3536580718
	9	State Bank of India, Lucknow	36008048813
45,622	10	Indian Overseas Bank, Thaltej Branch, Ahmedabad	374
	11	HDFC Bank CSE A/c	50200077923722
14,51,691		Sub-total "A" Rs.	29,54,159
<b>B. SAVINGS BANK ACCOUNTS</b>			
In the name of Nehru Foundation for Development-Centre for Environment Education with:			
76,467	1	Bank of India, Basaveswarinagar Branch, Bangalore (A/c 6056)	6056
1,14,943	2	Bank of India, Cantonment Branch, Bangalore (A/c 8435)	8435
1,36,457	3	Bank of India, Gultarga	5855
5,76,728	4	State Bank of India, Satellite Road Branch, Ahmedabad-Core	56388003005
1,40,648	5	State Bank of India, Satellite Road Branch, Ahmedabad-Project	56388004010
45,585	6	State Bank of India, Satellite Road Branch, Ahmedabad-SDF	56388002943
4,03,870	7	State Bank of India, Satellite Road Branch, Ahmedabad-SWF	56388002954
5,37,453	8	State Bank of India, Satellite Road Branch, Ahmedabad-CAPAF	66011679366
3,07,359	9	HDFC Bank - Drive in road branch, Ahmedabad CEE-IPP	50100130580280
37,704	10	Corporation Bank, Virapet Branch, Virapet.	16068
30,764	11	State Bank of India, Dharampur Branch	10713603782
67	12	ICICI Bank Ltd. - in the name of CEE-ICEEF Project Account, De	22401000005
79,740	13	ICICI Bank Ltd. - DEL-RHSDP Project	34301002177
13,99,115	14	ICICI Bank Ltd. - Guwahati	634301031898
5,94,418	15	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (CMU & Zoo)	6401026926
72,252	16	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (Do Future)	6401026940
7,39,316	17	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (Industry)	6401026927
90	18	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (NCB)	6401026929
28,14,427	19	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (RPG & West)	6401026928
10,41,940	20	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (Studio)	6401026925
4,41,311	21	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (YEN & PM)	6401026924
14,092	22	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (WARM)	6401026950
1,02,456	23	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (Society)	6401028495
2,21,128	24	ICICI Bank Ltd. Drive-in Road Br, Pune	187801000158
40,01,940	25	ICICI Bank Ltd. Lucknow	628101053040
11,843	26	ICICI Bank Ltd. Bhubneshwar	6101020966
15,97,685	27	ICICI Bank Ltd. Delhi	629401125698
5,76,154	28	ICICI Bank Ltd. Guwahati	634301031835
9,730	29	ICICI Bank Ltd. Coimbatore	1601026712
3,37,032	30	ICICI Bank Ltd. Goa-Panaji	1501011691
34,52,604	31	ICICI Bank Ltd. Pune	007301045285
1,22,275	32	ICICI Bank Ltd. Bangalore	5455
11,53,815	33	HDFC Bank Ltd. - Srirangpur Branch	415110000034
32,82,156	34	HDFC Bank Ltd. - Delhi Branch	3191110000228
31,638	35	State Bank of India, ESS Project	3185715451
24,282	36	State Bank of India, WG Project	31857154401
2,57,619	37	Kotak Mahindra bank Nid see a/c west	39501002445
5,196	38	Kotak Mahindra bank Nid see a/c camps	412742543
58,59,399	39	Kotak Mahindra bank Nid see a/c west	412742567
40,549	40	Axis Bank Ltd. -CEE A/c EMG	412673737
	41	Axis Bank Ltd. -CEE A/c STUDIO	919010030912887
	42	Axis Bank Ltd. -CEE A/c STUDIO	919010037062950
	43	Indian Overseas Bank-Parampara	4502000001876
4,03,37,637		Sub-total "B" Rs.	5,46,85,950

NEHRU FOUNDATION FOR DEVELOPMENT-CENTRE FOR ENVIRONMENT EDUCATION (SOCIETY)

SCHEDULE 'A' ATTACHED TO AND FORMING PART OF THE BALANCE SHEET AS AT 31st MARCH, 2023		Thaltej, Ahmedabad: 380 054, Amount (in ₹)	
TOTAL	Sr. No.	Account No.	TOTAL
31.03.2022			31.03.2023
<b>C. In the name of Centre for Environment Education A/c. Foreign Contribution with:</b>			
76,60,008	1	Indian Overseas Bank, Thaltej Branch, Ahmedabad	45001000002931
15,389	2	State Bank of India, Satellite Road Branch, Ahmedabad-R T T	33289906650
1,53,21,255	3	State Bank of India, Satellite Road Branch, NDMB, New Delhi	40137192929
2,29,97,651		Sub-total "C" Rs.	2,73,21,647
6,47,86,979			8,49,58,708
<b>D. FIXED/SHORT TERM DEPOSIT ACCOUNT</b>			
In Term Deposit Account in the name of Centre for Environment Education with:			
1,21,899	1	State Bank of India, Satellite Branch, Ahmedabad -(NLR Fund)	1,34,470
1,68,125	2	State Bank of India, Satellite Branch, Ahmedabad (Solar Energy society)	1,85,509
5,67,040	3	Indian Overseas Bank, Thaltej Branch, Ahmedabad	6,28,145
35,00,000	4	ICICI Bank Ltd A/c 006401026926	50,00,000
14,57,072	5	ICICI Bank Ltd A/c 006401026928	2,476
	6	ICICI Bank Ltd A/c 007305001057	14,57,072
40,00,000	7	ICICI Bank Ltd A/c 5455	15,00,000
8,75,535	8	ICICI Bank Ltd A/c 007301045285	18,19,732
4,00,000	9	ICICI Bank Ltd A/c 26925	8,75,535
12,20,000	10	Central Bank of India (SNC Fund)	19,00,000
	11	Central Bank of India (Food for SNC)	6,60,000
	12	Bank of India, Gultarga, South	
	13	Axis Bank Ltd, Ahmedabad Studio A/c 2950	10,00,000
15,00,000	14	Axis Bank Ltd, Ahmedabad Deposit against Security	
1,38,09,641			1,51,62,539
In Term Deposit Account in the name of Centre for Environment Education A/c Foreign Contribution Fund with:			
33,64,935	1	Indian Overseas Bank, Thaltej Branch, Ahmedabad	29,56,400
33,64,935			29,56,400
1,71,74,576		Sub-total "D" Rs.	1,81,19,339
0	E.	CHEQUES ON HAND	
31239	F.	CASH ON HAND	4,840
8,19,92,794		TOTAL "A" TO "F" Rs.	10,30,82,887

As per our report of Even Date

For Sorab S. Engineer & Co  
Firm Registration No. 1104

Chartered Accountants  
C.A. Chokshi Shreyas B.

Partner  
Membership No. 100892

Place: Ahmedabad

23 OCT 2023

D. N. Surati  
Chief Accounts Officer  
Date: 25t September 2023

Kartikya V. Sarabhai  
Director







# CEE

Centre for Environment Education

## **Centre for Environment Education**

Thaltej Tekra, Ahmedabad- 380 054

Phone : 91-79-26858002 to 05 Fax : 91-79-26858010

Email: [cee@ceeindia.org](mailto:cee@ceeindia.org) Website: [www.ceeindia.org](http://www.ceeindia.org)

**Founded as a Centre of Excellence of the Ministry of Environment, Forest  
and Climate Change, Government of India**

Follow us on:     