Annual Report
2017 - 2018

CEE

Centre for Environment Education

Nehru Foundation for Development, Ahmedabad

Supported by the Ministry of Environment, Forest and Climate Change
Government of India

Annual Report

2017-2018

From the Director's Desk

The year 2017-2018 has been a year of challenges. It was a year when CEE has been consolidating its activities and moving towards financial self-sufficiency. It was the first year without a core grant from the Ministry of Environment, Forest and Climate Change (MoEFCC). The challenge was therefore to transform the way CEE worked in a new environment. CEE has been undertaking many exciting projects in all the thrust areas and all our offices have been working towards strengthening our systems and finances. It was a year of forging new partnerships including for CSR supported projects.

On the thrust area of Education for Children, we have continued with earlier programmes like Paryavaran Mitra, Earthian, Eco-Schools and Swachhagraha, Ganges River Dolphin Conservation Education, Mari Shala, Gramshiksha, Urja Chetana, Environmental Service Scheme, CEE ka Bioscope and others. A notable addition is the Learning Non-Violence Programme that aims to create partnerships around the world in order to design, test and implement a pedagogy to develop critical competencies for non-violence behaviours based on Gandhian thought and launch it on the occasion of the 150th birth anniversary of Mahatma Gandhi on October 2, 2019.

On the Higher Education front, the Journal of Education for Sustainable Development and Regional Centre of Expertise activities have been continuing, and CEE has continued to offer courses at CEPT University and Development Management Institute, Patna.

Under the Education for Youth area, SAYEN (South Asia Youth Environment Network), of which CEE is the Secretariat, the Young Reporters for Environment (YRE) programme has had workshops and competitions. Internships from within and outside the country continue to be popular among youth and interns have been working on several CEE projects in different offices.

Experiencing Nature gained strength with Sundarvan continuing its regular educational programmes like 'Zoo Keeper for a Day', besides school programmes and special day events. Nature camps at CEE sites as well as in the North and Central offices have registered excellent response. Tilabari, Ralegan Siddhi and Pashan Nature Education Centre are the notable Interpretation projects undertaken by CEE during this period.

Under the Coastal and Marine Programmes, CEE has been designated the National Operating Agency for the Blue Flag eco-label certification for beaches which is operated globally by FEE (Foundation for Environment Education). As part of this, CEE facilitated a two-day orientation workshop as well as undertook field surveys and assessment for three beaches.

In the thrust area of Sustainable Business and Climate Change, CEE was a partner in the seminar cum debate competition "Framing the Debate on Climate Change" organized by

the Integrated Research and Action for Development (IRADe), along with Natural Resource Defense Council (NRDC) as knowledge partner, in eight host universities across seven North Indian states. The 13th Local Conference of Youth held in Ahmedabad; five solar energy consultations in partnership with HBF; and the development and launch of a book of case studies – Action for Climate Empowerment – in partnership with UNFCCC and UNESCO; and the Earth Care Awards were the other activities of this group.

Jalsetu funded by Hanns Seidel Foundation (HSS) aimed at empowering women in governance, and the NABARD water campaign titled 'Jal Jivan Hai' which touched more than a hundred thousand villages across India with the message of water conservation, were the two major projects under Sustainable Rural Development.

Sustainable Urban Development projects included promotion and outreach programme for Rainbow BRT in Pimpri-Chinchwad, Pune Cycle Plan, Advocacy for Road Safety and other programmes in Pune; Training Communities as Heritage Interpreters in Ahmedabad; and Pathik – a walkability study in Guwahati.

Water and Sanitation projects included the Clean Ganga Programme at Varanasi, in which CEE undertook education and awareness activities at the ghats and in schools as part of a project of the National Mission on Clean Ganga which is supported by JICA (Japan International Cooperation Agency), and training and orientation of Swachhagrahis in Barpeta District, Assam, where CEE is a Key Resource Centre for Assam Mission Directorate of the Swachh Bharat Mission.

In Waste Management, CEE's Environment Management Group (EMG) conducted awareness and capacity building programmes in waste management rules and in waste water treatment, recycling and reuse, and took up research and development projects with industry. The Common Health waste Appropriate Management Plant (CHAMP) in Kalaburagi continued to conduct training programmes and workshops for health care establishments.

In Biodiversity Conservation, the major programmes were the Ganges River Dolphin Conservation Education Programme and the Information Management, Education and Communication for Maharashtra Gene Bank.

Several training programmes were conducted in Jammu & Kashmir and Uttar Pradesh for Disaster Preparedness and preparation of disaster management plans for schools and villages.

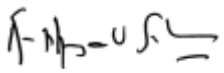
The GEF-UNDP Small Grants Programme continued support to more than a hundred community-based projects.

Under the Training and Capacity Building programmes of CEE, rural immersion programmes for NABARD officers and sustainability exchange programmes for nursing, education, environment sciences and visual communication students of Central Queensland University, Australia, were conducted.

Under Material Development, CEE developed a commemorative volume on the centenary of the Sabarmati Ashram for the National Archives of India along with an exhibition.

CEE's Information and Facilitation Centre (IFC) continued to conduct safe festival campaigns, 'orientation to environment' packages for schools and colleges, and summer programme for children. CEE staff from various offices attended training workshops as well as national and international conferences, workshops and seminars.

We look forward with great optimism to the coming year to take these and more programmes forward and strengthen CEE in all ways.



Kartikeya V. Sarabhai
Director

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Education for Children

1

1.1 National Green Corps (NGC)

Centre for Environment Education (CEE) has been designated as resource agency since 2001 for the national level Eco-Club programme 'National Green Corps' (NGC). CEE, with its national presence, has been providing technical and advisory support to state nodal agencies from 15 states and two Union Territories. In the year 2017-18, the programme was reviewed and it was felt that the respective nodal agencies could manage the programme. Thus the activities reported here are for the period till December 2017 when CEE worked as resource agency. However, CEE is guiding and networking with eco-club schools and the nodal agency through its various initiatives.

1.1.1 NGC in CEE North: Uttar Pradesh and Bihar

Under the NGC programme, CEE North worked in close coordination with the State Nodal Agencies (SNA) - Directorate of Environment (DoE), Government of Uttar Pradesh and Bihar State Pollution Control Board respectively. Regular meetings and discussions were held with the nodal agency regarding documentation, follow up with schools and reporting. CEE North provided technical support and inputs in the implementation of the programme.In Uttar Pradesh, 8,500 schools have been identified for the NGC programme where over 5912 schools have been selected and 5453 schools have received the eco-club grant through online transfer. In Bihar, 8600 NGC Schools from 38 districts of the state are working as eco-club schools.

In April and May, eco-club schools conducted school level events on the occasion of Earth Day and Biodiversity Day under the guidance of CEE North.

On the occasion of World Environment Day, CEE North, in association with the Directorate of Environment, invited eco-club schools to a state level event where they showcased their work in an exhibition. CEE North conducted an event in coordination with Sanjay Gandhi Zoological Park in Patna on World Environment Day. Students from eco-club schools participated in a painting competition. A nature trail was also conducted in the zoo to help them learn the skill of observation. Eco-club school teams also presented their action plans for environment projects.

Schools from UP and Bihar working under the Dolphin programme observed International River Day and eco-club schools observed National Dolphin Day held during the wildlife week in different districts.

CEE North conducted seven district level teachers training programme in Uttar Pradesh and one in Bihar as part of the WIPRO supported Earthian-Paryavaran Mitra initiative. These workshops were conducted with support from Master Trainers. School teachers attended the one-day training programmes which focused on the themes of 'water and sustainability'

and 'biodiversity and sustainability'. Each school worked on the selected theme and submitted their report for evaluation in November.

In the months of April, November and December, CEE North organised three nature camps for the eco-club schools of Uttar Pradesh, Bihar, Rajasthan and Punjab. These camps were conducted at Katerniaghat Wildlife Sanctuary, Suhelwa Wildlife Sanctuary and Valmiki Tiger Reserve. Over 110 students along with teachers from 16 schools attended these camps.

1.2 Paryavaran Mitra

Paryavaran Mitra Puraskar 2016 Exemplar Handprints

Since 2010, every year, handprint actions of schools, teachers and students across the country are being recognised at the national level. The Paryavaran Mitra Puraskar also provides a rich platform for schools across the country to share and learn from the hands-on experiences in environment education from each other.

The nominations for the Best School, Best Teacher and Best Student categories were shortlisted for a national jury on the basis of the criteria for the awards and the exemplars were selected the shortlisted entries. The highlights of the shortlisted schools were involvement of almost all students in the class in the action projects, delegation of roles to students and sharing of results, outreach as well as involvement of the community in some instances, achieving environmental and educational outcomes through action projects, linkages to the curriculum, etc. The exemplars chosen are:

Paryavaran Mitra Exemplar Schools

1. Nand Vidya Niketan Essar School, Jamnagar, Gujarat
2. St. Kabir School Navrangpura, Ahmedabad, Gujarat

Paryavaran Mitra Exemplar Teacher

1. Mr. Foran Chand, GHS Dasgrain District, Ropar, Punjab

Paryavaran Mitra Exemplar Students

1. Jyoti Purohit, Rajikiya Uccha Madhyamik Vidyalaya, Sartara, Sirohi, Rajasthan
2. Parag Shewaramani, Rachana School, Ahmedabad, Gujarat

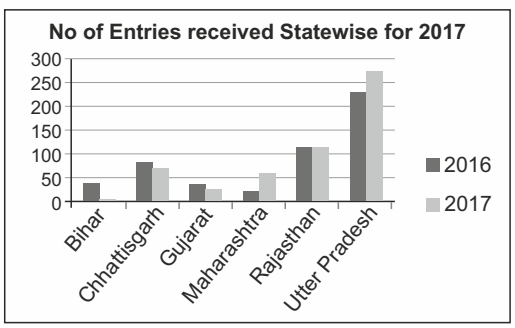
1.3 Earthian – Paryavaran Mitra Programme

'Earthian' by Wipro is a nationwide initiative to deepen the 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 and biodiversity 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 and the Paryavaran Mitra initiative of CEE. The partnership

involved the schools in the Paryavaran Mitra network, particularly government schools with Hindi as the medium of instruction, in activities related to the issue/theme of water and biodiversity. This partnership programme was implemented in the states of Uttar Pradesh., Bihar, Rajasthan, Gujarat, Maharashtra, Chhattisgarh and Jammu & Kashmir.

The activities under the project involved development of an Earthian brochure and translation of the Earthian booklet into Hindi for dissemination in schools, and also dissemination of Earthian material in schools in the Paryavaran Mitra network in the above mentioned states. It also included training of teachers from selected schools in these states to facilitate projects/activities on water and biodiversity in their schools and submission of entries from schools in the above states.



In 2017-18, the programme was initiated in July. Against a target of 1000 teachers to be trained under the programme, 1052 were trained. A total of 550 activity reports were received against a target of 450 from participating schools. Five school reports were selected for the final Earthian award.

Communication Media Website: Paryavaran Mitra website was revamped to a lighter version and is now the gateway to several ESD initiatives. The dedicated 'Focused Initiatives' webpage gives a wide array of different initiatives catering to different grade levels which any school can take up. The 'Campaigns' page is a catalogue of all the campaigns conducted so far and ongoing campaigns which schools look for and participate in.

Newsletter: The monthly newsletter covers several handprint actions from schools across the country and gives information on various new engagements as well as upcoming events. The newsletter is also a medium to provide teachers with ideas of Handprint actions to work with students in schools. More information on the programme can be had at:

www.paryavaranmitra.in

Paryavaran Saathi: An online communication platform for educators: This service uses the internet and mobile telephony to resolve queries of educators

related to EE/ESD and reach out to schools and teachers in the network. The aim of the platform is to provide online support for educators to effectively transact EE/ESD in schools. The service was launched on October 14, 2014 and is now open in four languages: English, Hindi, Marathi and Gujarati. It will be available in all major Indian languages shortly. Queries related to programmes from educators and students were addressed during the year. The toll free number for this service is 1800 3000 0996.

Global Handprint Day: Ten years of Handprint was celebrated on November 27, 2017 at CEE Ahmedabad. The day was marked by appreciating the handprint efforts of schools in India – especially the Paryavaran Mitra and Eco Schools India.

The Handprint was launched by CEE on November 27, 2007 at UNESCO's 4th International Conference on Environmental Education held at Ahmedabad, India. The concept emerged from one of the CEE's Programmes - Environmental Education in Schools of Andhra Pradesh (EESAP 2000 to 2008). Handprint represents positive actions taken by the people around the globe towards sustainability.

On November 27, 2017, a felicitation event was organised at CEE, Ahmedabad where winners of both the programmes Paryavaran Mitra Puraskar 2016 and Eco-Schools India Programme were awarded for their exemplary efforts towards the environment.

1.3.1 Earthian in Uttar Pradesh (UP) and Bihar

The strategy adopted for the implementation of the Earthian-Paryavaran Mitra Programme 2017 was to use the existing network of schools and also work with new districts. The programme was offered to schools that are part of the National Green Corps, Children's Forest Programme and Ganges River Dolphin Conservation Education Programme in Uttar Pradesh. To conduct teacher training workshop at the district level, CEE joined hands with local partner NGOs and master trainers. To reach out to a wider number of schools, CEE team identified and directly approached schools to host the workshop for students and teachers.

A one day teacher training workshop was organised by CEE in collaboration with schools, educational department, NGC master trainers and NGOs across six districts – Farukhabad, Badaun, Lakhimpur Kheri, Lucknow, Mirzapur, and Jalaun - in July-August. More than 450

teachers, NGOs and people from government institutions participated in these workshops. The districts were selected with the objective of spreading the reach of the programme in places which had not been approached previously.

The objective of the workshops was to develop an understanding among teachers about environmental education and the concept of sustainable development, their curriculum linkages, components of 'Earthian' and Paryavaran Mitra programmes and the role of schools and teachers in participating and implementing these programmes in their respective schools and communities.

Post teacher training workshops, follow up visits to schools were undertaken to guide the schools during the implementation of the action projects. Material related to project activities consisting of brochure and flyer were sent to around 3000 schools covering 38 districts of UP and Bihar.

The schools participated in the programme with enthusiasm and responded positively. A total of 282 reports were received from the state. The results were declared in the month of December and the felicitation ceremony was held in February 2018 in Bangalore, where two schools from the state made it to the top 10 schools at the national level.

1.3.2 Earthian in Maharashtra and Chattisgarh

The Earthian - Paryavaran Mitra: Water and Biodiversity is an activity-based learning programme aiming to help teachers undertake activities with children for exploring water and biodiversity through audit activities and drawing linkages between the local and global perspectives through research projects.

In Maharashtra, the Earthian - Paryavaran Mitra 2017 was implemented in the school network of the Environment Service Scheme (ESS) programme of the Maharashtra State Environment Department with CEE, Western Ghats Eco Club Programme and other networks.

Eighty teachers in 13 districts (Pune, Ratnagiri, Sindhudurg, Nashik, Jalna, Aurangabad, Parbhani, Solapur, Amravati, Nagpur, Jalgaon, Ahmednagar and Chandrapur) attended the workshops and increased their understanding of linkages between water, biodiversity and sustainable development in various parts of Maharashtra and learnt to carry out classroom activities and action projects with the students. Vamanrao Bade Vidyalaya Umrad, Zilha Parishad School Kondhar (Chincholi) Karmala, Solapur, Maharashtra was amongst the national level awardee schools who were felicitated by Mr. Azim Premji, Chairman, Wipro, at Bengaluru.

In association with the Department of Education, CEE facilitated this project through the National Green Corps (NGC) and other school networks across Chhattisgarh. Teacher training workshops to enhance their understanding of linkages between water-biodiversity and

sustainable development were conducted in four blocks from two districts of Chhattisgarh. Through group work, participants designed activities that could be conducted by students both in the classroom and in outdoor settings. Around 130 teachers participated in these trainings. Further, around 71 schools have submitted reports on their projects. Amongst these, two government schools have received cash awards for exemplary work on the theme of biodiversity and sustainability.

1.4 Continuous Engagement Programme (CEP)

1.4.1 CEP in Uttar Pradesh and Bihar

Starting with the Wipro Earthian - Paryavaran Mitra programme, awardees associated with CEE from the year 2015 onwards are engaged in a three-year long Continuous Engagement Programme (CEP). The objective of the CEP in partnership with Wipro is to enhance understanding of sustainability amongst teachers and develop a pedagogy model of education for sustainability.

During 2017-18, CEE North implemented the Continuous Engagement Programme (CEP) in collaboration with CEE and Avehi Abacus, a Mumbai based NGO. This programme is driven by the objective of enhancing the teaching and learning process, making it more interactive, learner-centric, participatory (such as learning from peers and the community) and empowering. From over two hundred schools who had participated in the Earthian - Paryavaran Mitra programme 2015, six schools from Uttar Pradesh and two schools from Bihar had made it to the national level award. As part of the award, CEE has been continuously working with these schools through CEP with the aim of enhancing social and environmental sensitivity among children. As a follow up of CEP activities, CEE team visited the schools to understand how the module is being used to get teachers' feedback.

CEE North team visited the six CEP schools in Uttar Pradesh (ML Convent School, Jalaun; Purva Madhyamic Vidyalaya, Itaunja; Purva Madhyamik Vidyalaya, Bibipur; KGBV, Mohanlalgunj, Lucknow; City Montessori School, Kanpur Road, Lucknow; and Benhur Public School, Pilibhit) with a view to assess the implementation, effectiveness, understanding and feasibility of the module, both for students and teachers. The team held an interactive discussion with the students and followed up with a question-answer session. During the visit, CEE team observed that the activities were conducted effectively by the teachers; the major

Earthian PM - Water testing at school in Pilibhit

objectives of the activities were well understood by the facilitators and also communicated to the students; students responded well to the questions, with the realisation of how all of us are dependent on each other, and each one of us has some unique qualities. Students could co-relate their learning with the activities they had undertaken during Earthian and also their day to day life.

1.4.2 CEP in Middle Schools in Maharashtra

The programme is being implemented in three schools of Maharashtra and will continue in these schools until the academic year 2018-19, progressing through the grades with the same students, which will help the implementers get insights into learning outcomes in ESD at the educator and student level.

Teacher orientation followed by classroom activities have been carried out by all the schools. Key insights from the teachers' were that they found the activities and games (approach) new and interesting and felt they were beneficial to the students as they helped them build on their skills of observation and critical thinking. Teachers also felt that the module which is aligned to the curriculum is good for them to learn new ways of teaching EE in particular subjects.

1.5 Eco-Schools Programme India

Eco-Schools is an international certification programme offered in more than 65 countries by the Foundation for Environmental Education (FEE). In India, the programme is offered by CEE which is the host organisation. The programme helps children in standards 1-5 explore the environment through classroom activities and action projects and take positive actions at school and their homes. The programme in India is offered through five thematic areas: Biodiversity, Energy, Waste, Water and Healthy Living, and schools need to adopt a seven step methodology for the implementation of the same. The programme has currently been tailor-made for the primary classes (1-5).

About 32 schools, including both private and government, enrolled for the programme in 2017-18. Some of these schools also received a small funding support to implement the waste management proposal submitted by them. Individual schools adopted different themes to implement the programme. Towards the end of the academic year, the enrolled schools were assessed on whether they could be awarded the Green Flag, the international certification for successfully completing the programme.

During the year 2017-18, the following nine schools received the International Green Flag award:

1. Army Public School, Bangalore, Karnataka: Year 2016-19
2. St. John's Universal, Goregaon, Maharashtra: Year 2015-18
3. Vidya Niketan English Medium School, Pune, Maharashtra: Year 2015-18

4. K.M.V. Red Hills High School, Bangalore, Karnataka: Year 2015-18
5. Vidyaniketan Public School, Bangalore, Karnataka
6. Govt. Lower Primary School, Pura, Kollar, Karnataka
7. Govt. Higher Primary School, Nosagere, Kollar, Karnataka
8. Govt. Higher Primary School, Thoralakki, Kollar, Karnataka
9. Seth Anand Ram Jaipuria, Ghaziabad, Uttar Pradesh

1.5.1 Eco-Schools, Maharashtra

In Maharashtra, the Eco-Schools programme is presently being implemented in four schools of the Universal Group in Mumbai and two schools in Pune.

The association with the five schools enrolled earlier continued this academic year, with the addition of one school in Pune, with school visits and facilitation for curriculum linked activities and projects. One school from Mumbai and Pune have received the Green Flag Award on November 27 at a ceremony celebrating the Handprint Day at CEE Ahmedabad.

1.6 Swachhagraha

'Swachhagraha' draws inspiration from 'Satyagraha' led by Mahatma Gandhi during the freedom struggle movement, which catalysed action through tremendous patience and perseverance, instilling dignity and self-respect in the Indian mind. It aims at engaging people and bringing about a change, similar in scale to India's freedom movement, where people get involved to take action for 'Creating a Culture of Cleanliness'.

Swachhagraha is about promoting civic consciousness among citizens through youth leaders. An initiative of Adani Foundation with Centre for Environment Education (CEE) as the Knowledge and Implementation partner, Swachhagraha in

2016-17, involved over 12000 active Swachhagraha Dal members who reached out to their 3,20,000 peers, their parents and the community through a variety of planned action projects and campaigns. The programme focused on four key themes, namely, Waste management and Littering, Sanitation, Personal Hygiene and Toilet Etiquettes. At the school level, the programme was implemented through teachers (Swachhagraha Preraks) and students (Swachhagraha Dal members). In 2017-18, so far 52,800, Dal members have reached out to over 12 lakh peers and 2 lakh community members.

Having started with 520 schools across six cities in Gujarat in 2016, with the success it achieved, it was extended nationally; the project is now implemented in 12 states of India.

The annual activity cycle included development and distribution of Teachers' Handbook, Activity Book for students, training of teachers and Dal members and implementation of activities in the schools. Campaigns through the website, social media, emails and WhatsApp updates have

helped in keeping the motivation and momentum of the programme high. A pre and post literacy test was conducted in a sample of schools from the Swachhagraha project schools, to ascertain the change in knowledge, attitude and behaviour among the students as a result of this programme.

Overall the programme seems to have made an impact on littering and toilet etiquette related attitudes and behaviours. Both Gujarati and English medium schools showed a similar increase of two percent in this area. For sanitation and hygiene aspects, only female students reported an increase in percentage scores.

The programme team was in close contact with schools through regular visits, handholding teachers and students, providing guidance while at the same time documenting and monitoring changes in behaviour and other visible physical aspects in the school. The programme has provided insights into dealing with misconceptions regarding cleanliness that many people have and helped devise strategies to deal with these. For example, some schools did not seem to feel that there

was a need for a project on cleanliness in their school as the school was very clean, but an activity as a part of the project helped them realise that there needs to be a focus on behaviour change in students and teachers; cleanliness is not just an activity which an employee carries out.

1.6.1 Swachhagraha in Uttar Pradesh and Bihar

In Uttar Pradesh, the Swachhagraha project was implemented in 13 districts with a major focus on Lucknow and Varanasi citie, with the other districts being Kanpur, Etawah, Saharanpur, Jalaun, Pilibhit, Bareilly, Farukhabad, Meerut, Gonda, Allahabad and Badaun. Under the programme, students of classes 6-9 were targeted; however, students from lower and higher classes were also involved in a few places. To initiate the planned activities, Teacher Training Workshops (TTWs) were organised in three locations: Lucknow, Varanasi and Kanpur. Teachers' orientation programmes were conducted in Jalaun and Farukhabad.

Teacher Training Workshop (TTW): TTWs were organised in three locations: (i) at La Maritniere Girls College in Lucknow in July 2017 in association with the Education Department, with 48 teachers from different districts participating; (ii) in Kanpur Nagar, with the help of Basic Shiksha Adhikari in July 2017, with 31 teachers from basic and inter colleges participating; and (iii) in two rounds in Varanasi in July and October 2017, with 96 teachers participating in all. Two orientation programmes for teachers were also organised: one at Jalaun and the other at Farukhabad for some schools on the request of the district education officers.

In Bihar, the TTW was organised in Patna in August 2017 where around 39 teachers participated. Later on the district education officer's request, Nalanda District was also included in the programme where 19 schools enrolled. For introducing the programme to these schools and teachers, orientation sessions were held and the material disseminated.

During the training workshops, teachers were briefed about the overall concept of the programme and behaviour change education, and were oriented on the use of the different materials developed for the programme. Overall 292 schools participated in the Swachhagraha programme (UP and Bihar) from North region of India.

Initiative taken by Schools: As conceptualised, after the TTW, the Swachhagraha Prerak introduced the concept to the whole school during the assembly and selected the Dal members. In each school around 35-50 Dal members were selected for the programme. Over 5292 students were involved as Dal members in 292 schools of UP and Bihar, who were oriented to the project and to the use of the activity booklet. After choosing a theme for their respective school based on the prevailing issues within and around their campus, a mitigation plan and related

activities were discussed among the Dal members and proposed to the school head and other stakeholders of the school, and later with the whole school. The activity booklet was used in the planning process.

Swachhagraha Wall: With the help of the Prerak, Dal members created a Swachhagraha wall using the Swachhagraha poster provided to them. After visualising the issue/theme and areas of intervention, Dal members prepared slogans, posters, poems and pictorial messages and decorated and updated the wall from time to time.

Swachhagrah Wall updation at Central Hindu Girls School, Varanasi

Swacchagraha Campaigns: Dal members participated in various campaigns like safai ke sitare, nukkad natak, essay writing, rally, etc. and the Prerak updated the activities of school on Whatsapp groups. The Safai Ke Sitare campaign was focused on paying attention and respect to the school staff involved in the cleaning of campus, classes, ground, etc. Nukkad Natak and rally aimed to reach out to the community with the learnings from the

Swachhagraha Nukkad Natak on the theme of cleanliness at Basant Kanya Inter college, Varanasi

programme and motivate others to follow clean behaviours.

Swacchagraha Material: CEE North gave inputs for translation and adaptation of Swachhagraha material – poster, students' handbook and teacher's handbook - in Hindi. Swachhagraha student booklet helped Dal members understand the sanitation and hygiene standards required, identify behaviours related to littering, were motivated to follow good practices in sanitation and cleanliness in school as well as in their homes.

Students initiated cleanliness drives in their campus and made dustbins for their classrooms using waste cartons. A 'litter free' campaign was organised by some schools where classes were graded and awarded for cleanliness. Personal hygiene practices were promoted among the students with the Dal members monitoring. Toilets were graded using colour coding and the administration informed of the same. Some schools have declared their campus as polythene free and promoted the

use of cloth bags within the school and reached out to the community.

Visits and Reporting: CEE team regularly visited schools to guide and orient the students and teachers on the activities. Schools creatively reported their actions and achievements and highlighted behaviour changes they observed during the year. In all, 213 school reports and 865 student reports were received from 292 schools. Student reports reflect the change in behaviour within and among the peer groups and also acceptance of their efforts in the society.

1.6.2 Swachhagraha in Maharashtra - Pune

As part of the project outreach in Pune, CEE conducted eight teacher training workshops across 284 schools – private (unaided) and government (aided). The students conducted around 115 Nukkad Nataks (Street plays) and interviewed around 331 Safai Karmacharis (cleanliness workers) from the Municipal Corporation which helped them to learn about local issues, public response and systemic issues that could be addressed at the individual and societal level.

Swachhagraha in Pune

Number of schools covered in Pune	284
Number of teachers trained in Pune	343
Swachagrahha Dals (clubs) formed	228
Swacchagrahis (club members)	3016
Outreach to students	1,23,500

Swachhagraha Awareness Rally by Vikhe Patil Memorial School

The programme has facilitated students to take up several issues, viz., converting best out of waste, composting, influencing public behaviour through the Soch Badlo Abhiyaan.

Exemplary schools included PMC Madhyamik Vidyalaya which created around 2000 kg of compost from the school garden waste, while PMC School No. 39 B created a 'Paper Bank' where students could deposit loose pages and old empty notebooks which could be recycled. Their Dal members oriented children of the younger sections toward toilet etiquettes.

Lexicon International - Nukkad Natak @Pune Railway Station

In March 2018, all the participating schools, including around 215 teachers, presented their learnings and reports in the presence of the Pune Municipal Commissioner and suggested several recommendations for a cleaner city.

1.6.3 Swachhagraha in Chhattisgarh

As part of the project, 102 schools from three cities of Chhattisgarh, namely, Raipur, Bhilai and Bilaspur, participated in the Swachhagraha project during the year 2017-18. The State Education Department is also involved in this project. CEE developed and disseminated educational materials to each school and facilitated the of student groups called 'Swachhagrahis' and 'Preraks' (teachers). Around 2460 Swachhagrahis and 108 Preraks have performed various activities in their schools and neighbourhoods. They also organised several campaigns like Safai ke Sitare, Nukkad Natak and Swachhagraha ke Reporter in order to create mass awareness and citizen action within the state. CEE documented several school project experiences and shared these nationally.

Group work during teachers training at Dhamdha, Durg, Chhattisgarh

1.6.4 Swachhagraha in Tamil Nadu

CEE Tamil Nadu conducted the Swachhagraha programme in 170 schools. The programme was carried out in a phased manner: a one-day orientation was provided to the teachers in batches, hands-on experience was encouraged by asking them to make the Swachhagraha Wall to create awareness. Further Swachhagraha Dals were formed in every school consisting of about 25 students each who were trained to communicate, practise and monitor the activities related to the programme. There were three main components for this programme: (i) Safai ke Sitare - where students were asked to click photographs with the cleaning staffs; (ii) Nukkad Natak - where students performed a street play based on the four themes; and (iii) Swachhagraha ke Reporter - where some of the Dal members took on the role of reporters, writing about the activities in their schools. In order to assist the students to implement the actions, activity books and swachhagraha badges were given to Dal members. By the end of the programme, behavioural change was observed among the students in schools that participated. The student essays and the teacher reports that were received at the year-end proved that the programme was enjoyed and appreciated by the schools. A total number of 70 reports from teachers and 70 essays from students were initially

received. A jury was constituted, and 10 best student essays and five best school reports were chosen.

1.6.5 Swachhagraha in Andhra Pradesh and Telangana

CEE Andhra Pradesh and Telangana conducted the Swachhagraha programme in 386 schools across four districts, namely, Hyderabad, Ranga Reddy, Guntur and Vijayawada. An orientation was first conducted for the teachers of the schools who were asked to create a Swachhagraha Wall to raise awareness and form a Swachhagraa Dal consisting a minimum of 15 students in each school. The Dal members were trained to communicate, practise and monitor the activities related to the programme. Activities related to the three main components for the programme – Safai ke Sitare, Nukkad Natak and Swachhagraha ke Reporter – were conducted, and swachhagraha badges and activity booklets given to Dal members to help them.

At the end of the programme, we were able to see a behavioural change not only in the Dal members but also in the other students of the schools. To reinforce this trend, random students from the Dal were asked to write an essay and the assigned teachers to write a report. In all, 348 reports from teachers and 1090 essays from students were received out of which 10 best essays and seven best school reports were selected by a jury.

1.7 Ganges River Dolphin - Conservation Education Programme

Ganges River Dolphin (Platanista gangetica gangetica) is listed as a Schedule-1 species in the Wildlife Protection Act 1972 and recognised as 'Endangered' by IUCN. CEE North has been working on the species since its inception as part of river conservation initiatives. CEE is implementing the Ganges River Dolphin programme with the support of the National Mission for Clean Ganga, National Ganga River Basin Authority under the Ministry of Water Resources, Ganga Rejuvenation and River Development. The project titled 'Educating Schools and Community for sustainable actions for conserving habitat of Ganges River Dolphin along Ganga River Basin' is in its Phase II.

As part of the school component, CEE North is working on 20 locations in Ganga Basin covering 10 locations each in Uttar Pradesh and Bihar; under community initiative, CEE North is working with five villages each at Bahraich and Bettiah in the two states.

School Interventions: For interventions in schools, CEE team selected 20 locations in Uttar Pradesh and Bihar based on the presence of the Ganges river dolphin in the river and the need for such a programme in the area. Overall 750 schools are covered under the programme.

Dolphin Cluster in Uttar Pradesh

Name of River	Location of Cluster	District	Schools
Ganga	Allahabad	Allahabad	40
	Hastinapur	Meerut	37
	Bijnore	Bijnore	35
	Kanpur	Kanpur	37
	Varanasi	Varanasi	36
Ghaghara	Jarwal	Bahraich	35
	Baundi	Bahraich	39
	Colonelganj	Gonda	58
Girwa/ Ghaghara	Katerniaghat	Bahraich	40
Saryu/ Ghaghara	Faizabad	Faizabad	32
	10 clusters	**Total**	**389**

Dolphin Cluster in Bihar

Name of River	Location of Cluster	District	Schools
Ganga	Patna	Patna	37
	Bhagalpur	Bhagalpur	33
	Begusarai	Begusarai	39
Gandak	Bettiah	West Champaran	37
	Bagaha	West Champaran	38
	Sangrampur & Pahadpur	East Champaran	30
	Paroo	Muzaffarpur	33
	Gopalganj	Gopalganj	27
Ghaghara & Ganga	Sonpur & Chhapra	Saran	38
Kosi	Supaul	Supaul	46
	10 clusters	**TOTAL**	**358**

Dolphin Outreach Event: An awareness and education event was organised by CEE North in Kanpur in collaboration with Kanpur Zoological Park in April 2017. The event focused on river conservation through raising awareness about the national symbol. Around 200 children from 22 schools of Kanpur participated in this school awareness event. Various competitions such as painting, rangoli, clay modelling and quiz were organised for the children on the theme of Save Ganga, Save River Dolphin' where the children expressed their thoughts and concerns.

A resource person from WWF India addressed the children and gave a talk on the Biodiversity of River Ganga with special focus on our National Aquatic animal. The Director of Kanpur Zoo, as Chief Guest of the event, encouraged the children to take small steps to conserve the biodiversity around them. A few teachers and students also shared how they have formed Dolphin Clubs in their schools and the various activities they take up to spread awareness in their school and community about the Ganga Dolphin, its threats and conservation.

Dolphin Cluster Awareness Programme: As part of the Dolphin programme, cluster level events were organised by school clusters in different locations in Uttar Pradesh and Bihar. The activities included dolphin awareness rally, nukkat natak, cycle rally, save Dolphin - save Ganga pledge campaign, etc. Dolphin schools, along with local NGO and other partners, organised dolphin awareness activities on

environment related days and on the occasion of river related festivals. The cluster level awareness programmes were held in all the dolphin locations including Kanpur, Jarwal, Katerniaghat, Mahsi in Bahraich, Varanasi, Allahabad, Meerut, Bijnore, Faizabad and Gonda in UP and Supaul, Begusarai, Bhagalpur, West Champaran, Gopalganj, Patna, East Champaran and Muzaffarpur, Bagaha and Saran in Bihar. In some of the dolphin awareness activities, essay writing, painting and quiz competitions were conducted. Exposure visits were organised for schools on the river banks and 'fun and learn' activities were conducted. More than 3000 children from Dolphin Clubs took part in this event where many of them have creatively expressed their thoughts about dolphins in the form of models, drawings, songs, poems, etc.

Dolphin Day Events: On the occasion of Dolphin Day, CEE, with support from the National Mission for Clean Ganga (NMCG), organised events at 20 locations where project schools participated in awareness rallies, slogan writing, essay writing, painting competitions and quiz. Students of Dolphin Clubs observed the day and also actively participated in the wildlife week programme. Students adopted different modes of communication to spread awareness amongst the masses. During the event community members, government officials, teachers and fishing communities were urged to come together for saving this beautiful animal and its home.

Development of IEC Material for Schools: As part of the dolphin initiative, CEE team developed awareness and classroom display material for schools. An environment calendar for the year 2017 focusing on the theme of the dolphin and its conservation were showcased to spread the message of positive action. A revised brochure was developed to inform project stakeholders about the interventions being carried out.

1.8 Urja Chetana

The Waste Management Group at CEE Kolkata is implementing the Urja Chetana programme since 2012 ,supported by Calcutta Electric Supply Corporation Limited (CESC Ltd.) as part of their CSR initiatives. Urja Chetana is an environmental sustainability education programme for generating awareness and action amongst students, teachers and the community about the environment and sustainable development. The programme is implemented in 30 schools in and around Kolkata through existing/to be formed eco-clubs/energy clubs. The programme

Awareness Rally on Clean Ganga

Exposure Visit at Banabitan Biodiversity Nature Park

provides a platform to the schools to undertake action projects through community outreach, helping children to share and expand their understanding, thereby bringing about change that has significantly reduced wastage of energy and rainwater, and helped manage waste and nurture plants.

The reporting period had numerous capacity building workshops on composting, waste paper recycling, product development, rain water harvesting and medicinal plant cum butterfly garden that benefitted students and teachers. This has helped them to implement and sustain best practices in schools. The teachers were sensitised on different facets of environment conservation and sustainability through a teacher training programme. From September 2017, the programme has initiated onsite sessions on project based learning for educators which have helped them to understand that environment can be linked to every subject and enabled them to design assignments that links environment to their subject. The sessions have engaged students by involving them in resource mapping. During the reporting period, various exposure trips to botanical garden, Indian museum and biodiversity park were organised to augment their classroom learning. Various competitions have enhanced the creative and lateral skills of the students. The schools celebrate the special environment days with the other members in the community. The school wall art by the students has helped to communicate key environmental messages not only to the students but to the nearby community at large, thereby promoting a healthy school environment and protecting the premises from any unsocial activity. The students disseminated the knowledge they gained under the programme to the nearby communities by conducting a series of community outreach and awareness campaigns, rallies, cleanup drives, tree plantation with senior citizens, etc.

The capacity building of the students and teachers has helped schools to implement the best practices (e.g. composting, waste paper recycling, rainwater harvesting and nurturing medicinal plants) to improve and sustain their school environment. Around 614.3 kg of organic waste was composted; 177 kg of waste paper recycled into handmade paper and then converted into useful products by students; and around 12,719,52.921 litre of rain water was harvested by the schools in the reporting period under the project.

A 'Save Energy Championship Trophy' was initiated for the first time to encourage young students to avoid getting glued to

television/smartphones/electronic gadgets and come out to play outdoor games. The football (boys) match and kabaddi (girls) match resulted in a reduction of energy consumption and carbon emission. For visibility and outreach of the initiatives, an exhibition stall was put up at the Annual Flower Show at the Agri Horticultural Society of India, Kolkata. The stall had informative standees, students' photo gallery displaying actions, and compost and handmade paper product samples on display, along with a campaign banner for signatures and a book for visitors' feedback. The eco-club students, teachers and CESC volunteers interacted with the visitors, providing insights about the environment sustainability education programme.

Under the theme of traditions and culture, schools celebrated Saraswati Puja in an eco-friendly manner with an emphasis on reducing plastic usage and adopting natural and alternative ways to celebrate puja without polluting the environment.

The project has been able to directly benefit 202 teachers, 16529 students and 55,856 community members during the reporting period. The project has also won the Certificate of Appreciation by Earth Day Network's 'Shaher Green Karo Campaign' in India, 2017, in recognition of the project's efforts to make Kolkata a greener city.

Save Energy Championship Trophy (Girls)

Save Energy Championship Trophy Finals (Boys)

Urja Chetana Exhibition at Annual Flower Show 2017

1.9 Learning Non-Violence Programme: Developing a Gandhian Pedagogy

CEE and the Sabarmati Ashram Preservation and Memorial Trust (SAPMT) collaboratively launched a three-year Learning Non-Violence (LNV) programme on October 2, 2016. The programme aims to

create partnerships around the world in order to design, test and implement a pedagogy to develop critical competencies for non-violence behaviours based on Gandhian thought and launch it on the occasion of the 150th birth anniversary of Mahatma Gandhi on October 2, 2019.

The pilot programme called the 'Ahmedabad Experiment' was initiated in October 2016 in three selected schools of Ahmedabad. CEE professionals designed and developed 25 activities in an action research mode, to support the development of nine non-violent competencies among children. About 12 of these activities were field tested by CEE faculty.

Based on the learnings of the pilot programme, during the academic year 2017-18, the activity book was translated from English to Gujarati. A team of teachers from six schools in Ahmedabad were oriented to the programme so that the activities could be tested in the classroom. Teachers provided critical feedback to further improve these activities during monthly meetings.

Given the experience and learning of the first phase, the second phase of the programme was initiated in November 2017 with the aim of validating and strengthening the designed activities in varied socio-cultural political contexts and envisioning and further developing the concept of a non-violent school.

During this period, the Canadian Prime Minister Justin Trudeau launched the Global Gandhi Peace Programme on his visit to the Sabarmati Ashram on February 19, 2018, by which the Learning Non-Violence programme links Ahmedabad school children with school children in Canada. This pilot programme established a partnership between St. Kabir School, Naranpura, Ahmedabad, and Father Fenelon Catholic School in Pickering, Ontario. The project aims to come out with a pedagogy for schools across the world to promote non-violence.

To report updates on the programme, a website has been created: http://www.handprint.in/lnv/

This programme is being currently offered in English and Gujarati.

1.10 CEE Ka Bioscope (CKB)

CEE ka Bioscope is an ICT enabled programme designed to provide interactive and fun-filled learning for school children. The activities of the programme help students in integrating their learning in Environmental Studies, Science as well as Social Sciences. In its ninth year, CKB programme has reached out to more than 300 students of grades 7 to 9. Two different modules, viz., Population and Development for grade 9, and Sustainable Agriculture for grade 8 were dealt with during the year. A wide number of topics including water, soil and crops, earth, climate change, carbon footprint and weather were covered for grade 7.

Various teaching-learning methods and tools were used as part of the programme, including PowerPoint presentations, global positioning system (GPS), Google Earth, MS Office, group discussions, nature camp and field visits among others. Students also had an opportunity to interact with experts and government officials of the Agricultural Produce Market Committee (APMC), the Waste Water Treatment Plant, and the Census Department, Gandhinagar. Educational tours to CEE's campsite at Bakore and Beyt Dwarka, and Sundarvan: A Nature Discovery Centre in Ahmedabad, were organised as part of the programme. Students were introduced to the local biodiversity, culture and lifestyles of the local community on these trips. An overnight trip was organised to Lokbharti for the students to understand sustainable agricultural practices, technology and research work happening in the field of agriculture.

As part of evaluation process, students of grades 8 and 9 undertook group projects and presented their study to the class.

1.11 Environment Service Scheme (ESS) Maharashtra

The Environment Service Scheme (ESS) is a programme of the Department of Environment, Government of Maharashtra, to create hands-on experiential learning in environmental conservation amongst school students. CEE is designated as the nodal agency to implement the scheme. Sixty schools from 12 districts are currently part of the programme.

The theme for this year was 'preparation of nursery in school campus'. To promote this, CEE conducted teacher trainings and exposure visits for students to learn about seed collection, treatment, preparation of saplings and maintenance. Fifty three schools prepared nurseries in their campus

and raised around 14000 saplings of local varieties. The saplings were distributed to local organisations and households for plantation.

CEE also facilitated place-based learnings about local issues related to soil, water, biodiversity, energy, waste management, etc. by guiding schools to prepare an environmental status of their village and school, and formulate need based action projects with participation from the local community. Projects included soil and water conservation, school vegetable and herb garden, promotion of organic farming, composting, use of biogas, energy plantations, eco-san, Integrated Pest Management (IPM) and Integrated Noise Module(INM), safe treatment and re-use of wastewater, solid waste management, school water and sanitation improvements, and others.

As part of the review of ESS by the Environment Minister, Government of Maharashtra, CEE presented the highlights of the ESS activities of the last seven years. It was noted that CEE had facilitated a variety of hands-on thematic activities for schools

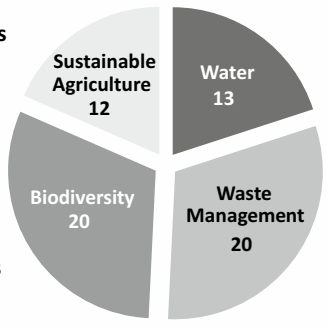
Learning about composting techniques as part of ESS

Students conducting water quality testing as part of ESS

across Maharashtra which led to positive impacts related to ground water recharge; water quality improvement; watershed knowledge; waste segregation; use of cloth and paper bags; local biodiversity conservation; preparation of Peoples Biodiversity Registers; soil conservation and improvement; energy conservation; improved cook stove usage; eco-friendly festival celebrations; use of natural colours, etc.

A significant achievement noted by the Minister was that CEE had conducted around 146 non-residential camps under nine different themes. Camping was very popular with the schools.

Different types of hands on activities designed and facilitated by CEE for ESS learning outcomes under various themes



1.12 Strengthening Environment Education in Junior Colleges of Panvel

CEE has initiated a project to strengthen environmental education in the junior colleges of Panvel, supported by Mumbai Metropolitan Region – Environment Improvement Society (MMR-EIS). Through project-based learning and action approaches, the project aims to enhance the effectiveness and quality of environmental education in Stds. XI and XII of the Mumbai Metropolitan Region and enable youths to take up locale-specific environmental studies and citizen action projects.

Students from A. D. Mhatre Junior College, Panvel conducting biodiversity survey

As part of the project, the existing teaching and evaluation of environmental education in 26 junior colleges in Panvel were surveyed. The challenges reported by teachers in the teaching of EE, and their views on how to strengthen and develop better EE implementation techniques were elicited through the survey. The content of the EE textbooks for the higher secondary level was correlated with the Environment Status Report (ESR report 2014-15) and City Sanitation Plan (CSP 2014) of Panvel. The report of the analysis would help to develop locally relevant student action projects. CEE has also held consultations with parents, teachers, students and local non-government organisations to identify some local environmental issues. The scope for involving students and citizens has also been discussed.

1.13 Swach Bharat Swach Vidyalaya WASH Initiative in Pune, Jaipur and Vallabhgarh

In partnership with the Lady Bamford Charitable Trust (LBCT), CEE is working with 30 schools from Pune (Maharashtra), Jaipur (Rajasthan) and Vallabhgarh (Haryana) to improve their water, sanitation and hygiene conditions. The project was initiated in 2015.

During this year, CEE worked with the team of educators from the Trust to prepare a report documenting the baseline

Sapling preparation

Understanding of Food Chain

conditions of the 30 schools. Further, a variety of IEC materials have been developed and capacity building workshops on water and sanitation conducted for educators and staff from the schools and the Trust. CEE organised a special summer workshop with the theme of 'Seed to Tree' to enable students to identify quality seeds and learn nursery raising techniques. A case study document was developed with LBCT staff and teachers followed by a SBSV Bal Anand Mela in Pune. A special conference was also organised on Environment Education and Education for Sustainable Development learning competencies.

1.14 Health, Hygiene and Sanitation for Government Schools in Goa

As part of the CSR activities of Zuari Chemical Industry, Vasco in Goa, the CEE Goa office designed and implemented teacher training and student orientation programmes on health, hygiene, sanitation and waste management. CEE developed and disseminated several posters on this theme. Five teachers and ten students were imparted intensive training to further take up several such related activities in their schools. The initiative was also appreciated by the State Education Department.

1.15 School Eco Club Action Project

CEE Kolkata, in collaboration with the US Consulate General of Kolkata, implemented a bi-state level programme - School Eco Club Action (SECA) - focusing on developing and strengthening the capacity building of the eco-clubs of 20 schools in Kolkata and Patna. The project also aims to develop a cadre of Young Leaders of Change (YLC), who were trained and supported to implement innovative action oriented environment and development projects in their school or neighborhood.

The programme was formally launched by Mr. Craig Hall, Consular General of the American Consulate, in January, 2017. CEE team was involved in the formation and restructuring of eco- clubs of the participating schools along with conducting capacity building of the students through classroom sessions and beyond-school activities. A massive community outreach was conducted for the Clean Ganga campaign by one of the participating schools as part of the 'beyond school' initiative. A two-day YLC Summit was organised for schools of Kolkata and Patna with the objective of training the

shortlisted project teams on different facets of leadership, sustainability, environment and development. The idea was to help them streamline their envisaged environmental action projects to be implemented in their schools/immediate neighborhood over the next few months.

Nearly 12 theme based action projects were taken up and implemented by students from Kolkata (10) and Patna (2). About 4160 students and 40 teachers from Kolkata and 1625 students and 10 teachers from Patna have benefitted from numerous classroom sessions conducted by the CEE team. Two exposure trips were conducted to augment the students' learning on environmental topics. Almost 23 teachers and 62 students (directly) and 115 teachers and 217 students (indirectly) have benefitted from the educational exposure visits. About 30 teachers have been trained through Teachers' Training Programme on various aspects of environment and sustainable development. The community outreach programmes have helped in reaching out to 647 community members. A poster with 28 environmental messages and a set of four posters were developed as IEC during the period. A web based interactive portal has been designed, which is dynamic and enables students to explore ideas, write, share and learn about their environment. An annual event was organised to felicitate the young leaders and their mentors, encouraging them to share their reflections on the journey and motivating them to continue their efforts to save the environment. A documentary showcasing the achievements and key takeaways (while implementing thematic action projects) of the young leaders has been made.

The YouTube link for viewing the documentary is

https://www.youtube.com/watch?v=k_5zS8hFIFU .

1.15.1 School Eco Club Action (SECA) Project in Patna

CEE implemented the SECA project to develop confidence and build the skills and abilities of students by grooming their leadership qualities, so as to understand the critical role of students in motivating their own school, neighbourhood and the larger society to bring about change,.

The project was focused on action oriented activities on the themes of waste management, recycling, greening & biodiversity, natural resource conservation, renewable energy and traditional knowledge, towards environmental conservation and protection. The students

and schools were oriented and facilitated towards their contribution to reduce carbon footprints through inculcating the habit of recycling, greenery development and rainwater harvesting.

An orientation programme and expert talks were conducted in the schools to help students develop an insight into the current environmental issues, and to motivate the Young Leaders to identify local environmental issues and develop action based operational models/projects on the project themes in the school/community. The project was also focused on building the capacity of teachers to impart Environment and Sustainability Education and establishing a linkage between the school and community through community based campaigns taken up by the schools under the project. Two action projects (of Patna Collegiate and K.B. Sahay School) were shortlisted from the five schools and assistance provided to implement them.

Activities undertaken as part of the project during April 2017–December 2017 are described below.

Review and Mentoring Workshop on Action Projects: To review and mentor the selected YLC action projects of Patna District, an awareness cum review workshop was organised at Patna Zoo in April 2017. Around 55 students and teachers participated in this and their action projects were discussed with the YLC students in the presence of the eco-club team and the teacher in charge. During the workshop, the Director of Patna Zoo and the US Consulate Kolkata mentored their action ideas. This was followed by visits and regular calls by the project team to guide the YLC students in implementing their action projects.

Students developed posters on the environmental issues which they encounter in their daily life and with possible solutions. Students presented their ideas school wise. Post event, eco-club students were regularly guided on the action projects. CEE team was in regular touch with the teachers to help them conduct school level activities.

World Environment Day (WED) 2017: To observe the day, CEE North organised an awareness programme for the schools of SECA project, Patna, in collaboration with Sanjay Gandhi Zoological Garden, Patna. Around 60 students from five schools participated in the programme. Prior to the competition, the participants were briefed on the SECA programme and the WED theme "Connecting People with Nature".

Briefing to students at Rajkiya Balika, Sr. Secondary School, Patna

Briefing to students about the WED and SECA program

The students took part in painting and essay writing competitions on the WED theme. Students poured their imagination and thoughts on paper touching every aspect of day to day life that is connected with nature. They visualised the past and future and how individual actions can bring desired changes in the current environmental situation by adopting anenvironment friendly behaviour.

Expert Talk on the theme 'Connecting People with Nature': In an expert talk on the theme, the Regional Director, Zoological Survey of India, Patna Region, spoke on the current environmental issues and how individual actions can improve the situation. Students interacted with the expert on various environmental issues raised questions. Expert talks were also conducted in other schools as well on other environmental days and occasions.

Implementation of Action Projects: Young Leaders for Change of both the shortlisted schools (Patna Collegiate and K.B. Sahay Sr. Secondary School) initiated their finalised plan in the campus and surrounding areas, and have completed an environmental audit of their campus and compiled a report based on it.

In Patna Collegiate, YLC students encouraged their peers to use the left over water in their bottles after school hours to water the plants. K.B. Sahay Sr. Secondary School has worked towards greening and better sanitation in their school as they face water logging issues in their campus. They have also repaired the leaking taps in the school. Both the schools addressed littering and waste management in their campus, with the eco-club members making dustbins for their classrooms by using waste cartons.

Other schools like Lokeswari Girls School worked on waste management as the school is situated in the market area. Students organised rallies and Padyatras with slogans and messages and also developed dustbins using waste cartons. Govt. Girls Sr. Secondary School, Shastrinagar, worked on sanitation and water conservation issues and on greening of the campus.

Setting up Biodiversity Garden: Under the YLC activities at K.B. Sahay Sr. Secondary School, YLC leaders carried out plantation activity in September 2017 under the supervision of the teacher in charge and CEE representative. The YLC leaders involved all the club members, students from different classes and teaching staff in this.

To promote and conserve the biodiversity, students planted various local varieties of saplings to improve the conservation of butterflies, birds, beneficial insects as well

as plant biodiversity. Around 30 saplings of fruit, ornamental and flowering plants were planted by the students which include Mango, Litchi, Guava, Lemon tree, Cherry berry, Guldaudi, Ashok, Gulmohar, etc. Prior to the plantation, students were briefed about the importance of plant diversity and techniques of plantation, and also assigned roles and responsibilities to club members for nurturing the plants.

Dustbin Making Competition: A dustbin making competition was organized at K.B. Sahay Sr. Secondary School, in September 2017 by involving the eco-club members and students of different classes. Students also drafted and developed informative signage for display on the campus walls, with information on protecting the environment and conserving the natural resources. The objective of the dustbin making competition was to motivate and sensitise the students to adopt habits of cleanliness and use of dustbins for disposing the waste generated in their class rooms. Students used waste carton boxes for this and decorated them with chart papers, sketch pens and crayons. They also wrote messages and slogans with positive thoughts and behaviours on their dustbins. The winning team members were encouraged and appreciated during the assembly by the Principal.

Outreach events – Rally and Padyatra: The outreach event - rally and padyatra - was organised by the eco-club members and YLC team leaders of all the schools to convey the messages to the nearby community members in the market and residential areas. Students prepared placards with messages related to conserving the environment, planting trees, minimising wastage, recycling and reusing. During the rally, students interacted with the shopkeepers and residents for maintaining the cleanliness and hygiene in the locality and surrounding area. Increased level of noise due to vehicle and heavy traffic around the school campus was also addressed as students talked to the auto and tempo drivers who use blow horns and requested them to use the horn only when required.

Essay Writing Competition: An essay writing competition was organised involving the students of all the classes, on the theme of 'Swacchata – Whose Responsibility?' Students, in their essays, accepted that it is each one's responsibility to keep surroundings clean. They highlighted the major issues related to Swacchata such as generating huge a quantity of waste. They analysed this further as increased use of packaged items, poly bags, and use and throw practices in day to day life. They also shared their thoughts on practical solutions to waste related problems that they encountered in their daily life and stressed on the need for awareness in the society and individual action to bring about desired changes.

School Competition: An inter school competition in dustbin making was organised involving three schools situated in same locality in Patna, in which students enthusiastically participated, preparing dustbins of various designs and shapes,

decorated with colours and inspirational messages. Experts judged the entries and prizes were given to the winners.

Annual Felicitation Event: Two YLC students were selected along with their teachers from Patna Collegiate and K.B. Sahay School who represented their school during the felicitation event organised at Kolkata by CEE Kolkata in October 2017. Students presented their action projects during the ceremony, interacted with other teachers and students from Kolkata and shared their experiences.

1.16 Child Friendly Schools and Systems (CFSS) Project in Vaishali Bihar

Swachh Vidyalaya - Swasth Vidyalaya Initiative

Provision of quality education along with safe drinking water and sanitation facilities have been broadly envisaged in the Constitution under Article 21-A: "free and compulsory education of all children in the age group of six to fourteen years as a Fundamental Right", and specifically notified in the RTE Act, 2009. In Bihar, CEE has partnered with UNICEF and Bihar Education Project Council (BEPC) to promote Child Friendly Schools and Systems (CFSS) in 100 schools of Vaishali District, Bihar. This initiative focuses on demonstration of *'Swachh Vidyalaya - Swasth Vidyalaya'* education, ensuring a set of functional and well maintained water, sanitation and hygiene facilities along with improvement in the school's overall

CEE team facilitating discussion with School Management Committee members at Vaishali under CFSS project supported by UNICEF

teaching learning environment, thereby making the school environment a 'child friendly learning space'.

Child friendly schools and systems covers child friendly quality education system, activity based learning, proper function of SMC, MTA, Child Cabinet, Meena Manch with clean and green environment of school, proper sanitation and hygiene (WASH) practices by students and safe and nutritious MDM. School sanitation and hygiene depend on a process of capacity enhancement of teachers, community members, SMCs, Non-Governmental

Students taking part in interactive activity at school, CFSS project

Organisations (NGOs) and Community Based Organisations (CBOs), and education administrators. A key feature of this 20 month long campaign is to ensure that these 100 schools are developed into a *'Swachh Vidyalaya¬-Swasth Vidyalaya'* campus. It is also envisaged that a similar model will be established in all the districts of Bihar with the help of BEPC based on the inputs from UNICEF and CEE's work in Vaishali.

The programme is a 20 month initiative starting in October 2015; the activities conducted till June 2017are given below.

Portable hand washing unit in school CFSS project

Creating Enabling Learning Environment: Enabling learning environment could be created for children by using various tools and methodologies, but it is important to promote child focused teaching-learning activities and materials for making learning fun in school and in the classroom. A menu has been developed by CEE team of possible elements which could be included in the school learning environment.

Art Integrated Learning (AIL): For promotion of an enabling learning environment in schools, art integrated learning was introduced as one of the approaches in the CFSS schools covering on an average 600 students. During the AIL activities which is a half day exercise, children prepare paintings, take part in 'Tree of Hope' exercise, involve themselves in preparing Kala Adhigam Kona in their classrooms and decorate the konas.

Library Setup and Activation: This was carried out in 40 schools where students consisting of Bal Sansad and Meena Manch members were involved in the entire process. Various activities were conducted during library activation.

IEC Wall Painting and Distribution of Library Books: As part of the 'joy of learning' classroom, wall paintings were executed in other parts of the campus in 41 Schools. Fifty two schools were also provided with a set of books each for their library based on their need and scope of adding more books. In all, 1151 books were distributed to schools.

Augmentation of Hand washing Units: The purpose of a hand washing (HW) station is to create infrastructure in the school to encourage cleaning of hands before and after mid-day meal and after using toilets among students, and to help them learn and adopt it as their daily habit. Hand washing helps reduce diseases in children caused by germs and bacteria. The process adopted for installation of hand washing stations was: visit and survey of school, meeting with SMC, preparation of a plan for the school with estimated budget, approval from SMC and installation of HW Station. In all, 100 hand washing units are to be provided in schools, for which the design has been approved. Fifty seven fixed units had been installed in previous year, while the remaining schools have been provided with 38 portable units.

End Term Survey: An end term survey was conducted to obtain a snap shot of the project intervention in schools. The survey attenpted to cover various aspects such as the present status of WASH elements in the project intervention schools, the status of hygiene and sanitation in schools, functionalities of Meena Manch and Bal Sansad, functionalities of SMC, present status of teaching learning methodologies and environment status of the school. The end term survey covered all the 100 schools.

District level sharing meeting: A district level sharing meeting for different stakeholders of the district education department was organised in May 2017 at DIET, Vaishali. The objective of this sharing meeting was to present the findings of the end-term survey conducted in the 100 schools to the BRPs and CRCs. The meeting also sought to share the success stories, case studies, the interventions done and challenges faced during the implementation of the 'Swachh Vidyalaya-Swasth Vidyalaya' initiative. More than 45 district and block level officials attended this meeting. An activity review meeting was also held between the CEE and UNICEF teams.

Film on CFSS Initiative: To capture the impact of the programme and the process adopted in the making of a CFSS school, a short bilingual film has been developed showcasing model CFSS schools. The film has been edited and finalised for sharing with the UNICEF team and on other platforms.

Submission of Final Project Report: As the project was completed in June 2017, a report detailing the interventions executed from September 2015 till the end of the project has been prepared, wich documents activity wise summary of the work done and the outcomes along with photo documentation. A profile of the 100 school with details of the activities conducted in each is also part of the report.

1.17 Mari Shala - CEE Field Office, Halvad

(A Joint initiative of Reach to Teach and CEE Ahmedabad for Quality Education with the Department of Education, Govt. of Gujarat)

Mari Shala – a joint initiative of Reach to Teach and CEE for quality education with the Department of Education, Government of Gujarat - is a flagship project of Reach to Teach (R2T) under its Education and Community Programme (ECP) started in April 2015 in partnership with CEE. The ECP strengthens community and school partnerships to ensure that children receive the best quality education, maximising their future opportunities.

The first phase of the project covered 30 government primary schools and communities of Halvad Block. In the second phase of the project beginning April 2016, 30 more schools were added, making it 60 government schools.

Project Objectives: The Mari Shala project works collaboratively with communities and schools to support enrolment, encourage attendance, improve teaching and learning quality and overall pupil learning outcomes. The project envisages the following sub objectives:

- Promote high quality teaching and learning practices that feed through to improve education outcomes
- Ensure children of school going age attend classes regularly
- Support professional development of government teachers and leadership development of head teachers
- Help parents and communities understand the importance of regular attendance in improving children's learning outcomes and build community ownership of the attendance programme

The project is being implemented in 60 selected schools based on specified criteria that include shortage of teachers and low Gunostav grading. (Gunotsav is an accountability framework for quality of primary education which includes learning outcomes of children as well as co-scholastic activities, use of resources and community participation in government schools of Gujarat).

Key Outcomes: In 2017-18, the project interventions were focussed on classes 3 and 4. The graphs below show the progress during the year. An average of around 26% to 30% of class 3 and 4, were seen reaching their age-appropriate levels in Maths and Language respectively.

The paired professional development opportunity through this project has positively helped in reforming and transforming the attitudes, knowledge, skills and behaviours of most of the teachers with whom the project team has been working. Feedback and suggestions from head teachers and government teachers on co-teaching and the formal

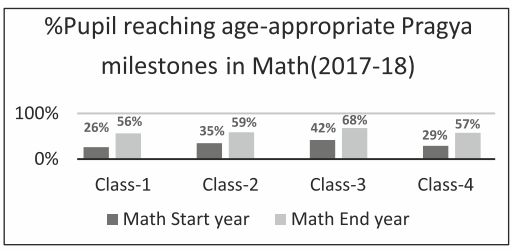


Fig-1 Average age-appropriate levels in Maths

training sessions were helpful in ensuring complete involvement of the teaching staff in enhancing their professional practice. However, the project does not intend to evaluate these improvements formally.

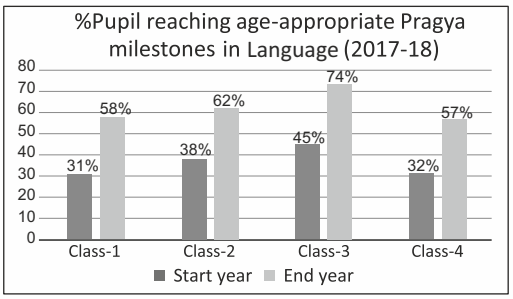


Fig 2. Average age-appropriate levels in Language

1.18 Gramshiksha

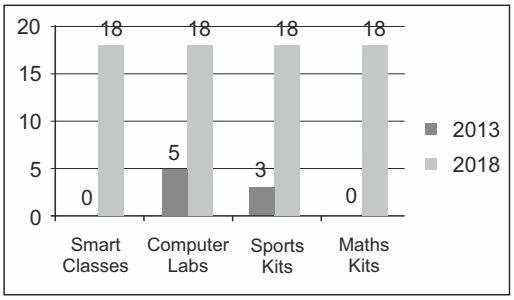
Gramshiksha project focuses on the education and holistic development in schools and communities in 15 villages surrounding the refinery???, touching all ages between 6-35 years through multiple interventions. CEE Ahmedabad partnered with Essar Oil Ltd. and initiated the Project Gramshiksha in 2016. Over the years, Gramshiksha has been carrying out multiple interventions in Primary as well as Secondary Education.

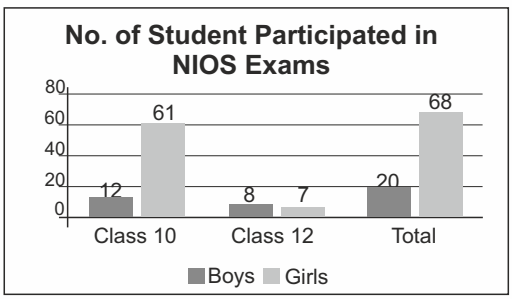
Aims and Objectives: The ultimate goal of Project Gramshiksha is to prepare a model of 'Literate Village' where literacy does not only mean the formal education, but beyond that as well. Project Gramshiksha's major objectives were envisaged in a broad lifelong learning perspective that aims at empowering people to realise their right to education, fulfil their personal expectations for a decent, healthy life and work, and contribute to the achievement of their societies' socio-economic development objectives. The following objectives were applied to guide the agenda:

- Ensure that all children of 6-14 years of age complete elementary education leading to relevant learning outcomes.
- Ensure that all youth dropouts of 15-25 years of age complete secondary education.
- Ensure that all adults of 26-35 years and beyond achieve functional literacy and numeracy.
- Build and upgrade education infrastructure and resources that provide inclusive and effective learning environments for all.

Outreach and Project Impact: Through the support and efforts of stakeholders, the project has been able to create an everlasting change in the lives of 4000+ children and of 2000+ youth and community members. The project has improved the infrastructure by investing in Sanitation, Drinking Water, and ICT based and Computer Aided Learning.

The child centric experiential learning approaches have ensured that children's voices are heard while organising events like Bharat Ek Khoj, exposure visits to marine life, celebrating World Environment Day, summer camps, campings, Anand Melas, etc. The impact of the project is reflected in the improvement of Gunotsav Grade of the schools in 2017 as compared to 2016. At the community level,





the National Institute of Open Schooling (NIOS) and Adult Literacy Centres are transforming the lives of the people.

The project has had a positive impact on the reach out and acceptance within the community and hence it was decided to incorporate Essar oil's other flagship programmes like Shala Praveshotsav and scholarship. The scope of the project broadened to increase the girl child enrollment at the primary level as well as to promote higher education of the girl child by incorporating Shala Praveshotsav and scholarship in the second year (FY 2017-18). By the end of the March 2018, the project has reached out to more than 10,000 beneficiaries. The project has brought educators together to collectively contribute to a cause that they feel passionate about. The programme supports diverse activities covering the entire school as well as the community in providing quality education to the backward children. Project Gramshiksha has become a bridge between the school and the community and has been able to build lasting relationships at the community level.

School Level Impact: The positive impacts of the project obtained through targeted interventions in schools is visible in the improvement of the Gunotsav Grades of 2017, where 10 schools received Grade A as against only eight in 2016. Also, the improvement in grades is clearly visible in the areas of project interventions, viz., Sports, Activity & Baal Mela, Library and others. Some of the outreach is as follows:

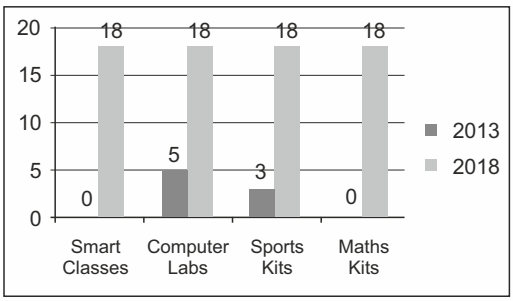


Figure 1

- Established smart classrooms and computer labs in 18 schools to support effective use of ICT for learning.
- More than 5000 government school students are engaged through Activity Based Learning in 18 villages on a regular basis.
- Around 1800 children from 18 schools were involved in the large-scale co-learning event - Bharat Ek Khoj 2018.

Village Level Impact:

- Eight centres of National Institute of Open Schooling (NIOS) were opened for dropouts between the ages of 15 to 25 years to enable them to complete secondary schooling.

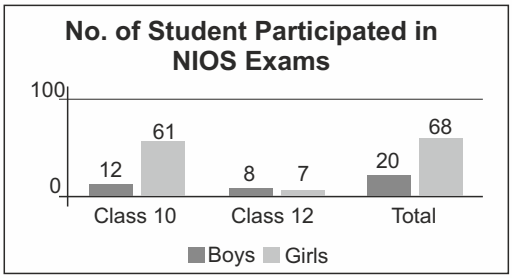


Figure 2

- A total of 88 students appeared for the board exams: 73 (12 boys and 61 girls) appeared for 10th class board exams and 15 (8 boys and 7 girls) appeared for 12th class exams.
- Four Adult Literacy Centres (ALCs) for youth between the ages of 26 and 35 years were opened, through which 70 youths were enabled to achieve functional and operational basic literacy and numeracy.
- Community libraries were established in five villages.
- Strengthening SMCs and PRIs towards School Governance: 66 SMCs and PRIs of seven villages were oriented on Right to Education (RTE) provisions, School Development Plans (SDP) and their roles and responsibilities.

1.19 Green Teacher Diploma in Environment Education – Pune Study Centre

CEE and Commonwealth of Learning (COL), Vancouver, Canada, have established the Green Teacher Diploma in Environmental Education, a one-year distance learning diploma course in Environmental Education for in-service teachers and educators. CEE Central Regional Cell, Pune is a study centre for this course.

During this year, the Pune study centre enrolled nine participants from schools in urban and peri-urban areas. The course has been customised to focus on urban themes. In the first contact session, the participants were oriented to key concepts in ecology, and approaches and tools for environmental education and education for sustainable development. Orientation methods included field visits, surveys and audits on biodiversity, waste management, transportation, water, energy, climate change and ecology. This enabled hands-on learning experience and appreciating project and place-based learning transactions and impacts. Participants were encouraged to use these approaches in environment education in their schools. The course will orient participants to project-based learning over the next few months.

Higher Education and Youth

2.1 Journal of Education for Sustainable Development (JESD)

JESD is a peer reviewed international academic journal published by SAGE, which is being managed and edited by CEE Australia since 2012. It provides a platform for presenting research, debating ideas and showcasing success stories in the emergent field of ESD.

During the current year, two issues – 11.1 and 11.2 – were brought out as per schedule.

2.2 Regional Centres of Expertise (RCEs)

2.2.1 RCE Lucknow

CEE North, in partnership with eight organisations, has established an RCE network on ESD in Lucknow, with the key areas of focus on biodiversity conservation and school education programmes. The target groups for these activities are students, teachers, NGOs, communities, youth, etc. CEE North, as the nodal point for RCE Lucknow, initiated the following ESD activities with its RCE partners.

- School events based on various environment related themes were organised with students and teachers from various schools of Lucknow participating.
- Biodiversity focused ESD initiatives were carried out in Uttar Pradesh with the help of formal education institutions such as the University of Lucknow and non-formal education institutions like the UP State Biodiversity Board, Education and Forest Departments, schools, scientific institution, Lucknow Zoo, etc.
- CEE North hosted interns from the University of Lucknow who worked on various ongoing programmes.
- A session on Environmental Education was conducted for students of the diploma programme in Wildlife Sciences of the University of Lucknow. As part of RCE Lucknow activities, CEE developed a two-day module for conducting sessions on EE, covering the need and scope, target audience and techniques. Various classroom and outdoor sessions were held during the module.

Interaction with RCE Western Sydney: A two member faculty team from RCE Western Sydney visited Lucknow in September to discuss a project to visit locations where biodiversity focused programmes are being taken up with the indigenous community. The team met with RCE partners, and visited Suhelwa Sanctuary and met members of the Tharu tribe. The team also visited a Paryavaran Mitra school in Lucknow and interacted with the students. After discussions, a study visit of students from Western Sydney University has been finalised and planned for the coming year.

2.2.2 RCE Srinagar Activities

Asia-Pacific Regional Workshop on ESD

RCE Srinagar participated in the Asia Pacific Regional Workshop on The Global Action Program (GAP) on Education for Sustainable Development and Cities which was held in New Delhi, India from November 28-30, 2017, in partnership with the Ministry of Human Resource Development (MHRD), Government of India. More than 50 resource persons/experts and city representatives participated in the workshop. The workshop helped to identify key opportunities for regional cooperation and introduced and promoted policy and action plans. It facilitated the sharing of good practices and policies in urban contexts relevant for the region and also provided an opportunity for relevant local stakeholders to develop new partnerships and initiate regional cities networks.

The 9th Tongyeong ESD International Forum 'Sejahtera Forest for All', 2017

The 'Tongyeong Education Foundation for Sustainable Development' and RCE Tongyeong invited Dr. Abdhesh Kumar Gangwar, Programme Director, CEE, as a key note speaker, to deliver a talk on DRR preparedness, role of youth, and local governance at the 9th Tongyeong ESD International Forum 'Sejahtera Forest for All on December 12-13, 2017, at Tongyeong, Republic of Korea. Dr. Gangwar shared his experiences with DRR preparedness, reviewed the role of Sejahtera Forests as an ESD platform and shared his thoughts on how to make a better society through ESD and strengthen the RCE network for ESD in the Asia Pacific region including possibilities of collaboration amongst RCEs of India as well as Asia Pacific.

CEE and RCE Srinagar have been actively involved in creating awareness about the environment and sustainable development through formal and informal learning with curriculum based activities. RCE Srinagar is working to promote joyful method of teaching and learning in 2500 schools of Baramulla District, Jammu and Kashmir and 50 schools of Uttarkashi District, Uttarakhand, focusing on the issues of disaster risk reduction, climate change and sustainable mountain development. CEE Himalaya and RCE Srinagar have also constructed eight sustainable model schools named *Anandshalas* (Joyful School) in Uri tehsil of Baramulla District, post Kashmir Earthquake 2005. These schools enrich education by linking classroom teaching with the outside environment. Students are involved in different activities - gardening, bird watching, flora and fauna species identification, eco-camps and yoga, apart from the regular school curriculum. In addition to this, CEE India and RCE Srinagar have been contributing towards Education for Sustainable Development (ESD) by organising international and national workshops, ESD forums, programmes and other activities.

Workshop on 'Writing Research Proposals, Papers and Grant Applications for Social Science Faculty and Researchers'

The Department of Economics, University of Jammu, RCE Jammu and RCE Srinagar jointly organised a one-week training workshop on Writing Research Proposals, Papers and Grant Applications for Social science Faculty and Researchers in which nineteen young researchers participated

Reorienting School Education for Tribals in Jammu and Kashmir, India: A Consultation Workshop

CEE Himalaya participated in a one-day consultation workshop on 'Reorienting School Education for the Tribals in Jammu and Kashmir', organised by the Department of Economics, University of Jammu in collaboration with RCE Jammu. Mr. Balbir Ratan, Vice Chairman, Jammu & Kashmir Scheduled Caste & Scheduled Tribes Development Corporation was the Chief Guest of the event. The other dignitaries who were part of the workshop included Dr. Kavita Suri, Director Department of Lifelong Learning; Dr. Abdhesh Kumar Gangwar, Regional Director, CEE and RCE Srinagar; Dr. C.M Seth, Director, CEET; Dr Javed Rahi, Chief Editor, J&K Academy of Arts, Culture and Language; Mr. R.L Gupta, Joint Secretary Jammu & Kashmir Board of School Education and Mr. S.M Sahni of J&K Indian National Trust for Art and Cultural Heritage (INTACH).

2.3 Courses Offered/Taught by CEE

2.3.1 UNESCO Chair on ESD and Sustainable Human Habitat

The UNESCO Chair completed four years of activities in 2017. Activities during the year included the Summer Winter School: Learning from Pols of Ahmedabad. A winter school programme was conducted in coordination with the Kingston School of Art, London, CEE and Mahila Housing Trust, Ahmedabad, during December 4-9, 2017. A group of 17 students and two faculties from Kingston School of Art, along with CEE and MHT representatives, conducted a local studio in the Dhal ni Pol area of Ahmedabad. The students conducted studies of the house typologies, public spaces and interactions of people that formed the cultural and social core of these living spaces. They further worked on a three-month studio at the Kingston School of Art; subsequently, their work has been compiled as a book which was shared with the community.

2.3.2 Streets for People – an Elective Course at CEPT University

The course developed as a part of the SUMNet initiative and the UNESCO Chair was offered during January 2 – March 27, 2018. Twenty eight students from Architecture, Planning, Urban Design, Technology and Urban Habitat areas of the CEPT University took the course, which involved interactive sessions, expert

lectures, and projects situated in the urban fabric of Ahmedabad city. The final presentations of the projects included suggestions for solutions and designs for two mobility corridors – a flyover near Ellis Bridge and the Ellis Bridge itself.

2.3.3 Courses Offered at Development Management Institute, Patna

CEE entered into an MoU with the Development Management Institute, Patna in 2016 to teach two courses of 40 hours each to students of the final year students of the Post Graduate Diploma in Development Management course. During 2017-18, one more course module on Urban Environment was added. The condensed modules conducted over a week included lecture-presentations, field visits, interactive discussions, assignments and projects. The courses were well received by the students and the institute.

CEE designed and conducted the course on 'Waste Management and Towards Circular Economy' for the final year students during February 5-9, 2018. The credit course facilitates students in learning about the management aspects of waste in urban centres and introduces them to the concept of circular economy in resource management. The course is a blend of classroom teaching, activities and discussions. It also exposes students to experiential and place based learning through field visits, interactions with practicing NGOs, Municipal Corporation and others.

The course module integrated circular economy concepts and urban and rural resilience for waste management. The course methodology consisted of classroom lectures, case studies, assignments, film and documentary screening, along with field visits to demonstrate the waste collection and management system prevalent in Patna. During the field visits, students interacted with all the stakeholders of the waste management chain which helped them gain useful insights. The student evaluation was carried out based on individual assignments, projects, group work, interaction in the classroom and end-term examination. Reema Banerjee (Waste Management initiatives) and Amar Karan (CEE Urban) conducted the course.

Education for Youth

3

3.1 South Asia Youth Environment Network (SAYEN)

SAYEN initiatives during the year focused on engaging youth in sustainability action on their campuses and in the community, and fostering new and strengthening on-going partnerships. SAYEN was recognised as the National Focal Point for the Young Reporters for the Environment (YRE) initiative of the Foundation for Environmental Education (FEE) in 2016, and conducted the Litter Less Campaign during the year. SAYEN Secretariat supported the youth events organised at the Indian Institute of Technology (IIT) Kharagpur, IIT Mumbai, IIT Roorkee, Birla Institute of Technology (BITS) Goa and SVIRM, Chennai, where guidelines on organising of events sustainably were shared with the institutes. CEE continues to receive interns and the SAYEN Secretariat facilitates the process of placement of interns within CEE.

3.1.1 SAYEN Internships

Throughout the year, around 120 interns and volunteers are placed in various offices of CEE to work on various thematic areas with the ongoing projects. They are involved in communication material development, research, survey, field work, campaigning and fundraising activities. As a part of the ongoing partnership arrangement with KURVE Wustrow, a peace-building organisation in Germany, CEE is hosting two volunteers during 2017-18.

3.1.2 Young Reporters for Environment – India

Young Reporters for the Environment (YRE) is a network of international youth engaged in Education for Sustainable Development, coordinated by the Foundation for Environmental Education (FEE). Young Reporters, aged between 11 and 21 in more than 25 countries, investigate environmental problems and issues and propose solutions through published investigative reporting, photographic and video journalism. Every year the best article (written in English), photograph and video in each age category are submitted to an international competition, following a national one. This year, the competition is focused on reporting about local environmental issues in the context of any of the 17 sustainable development goals. Students can select any one mode of creative - article, photo and video.

YRE Litter Less Campaign Teachers Training Workshop - April 2017: YRE Litter Less Campaign is an awareness campaign focusing on waste management issues, using Environmental Journalism as a skill for Youth, to explore their surroundings, identify problems and find solutions, and share them with the wider community through journalistic pieces: written reports, photographs or videos. The programme was implemented in 30 schools. The activities included an orientation and training of teachers, students' projects, and concluded with an

Award Ceremony in November 2017. The national winning entries were forwarded to the international jury for awards.

YRE Workshop in Lucknow: YRE as a pilot has been introduced in schools in India and Lucknow is one of the cities participating. A teachers' orientation cum training workshop was conducted by CEE in Lucknow in April 2017. Over 20 teachers from schools in Lucknow willing to be part of this competition attended the workshop. Teachers were briefed that YRE will enable participants to develop skills and expand their knowledge. Besides gaining a deeper understanding of sustainable development, the programme will enhance communication and citizenship skills, individual initiative, teamwork, critical analysis, social responsibility and leadership.

YRE Orientation in City Montessori School, Lucknow: An orientation session on YRE was conducted by CEE in March 2018 at City Montessori School in Lucknow, in which over 20 environment coordinators participated. Besides providing details of the competition, CEE team also shared information about CEE's ongoing EE programmes for schools.

3.2 Swachhagraha Youth

The Swachhagraha programme which, in the first year, focused on schools was extended to youth in the second year. Activities included youth consultations in Ahmedabad and Vadodara on the issue of littering and youth action ideas to deal with the issue; creative approaches to reach youth through festivals such as the Navratri and youth festivals in colleges; and development of an online learning module for youth trainees at the Adani ITI training institutes.

3.3 Interns at CEE Offices

Internships at Jaipur: Internship programmes for students/young entrepreneurs/innovators provides an opportunity to develop a cadre of professionals in the field of education for sustainable development (ESD), through capacity building of individuals, who in turn will infuse professionalism into the organisation they work with. CEE Rajasthan engaged two interns from Central University, Ajmer and Banasthali Vidhyapeeth to provide them an understanding of sustainable development under the Swachhagraha project.

Experiencing Nature

4

4.1 Sundarvan – A Nature Discovery Centre

Created in 1978, Sundarvan is recognised as a Mini Zoo by the Central Zoo Authority of India. It is popular for its snake rescue and snake awareness programmes.

Sundarvan received 81,102 visitors, including 34,225 (42.2%) children and 46,877 adults during the period. A total of 16021 students and 2107 teachers from 293 schools visited during this year.

Reptile Awareness Programmes were conducted for park visitors on every Sunday. It was carried out for 31 schools on other days, where about 2000 students and teachers participated. Sundarvan plays a very crucial role in sensitising and creating appreciation for wildlife, specially the lesser known species like snakes and other reptiles. These awareness programmes have directly led to considerable reduction in the killing of snakes by people, hence emphasising the conservation and wildlife educational role of this facility.

4.1.1 New Snake Enclosures

A pair of new snake houses with larger space to allow them free movement, and with due consideration for other factors such as safety of the animal keepers and enhancement of visitors's experience, were made during this period. The Indian Rat Snake and Russell's Viper are now kept in these enclosures.

4.1.2 Young Naturalists of Sundarvan

The annual membership programme for schools, 'Naturalists of Sundarvan', especially for students of classes 6 to 8 was continued this year too. This initiative aims to create a connection between the kids raised in an urban environment and their natural surroundings, through nurturing the innate curiosity within every child. Each programme is planned at a different location and is packed with hands-on learning modules, resource materials and immediate help of experts.

Fifty two young naturalists from St. Kabir School were enrolled for the academic year 2017-18. Apart from this, 15 students from Mahatma Gandhi International School, Ahmedabad, also participated with a special focus on birds, covering different activities such as introduction to the world of birds, food and feeding, breeding and bird watching field visits.

4.1.3 Riverside School Project

The Riverside School in Ahmedabad has carried out a student project with

Sundarvan during this year. The students of grade 6 visited the zoo and conducted a survey among the visitors to identify activities they could take up. Based on their findings and considering the feasibility of undertaking, they have installed wayside signage, zoo map and given a facelift to the main gate at Sundarvan. Students of grade 4 had created a butterfly garden at our facility a few years back. These projects provide students practical hands-on experience and also send a message to the community that they can contribute to such public places.

4.1.4 Special Day Events

National Wildlife Week is celebrated across the country during October 2-8 to create awareness among the general public and instill in them a curiosity and passion about the wildlife of India. This year, Sundarvan celebrated the week with a series of events, starting with two wildlife quiz programmes on October 3, 2017: one in the morning for school students and another in the evening open to all. The Quiz Master for the school quiz, Mr. Bhushan Patel designed different rounds that encouraged participants to learn more about the wildlife of India and the world. The open quiz in the evening was conducted by Mr. Kushan Patel, founder of Ahmedabad Quiz Club. He brought in many topic-appropriate questions designed in exciting rounds by which not only participants but also the audience got to learn some amazing facts on flora and fauna, popular personalities who contributed to wildlife conservation and more. JK Laxmi Cement extended their generous support to carry out these quiz programmes.

On October 6, a programme called 'CrOctober Friday' to talk about an important member of wildlife – the crocs – was organised. The event started with a general introduction to reptiles, followed by the features of the crocodile, its feeding habits, breeding, parental care, conservation issues, etc. Later, their favourite food - fish - was fed to these mighty beasts in the presence of the participants. The interactive talk generated a lot of curiosity which facilitated the audience to ask many questions and clarify their doubts on crocodiles. The evening ended with the screening of the documentary 'Here Be Dragons'.

The vivid colours of nature captured from different parts of Gujarat by one of our young volunteers Neel Panchal was exhibited for visitors from October 6-8. Mr. Ratilal Kansodaria, Principal, Sheth C. N. College of Fine Arts, Ahmedabad, inaugurated the event. Over 50 photographs of wildlife ranging from spiders to birds and mammals were exhibited on the occasion.

'Lets Talk about Photography', held on October 7, became a highly popular event. The programme was targeted towards photography enthusiasts with special interest in shooting wildlife. Mr Pavan Patel was the speaker of the day.

4.1.5 Other Educational Activities

Three different activities – 'Young Naturalists' for 8 to 12 year olds, 'Zoo Keeper for a day' for 10 to 15 year olds and 'Mom and Me' exploring the zoo for 4 to 7 year olds - were conducted during this summer. Over 100 children participated in these programmes. The winter programme with special focus on spiders attracted 175 kids who participated in batches. A significant attitude change towards the spider was found through the pre and post programme questionnaire survey.

Green birthday celebration for small children with various awareness activities were carried out for 13 children during this period. Around 300 people including children and adults participated in these birthdays. Discover Bat – a bat awareness programme consisting of a PowerPoint presentation, movie clippings, games, visit to the roost site (within Sundarvan campus) and observing bats feeding fruits - was conducted once for participants of mixed age group.

A bird watching trip to Pariej Wetland, Gujarat, was organised December 3. The participants, consisting both children and adults, showed a keen interest in observing the different birds in the wetland and noting down their names. CEE's bird chart titled 'Our Birds Our Friends' was distributed to all as a resource material to encourage bird watching

4.2 Nature Camping

4.2.1 Nature Camps at CEE Sites

CEE's nature camping programmes provide an opportunity to people of all ages to 'reconnect with nature' and experience its beauty and diversity, ranging from the high altitude camps in the Himalaya to the grasslands of Velavadar, from marine camps at Beyt Dwarka on the mouth of the Gulf of Kutch to mountain trekking and adventure camps at Mt. Abu and Kumbhalgarh. Similarly, forest camps at Polo and Bakore provided a wonderful opportunity to not only explore the unique forest eco-system, but also opened a window to the life of the forest dwellers, their culture, agriculture and traditions.

During 2017-18, Sundarvan's corest campsite at Bakore was renovated with a view to make it almost reptile proof; during the entire camping season, no reptile was

Velavadar N.P.

seen in the vicinity of the camp huts. Saplings of native trees were planted at the site which are doing well. In all, 29 camps were conducted here in which 1128 people participated, with a total occupancy of 87 days. New attractions like Star Trails were initiated wherein participants come and take pictures of the celestial movements in the sky. Three camps were conducted for specially abled members at Bakore campsite. During the first week of October 2017, the first Basic Course in Butterfly Watching & Taxonomy was also conducted at Bakore.

Trek for the blind boys (specially abled)

The marine camps at Sundarvan Beyt Dwarka are much awaited by people. In all, 19 batches consisting 740 participants participated in camps of two nights and three days each. Though Gujarat has the longest coastline in India, this is the first marine experience for most of the participants. The camps were conducted during December to end February. Most of the participants could see different types of corals, crabs and other marine life including plenty of algal growth, with a sighting of the playful dolphins making it a memorable experience.

Four high altitude Himalaya camps were conducted during this year in the beautiful Kullu Valley, with 126 students enthusiastically completing the Dhanu Kanu (12,190 feet) trek, mesmerised by the beauty of the Himalaya.

This year again, camps at Mt. Abu were organised during the summer. A total of 11 batches involving 328 campers from all age groups participated in the wilderness camps of Arbudachal. A special camp for tribal children as well as adventure camps were also organised at Mt. Abu as is done every year. Besides trekking, nature awareness and the usual camping activities, sloth bear sighting always remains one of the most thrilling experiences of the camps at Abu.

Two camps based on the theme of agriculture were organised at Lokbharati Sanosara. Lokbharati is a centre in Saurashtra where the Lokvan wheat variety was developed. It has a beautiful campus and a vast expanse of land surrounded by hills covered with scrub forest. These camps provided adventurous activities such as trekking and bird watching, along with a glimpse of tribal culture and the land cultivation pattern. More than 87 campers participated in these camps.

To mark the celebration of World Environment Day (WED) at CEE, an overnight camp for children was organised on the CEE campus itself on June 4. Activities such as star watch, night trekking, nature trails, bird watching and adventure games were the major attractions of this overnight camp. The children then participated in the WED celebrations at CEE.

Apart from these camping experiences, different watch programmes including a monsoonal visit to a grassland were some of the highlights of the year. Overall, during the year, about 2500 plus participants were hosted in these nature camps, igniting in them an appreciation and love for nature.

4.2.2 Nature Camps in CEE North

Dolphin Camp at Valmiki Tiger Reserve: As part of the Dolphin programme, CEE North conducted two dolphin camps cum

mela of two days-two nights duration at Valmiki Tiger Sanctuary. The camp was attended by 10 dolphin schools from different clusters with over 40 students along with teachers and partner NGOs participating. Nature trails and 'walk in nature' were conducted by the CEE team. School teams displayed their work on dolphin conservation in an exhibition held on the second day of the programme for local schools and other visitors.

Bio-cultural Nature Camp Programme: Since 2013, CEE and Wipro are working together on the Earthian-Paryavaran Mitra initiative. To provide a different kind of educational experience, the Earthian winning school teams of 2016 of the Continuous Engagement Programme in Uttar Pradesh, Rajasthan and Punjab were invited to be part of a bio-cultural camp. Bio-cultural camps are focused on learning about biodiversity and the cultural importance of the area. Such camps are an opportunity to stimulate joyful, enlightening insights and experiences – for ourselves, as well as for our children and youth. These programmes are aimed at inculcating appreciation of nature, natural resources, indigenous people and their culture, and its importance.

In November 2017, a two nights and three days nature camp for a group of 25 students and five teachers was offered to the Earthian-Paryavaran Mitra winner schools of UP, Rajasthan and Punjab. The nature camp was organised in one of the famous protected areas of UP - Katerniaghat Wildlife Sanctuary, situated in Bahraich District of Uttar Pradesh. The objective of the camp was to orient students to the unique biological and cultural aspects of the sanctuary, to expose students to the conservation and sustainability practices of the sanctuary and to develop an appreciation of the need for biodiversity conservation. In all, 25 students and five teachers from five schools of Lucknow, Ajmer, Barmer and Ludhiana attended the bio-cultural camping programme.

National Nature Camping Programme at Suhelwa Wildlife Sanctuary: In December 2017, a nature camp of three days and two nights' duration was organised by CEE

North at Suhelwa Wildlife Sanctuary. A group of 30 students and three teachers from a school in Lucknow attended the camp held during the Christmas break. Suhelwa is popular for its bird sighting, especially some rare forest and water birds. As part of the camp activities, the CEE team conducted a lot of nature games to help children understand concepts related to varied ecosystems present in the sanctuary. Apart from these, students got to see vultures which can be sighted only in protected areas now. Students also interacted with the Tharu tribe residing around the sanctuary. The participants stayed at Tapovan farm which helped them to see and learn about the different varieties of grains and their cycles, eco-friendly technologies such as solar pumping station, vermi composting system, bio control methods for pests and also the rich biodiversity of the area.

The group also visited a rural school and interacted with the children there to learn about the sanctuary from them. In the evenings, the students shared and expressed their thoughts about their interactions and observations. A quiz was conducted to gauge the children's understanding and the winners were given prizes.

4.2.3 Biocultural Camp

CEE, in partnership with Wipro and Bhagirath Gram Vikas Pratishthan, organised a three day camp during September 2017 at Nivaje village in Sindhudurg District of Maharashtra. The camp aimed at orienting students to the unique biological and cultural aspects of the region and was attended by 12 students and three teachers from three schools of Maharashtra.

The camp provided students an experiential learning opportunity about the biodiversity, livelihoods, lifestyles and culture in the Western Ghats. The group was hosted in seven family homes in Nivaje Village. Students lived in the local people's homes and experienced their daily routines and got to know the local culture via several group sessions like nature trails, cultural programmes, talks, visits to local units, etc.

The work undertaken by Bhagirath under the Small Grants Programme (SGP) on promoting and constructing biogas plants and improved animal health in the village was also highlighted. This initiative also enabled the local community to get an exposure on home stays and camp facilitation as an income generation activity.

5 EE through Interpretation

5.1 Nature Interpretation Centre - Tilabari

A Nature Interpretation Centre was set up at Tilabari in Northern West Bengal. The centre serves visitors who come to the Gorumara National Park, an important protected area in the region. Developed for the West Bengal Tourism Department, the centre houses life-size models of several animals including the Indian Rhinoceros in its habitat. There is also a section dedicated to the floral diversity of Gorumara as well as the life-cycle of plants. A mixture of media like panels, photographs, 3D models and animations have been used to describe the various aspects of the forest.

5.2 Ralegan Siddhi Interpretation Centre

CEE recently developed an Interpretation Centre at Ralegan Siddhi Village in Ahmednagar District of Maharashtra. The centre interprets Watershed Development and how Ralegan Siddhi village has achieved water security and economic and

social development through development and management of its watershed. The centre features to-scale relief model of the watershed of the entire village as well a model demonstrating various watershed techniques. It also features dioramas with realistic models

of the mammalian, avian and reptilian fauna found in and around the village. There is also an interesting exhibit which features two relief models of the village, one shows the village before watershed development was undertaken and one shows the village as it is now. The model demonstrates the immense difference in vegetation on the hills, area under agriculture and condition of housing and other infrastructure in the village which occurred in a span of about thirty years. For those who are curious to learn more, there is an interactive touch-screen exhibit which further elaborates the watershed development, economic development and social development of the village.

5.3 Pashan Nature Education Centre

Recognising the ecological importance and the ecosystem services provided by urban wilderness areas, an educational project 'Awareness and Education about Birds in Pune city', has been taken up by the Pune Municipal Corporation and Indradhanushya Centre for Citizenship and Environment Education, which is being implemented by CEE. The project site is Pashan Lake in Pune, an important urban wetland in the city. Diorama, photo panels, collages of key bird species and wayside signages on local ecology have been developed for placement in the visitor centre at the site. The centre features information panels that elaborate upon the history, watershed, biodiversity and importance of the lake. It introduces the visitors to several species of resident and migratory water birds and terrestrial birds which visit the lake. It also talks about the importance of urban wetlands, the threats they face and the need to conserve them.

Other activities included facilitating nature trails, bird watching activities and discussions with experts. The resource material developed for the educational activities includes an educator's manual, self-guided nature trail brochure for educators and the general public, and a specially designed Nature Journal for children to start them on the journey of exploring the environment. CEE has conducted nine nature trails at Pashan, of which six were for PMC schools while three were open to the public.

Pashan - Wetland and Watershed

Pashan - Tree Autograph

6 Coastal and marine programmes

Coastal and marine areas in India and across the world are facing severe negative impacts due to unsustainable developmental activities. The major impacts include degradation of coastal habitats, declining fish stock, polluted marine waters, salinity ingress and inundation by coastal waters. Climate change impacts – particularly sea level rise, storm surges, monsoon pattern shifts, fish migration and increasing frequency and intensity of coastal hazards – will further magnify our challenges. Considering the need to address these challenges, CEE's Coastal and Marine Programme focuses on initiating, designing and implementing strategic projects that enhance participatory and integrated approaches for sustainable coastal and marine area management. Education is considered as the key driver in these interventions. Partnerships range from local, regional, national and international levels.

6.1 National Centre for Sustainable Coastal Management (NCSCM)

CEE is a knowledge consortium partner of the National Centre for Sustainable Coastal Management (NCSCM) which has been established under the provisions of the Coastal Regulation Zone (CRZ) 2011 Notification. CEE's Coast and Marine Programme has played a key role in policy advocacy and integrating disaster risk reduction and climate change into coastal management planning in India. CEE's strength lies in undertaking demonstration projects, social research, field studies and stakeholder consultations.

6.2 Assessment of Social Dependency and Governance in Critically Vulnerable Coastal Areas

During this year, CEE worked closely with the National Centre for Sustainable Coastal Management (India and studies on Coastal Regulation Zone (CRZ) notification. A decision support tool has been developed under this project that analyses the field observation data across CVCA areas in India and suitably recommend the management approach and key interventions required at the NCSCM) for finalising technical reports and policy input document related to "Assessment of social dependency and governance aspects in Critically Vulnerable Coastal Areas (CVCAs)". The reports will inform the Central Government for designing suitable interventions in the CVCA areas across local level. CEE has suggested that further consultation workshops may be undertaken with the community members in the CVCA areas in order to identify challenges, mechanisms and legal processes for enabling establishment of community managed or co-managed coastal areas in India.

6.3 Blue Flag Certification

The Coastal and Marine Programme of CEE is specifically focusing this year on initiating and demonstrating an internationally recognised beach

certification programme that empowers local self-government institutions from the coastal states and Union Territories to sustainably manage their beach areas.

The Blue Flag programme is a world-renowned eco-label certification for beaches, marinas and boats. It is operated under the auspices of the Foundation for Environmental Education (FEE), an international, non-governmental, non-profit organisation. The programme was initiated in France in 1985 and is currently implemented in 49 countries. CEE is the National Operating Agency for Blue Flag in India.

During the year, CEE facilitated a two-day national workshop organised by the Society of Integrated Coastal Management (SICOM) under the Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India. Additional Secretary Shri A. K. Mehta IAS inaugurated the workshop in the presence of the Joint Secretary, Shri Ritesh Kumar Singh, IAS, and Additional Project Director, SICOM, Shri Arvind Nautiyal, IRS. The State Nodal Officers from the coastal states and Union Territories attended the workshop. They were oriented to the Blue Flag certification process by Mr. Malcolm Powell, international board member from FEE Denmark.

During this year, CEE completed the national level Feasibility Study for the Blue Flag programme and submitted it to the FEE International for formally initiating the programme in India. The CEE team also conducted field surveys and assessment for three beaches (Bhogwe in Sindhudurg District, Maharashtra and Padubidri in Karnataka) for gap analysis against 33 certification criteria. This study was undertaken to facilitate the scope for Blue Flag certification for the beaches supported by the SICOM under their pilot project for developing sustainable tourism and environmental conservation of international standards in 13 model beaches across India. A similar assessment was done at Sagartirth beach at the request of Maharashtra Maritime Board.

CEE is in the process of setting up a Blue Flag National Jury and formalising its partnership with the MoEFCC for scaling up the programme and engaging with the state governments and other stakeholders from the coastal states for their participation in Blue Flag certification.

CEE Blue Flag India team conducting assessment for gap analysis as part of Blue Flag certification for Bhogwe Beach, Maharashtra

View of Bhogwe Beach under consideration for the Blue Flag beach certification, Maharshtra

7 Sustainable Business and Climate Change

7.1 CEE Climate Change Group – Projects and Programmes

7.1.1 Framing the Debate on Climate Change

The Integrated Research and Action for Development (IRADe) organised the seminar cum debate competition "Framing the Debate on Climate Change", in partnership with CEE and Natural Resource Defense Council (NRDC) as knowledge partner, in eight host universities across seven North Indian states — Delhi, Punjab, Haryana, Rajasthan, Uttar Pradesh, Uttrakhand and Himachal Pradesh. The U.S. Embassy, New Delhi, under the United States Mission India Public Diplomacy Grants Program, funded the project.

The three-day seminar consisted of two days of climate change lectures and a full-day debate competition which aimed to raise awareness about the ongoing complex conversations on climate change issues while empowering young leaders to participate in these discussions in an informed manner. A final inter-university debate competition was organised at the American Centre, New Delhi US Embassy, to identify and award a national champion.

Rajasthan: As part of 'Framing the Climate Change Debate', an event was organised at the Central University of Rajasthan, Ajmer, during September 21-23, 2017. Around 80 students participated in the event, where symposiums on climate change and debates were the key components. The symposium held on first two days aimed at empowering the youth participants to take the right decisions and make the right choices to combat the emerging challenges arising from the problem of climate change. The sessions covered introduction to climate change, impact of climate change, adaptation and mitigation, policy progress in India on climate change and international climate change policy framework. Thirty students were selected after preliminary rounds to participate in the debate on the third day. The winner took part in the final round at Delhi.

Varanasi, Uttar Pradesh: A climate change symposium cum debate was organised at Sambodhi Sabhagar, Samata Bhawan, Department of Sociology, Banaras Hindu University, Varanasi, during November 11-13, 2017 as part of 'Framing the Climate Change Debate'. The programme comprised two days of lecture sessions followed by a debate competition.

Allahabad, Uttar Pradesh: CEE organised the symposium and debate as part of this project during February 3-5, 2018 at K. Banerjee Centre of Atmospheric and Ocean Studies (KBCAOS), University of Allahabad, Allahabad. Lectures on climate change issues were delivered by various dignitaries, calling upon students to acquire attitudes and knowledge contributing to CC adaptation and mitigation, and ultimately sustainable development. The discussions centred

around indiscriminate use of natural resources, various kinds of pollution, the CoP meetings and their significance and CEE's mandate of creating awareness on CEE issues at various levels of the community. Thirty students were shortlisted for the debate based on an examination and the winner took part in the final in Delhi.

7.1.2 Thirteenth Local Conference of Youth (LCOY 13) — India (South Asia Region)

The Local Conference of Youth (LCOY) is an official youth symposium endorsed by YOUNGO, the official youth-constituency to the United Nations Framework Convention on Climate Change (UNFCCC). The Climate Change group at CEE has been hosting LCOY-India since 2015 and organised the Thirteenth Local Conference of Youth (LCOY 13) India and South Asia Region, in Ahmedabad from October 12 to 14, 2017. LCOY13 India was a three-day conference with over 100 youth participants from India, Nepal and Bangladesh which aimed at enhancing participants' understanding on climate change and sustainable development, empowering them to make a difference in the climate action movement, providing them a platform to share their experiences with each other, and making their voices heard globally at COY13 in Germany. Through social media platforms, the conference also managed to reach out to more than 300 young people who could not physically participate in the conference.

This year, two members of the LCOY India organising team got the opportunity to represent LCOY-India at the Global COY13 in Germany. Their participation at the global conference ensured that the messages of the South Asian youth were shared with their counterparts from around the world. Key outcomes and recommendations from the three-day discussions at LCOY-India were submitted and incorporated in the outcome document for Global COY13 and critically discussed with YOUNGO's Action for Climate Empowerment (ACE) working group by CEE's representatives.

LCOY13-India was supported by the Heinrich Böll Foundation and officially recognised by YOUNGO.

7.1.3 Action for Climate Empowerment: A compilation and analysis of case studies

CEE, in partnership with United Nations Framework Convention on Climate Change (UNFCCC) and United Nations Educational, Scientific and Cultural Organization (UNESCO), developed and launched a compilation on best practices across the globe where education played a crucial role in climate change mitigation and adaptation on the Education Day during COP 23, Bonn, Germany.

The role of education in supporting climate change mitigation and adaptation has been underrated for a long time. The critical role of education and training in climate change was given the stamp of approval in the Paris

Agreement and its Article 12 that recognises the role of education in meeting the nationally determined contributions (NDCs). This compilation consisted of an analysis of 17 case studies from across the world using education as a powerful catalyst for effective climate action. The findings of this analysis suggested that education has been successful in supporting the achievement of the Paris agenda at many different levels. Since factors that lead to climate change are closely connected to individual lifestyles and the current development paradigm, any change in these factors can only happen with a change in human attitudes and behaviour. Education is the only way by which this change can be instigated. Awareness, knowledge and skills are required to implement the targets, which were developed for the current NDCs. Future NDCs must also include educational components to strengthen their approaches.

7.1.4 Informing the Indo-German Solar Energy Partnership

CEE organised five solar energy consultations with support from the Heinrich Böll Stiftung India (HBF) and in partnership with the Gujarat Energy Research & Management Institute (GERMI). The stakeholder consultations sought inputs from a wide range of stakeholders on challenges, gaps and learnings from different experiences across the country in fostering the use of solar energy. This bottom-up consultative approach aimed at helping to bridge the gap between policy formulation and implementation and build momentum for adoption of solar energy systems, informing national solar policy, the Indo-German bilateral solar cooperation and possibly also the International Solar Alliance and other solar partnerships.

CEE approached a diverse group of stakeholders including farmers and saltpan workers, household consumers, manufacturers and service providers, consultants, government, scientists, think tanks and NGOs to participate in the five consultation events to share their perspectives on solar energy utilisation and policy. The five consultation events were held in Dhundi village in Anand and Halvad Block (both in rural Gujarat), Ahmedabad, Bengaluru and Delhi from December 2016 to March 2017. All the stakeholders articulated the need for revising financial support policies, raised technology concerns and highlighted capacity building demands as well as the need for adjustment of the current administrative processes for solar power adoption.

7.2 Earth Care Awards

The Earth Care Awards, started in the year 2007, entered into its eighth edition this year. The awards recognise excellence in climate change action and covers both mitigation and adaptation sectors. As part of the process, CEE evaluated 267 applications (Table 1) from categories like industry, community, urban and

innovation. The applications were received from across India and countries in the SAARC region. The cases on climate change were assessed on climate change mitigation and adaptation aspects and were further evaluated on the basis of their impact, adherence to benchmark and sustainability aspects. Further, an evaluation team visited the shortlisted applicants for completing site level evaluation, and the findings were presented to the jury. The awardees were felicitated with the Earth Care Award in an event where their efforts were showcased and presented.

Table 1

Category	Application Received	Award Given
Leadership in Urban Climate Action	96	3
Community	86	1
Innovation for Climate protection	59	2
Large Scale Enterprises	26	3
Total	**267**	**9**

7.3 Climate Change Education in Bhopal

CEE has been commissioned by the Madhya Pradesh Clean Development Mechanism Agency (MP-CDMA) to undertake a public awareness campaign to enhance understanding about climate change and actions for mitigation. Towards this, CEE designed and implemented a public campaign - 'Climate Caravan – Hum Saath Chalein' that included conducting hands-on activities and interactive sessions for around 267 students from four schools at Habibganj Railway Station. Several resource materials on the causes and impacts of climate change and citizen actions for reducing Green House Gas (GHG) emissions were developed in both Hindi and English. Activities were conducted to help students understand about responsible consumption, lifestyle and energy conservation. The campaign covered topics related to electricity conservation, waste management, water conservation and sustainable transportation.

8 Sustainable Rural Development

8.1 Jalsetu

CEE is implementing the project 'Jalsetu' in Gujarat state. It is a climate project funded by Hanns Seidel Foundation (HSS) and was initiated in 2016. The project is founded on the premise that empowering women, especially those who are in governance, can go a long way in effectively addressing one of the most pressing challenges of our time - climate change and its impact on rural water security. The project therefore focuses on empowering women elected representatives (WERs) towards addressing issues of rural water security. During the first year (2016), the project was implemented in 10 villages of Gujarat divided into two clusters: Halvad Cluster and Jasdan Cluster. During the second year (2017), 10 more villages were added - five in each cluster, thus covering 20 villages in total.

Building further on the awareness and capacity building base achieved in the previous year of 2016, the project in the current year focused on vertical expansion of activities as well as horizontal spread in the project area. Some of the key activities during the year include capacity building of Jaldoots (water communicators) in geo-hydrology, various technological demonstrations, awareness programmes at the community and school levels, exposure tour and training of PRI (Panchayati Raj Institutions) members. Towards the end of the year, activities like workshop with NGOs and a state level workshop helped in reaching out to a wider audience and creating linkages with other stakeholders working in the water sector.

8.1.1 Capacity Building of WERs & Jaldoots

WERs being the main stakeholders for the project, two training programmes were organised specifically targeting the WERs and women SHG leaders from the project villages with about 100 participants. This three day training empowered them with information on various government programmes related to water resource management and ways to take advantage of them. It also introduced them to the concept and importance of watershed management as well as various water harvesting structures such as check dam, farm ponds, etc. The training helped motivate them to participate more actively in the governance process.

Jaldoots are an important link in the project as they act as the support mechanism for the PRIs by helping them address water issues. Their major role is to identify appropriate water harvesting structures based on local geology and act as barefoot water resource managers. Five youth from each village have been selected as Jaldoots and a three day training programme organised for 50 of them.

8.1.2 Exposure Tour

To enable behaviour change – whether it is taking tangible action such as adopting a different technology or practice, or bringing in intangible change such as effective

mechanisms of governance or strengthening the role of people's institutions for more transparent and efficient implementation - peer learning and exposure to best practice models is one of the most effective methodology. Keeping this in mind, during the year, a group of participants comprising WERs, other PRI members, SHG members, farmers, Jaldoots and other interested community members was taken on a four day exposure tour to areas where the best water resource management models are seen. These included visits to (i) WOTR (Watershed Organisation Trust), (ii) Ralegan Siddhi to see the exemplary work done by Anna Hazare, and (iii) Hiware Bazar to understand the concept of water budgeting in practice and were a highly inspirational learning experience for the participants.

8.1.3 Community Awareness Programmes

Several community and school awareness programmes were conducted as part of the project with a view to enhance awareness of the community members on sustainability.

Jalmelo (Water technology fair): The concept of Jalmelo was an inspiration from the traditional fairs which are very popular among the rural communities in the Saurashtra region of Gujarat, where the project is functioning. In this event, various water-related technology models were displayed, a water exhibition was held, and activities for children were conducted. Government departments were also invited to provide information about their various schemes and programmes. This day long cluster level event attracted about 450 participants.

Folk media for awareness creation: In all the project villages of both the clusters, folk media such as theatre, puppets and 'Bhavai' which is a traditional dance form, were used very effectively to convey messages on water conservation. Folk performances were organised in late evenings during winter, which attracted large audiences. The professional folk artists conveyed water related messages using humour and sarcasm to question the water consumption habits of people and to motivate them to adopt efficient water consumption practices at domestic and work levels.

Puppet shows were organised in all the schools to highlight water related issues like water wastage and water quality to create awareness among children.

8.1.4 Technology Demonstrations

CEE's experience shows that demonstration is the best tool to introduce a new technology or practice to farmers and the village community as a whole. During the year, several technological demonstrations addressing a wide range of issues were set up at the individual and community levels, as part of the project. These include gabion check dams, underwater dyke, farm pond, ferro-cement storage tanks, rain water harvesting system, drip, solar pumps, bore-well recharge, village pond with lining, arch

dam using ferro-cement technology and others. These demonstrations have covered a large number of community members as direct beneficiaries, while also inspiring other community members and other villages to adopt similar technologies.

8.1.5 Networking and Outreach

Apart from the village, community and WERs who are the direct stakeholders, CEE also organised two outreach and networking events in order to enhance the replicability of the model as well as to incorporate learnings and knowledge from other experts. A two-day district level NGO training and capacity building workshop on water-climate and livelihood issues was organised at Rajkot where NGOs working in the water sector were invited to participate from both the clusters. A one-day state level conference was organised in which leading water sector experts from the academics, practitioners and policy domain were invited as panellists and discussants. The workshop served as an interface between the three domains and was widely appreciated.

8.2 NABARD Water Campaign

To create awareness among rural communities regarding water conservation and water efficient technologies, NABARD launched a major education and communication campaign called Jal Jivan Hai or Water for Life, in partnership with Centre for Environment Education, on the occasion of World Water Day 2017. The campaign reached out to over a hundred thousand villages spread across 21 states of the country with the help of a specially trained cadre of youth called Krishi Jal Doots (KJD). Along with training, KJDs were provided with a kit containing educational resource materials to conduct 'A day in a village' campaign module. They were also provided with a detailed manual on how to conduct the campaign. KJDs thus acted as facilitators and implementers of the campaign at the local level. The campaign was conducted with the objective of enabling mass participation and voluntary action on water harvesting, conservation and encouraging water use efficiency in agriculture.

The campaign designed and developed educational material to promote public awareness of the need for water conservation. The campaign adopted a cascading approach to enable the flow of knowledge to the grassroots. Training was provided to the over 200 Master Trainers identified by NABARD, who in turn trained over 8000 KJDs , developed the Master Trainers training manual and the 'A day in a village' campaign module. The KJDs worked in pairs to cover a hundred thousand villages. They met key people in the villages and identified 11 youth volunteers who helped them in running the campaign activities which included save water awareness rally/padyatra, water resource mapping, meetings with farmers and SHG women members and Krishi Jal Samvaad – an event open to all the villagers to discuss issues related to water. This campaign not only created awareness but

NABARD Water Campaign - Water Resource map prepared by Community, UP

equipped village communities to prepare participatory water resource maps of their village. The KJDs also helped them develop a list of action points to further augment the village water resources through various means such as use of innovative, water efficient technologies and practices in farming, renovation of existing water harvesting structures, enhancing the potential of storage bodies, and creating new structures. Post campaign, debriefing workshops were held to obtain feedback from KJDs and capture the essence of the campaign.

In all, the KJDs have interacted with over one crore farmers, women, villagers and children during this campaign.

8.2.1 Water Campaign in North

CEE North facilitated activities in three states of northern India, namely Uttarakhand, Uttar Pradesh and Bihar. In each state, 10-12 water stressed districts were identified by NABARD. Partner NGOs working with NABARD were selected as district level master trainers. In each state 500-600 villages were covered under the campaign.

Regional Master Trainer Workshop: A two day workshop was organised in April by CEE North at NABARD Office, Lucknow, with over 28 master trainers from the three states participating. Participants were introduced to the format of campaign, IEC package and the reporting app. Senior officials from NABARD also addressed the participants regarding the expectations from the campaign. Master trainers were provided guidance on selection of Jal Doots in each village and their training. They were also given orientation on the use of the IEC material including posters, pamphlets and flip charts.

Regional Master Trainer workshop of NABARD Water Campaign at Lucknow+

Jaldoot Training Workshop: In May 2017, Jal Doot training workshops were conducted by the respective master trainers in which CEE North team participated as resource persons, in Pithorgarh and Champawat (Uttarakhand), and Bahraich.

NABARD Water Campaign - Prabhat Pheri, Bhatevra village, UP

A Day in a Village Water campaign: In June 2017, CEE team visited two village level events in each state in the northern region covering Uttarakhand, Uttar Pradesh and Bihar to observe the awareness activities and their impact: Bhatevra and Pardi (Mirzapur District of Uttar Pradesh), Atodar and Silauta (Bahraich District, UP), Bichhai and Dharchula (Pithorgarh and Champawat

Districts respectively, Uttarakhand), Sishani and Gadahiya (East Champaran District, Bihar), and Basra and Basanpur Raghunath (West Champaran District, Bihar).

District level Debriefing Workshop: In July 2017, after completion of the campaign activities, a district level debriefing workshop was organised to record feedback from the KJDs, to share learnings related to water conservation from the field, and to build linkages with concerned departments. CEE North team facilitated debriefing workshops in Darbangha, East Champaran, Gopalganj, Kishanganj and West Champaran districts in Bihar; Rudraprayag, Tehri and Uttarkashi districts in Uttarakhand; and Basti, Banda, Chitrakoot, Mahoba, Bahraich, Sonbhadra, Hamirpur, Jalaun, Mirzapur, Lalitpur, Kaushambi and Jhansi districts in Uttar Pradesh.

State level Debriefing Workshop: In August 2017, state level debriefing workshops were conducted to assimilate learnings from all the districts of the respective state. CEE team participated in the state workshops held in Uttar Pradesh and Uttarakhand for sharing insights from the observations made during visits and the points that emerged from district level debriefing workshops.

8.2.2 Water Campaign in East

CEE Kolkata, in collaboration with NABARD Regional Office, Kolkata, implemented the various stages of the campaign across nine districts in West Bengal.

A two day training programme was conducted by CEE at NABARD Regional

Rally on Save Water by the villagers

Office, Kolkata to orient 30 Master Trainers (from selected districts of West Bengal, Assam and Jharkhand) on April 19-20, 2017. It helped them understand the objective of the save water campaign, the communication strategy and how to conduct the campaign effectively to enable mass sensitisation at village level. The highlight of the training was the introduction of an interactive Mobile App, designed by CEE, for monitoring the activities at the grassroots level. CEE monitored 'A day in a village' campaign (DVC) in two districts, namely, Birbhum and Burdwan, to assess the efficacy of the campaign.

CEE team conducted debriefing sessions across nine districts of West Bengal, and interacted with the Master Trainers (MTs) and Krishi Jal Doots (KJDs), encouraging them to share key takeaways and document the feedback generated while conducting the campaign at village level. The sessions also served as an interface where representatives from various line departments (district level) were present and KJDs and Jal Sahayaks could meet and communicate effectively for further interventions.

8.2.3 Water Campaign in Central

CEE Central staff supported the orientation of master trainers from Madhya Pradesh, Maharashtra and Chattisgarh. The programme was implemented in 16 districts in Maharashtra. In Chattisgarh, eight master trainers from eight districts were oriented to the programme. The campaign activities included awareness rally, resource mapping, need assessment and Jal Samvaad (i.e. focus group discussion among villagers, self-help groups, youth) to identify solutions and action plans for water conservation in their village.

In Chattisgarh, around 274 Krishi Jal Doots were oriented to the project activities and they disseminated the campaign in around 3875 villages across the state. The campaign helped to identify several water use related issues in the villages like water scarcity, ground water depletion, water borne diseases during rainy season, lack of awareness amongst farmers and general public about irrigation schemes, water conservation and hygiene measures. CEE consolidated the learnings by facilitating de-briefing workshops with the master trainers and KJDs. The inputs from the workshops were further shared during the NABARD state level workshop. The campaign helped in enabling people participation for water conservation and identifying areas for improvement in

Debriefing meeting with NABARD and Jal Jeevan Hai campaign team at Mahasamund

government schemes and delivery mechanisms for water conservation and sustainable use in the rural areas of the state.

8.3 Jaldhara se Jeevandhara

CEE, in partnership with Canara HSBC OBC Life Insurance Company and Mahatma Phule Samaj Seva Mandal, Karmala, is implementing a project to strengthen sustainable agricultural practices in the drought prone villages of Aljapur, Kamone and Khadki in Karmala taluka of Solapur District, Maharashtra. As part of the project activities, a check dam was repaired and a couple of water tanks constructed to improve groundwater recharging and enable better access to drinking water. Further, sustainable irrigation practices and alternative horticulture cropping were demonstrated on eight acres of land. The local women-led Self Help Groups (SHGs) have been trained to prepare pickles and jaggery for commercial sale to enhance their incomes. These are now being converted into business ventures.

Sustainable Urban Development

9

India and other developing countries are experiencing rapid urban growth. The existing urban situation and this pace of growth presents challenges as well as opportunities for increasing wellbeing in low carbon ways. CEE believes that solutions for urban areas have to be evolved through partnerships and may integrate traditional urban living and management practices with new technologies and approaches. CEE's Urban Programme focused on educational approaches for systemic changes, multi-stakeholder approaches, public engagement and IEC strategies to integrate with municipal functions and services, public deliberations on urban issues, development and delivery of academic courses on selected urban topics, demonstration projects, etc. CEE works closely with city governments, academic institutions, citizens' groups and NGOs.

9.1 Urban Programme Activities in Pune

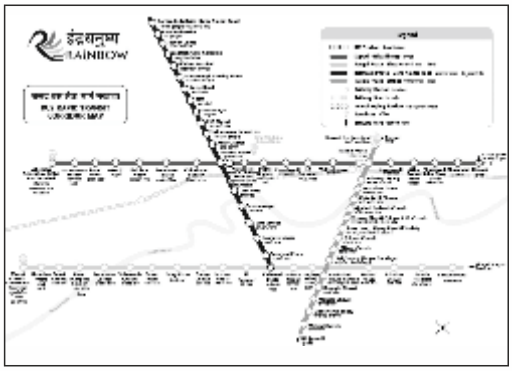
9.1.1 Promotion and Outreach Programme for Rainbow BRT (Phase II) in Pimpri Chinchwad

The Rainbow Bus Rapid Transit (BRT) system is operated by the Pune Mahanagar Parivahan Mahamandal Ltd. The infrastructure for this transit system is being developed in phases by the Pune Municipal Corporation (PMC) and the Pimpri Chinchwad Municipal Corporation (PCMC). CEE has been commissioned by the PCMC to develop and implement a promotions and outreach programme as it is preparing to launch two new corridors: Nigadi to Dapodi and Kalewadi phata to Dehu-Alandi Road.

A Situation Analysis report was prepared after a public perception survey, corridor visits, discussions with elected representatives and officials, NGOs, project consultants, and analysis of the media reportage. The situation analysis presents the current transport scenario, people's perception regarding this corridor and BRT as a whole, their needs and concerns. A Communication Strategy was prepared on the basis of this analysis.

Visits were undertaken to schools and colleges in the vicinity of the corridor. Presentations were made with a view to inform the schools and students about the features of the Rainbow BRT and safe usage, as well as to highlight the need for a shift to sustainable mobility modes. Concerns expressed by school managements in relation to the students'

Informing school students about the features of the Rainbow BRT safe usage



Informing school students about the features of the Rainbow BRT safe usage

usage of the corridor were noted and communicated to the municipal officials. Signage for stations and terminals has been prepared, as well as outreach materials for the future launch of BRT services in the new corridors, including radio jingles, banners and hoardings on safe usage of the corridor, and route information flyers for existing and potential bus commuters. Reportage in the print media is being monitored to track for comprehensiveness and accuracy of information about BRT.

9.1.2 Public Engagement for Preparation of the Pune Cycle Plan

The Pune Municipal Corporation (PMC) has commissioned the preparation of a Comprehensive Bicycle Plan for Pune through a project supported by the Ministry of Housing and Urban Affairs, Government of India. PMC has engaged iTrans, Prasanna Desai Architects and Centre for Environment Education (CEE) as the team of consultants to prepare the draft Pune Cycle Plan, work on which started in 2016.

CEE's role is public engagement for inputs to the plan. Extensive public engagement was sought through ward level consultations, stakeholder consultations, including with bicycle shops, cyclists, non-cyclists, school representatives, youth/colleges, corporates and CSR, public bike share vendors, etc. Two rounds of public consultations were conducted as part of the process of preparing this plan. A Preliminary Draft of Pune Cycle Plan was published in August 2017, providing the results of the studies and detailed provisions for cycle improvement. Public inputs were sought on this preliminary draft through the second round of consultations, meetings and surveys conducted in August and September 2017. Meetings were organised at ward offices for Prabhag Samitis and with citizens groups. Information about the preliminary provisions was also shared through newspaper articles, website and social media. Over 11000 individuals were directly engaged in different ways through these forums, in addition to the dissemination of information through newspapers, website and social media. The Plan was approved by the PMC General Body in December 2017 and is currently being implemented.

9.1.3 Advocacy for Road Safety in Maharashtra

CEE, in collaboration with Parisar, is implementing a project on advocacy for road safety improvements in Maharashtra. The project aims to support the Motor

Vehicle Amendment Bill 2017 which introduces certain specific clauses like stricter enforcements and increased penalties for promoting safer road user behaviour, protection to Good Samaritans and promoting safe driving, safe vehicles and safe roads. During the year, CEE facilitated the formation of a Road Safety Network which is a coalition of civil societies from different cities in Maharashtra advocating for the passage of the bill to the members of the parliament and councils of the states. CEE was involved in developing the brand identity for the network, a website on road safety, and an outreach strategy for engaging different stakeholders for public advocacy. The larger project is supported by the Global Road Safety Programme.

9.1.4 Knowledge Management for Sustainable Use of Groundwater in Pune City

CEE, with support from Wipro and in partnership with Acwadam, has undertaken to identify key issues and evolve management solutions related to groundwater in Pune city. As part of this, CEE interviewed several experts and conducted a survey of bore-wells, dug-wells and groundwater related structures including natural springs in Aundh, Baner and Pashan areas of the city. Further, a consultation workshop was held with experts and citizens to understand groundwater dependence and evolve participatory solutions. The aim is to initiate a Knowledge Management Platform to provide systemic solutions related to groundwater management in Pune city. CEE also collaborated with Mission Groundwater, a citizens' initiative, for conducting studies and reaching out to housing societies for promoting rainwater harvesting and groundwater recharge. The future plans include further participatory studies to monitor groundwater usage in the city and to develop options of urban groundwater governance and management.

9.1.5 Public Deliberation on Streets and Mobility

CEE has organised public deliberation processes around civic issues with the view that well-designed public deliberation processes can bring clarity, transparency and accountability in public governance. Proposed projects can be more closely attuned to the needs of the public, and social learning about the issues and solutions can ensue.

In September and October 2017, CEE took up a public deliberation around street design and mobility needs of the Aundh neighbourhood within the smart city area of Pune. The CEE-led civic process was combined with a field research by masters' level students as part of a Winter Institute programme of 10 days duration in October 2017. This activity was undertaken as a collaboration between CEE and the Centre for Urban Policy and Governance at the School of Habitat Studies, Tata Institute of Social Sciences (TISS), Mumbai. The students studied street usage, interviewed

different users of streets, shopkeepers, residents, senior citizens, street vendors, waste collectors, community leaders, political leaders, elected representatives, etc. The public deliberation event assembled a 'mini public' from among these segments of society in Aundh and surrounding areas. The day-long deliberation yielded priorities and concerns for streets and mobility planning. The report has been submitted to the civic authorities.

9.1.6 Stakeholder Deliberations on the Cycle Rickshaw

The Cycle Rickshaw has been and continues to be a mobility solution in many cities in India, and especially in Bihar and Jharkhand. It is also a source of livelihood for many urban poor and seasonal migrants to cities. The sector needs attention for improvement as an occupational sector as well as for how it is integrated into mobility services. The Sustainable Urban Mobility Network (SUM Net), of which CEE is a member, is arranging stakeholder deliberations in several towns in Bihar and Jharkhand, on the need for and possible contours of a legislation to enable improvements to the sector.

CEE Urban, in collaboration with SUM Net, designed a methodology for stakeholder deliberations. The attempt was to facilitate discussions with multiple stakeholders including the cycle rickshaw community, i.e., cycle rickshaw pullers and owners of cycle rickshaws, commuters, social activists, and others. The activities undertaken as part of this project were:

- Review texts of legislation on informal sector livelihoods
- Design the consultation process including identification of key stakeholders
- Orientation of facilitators on conduct and documentation of deliberations
- Conduct of a few public deliberations to demonstrate or assist in the process
- Analysis of deliberation outputs

The outputs of the deliberations will be synthesised and considered in the preparation of the draft bill text, and used to plan state level deliberations to be conducted in the following year.

9.2 Urban Programme Activities in Ahmedabad

9.2.1 Training Communities as Heritage Interpreters – Dhal ni Pol no Vaarso Walk

CEE had developed a heritage interpretation walk for the Mahila Housing Trust at the Dhal ni Pol in 2016. The walk aimed to introduce the old city, its rich heritage and culture to the young children of Ahmedabad, and was developed mainly for schools. Responding to the interest among the residents in continuing the activity, MHT and CEE teams developed the idea into a self sustaining initiative. Seven women from the Pol were trained in conducting the walk. The activities include

interpretation of the Pol through story telling, environmental activities and games. The fee based initiative was launched during the Heritage week at Ahmedabad and was offered during weekends to local schools.

9.3 Urban Programme Activities in Guwahati

9.3.1 Pathik

Project Pathik aims to study the walkability situation of Guwahati and raise awareness about the issues faced by pedestrians on the city roads. The project would assess various aspects of walkability on seven roads of Guwahati city in the light of Indian Road Congress (IRC) and National Urban Transport Policy (NUTP) guidelines, and will engage with major stakeholders to analyse the issues related to walkability in the city. The project would also engage local media personnel and sensitise them about walkability so that they cover issues related to walkability in their reporting and media research writing.

The project activities included:

Observation Walks: The observation walks were undertaken for physical assessment of the roads selected for survey. As a number of manned and unmanned pedestrian crossings were observed during the visit, a study on the crossings was conducted separately. Photographic documentation of the stretches was undertaken for detailed study of the issues.

Structured Observation Survey of Stretches and Crossings: Formats were developed for structured observation survey based mainly on the parameters of the Global Walkability Index (GWI). The scoring system used was a modified form of the assessment score given in GWI.

Pedestrian Interviews: These interviews were designed to understand the ease of walkability from a pedestrian's point of view and to understand the obstructions and difficulties faced by pedestrians.

Department Visits: Line departments which are directly involved with pedestrian safety, roads and mobility were visited to gather more information and also to apprise them of the activities of the project.

Stakeholder Meeting: A discussion on the walkability situation of the city was organised on May 16 at Guwahati. Mr. Rizwan Uz Zaman, State Team Leader and Technical Expert with the Assam Climate Change Cell, Government of Assam; Dr. Abhinandan Saikia, Assistant Professor, TISS Guwahati; members of SUMNet India; and representatives from North East

Network, FASCE India, NEDSS Guwahati and IIT Guwahati participated in the discussion. Members from SUMNet India presented ideas for street designs using the MRD road as an example. A set of recommendations for improving pedestrian safety in the city was also an outcome of the discussion.

Media Interaction: A media interaction on walkability was organised on May 31 at Guwahati Press Club, with a view to raising awareness of the use of walkability as a tool to understand and improve the pedestrian friendliness of the city. The study was shared with print and television media personnel of Assam.

The project has helped raise awareness about pedestrian issues among the major stakeholders of the city including line departments, NGOs, academicians and students. A fact sheet on pedestrian issues has also been developed.

Water and Sanitation

10

10.1 Clean Ganga Programme at Varanasi

Swachh Ganga - Swachh Kashi Initiative

Ganga River is believed to be one of the India's holiest rivers with cultural and spiritual significance attributed to it by the people. Despite its importance and religious beliefs associated with it, the river is facing extreme pollution which is posing a great threat to its biodiversity. Recognising the river Ganga as the country's heritage, and to give an impetus to its conservation, the Government of India has declared it as 'National River'. When it comes to creating awareness about keeping our rivers clean, it is important to realise that it requires a change in people's attitude and hence their participation.

National Mission for Clean Ganga has taken up the Ganga Action Plan Project (Varanasi) under the National Ganga Council in Varanasi, with the support of Japan International Cooperation Agency (JICA), with Varanasi Nagar Nigam (VNN) as the implementing agency. While infrastructural improvement is one aspect of this initiative, the other important aspect is Public Awareness and Public Participation (PAPP), for which CEE was invited in 2016 to take up education and awareness programmes at the ghats and in schools. CEE Varanasi was established as a project office to implement the project activities. In 2017, CEE was also given the responsibility for residential zones which are close to the ghats.

CEE North is implementing the Swachh Ganga-Swachh Kashi initiative with support from Varanasi Municipal Corporation (VNN), as part of which CEE is working with 100 schools, 32 wards and 86 ghats to raise awareness and sensitise them towards cleanliness and sanitation. Under the ghat and school initiative, CEE undertook took awareness generation and sensitisation activities during 2017-18, as given below.

10.1.1 Clean Ganga Club Activities

CEE team has enrolled 100 schools and colleges in the programme and provided orientation to students and teachers on the formation and functioning of Clean Ganga Clubs.

Teacher Training: A teacher training programme was conducted in October 2017 for all 100 schools on Clean Ganga Club formation and functioning. The two day workshop facilitated by CEE enabled sharing the details of the programme and discussing the plan of action with the schools and teachers, including conducting school and ghat level activities. About 73 teachers from 69 schools of Varanasi participated in the workshop.

Ganga Chaupal: To involve all the 100 enrolled schools, two Ganga chaupals were conducted in December 2017, where students were encouraged to showcase their ideas through painting competitions. Over 506 students from 79 schools attended the events. At the event, CEE team presented potted plants to guests from the

JICA Project Management Unit. After the painting competition, a topic was announced for a debate competition following which an open discussion and question-answer session was held with the students in the audience participating. Around 54 students presented their thoughts at the facilitated discussion.

Ganga Mela: The annual event of Clean Ganga Club schools was organised as a Ganga Mela in January 2018, with the objective of encouraging the club members to share their learning and experiences by showcasing their work in an exhibition. At the event, more than 700 students from 52 Clean Ganga Club schools participated, with more than 1500 community members and other key stakeholders joining the event. Overall, more than 2500 participants visited the mela and interacted with the club teams at the stalls. Some of the core themes of the programme were cleanliness and keeping our rivers clean; river biodiversity and its conservation; solid waste management; and water conservation. Students and groups from various schools presented songs, dances and nukkad natak at the event. Guests and visitors appreciated the efforts of the Ganga Club schools.

10.1.2 Clean Ganga Ghat Activities

CEE's awareness activities on Ganga ghats, initiated since 2016, included regular interactions with stakeholders on the ghats such as vendors, tourists, priests, pilgrims, boatmen, washermen, youth and others. Vendors meetings were organised at various ghats to initiate a dialogue with them on concerns related to keeping our ghats clean. Different stakeholder groups were identified and meetings held with them to seek their support and cooperation. During first year, nukkad natak shows and distribution of dustbins were undertaken at the ghats.

Visits to Ghats and Consultations: During 2017-18, CEE team regularly visited the ghats and met different stakeholders such as boatmen, washermen, vegetable vendors and shopkeepers to discuss their issues and concerns, while also obtaining their feedback on the use of dustbins, possibility of saying no to plastics and monitoring the use of facilities available at the ghats like toilet, bathroom and changing room.

Vendors and Stakeholders Meetings: With the survey and ghat visits, CEE team identified vendors and started consultations with them on emerging issues of concern and interest. CEE team has conducted 12 vendor meetings at different ghats. During the reporting year, three stakeholder meetings were conducted to discuss and share activities being undertaken at the ghats and feedback on use of dustbins from boatman, vendors, barbers, priests, etc.

Exhibition Stalls: A three day exhibition was setup by CEE during three occasions - Ganga Mahotsav post Diwali celebrations, Ganga Mela and Swachhata Pakhwada, to raise awareness among visitors about the initiative. Another exhibition is being planned at an appropriate occasion.

Awareness Rallies: To create awareness about cleanliness and sanitation, CEE team organised rallies to motivate and ensure participation of community members in maintaining sanitation and hygiene highlighted the need for sanitation, cleanliness and waste management and encouraged people to take responsibility for these in their localities. Vendors were also motivated to take part in the rally. During the reporting year, 24 awareness rallies were organised with the participation of more than 3500 people.

10.1.3 Residential Zone Awareness Activities

CEE is covering two residential zones, namely, Adampur and Kotwali zones, for mobilising ward sanitation committees and conducting awareness and education activities/programmes, covering 32 wards. During the year, CEE's Varanasi office project team has conducted various activities and events among the community members.

Special Events: On the occasion of environment and health related days, CEE team conducted special events. In Adampur zone, events were organised on World Toilet Day and National Sanitation Day, to discuss the public's role and participation in maintaining cleanliness in Ganga, water management, bringing about behavioural changes so as to avoid wasting water and besides various water and environment related issues. In Kotwali zone, World Environment Day and World Water Day were celebrated as special events. More than 1000 people participated in these events.

Nukkad Natak: In Adampur and Kotwali zone, CEE team organised street plays in all the 32 wards. These nukkad nataks (street plays) were conducted to raise awareness on making wards open defecation free and promoting solid waste management, and to create awareness regarding waste management, cleanliness, sanitation, etc. The drama Kashi ki Pehchaan was presented by Prerna Kala Manch. IEC materials appealing to the public to keep their surroundings clean were also distributed after the play. These plays helped in sensitising people towards maintaining cleanliness and adopting sanitation related practices.

Meetings at Wards: To ensure people's participation towards sanitation and cleanliness of wards, over 80 Ward Sanitation Monitoring Committee (WSMC) and eight Zone Sanitation Monitoring Committee (ZSMC) meetings were organised in Kotwali zone; over 175 ward level meetings and seven zone level meetings were conducted in Adampur zone. Regular interaction at various levels in the form of monthly meetings was undertaken from July 2017 to March 2018 in all 32 wards of both zones. Committee activities and sanitation related issues were discussed in these meetings, besides reporting of ward problems and people's participation.

Awareness Meetings: Various Awareness Meetings were organised during every

quarter in both the zones to sensitise people about the initiative and raise public awareness about the need for cleanliness in the area. The role of the public in maintaining cleanliness in the Ganga river, waste management, solid waste management, behavioural changes to prevent throwing of garbage on the street, use of dustbins, use of community toilets and various problems related to the wards and the role of community was discussed in these meetings. Community members also got an opportunity to directly interact with officials through these meetings, share their problems and suggest measures to solve them. Dustbins were distributed to vendors who did not have them in their shops.

To sensitise the various stakeholders, members of various communities such as weavers/bunkar, washermen/dhobi, sanitary staff, dyers, gaddhidar, kasera society, various committees (i.e. Taziya, Durgapooja Samiti, Sardar, Vyapar Mandal), government officers, Community Toilet Complex staff and NGOs, were invited to participate in awareness meetings. Four such meetings were conducted in each ward during the year.

Cleanliness Drives for Wards: To strengthen the bonding of WSMC/ZSMC Committees, CEE team had organised about 100 cleanliness drives in both the zones. Through these drives, temporary unauthorised dumping locations were identified in the zones, cleaned and converted to non-dumping locations by persuading the local people. Prior to the drive, volunteers went door to door and gave cleanliness related information to the public and made an appeal to the people to avoid throwing garbage on the road or the street. This ensured that along with the CEE team, community members also participated in the clean drive. The field team continuously visited the wards every month to create awareness regarding removal of dumping points.

Announcement in Colonies: Regular announcement was planned in colonies in order to remind people on a continuous basis about the good practices related to solid waste management, making the zones open defecation free, protecting the environment and keeping the Ganga free from pollution. Tricycles/rickshaws with recorded messages which moved around in the colonies and slums were used for this purpose. The rickshaw announcement was organised by CEE with audio spots developed in the local language. The field team also visited the wards with the rickshaw puller and appealed to the public not to throw garbage in the road or the street. Such announcements were done in all the 32 wards.

Rallies/Padyatras: To ensure the active participation of community members in keeping the ward clean, stopping open defecation, ensuring door to door garbage collection and solving other problems of the ward, it was decided to organise two-three rallies in each ward every month. During the rally or padyatra, participants interacted with other community members

regarding sanitation and other burning issues, going door to door and convincing them. Ward Parishad members, Anganwadi workers, sanitary inspector, police Inspector and ward member joined the rallies and flagged off padyatras. In both zones, 40 awareness rallies were organised in different wards where more than 2000 people participated.

Training for Women Members of WSMCs/ZSMCs: A three day training workshop for women's groups was organised by CEE with support from Varanasi Nagar Nigam in Kotwali zone, with the aim of imparting skills in making different types of cloth products. The main focus of the programme was to sensitise and train women towards reuse of old clothes and making new things using old clothes like various kinds of bags, file covers, mobile pouches, etc. Solid waste management and reducing the amount of waste in the garbage discarded from homes was also discussed. A local expert was invited to guide the women's group in making different products.

IEC Material: IEC material with key communication messages was visualised, designed and developed by CEE, and subsequently shared with VNN and printed. A brochure on the project was also developed along with flyers and small booklets.

Stakeholder Meeting: CEE team conducted a stakeholder meeting with zone committee members and ward committee members of both the zones, to ensure their active participation for effective implementation of the project activities. This was held with support from VNN/PMU and PMC. Cleanliness, open defecation, use of dustbin and various issues related to cleanliness and solid waste management, the need for everybody to involve in cleaning the wards were some of the topics discussed. Officials of the project interacted directly with the public and heard their problems and suggested ways to resolve them.

10.2 Training and Orientation of Swacchagrahis (Swacchata-doots) of Barpeta District, Assam

In order to achieve the targets and objectives of the Swacch Bharat Mission (SBM), it is necessary to bring about behavioural change in communities on a large scale. The Government of India has selected some organisations as Key Resource Centres (KRCs) at the national level to impart training on various issues related to water and sanitation and best practices to motivated leaders and communities. As a part of this, the Mission Directorate of the state of Assam has engaged some of the selected KRCs for supporting districts in capacity building and social mobilising activities. CEE is one of the National Key Resource Centres under the Ministry of Drinking Water and Sanitation. A pilot project was initiated in Assam by the Mission Directorate in three districts: Morigaon, Nagaon and Barpeta, to select motivated Swachhagrahis and

enhance their skills and capacities to fulfill the goals of SBM (Gramin). CEE provided training to swachhagrahis of Barpeta District under the auspices of the District Water Sanitation Committee (DWSC).

The training covered:

- The goals and objectives of Swacch Bharat Mission - Gramin
- Communication tools that can be used to mobilise communities for effective behaviour change
- Information pertaining to WASH (Water, Sanitation and Hygiene), ODF (Open Defecation Free), scientific aspects of toilets and their usage, use of sanitary toilets and Solid Liquid Waste Management interventions
- How to generate awareness in schools and anganwadis for bringing about behavioural changes in schools and children, and safe disposal of child excreta
- Motivation of the Swacchagrahis to take up the responsibility for mobilising the community so as to make it a cleaner and safer place

The project activities included a one-day training of swachhagrahis and swachhatadoots conducted at Barpeta District that used participatory methods like presentations, interactions and activities on different aspects of Swachh Bharat Mission. Activities like demo on hand-washing, and community mapping were conducted to understand unhygienic practices and ways to change them.

The training facilitated the Swacchagrahis from different regions and Gram Panchayats of the district to interact with each other and to share experiences. It provided capacity building on not only sanitation and hygiene but also on communication skills for effective behaviour change in communities.

Interactions

Handwashing

Waste Management

11

11.1 Environment Management Group (EMG)

The Environment Management Group (EMG) of CEE focuses on significant aspects of waste management, wastewater treatment and reuse, environmental monitoring, training and capacity building of various stakeholders, performance evaluation of common facilities and research and development in the field of waste utilisation. The objective of the group is to improve environment management through conservation of natural resources, adopting the concept of 4R and continual compliance through technical and legal support and guidance to industrial and other sectors.

The group has signed Memoranda of Association (MoAs) with enforcing agencies, research institutes, technical institutes, common facility operators and industrial associations to achieve the desired targets. The following programmes were organised during the reporting year to achieve the anticipated results.

11.1.1 Awareness and Capacity Building Programmes

Waste Management Rules and Innovations in Waste Management: Gujarat Pollution Control Board (GPCB) and Centre for Environment Education (CEE) have signed a MoU for the purpose of encouragement, facilitation, collaboration, technology transfer and partnership towards promotion and development of best practices in the field of environment. This includes adoption of the concept of 4R, building capacity and developing skills of the stakeholders through various programmes, sharing best EMPs (Environment Management Plan) and implementing the concept of circular economy for sustainable industrial development. National Environmental Engineering Research Institute (NEERI) Nagpur has signed an MoA with CEE in this respect.

The Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India notified six waste management rules in 2016, viz. Hazardous, C & D (Construction & Demolition), Plastic, Biomedical, Solid Waste and E-waste. These rules place emphasis on important aspects like waste segregation, its utilisation, and broadening the accountability of stakeholders and others for effective waste management in the country.

A workshop on 'Waste Management Rules and Innovations in Waste Management' with the theme: 'Increase your Hand Print (positive actions towards sustainability) and Reduce your Footprint', was organized on April 11-12, 2017 at GPCB Gandhinagar,

with a view to provide training and awareness on these new rules. More than 350 participants from industrial associations, individual industries, all common facility operators like CBWTF, CETPs, TSDFs, CHWIFs, MSW, Preprocessing; cement, iron and steel and power plant industries; regulators such as local bodies, Pollution Control Boards, offices of the Collectorates; policy makers such as representatives from the Department of Environment of State Governments; academia and research institutes; technical students; NGOs, auditors and consultants, attended this programme for improving awareness and effective compliance of all the above rules.

The programme covered subjects like: (i) HWM Rules, 2016, New Provisions and Responsibilities; (ii) Different aspects of landfill sites and remediation of contaminated land; (iii) Development of appropriate technology for environmental quality improvement encompassing the hazardous waste management; (iv) Use of CEPI as a tool for measurement of environmental pollution in industrial clusters; (v) Eco-friendly management of Plastic Waste through Pyrolysis and other methods; (vi) Schemes of central or state government for financial assistance to industries/common facility operators for improvement in their EMS; (vii) C&D Waste Management Rules-16; (viii) Advanced C&D Waste management practices and green building concept; (ix) EIA notification 2006 – major provisions and recent changes; (x) Waste management case studies; (xi) Plastic Waste Rules 2016; (xii) 360 degree approach to waste management; (xiii) Challenges and innovations in Solid Waste Management; (xiv) Bio Medical Waste Management Rules-16; (xv) National scenario and advanced Bio Medical Waste Management Practices Case Studies; (xvi) Solid Waste Management Rules, 2016; (xvii) Best Solid waste Management Practices; (xviii) Recent Innovations in E-waste management: (xix) E-Waste (Management) Rules, 2016; (xx) Importance of Co-processing in Hazardous Waste Management; (xxi) CEE's

Contribution towards effective Bio Medical and Municipal Solid Waste Management for a sustainable future; (xxii) Bio medical Waste Management: Case Studies.

The recommendations drawn from this workshop by the expert panel were sent to the Government through GPCB for improved compliance.

Innovations in Wastewater Treatment, Recycling and Reuse: CEE, NEERI and GPCB organised a one day workshop on 'Innovations in Wastewater Treatment, Recycling and Reuse; Wastewater-the untapped resource' on January 10, 2018 at GPCB Gandhinagar. About 300 participants attended this programme.

The programme covered subjects like: (i) Cutting edge technologies for treatment of CETP effluent and its reuse, (ii) Reuse and recycling of treated waste water in textile and pharma sectors - case studies, (iii) AOP based advanced wastewater treatment at CETP (NIA) - a case of first ever non-biological CETP, (iv) Waste is wealth: recovery of valuable products from industrial effluent - case studies, (v) Industrial symbiosis - sustainable reuse of treated sewage from local body for industrial purpose - case studies, (vi) Application of Hydrodynamic Cavitation process for treatment of wastewater from industrial sectors - case studies, (vii) Phytorid wastewater treatment - case study by NEERI, (viii) ZLD - concept, pros and cons and economical aspects and (ix) Marine disposal; present scenario and future prospects - case studies.

The recommendations drawn from this workshop by the expert panel too were sent to the Government through GPCB for improved compliance.

11.1.2 Research & Development Projects

CETP Upgradation Project: Pandesara Industries Ltd (PIL), a CETP at Pandesara in Surat District, appointed EMG Ahmedabad to guide them on the upgradation of their CETP for achieving the prescribed norms of GPCB. After discussion, site visits and collection of samples from the inlet, pre-primary outlet, primary outlet and secondary outlet of CETP operations were conducted. Based on a study of the analysis and reports of the wastewater at each stage, a report has been submitted with suitable recommendations which are at the implementation stage.

Waste Utilization Centre: Pandesara Industries Ltd (PIL), a CETP at Pandesara, has a 100 MLD wastewater treatment capacity and generate approximately 900-1000 tonnes of primary sludge per month. The charges for the management of the

sludge are high and storage of the hazardous waste in the TSDF site is not a concrete solution with reference to the sustainability of the environment.

EMG proposed a novel solution to them to manufacture bricks from such hazardous wastes. Several trials have been conducted with different permutations and combinations of raw materials. Efforts are on now to utilise maximum amount of sludge and bring the CS of the bricks to @ 7 N/mm2.

Sustainable Textile Production: Sustainable production is the need of the hour in the industrial sector and the textile sector is no exception to this. The SGTPA/PIL management has great concern for the betterment of the environment and are affirmative about actions for the implementation of sustainable textile production. They therefore approached EMG-CEE to guide them to adopt sustainable textile production in their textile industries. A series of visits were carried out for the audit of one selected textile unit to understand the textile processes for different types of fabrics, energy utilisation, wastewater generation, its characteristics and its probable reutilisation. After the compilation of all the data, EMG-CEE have drawn up recommendations in the form of a report and submitted to them, which are at the implementation stage. After successful implementation, the same will be replicated in all the other units of Pandesara GIDC.

11.1.3 Assessment project

Earth Care Awards 2018: The Earth Care Awards, started in the year 2007, entered its eighth chapter during FY 2017-18. The awards recognise excellence in climate change action and covers both mitigation

and adaptation sectors. As part of the process, CEE evaluated around 267 applications from categories like industry, urban, community and innovations. EMG-CEE was responsible for the industrial category where twenty seven applications from diverse categories like Textile, Fertilizers, Mining, Hospitality Management, Food, Banking, Aviation, Chemicals, Diamond/Jewellery, Cement, etc. IFFCO, Kalol, received the ECA 2018 under the category of GHG Mitigation in Large Scale Enterprises.

11.1.4 Signing of New MoAs

The group has signed MoAs with Gujarat Chemical Association, NEER-Nagpur and E-Coli Waste Management Pvt. Ltd. for association in the field of environmental pollution prevention and improved waste management. It has also signed MoAs with common facility operators and GIZ to impart training to the operators and helpers of CETPs and ETPs.

11.2 Common Healthcare Waste Appropriate Management Plant (CHAMP)

The Waste Management Group of CEE is implementing a project 'Healthcare Establishment Waste Management and Education Programme (HEWMEP)' wherein a Common Biomedical Waste Treatment Facility called CHAMP has been set up in Kalaburagi city. The CHAMP Facility is in operation since May 2005. CEE CHAMP Kalaburagi facility is collecting, transporting treating and disposing the collected waste of Kalaburagi City healthcare establishments (HCEs) successfully since the last 12 years.

The CHAMP facility is collecting, treating and disposing about 17 MT of biomedical waste per month from the HCEs of Kalaburagi city and all six talukas, thus improving the public health scenario of the region in a significant way. In the reporting period, 143 in-house training programmes were conducted in HCEs with a total number of 755 healthcare staff trained through the same. Four workshops were organised in Kalaburagi for administrations and doctors of various HCEs to sensitise them on the revised BMWM Rule, 2016 and the bar coding aspects. About 300 healthcare personnel were trained and sensitised through these workshops. A set of posters on integrated Biomedical Waste Management was developed for HCEs as per the BMWM Rules, 2016; 350 HCEs have been provided with these IEC materials.

Bar coding to track the waste has been initiated and 746 HCEs have been provided with label/ QR code. The continuous emission monitoring system to monitor CO, CO2 and SPM has been installed and is also linked to the CPCB and KSPCB sites for online monitoring. The incinerator of the unit has been upgraded with droplet collector, residence time of 2 sec and improved ventury scrubber with PLC to display burner temperatures, as per the requirement of BMWM Rules, 2016.

About 350 medical and nursing students from 11 medical and nursing colleges of Kalaburagi visited the CHAMP for a demonstration and as a study of the ideal BMWM facility.

11.3 Toxic Site Identification Programme

CEE Kolkata, in collaboration with Pure Earth and USAID, organised an orientation workshop of two days on Toxic Sites Identification Programme (TSIP) on November 17-18, 2017 at Birla Industrial & Technology Museum, Kolkata. It aimed to identify and screen lead contaminated sites with a potential human health impact.

About 13 participants representing national and international nonprofit organisations, government departments, faculty and students from educational institutions were part of the training as field investigators. A site visit for demonstration was conducted for the participants at Makardah near Ankurhati, Howrah. The site is a cluster of

Interaction with bangle making workers

informal lead recyclers, from where soil samples were collected for lab testing. The participants had a hands-on experience during the online data entry exercise that gave insights on database logging, entering information and reviewing entries.

The training is a precursor to a site investigation project to be undertaken by CEE in Southern States.

Toxic site Identification programme

Biodiversity Conservation

12

12.1 Ganges River Dolphin - Conservation Education Programme

Educating Schools and Community for sustainable actions for conserving the habitat of Ganges River Dolphin along the Ganga River Basin

Based on the experience of Phase I, CEE is now implementing Phase II of the Ganges River Dolphin programme with support from the National Mission for Clean Ganga of the National Ganga River Basin Authority under the Ministry of Water Resources, Ganga Rejuvenation and River Development. The project titled "Educating Schools and Community for sustainable actions for conserving the habitat of Ganges River Dolphin along Ganga River Basin" is being taken up as Phase II of the project.

As part of the school component, CEE North is working on 20 locations in Ganga Basin covering 10 locations each in Uttar Pradesh and Bihar, while under the community initiative, CEE North is working with five villages each in Bahraich and Bettiah in UP and Bihar respectively. The following are the community interventions being undertaken under the project.

12.1.1 Community Interventions

(i) Capacity Building Programmes: CEE team facilitated a series of capacity building programmes in both the project locations. The participants for training/exposure visits were selected through village level meetings held with the assistance of youth volunteers from all five project villages.

(ii) Demonstration of Sustainable Options in Agricultural and Fishing Practices

Vermi Composting: As part of the project, CEE demonstrated 62 units of vermi compost pits in Bahraich, UP and 26 units in Bettiah, Bihar, to promote organic farming in the targeted project villages so as to reduce the use of pesticides and chemicals on the river banks. This activity involved identification and selection of beneficiaries for provision and construction of vermi compost pits and providing them with earthworms suitable for the area, with financial support from the project. As a result, vermi compost produced from these pits is now being used for river bed farming and vegetable cultivation.

Riverbed Farming, Vegetable and Fruit Tree Plantation: CEE had observed that most of the farmers were using heavy pesticides and chemicals during the cultivation of watermelon and muskmelon in their farm land on the river bank. The runoff of these pesticides and chemicals were adversely affecting the ecology of the river. To reduce this, watermelon and musk melon seeds were provided to more than 225 beneficiaries selected by the team and encouraged to adopt organic cultivation on the river bed in the project villages. Farmers have received a good harvest with less investment from this riverbed cultivation after adopting organic farming.

CEE team has formed women's groups to promote kitchen/backyard gardening in the

project village of Baundi and provided fruit trees to their households to ensure better nutrition for the women and children. More than 70 households were benefited with these plants in both locations of the project in UP and Bihar.

Beneficiaries were selected from among farmers based on their interest, land holding and availability of organic manure, for organic vegetable cultivation in their fields. Seeds of different vegetables like onion, lady's finger, pumpkin, cauliflower, potato, bitter gourd, bottle gourd, etc. were distributed to them with the help of Souns Sanrakshan Samiti. This demonstration was successful with the farmers getting a good harvest of vegetables without use of fertilizers and pesticides, and they are now inspired to take up organic cultivation of other crops too.

A similar demonstration was conducted in Bettiah project villages too. A few members of the committee also cultivated banana and papaya to demonstrate the potential in farming these organically.

Promoting Use of Bio Pesticides: CEE also promoted and encouraged the use of bio-pesticides, another aspect of organic farming, among farmers, using locally available materials. Various methods were demonstrated by CEE team with the help of experts to convince community members to adopt them in their farming practices. Use of panchgavya and vermi wash was specifically promoted in the project villages.

Community Level Awareness Initiatives: CEE field team, at both the Dolphin locations Bahraich and Bettiah, organised community based awareness campaigns and rallies on the occasion of different environment days like World River Day, World Environment Day, International Day of Biological Diversity, Dolphin Day, Earth Day and Turtle Day. Local youth, farmers, fishermen, government officials and other key stakeholders were sensitised about the current issues affecting the environment and motivated to work for the conservation of biodiversity around their villages. Regular meetings, rallies and consultations with the community encouraged them to initiate conservation activities at the village level.

Initiatives Taken by Youth Volunteers: As part of the Ganges river dolphin project, youth engagement has been an important objective, especially in generating awareness on the importance of the environment and river biodiversity, building networks with various stakeholders and community groups

(farmers and fishermen) and acting as change agents for improving hygiene and sanitation.

CEE field team, at both the Dolphin locations of Bahraich and Bettiah, interacted with the youth during community meetings to identify suitable and interested candidates for selection as youth volunteers. As a result, six volunteers in Bahraich cluster and five in Bettiah cluster have been selected and are working with the community to organise regular meetings of the Souns Sanrakshan Samiti (SSS) formed in each village, and to maintain regular vigil on illegal activities around their respective villages.

Promotion of Backyard Poultry: To provide a better source of nutrition and generate extra income, CEE facilitated backyard poultry keeping among selected beneficiaries in the project villages. These beneficiaries were selected on the basis of people's interest in the activity as an alternate source of incom, recommendation of village volunteers, and availability of space for keeping chicks. A set of 10 chicks (7 female, 3 male) of local breed were provided to each beneficiary. Overall, 70 families were supported in both locations with chicks which provided an extra income source for the BPL families.

Showcasing Sanitation Options: In Bahraich, a location was identified to develop and demonstrate a community sanitary toilet complex, and a community consultation held for its construction, maintenance and proper use.

Simultaneously, a discussion was also held in the market area where people felt a need for community dustbins. CEE Bahraich completed both the tasks – construction of the toilet complex and purchase of community dustbins - which were inaugurated and handed over to the community by the District Magistrate of Bahraich, who also appreciated CEE's work in the area. Over 40 families (6-7 members in each family) living around that area benefit due to these facilities.

In Bettiah, 30 individual toilets were constructed with the support of the community. Based on a need assessment, CEE also decided to construct 30 model individual toilets in the five panchayats through the Dolphin programme. Due to this, the fisherman community benefitted from individual toilets, while many families were motivated to obtain government subsidy and construct toilets in their homes. Better sanitation has helped reduce medical expenses in families. The toilets promoted by CEE found favour with the community members as the design is user friendly and the quality of construction was assured.

Alternate Energy Options: CEE promoted alternate energy options which are durable, sustainable and low cost in the project villages. About 40 solar lanterns were distributed among the fishermen community to showcase the use of solar energy. Considering the indoor pollution caused by cooking with wood, associated health risks for the women and children,

and the high carbon emission it produces, CEE introduced smokeless chulhas in the villages. These chulhas which are approved by IIT Bengaluru, has helped improve living conditions and health of women, and reduce the load on natural resources.

On World Environment Day, the CEE team organised training for the beneficiaries on the importance of conservation of the environment and efficient use of energy. CEE team also organised training in the dolphin villages whereby 45 beneficiaries were trained in the making of smokeless chulha.

Ecotourism Based Activities: CEE team identified a location each in both the states - Katarniaghat Wildlife Sanctuary in UP and Valmiki Tiger Reserve in Bihar - for promoting ecotourism activities focused on dolphin education, with the help of eco development committeess. CEE team held meetings with the concerned State Forest Department and Wildlife Division to plan and initiate the activities. CEE team also conducted meetings with eco development committee members and the local youth to assess the need and enlist possible interventions, and engage the local community.

The regular consultation meetings organised in both the siteshelped promote Dolphin specific ecotourism among the local youth, and the fishermen and boatmen communities residing along the river banks of the protected areas. The youth showed commitment for the conservation of the river dolphin and for improving ecotourism facilities. Camps for nearby schools were conducted to promote dolphin focused tourism in Valmiki and Katerniaghat.

Community Educational Material: Various kinds of resource material were developed based on the interventions of the project to create awareness about the river dolphin. A booklet on organic farming and alternative livelihood options was developed for community members to guide them to adopt these practices.

Dolphin Camp cum Mela at Valmiki: CEE North, in collaboration with Valmiki Tiger Reserve, Division II, Bihar Forest Department, Bettiah, organised a two days' national level Dolphin Mela cum Camp in April 2017. The objective of the event was to raise awareness about this national symbol and to convey the message of river conservation. This unique camp cum mela was attended by more than 400 participants coming from Uttar Pradesh and Bihar including students, teachers, NGOs, Tharu community members, government officials and other key stakeholders of the programme. The first day was devoted to a camp where students, NGOs and forest officials were taken on a trail inside the reserve to observe the river and forest biodiversity. As part of the event, students and partner organisations showcased various models, posters, paintings, poems, pebble paintings, songs and dance performances for raising awareness on the conservation of endangered species found in rivers and forests. Wildlife Trust of India

(WTI), World Wide Fund for Nature (WWF India), Forest Department and Eco Development Committees (EDCs) set up exhibitions on community led initiatives for the conservation of forests and rivers.

12.1.2 Final Report and Film on the Project

A final report of the three year long project which was completed in June 2017, summarising all activities under the school and community components has been compiled. A short film has also been prepared on the experiences of the initiative, which provides insights into the field level interventions of the project.

12.2 Information Management, Education and Communication for Maharashtra Gene Bank (MGB) Project

The Maharashtra Gene Bank (MGB) project aims to strengthen participatory studies and conservation of various genetic resources of Maharashtra which are valued by the user communities. These resources encompass local crop varieties, animal breeds, biodiversity associated with grasslands and freshwater bodies, forests and marine sponges. CEE, with financial support from the Rajiv Gandhi Science and Technology Commission (RGSTC) of the Government of Maharashtra, is implementing the Information Management Education and Communication (IMEC) component of the

Student observing the different varieties of fungi using a field guide developed by CEE under the Maharashtra Gene Bank Programme

MGB. This project currently involves around 20 local, regional and national level NGOs and research institutions.

During this year, CEE facilitated the external mid-term review of the MGB-IEC component. Further, CEE identified opportunities for mainstreaming project-based learning as a key method and approach in formal school education. Towards this, CEE developed a bank of around 60 action projects covering the topics of ecology, history, culture, gender, economics and public policy within the various sub-themes related to biodiversity and ecosystems. This strengthened the method of continuous comprehensive assessment at primary level and enabled a learner centric approach at the secondary and higher secondary levels, overall leading to influencing policy and guidelines for engaging schools with non-formal and real life situation learning spaces.

CEE organised a three-day capacity building workshop for Paryavaran Shikshan Mitras (PSMs) in September 2017

that included topics related to capacity building on multimedia documentation, communication skills, and biodiversity based local developmental planning. PSMs are school cluster facilitators associated with partner organisations.

CEE also developed an educators tool kit called the 'Jaivividhata Pitara' which comprises of biodiversity-related field guides, camera, binoculars, rocks and mineral kit. To ensure effective dissemination and use, around 16 clusters with partner organisations were established so that they may use these as common resource materials. Cluster level training for the respective schools was also conducted during January 2018.

Eleven workshops of three-day duration, Anandshala Shibirs (School network workshops), were held across six locations in Maharashtra in November and December 2017. About 122 teachers, 276 students and 36 partner organisations participated in these workshops. The workshops focused on capacity building for project-based learnings. Teachers reflected on their progress and the effectiveness of the trainings received in the last five years. Intensive discussions were held on various topics including the 2016 baseline study outcome; criteria for selection of projects and associated field work; skill building for biodiversity documentation; understanding project data analysis; interpreting results; and improving presentation methods. The participants also worked on future project ideas and timelines. The workshops also helped to encourage cultural events and record overall feedback.

Students with herbarium during Anandshala Shibir under IEC for MGB project

Students doing a Shivar Feri in Mendha Lekha Gadchiroli during Anandshala Shibir under IEC for MGB project

A prototype of a website for the larger MGB project was developed to serve as a public platform to share information on biodiversity and conservation, and educational resources. Drafts of Gotul magazine were developed for sharing project learnings and experiences with the networks and stakeholders. The final publications are scheduled during 2018-2019.

The annual meeting of the Monitoring Committee for the larger MGB project was held in September 2017 at the National Institute of Oceanography, Goa. CEE made a poster presentation on the progress of its project activities and learnings which was appreciated by the committee members who are drawn from the community of biodiversity experts from across the country. They gave suggestions on strengthening online platforms for learning and sharing information and also exploring the possibility of designing a specialised course on biodiversity which is contextualised to the state's biodiversity context.

CEE has also initiated a study of learning outcomes from student projects, to assess the effectiveness of the methodology and materials used and available in the market across the state. As a part of this, a survey was conducted covering over 1000 students across Maharashtra.

Field visits were undertaken for audio-visual documentation of selected biocultural practices relevant to the project themes at Shahada, Nandurbaar, Navegao Bandh, Gondia, Umra and Kalamnuri, Hingoli, Botany Department of Shivaji University, Kolhapur, and Attapadi.

Shivar Feri - neighborhood biodiversity exploration under IEC for MGB project

Students studying types of fishing nets under IEC for MGB project

Students presenting their project findings under IEC for MGB project

Students studying aquatic plants under IEC for MGB project

13 Disaster Preparedness and Rehabilitation

13.1 Mustaidi: Promoting Community based Disaster Management in J&K

In the aftermath of the Jammu & Kashmir deluge in 2014, CEE Himalaya put together its relief and rehabilitation programme named Rebuilding Trust (RT). Weighing the disaster proneness of the state and underlying vulnerabilities, and to mitigate the impact of disasters on life and property through disaster risk reduction (DRR) awareness and preparedness, Give2Asia supported the project Mustaidi (meaning readiness or alertness). DRR programmes using community based disaster risk management (CBDRM) approach were conducted for the children in schools and the larger village communities. The programme lay emphasis on the fact that the residents of the Valley must be prepared to handle any disaster or emergency as well as bounce back to normalcy at the earliest.

13.2 Disaster Awareness Raising and Training in Uttar Pradesh

The project supported by Give2Asia: 'Awareness and Training to help people cope with floods and improve their quality of life', earlier implemented in 35 schools and 20 villages, was later extended to training the teachers of all the 234 schools of Jarwal Block in flood affected Bahraich District of Uttar Pradesh. CEE Himalaya organised and conducted various programmes and workshops to educate, and to raise awareness in students, teachers, villagers and the representatives of the school departments on the need for capacity building to deal with alter situations. The activities were fulfilled through various programmes listed below.

13.2.1 Teacher Training Workshop on DRR Preparedness

Permissions were obtained from the Director - Elementary Education and Director - Secondary Education for conducting DRR Preparedness programmes in the schools of Bahraich as well as all the flood affected 23 districts of UP. Permission was obtained from the Director SCERT for conducting teacher training through the DIETs of the concerned districts. CEE Himalaya and RCE Srinagar organised four teacher training workshops (TTWs) on DRR Preparedness for the teachers of Jarwal Block of Bahraich District, Uttar Pradesh, with financial support from International Centre for Integrated Mountain Development (ICIMOD) and Give2Asia. All the four TTWs were conducted at the Block Resource Centre (BRC), where teachers of all the 234 schools were trained.

Along with the DRR training, the TTW participants were also apprised of the Niti Aayog's Report 'Transformation of Aspirational Districts - Baseline Ranking and Real-time Monitoring Dashboard 2018' which has eight districts of Uttar Pradesh included amongst the 101 most backward districts identified. CEE team brought out

details of the ranking which is based on performance in five sectors, viz. Health and Nutrition, Education, Agriculture and Water Resources, Financial Inclusion and Skill Development, and Basic Infrastructure. Since Bahraich ranks 96th overall and 100th in education, CEE exhorted the participants to work together and improve the ranking of the district in all sectors.

13.2.2 Training on Early Warning and Indicators of Heat Waves

The representatives of CEE Himalaya, Programme Director Dr. Abdhesh Kumar Gangwar and Programme Officer Dr. Apurva Rai were invited as resource persons by the Uttar Pradesh State Disaster Management Authority (UPSDMA), Lucknow, to train the government officials of UP on Early Warning and Indicators of Heat waves. The two one-day training programmes had about 80 participants besides the UPSDMA officials.

The session covered the topic of managing heat waves - before, during and after. It concluded with making participants to understand the need for efficient and effective measures to protect ourselves and others during heat strokes. The session also brought out the need for Community Based Disaster Management Plans, capacity building required for Gram Panchayats and municipalities to handle disasters, and how DRR needs to be made part of every Gram Panchayat Development Plan.

13.2.3 Disaster Management Plans of the Schools and Villages: Review Workshop

CEE Himalaya, in collaboration with State Council for Educational Research and Training (SCERT), Sarva Shiksha Abhiyan (SSA) and Directorate of Elementary Education, Uttar Pradesh, organised a one-day workshop to review and revise the School Disaster Management Plans (SDMPs) and Village Contingency Plans (VCPs) prepared by the teachers and students with the participation of School Management Committee, members of the Gram Panchayat and village community at

the Nyaya Panchayat Sansadhan Kendra, Purva Madhyamik Vidyalaya, Jarwal, Bahraich. The 234 government schools of Jarwal Block are divided into 10 Nyaya Panchayat Resource Centres (NPRCs), with one NPRC member in each responsible for the activities of teachers in the school falling under that NPRC.

The teachers of all the schools of Jarwal Block were trained by CEE in DRR Preparedness through four Teacher Training Workshops (TTWs) and were subsequently given the responsibility of preparing the SDMP of their school and the VCP of the village where their school is located. At the review workshop, CEE helped finalise the SDMPs and VCPs for all the 234 schools and 78 Gram Panchayats of Jawral Block.

13.2.4 Skill Development Training under 'DRR Preparedness' in Bahraich, UP

A two day skill development training on February 20-21, 2018 was proposed under the activity of Demonstration-cum-Training on livelihood improvement activity for the women of the flood affected villages of Chudipurwa, Dhobinpurwa and Barkhandipurwa of Jarwal Block near Ghaghara. Master Trainers Ms. Aarti Rana and Ms. Kavita Mishra trained the women of the riparian communities in alternate livelihood options, through developing their skills in making handicraft items and in marketing and sale of the products made. As part of this workshop, CEE conducted a session focused on Disaster Risk Reduction, Environment Protection and Livelihood Improvement of the people affected by the Ghaghara River floods. Elaborating on CEE's programme on awareness and training on DRR preparedness for school children and teachers and the members of the Panchayati Raj Institutions, especially the elected representatives, the Gram Pradhans, and the village community in Jarwal block, CEE requested the workshop participants to extend their cooperation in making CEE's progtamme successful in their villages.

13.2.5 Workshop on 'Being Climate Smart, Sustainable and Disaster Resilient'

CEE organised a workshop for M.Sc. Environmental Science students, Department of Botany, Institute of Science, Banaras Hindu University, Varanasi, on May 25, 2017. The workshop was attended by 16 Professors, 26 Masters students and 11 Research scholars. The workshop focused on making every citizen Climate Smart, Sustainable and Disaster Resilient.

13.2.6 Launch of DRR Network Asia Pacific at Sejahtera

A DRR Network of RCEs at the Asia Pacific level was launched at the 9th Tongyeong ESD International Forum 'Sejahtera Forest for All'. Abdhesh Gangwar made a presentation and highlighted the efforts of RCE Srinagar and CEE Himalaya in developing this Regional Network, and spoke on how different countries, especially less developed countries, can take advantage of the network to in-build DRR Preparedness that can compare with advanced and developed countries like Japan and Republic of Korea.

14 Facilitating NGOs and Community Initiatives

14.1 GEF-UNDP Small Grants Programme, India

The GEF UNDP/SGP in India is implemented country wide as a Full Scale Project (FSP), working extensively in the areas of Biodiversity Conservation, Climate Change Mitigation and Land Degradation, with emphasis on eco-friendly livelihood measures. SGP was designed to demonstrate community action as a primary measure for balancing human needs and environmental imperatives.

CEE is the National Host Institution (NHI) working closely under UNDP Country Office and MoEF&CC, and coordinating with more than 400 Non-Governmental Organisations (NGOs) and Community Based Organisations (CBOs) . SGP India has coordinated various Operational Phases and the interventions brought out remarkable positive changes in the areas of rural development, eco-friendly livelihood and small business management. In all, 443 projects were supported through five SGP Operational Phases and the current Phase 05, was completed on March 31, 2018.

As one of the upgraded SGP Country Programmes, SGP India has supported 112 community-based projects to date in its Fifth Operational Phase, to protect biodiversity, address climate change and prevent land degradation, benefiting over one lakh people across the country. In addition to improving the functioning and productivity of local ecosystems through better resource use practices and restoration activities, SGP projects in India have also delivered an array of local economic, social, and political benefits, including job creation and expanded local markets, greater social cohesion and community self-reliance, political and social empowerment, and increased food security and water access.

Achievement Highlights of SGP OP5 for the year 2017-18

The important achievements of the project may be summarized as follows:

- 72 Small Grant Projects were successfully completed by exercising the mid-term and final evaluation in coordination with the respective CEE Regional Offices. The 10th National Steering Committee Meeting held at MoEF&CC on November 8, 2017 had approved 10 new projects and allocated USD 147307.
- **Green Haat at MoEF&CC:** On the occasion of the visit by the CEO and Chairperson of the Global Environment Facility, Ms. Naoko Ishii, SGP India in collaboration with MoEF&CC, UNDP and CEE hosted a 'Green Haat' from October 31 to November 6, 2017 for rural communities whose livelihoods depend on ecosystem services, to showcase and provide a market place for their biodiversity products crafted with support from COMDEKS and SGP projects. By creating a platform for vulnerable communities to display

their products from rural production landscapes that highly depend on a sustainable relationship between livelihood activities and the environment, communities are socially empowered and encouraged to conserve biodiversity and reduce land degradation.

Together with Ms. Ishii, other eminent guests included Dr. Mahesh Sharma, Hon. Minister of State, MoEF&CC, and other officials from the Ministry and UNDP, encouraging the mainstreaming of grassroots innovations. Among the 22 local producers who displayed their produce, COMDEKS partner Chhattrasal Sewa Sansthan displayed its organic pulses, ginger, garlic, spices and pickles. The event also displayed the achievements of COMDEKS-supported initiatives through an impressive 'Gallery Walk', which illustrated numerous pictures from project sites as well as short videos capturing the successful impacts of these community-led projects.

This event was a significant opportunity for rural producers to sell and market their sustainably generated products. Within seven days, the event saw more than 12,000 visitors and the revenue from sold produce reached around 400,000 rupees (about USD 6,060).

- More than 3000 hectares of land have been brought under sustainable land and resource management (SLRM) in the Western Ghats (WG), Himalayan Front (HF) and Arid and Semi-Arid Regions (ASAR) through sustainable measures such as organic farming and community managed enterprises for non-timber forest products (NTFP); improved agricultural, land and water management practices; and the promotion of sustainable income generation activities among the below poverty line (BPL) tribal families.
- In the reporting year, through SGP interventions, approximately 5000 metric tons of CO2 emissions have been reduced at the community level. This was achieved by promoting more efficient fuel wood usage and introducing low-GHG tools and products — efficient cook stoves, biomass driers, briquetting units, vermi-composting, waste recycling, and energy efficient furnace. Further, use of technologies like micro-hydro, wind, solar and biomass energy options, has resulted in enhancing the livelihoods of poor and marginalised communities.
- SGP India has continuously reached out and collaborated in meaningful ways with a wide variety of stakeholders including NGOs and CBOs, national and local government entities, private sector, and academic, research and extension institutes.
- During the reporting period, an additional 1,101 new women

collectives, such as Self Help Groups, Energy Producer Groups, Fodder Management and Development Committees, have been formed and strengthened compared to the numbers reported in the previous year. In most SGP projects, there is a major focus on developing and strengthening institutional structures such as SHGs, Producer Organisations, etc. at the grassroots level to ensure sustainability once the project activities have ended.

- Products of 246 Self Help Groups are being promoted with branding and certification.
- Guidance workshops were organised in Bengaluru and Bhubaneswar in June and December 2017 respectively, to provide capacity building for SGP partners and linking them with government departments and private agencies.
- Workshops on beekeeping were organised in three different locations in India covering more than 140 farmers.
- Knowledge Management Materials such as brochures for some of the SGP Partners – viz. CTD, Delhi; STD, Mandi; and CHARDEP, Tamil Nadu, - and a book on Soil Health were developed and published.
- One of the SGP partners, LOTUS Progressive Centre, Assam, has developed a low cost seed bank for the preservation and multiplication of native rice paddy. LOTUS is in the final stage of receiving GI registration of the native black rice variety promoted by it.

14.1.1 Small Grants Programme – CEE Central

CEE conducted a meeting of the Regional Committee to review projects and proposals. Short-term projects were awarded to two organisations. Mid-term reviews of eight organisations from Madhya Pradesh and two from Maharashtra were completed. Final reviews and release of grants were completed for 10 NGOs from Madhya Pradesh, seven from Maharashtra and one from Chhattisgarh.

The final evaluation of the Operational Phase (OP) 05 of the SGP (for CEE) was undertaken by an external evaluation team in January and February 2018. They interacted with five NGOs in the CEE Central region as part of the process and also held a consolidation evaluation meeting at Ahmedabad.

Training, Capacity Building

15

15.1 Rural Immersion Programmes

Rural Programme Group (RPG) of CEE has been providing curriculum based experiential learning opportunity to students from various national and international universities of short and long duration modules. Two such programmes were conducted during the year 2017-18 in the form of rural immersion programme.

15.1.1 NABARD Rural Immersion Programme 2017

The first Rural Immersion Progrmame for the new direct recruit officers of NABARD (National Bank for Agriculture and Rural Development) was organised in July 2017. This four-week long programme was attended by 18 officers. The purpose of this programme was to orient the newly recruited officers to the rural development issues, challenges and various approaches. The programme also aimed at widening their understanding about what kind of role NABARD can play in addressing various rural challenges. The programme combined theory and field experience in a highly structured manner, to give participants four full weeks of learning. The first week was based at CEE, providing opportunities to interact with leading rural sector experts from various domains such as agriculture, governance, water management, rural policies, livestock, energy, etc. For the next two weeks and a few days, the group travelled extensively to various parts of rural Gujarat. The visit covered a wide range of rural development related works being implemented by CEE and various other NGOs in different parts of the state.

The visits covered various topics such as understanding what is participatory need assessment, various PRA tools, the concept of SHGs, federation, food security, women entrepreneurship, farmers producer organisations, APMC (Agriculture Produce Market Committee), women's cooperative, dairy farm, water harvesting structures, participatory irrigation management, handicraft revival and livelihoods, biodiversity, governance, etc. Towards the end of the programme, in the last three days, participants consolidated their learning and had a chance to interact with experts to clarify their doubts and strengthen their learning.

During the inauguration and valediction, the Chief General Manager of NABARD (Regional Office Ahmedabad) and Shri Kartikeya Sarabhai (Director, CEE) remained present to encourage the participants. The talk delivered through video conferencing by Shri H. R. Dave, Deputy Managing Director, NABARD, was an inspiring highlight of the programme. The programme was appreciated by the group as an excellent learning experience that provided an extensive exposure to rural issues within a short duration.

15.1.2 Rural Immersion Module for the Students of Development Management Institute, Patna

In February 2018, a two-week long, rural immersion module was offered to the 2nd year students of the Development Management Institute (DMI), Patna, pursuing their Post Graduate Programme in Development Management. The module was part of their four week long experiential learning programme on "development immersion". The rural immersion programme was therefore structured based on their curricular requirement, linking theory with real life experiences. Twenty two students joined this programme. At the end of the programme, the students were asked to make presentations of their learning, and a formal grading to meet the academic requirement was also carried out.

15.2 Sustainability Exchange Programme – Central Queensland University (CQU), Australia

Communication for Sustainable Development (CSD) Group hosted two batches of students from CQU during the year as part of the Sustainability Exchange Programme. This programme is designed to provide holistic exposure to the socio-economic and environmental diversity of India with a view to promote sustainability and cross-cultural understanding. The programme focuses on hands-on learning through field visits and working sessions related to the respective disciplinary areas of the participants.

15.2.1 Nursing: October 21 – November 6, 2017

During October-November, a group of 10 nursing students and two faculty members came to Ahmedabad as part of the SEP. Being the first time that we are hosting nursing students, CSD team liaised with hospitals in Ahmedabad in advance to ensure that they go through a relevant and useful experience. As their objective was to gain an experience of the health care scenario in India, CSD arranged to place them in two private hospitals and visit a public and rural hospital, besides a nursing college. Accordingly, they spent three days each in a multi-specialty and women's hospital, visited a public hospital and a Primary Health Centre in a village.

The students had raised funds to contribute to the hospitals they would be visiting. Collectively they raised AUD 3034.85 (approximately 1.5 lakh) which they contributed to the rural primary health centre who had provided a "wish list". The Purchase group at CEE facilitated the purchase of the medical equipment by negotiating the best prices and service contracts. The purchases included two incubators (one stationary, one portable), two blood pressure monitors, a HB meter, wheelchair, delivery table and mattress, and 50 HIV testing kits.

The participants were divided into two groups, each with a faculty and five

students. The groups alternated between two hospitals in the city – Zydus Hospital (a multi-specialty hospital) and Mayflower Women's Hospital. At Zydus, they were able to visit all the departments and were fortunate to observe surgeries – one group was able to observe an open heart surgery while the other a brain tumour removal. The groups could demonstrate slider sheets used to transfer patients at the Mayflower Hospital and also visit and understand the working of Arpan Neonatal ICU.

A visit was arranged to Sola Civil Hospital to give them an experience of a public hospital, where while being shown around, they were able to witness two live births. They also visited a Primary Health Centre at Ranmalpur in Halvad where they handed over some of the equipment they had got with the funds they raised. After this visit and interaction with the staff there, they had a walk in the village and visited the Sarpanch's house. The rest of the equipment was later handed over to the District Hospital in Halvad.

The group was then taken to Khyati Nursing College, where they could see the facilities, interact with faculty and students, and understand the nursing education scene in Gujarat/India. The staff of Khyati Nursing College and the team from CQU both made presentations on the nursing education in their respective countries and also interacted with the students and faculty.

As part of cultural exposure, they were taken to Adalaj Stepwell and Akshardham in Gandhinagar, as well as for a traditional Gujarati dinner at Rajwadu, a restaurant with a village ambience. An evening of traditional and pop music and dance of India was also organised with traditional lamps and sweets to invoke Diwali.

At the valedictory function, the students made PowerPoint and poster presentations on their learnings, takeaways and experience in Ahmedabad.

15.2.2 Education, Environmental Science, Science, Digital Media: January 5-18, 2018

CSD group hosted another group of 20 undergraduate students from Environmental Science, Digital Media, Science and Teacher Education departments along with two faculties, from Central Queensland University, Australia, as part of CEE's Sustainability Exchange Programme (SEP) from January 5-18, 2018.

The Environmental Science students visited the Mahila Housing Trust (MHT) to understand their work by observing two slum based models, one where there is an ongoing intervention and another where the intervention has successfully led to a visible impact. They also visited Ahmedabad Municipal Corporation (AMC) and interacted with the officials of Solid Waste Management (SWM) division to learn about urban waste management and were invited to visit Pirana landfill along with the waste segregation plant of Let's Recycle. Thol Bird Sanctuary and Sundarvan, a Nature Discovery Centre,

provided them with insights on the biodiversity in and around the city along with awareness sessions on conservation. AMC's Sewage Treatment Plant was another subject based visit where they were briefed about the working of the site.

The Teacher Education students visited three schools - Mahatma Gandhi International School (MGIS), IQRA Primary School and Red Bricks School to understand the difference in curriculum and pedagogy in the education systems of India and Australia. The Digital Media student was engaged in documenting the entire process visually along with creating a blog and sharing reflections on the programme. Common visits for the two groups included CEE's Bakore camp site and Vikram A. Sarabhai Community Science Centre (VASCSC).

As they were just in time for the celebration of Uttarayan in Gujarat, they enjoyed learning how to fly kites and experience local festivities in the heart of the old city area in Ahmedabad.

A cultural experience through a Heritage Walk was organised for the participants. This was in addition to a special Bollywood evening to showcase a popular movie with dance and music, followed by a dance session to the tune of Hindi and regional film songs. This unique experience was rounded off by a dinner at a well-known village themed restaurant.

A Warli painting session along with Gujarati language lessons were specially arranged for them to grasp a few common phrases and terms. The programme culminated in a valedictory session on January 18, 2018 where the participants presented their learnings and shared their experiences and feedback.

15.3 Training Sessions in DIET, UP

15.3.1 Pre Service Teachers Training, DIET Lucknow

Dr. Abdhesh Kumar Gangwar, Programme Director, CEE Himalaya, was invited by the

Students learning how to make VCPs, DIET Bahraich

District Institute of Education and Training (DIET), Lucknow to address their pre-service teachers undergoing Diploma in Elementary Education (D.El.Ed.) (formerly called Basic Training Certificate) on January 23, 2018. He spoke on the subject of reorienting education and teacher training, especially on how teachers can make their teaching-learning better, effective, relevant, useful and interesting for the children. This could counter issues like lack of interest in parents and children coming to school as they see no tangible benefits from the education being imparted in schools. Connecting classroom teaching with the outdoor environment, designing and conducting activities, making and using teaching aids from low and or no cost material, conducting activities related to village life, livelihood, culture, traditions, etc. was emphasised.

Thirty pre-service teachers attended the session where topics like drinking water, open defecation, menstrual hygiene, food, nutrition, diarrhoea deaths, stunting, anaemia, personal hygiene, health and fitness were also discussed. IEC material developed by CEE Himalaya was used to support the deliberations.

15.3.2 DRR Preparedness Session at DIET Bahraich Pre-Service Trainee Teachers

A pre-service teachers training workshop on DRR Preparedness was held on March 13, 2018, in the District Institute of Education and Training (DIET) Bahraich, Uttar Pradesh. More than 500 students, drawn from BTC, D.El.Ed, and from Kasturba Gandhi Balika Vidyalaya, participated in the workshop along with faculty members and office staff of DIET, and teachers from the school. The programme focused on raising awareness on DRR preparedness and preparation of School Disaster Management Plans (SDMPs). The DIET Principal and staff showed keen interest in the details of SDMP and its importance and necessity, and agreed to support further activities related to achieving 'Climate Smart, Sustainable and Disaster Resilient Communities'.

16 Material Development and Publications

16.1 Sabarmati Ashram Centenary Project

As part of the Sabarmati Ashram Centenary celebrations, CEE undertook a project for the National Archives of India (NAI), to set up a month long exhibition and develop and publish a commemorative volume on the Ashram. Communication for Sustainable Development (CSD) team undertook the task of preparing the publication.

With inputs from NAI and Sabarmati Ashram Archives, CSD developed a 180 page book centred on the Ashram, covering its establishment, life in the Ashram, inmates of and visitors to the Ashram over the years, the major national movements that had their genesis at the Ashram, and current government programmes that take forward Gandhi's principles and philosophy. The book is in three languages and has extensively used archival material and photos related to the Ashram. It was formally released on June 29, 2017, at a function held to mark the centenary of the Ashram, by the Prime Minister of India, Shri Narendra Modi.

16.2 IEC Material on Biodiversity – CEE North

Resource Material on Wetlands of Bihar: CEE North was invited by Bihar Environment and Forest Department to develop a set of material on the wetlands of Bihar. Based on extensive research into the wetland spread and key wetlands of Bihar, and after reference to key documents, books, reports, etc., CEE team prepared a brochure showcasing the wetlands of Bihar. The brochure was finalised with inputs from forest department officials and 1000 copies were printed. A poster and set of stickers were also designed and developed in Hindi by CEE team on wetlands to communicate the message of 'save wetlands'.

Ecomap of Uttar Pradesh: Supported by the Uttar Pradesh State Biodiversity Board, CEE North has developed a chart

showcasing information and facts about the rich biodiversity of Uttar Pradesh. The chart included information about the state symbols, key species found in various ecological zones of UP which are currently under threat, and major flora and fauna species. This chart has been developed for schools and other stakeholders, and was released by the Chief Minister of Uttar Pradesh on the occasion of World Environment Day. This material has been provided to schools for use as display material.

Calendar on Suhelwa Sanctuary: Keeping in view the upcoming UP Bird Festival at Dudhwa National Park in February 2018, an IEC material was planned to be developed for dissemination to inform everyone about Suhelwa Sanctuary as an important birding location. A 14 page wall calendar was developed with the focus on wetlands and migratory birds found in Suhelwa. While background research was conducted to find the highlights of Suhelwa, high resolution good quality photos were solicited from birders for the calendar. Balrampur Sugar Mills and British India Association supported the printing and development of the calendar.

16.3 Publications from CEE Himalaya

- CEE Himalaya brought out several publications and contributed thematic write-ups for different publishers/ topics. A list of such publications/write-ups are given below.

- **Being Climate Smart, Resilient and Sustainable:** A Disaster Risk Reduction Approach for Himalayan States by Dr. Abdhesh Kumar Gangwar and Dr. Rashmi Gangwar.
- A case study on **Rebuilding Trust -** CEE- CARE India & Plan India, Jammu and Kashmir, September 2014 Flood Response – this is being compiled by SEEDS and is funded by USAID.
- **Herbs for Health: Communicating for Conservation, Cultivation and Sustainable Utilisation of Medicinal and Aromatic Plants** by Riyaz Ahmed Mir, Abdhesh Kumar Gangwar and Rashmi Gangwar, RCE Srinagar, India
- **Rural Sanitation and 'Open Defecation Free' Environment** by Dr. Rashmi Gangwar and Dr. Abdhesh Gangwar, RCE Srinagar, 2017. Write-up accepted by UNU-IAS for their publication during 2017 to be launched during the 10th Asia Pacific Meeting of RCEs, November 2017 in New Delhi.
- **Promoting ICH Safeguarding Activities of NGO-PINA** by Abdhesh Gangwar with Rahul Goswami. To be published in 2018. The book's shared theme focuses on educational approach to safeguarding ICH to achieve SDGs.
- **Vidyalaya Aapda Prabhandan** (Hindi) - School Disaster Management Plans of 234 schools of Jarwal Block of Bahraich District, Uttar Pradesh
- **Gaon Aapda Prabhandan Yojna** (Hindi) - Village Contingency Plans of

121 villages of Jarwal Block, Bahraich District, Uttar Pradesh

- A set of 36 book label stickers on Disaster Preparedness. The disasters covered are fire, thunder and lightning, landslide, earthquake and flood. A CEE Himalaya Publication
- **Prakritik Aapdayen: Kabhi Bhi! Kahin Bhi** - A DRR Preparedness Year Planner 2017-2018
- **Achieving ODF Environment -** Year Planner 2017-2018 on Water, Sanitation and Hygiene promoting 'Open Defecation Free' Environment. A CEE Himalaya Publication
- **Hand Out on DRR preparedness –** This 21 page booklet was prepared and distributed in flood affected areas.

16.4 CEE-DMI Case Research for Sustainable Development

CSD Group of CEE and Development Management Institute (DMI), Patna, have agreed to collaborate on an in depth research and documentation study of innovative field projects across the eight themes/sub themes relating to the Small Grants Project (SGP) of UN Development Programme-Global Environment Facility (UNDP-GEF). The study will be undertaken through case research methods and other approaches over a year long period during May 2017 to April 2018.

Having been part of the SGP Meet in March 2017, the DMI team realized that the innovations, processes and upscaling of projects under the SGP are very much in sync with their mission and provide excellent material for their students to understand the processes related to grassroots empowerment and livelihoods. Subsequently, DMI entered into an agreement to develop eight case studies through a mixture of secondary data and field study, which will then be used as study material for their classrooms.

Eight organisations have been selected for the study based on criteria like impact on community, relevance to local issues, potential for sustainability, leveraging of grant for scaling up, innovation and creativity, demonstration effect and technology. A high level academic team from DMI is involved in the field study in coordination with CEE programme staff at various locations.

As part of the project, two workshops with both the teams participating, were conducted: (i) June 21-22, 2017 – to identify organisations to be studied and plan the activities and timeline; (ii) October 4, 2017 – to discuss the pilot case study after the team had visited one organisation as a pilot study.

Institutional Development and Support 17

17.1 CEE – Information Service Centre (CEE-ISC)

CEE-ISC has been established with a view to provide and disseminate information on Environmental Education (EE) and Education for Sustainable Development (ESD) and related areas. It caters to the needs of educators, researchers, decision makers and the general public.

ISC has a rich collection of books, journals, periodicals, reference books and children's books in English, Hindi and Gujarati. The collection of books at ISC now stands above 20000; periodicals number about 25 while the CD/DVD collection is around 510.

During the reporting year, no new books were acquired, but ISC continued to renew the subscriptions of journals and magazines.

17.2 Human and Institutional Development (HID) Activities

The Centre went through a very difficult financial situation during the year 2017-18 and hence the focus of HID initiatives led by the Director and senior management were in the areas of

- Restructuring of teams
- New programmes, funding opportunities and fund raising
- Retention strategies for retaining trained staff
- Identifying potential self-sustaining units and strengthening the existing ones
- Setting up income generating activities and units
- Addressing human resource issues

- Several meetings of the Programme Director's Forum (PDF+) were held the during the reporting period to discuss institutional matters. A meeting of PDF+ was held on March 20-21, 2018, to discuss the programme and financial planning for 2018-19.
- To meet the internal communication forum needs, CEE Intranet was revamped and launched.
- An internal training workshop on Administration and Accounts was scheduled during January 2018.
- Project recruitments were carried out to identify potential resources for project implementation.
- Training on use of tally software and use of smart sync pro was organised for staff members
- An in-house training workshop on GST and its applicability to CEE's work was organised during this period.

The following staff members were nominated for external training programmes and workshops.

Sr. No	Name	Topic	Organizing Agency	Location
1.	Mr. Ashwin Wasnik Ms Heleena Christian	EIA training, February 5-9, 2018	NEERI	Nagpur
2.	Mr. Sujeet Dongre	Leadership training 2017-18	ARITRA	Bangalore (face to face and online programme)
3.	Ms. Viveka Jani	KF Reverse Programme, May 1 – July 6, 2017	BMZ and a local state ministry in Germany	Germany
4.	Ms. Saymanti Bandyopadhyay	NAAEE 'EE 30 under 30' Programme	NAAEE	Online programme
5.	Ms. Priyanka Sinsinwar	Rajasthan CSR Summit, Feb 6, 2018	NGOBOX	Jaipur
6	Mr. Dhiraj Gidwani	National CSR Conclave and Awards 2018 at Ahmedabad	AMA	Ahmedabad

17.2.1 Staff Recruitment in CEE Central

In CEE Central, one Project Officer each was recruited for the three projects: Environment Service Scheme, Lady Bamford Charitable Trust (LBCT) and Mumbai Metropolitan Region Environment Improvement Society (MMREIS).

Nineteen interns and 25 volunteers were engaged in various projects of the Regional Office during the period.

17.3 Corporate Communications (CC)

Overall Contribution

Corporate Communications were involved in the transcription of the plenary as well as inaugural speeches delivered by dignitaries, at The International Conference on Education for Sustainable Development for Children and Youth, which was held from September 16-18, 2016. World Environment Day 2017 celebration saw CC participation in the form of organising Quizzola and One Minute Games as well as in the 'Biodiversity Walk' on the theme 'Connect with Nature'. The team collated the data for a brochure showcasing projects implemented by CEE in partnership with organisations in Japan. CC was actively

involved in facilitating the Sustainability Exchange Programme 2017 and 2018 with Central Queensland University, Australia for its Nursing as well as Education and Environment students pursuing their bachelors in the same. For the Distance Learning Programme, a three month online certification course offered by CSD, CC facilitated its admission and poster updates on various platforms.

17.3.1 Websites

During the year, the team ensured regular updates of the Centre's activities on the website. Meanwhile, a new dynamic website for the centre is being developed that will enhance the visitors' experience, both functionally and aesthetically. An html page, dedicated to the Sustainability Exchange Programme (SEP), an initiative by the Communication for Sustainable Development (CSD) group of CEE, was designed and developed along with the content, to go live in April 2017 on the CEE Australia website.

17.3.2 Booklet, Brochures & Other Promotional Material

Promotional material to put forth the Centre's initiatives and programmes were designed and developed.

- Ganga Swachhata Pakhwada, a cleanliness campaign in cities along the banks of River Ganga, flagged off on March 16 till March 31, 2017, was documented in a photographic coffee table book – Glimpses of Pakhwada Events and Activities across Ganga Basin States.
- CEE in partnership with NABARD, implemented a national campaign 'Jal Jeevan Hai', with a focus on water for agriculture in 1,00,000 villages of 21 states. CC was involved in facilitating the development of IEC material and other collaterals.
- CC supported the development of materials for the centenary celebration of Sabarmati Ashram, Ahmedabad, which was commissioned to CEE by the National Archives of India. CSD developed a publication – Sabarmati-Ek Karyanjali; a brochure as well as content for various panels for the exhibition (displayed at the Ashram), which formed part of it.
- A photo documentation booklet - Glimpses of Activities, on various programmes undertaken by CEE through its state offices across India, was developed for the period of June to December 2017.
- The 'Innovation for Sustainability' booklet (presenting the case study of 40 organisations under the GEF Small Grants Programme was finalised.

17.3.3 Social Media

The team has been handling the social media accounts of the Centre. Updates of various programmes and initiatives are shared regularly on the Centre's Facebook page.

18

Events

18.1 World Heritage Day and Earth Day – April 18 & 22

CEE Varanasi: CEE Varanasi project office conducted awareness events in schools on the occasion of World Heritage Day on April 18, 2017, at Brahma Ved Vidyalaya, a Clean Ganga Club school. Over 80 students and five teachers participated in the programme. Students were briefed about the valuable heritage of Varanasi city and the threats being faced by these sites. Students were asked to prepare plans for preserving a nearby heritage site. On the occasion of Earth day on April 22, CEE team conducted events at two schools: Adarsh Shiksh Mandir, Bhadaini and Central Hindu Girls School, Kamacha, where over 150 students and 10 teachers participated. Students were briefed about the theme of the day and what steps could be taken in daily life for a low carbon lifestyle.

18.1 International Day for Biological Diversity (IBD) – May 22

In partnership with Nehru Yuva Kendra Sangthan (NYKS) of the Ministry of Human Resource Development, Government of India, RCE Srinagar with CEE Himalaya celebrated the International Day for Biological Diversity 2017 on May 22 across the Indian Himalayan Region (IHR). The celebrations were held in two places in Western Himalaya - Baramulla and Rajouri in Jammu & Kashmir; Uttarkashi in Uttarakhand in Central Himalaya; and in Deythang village of West Sikkim District, Sikkim, in Eastern Himalaya.

Baramulla: IBD was celebrated in the village of Delina, Baramulla District, Jammu & Kashmir, which is located on the national highway of Srinagar – Uri. The village is inhabited by the Muslim community, both Shia and Sunni, with about 700 households. The main occupation of the people is agriculture, horticulture (apple orchards) and animal husbandry. During IBD celebration, the importance of agri-biodiversity was highlighted; how farmers can help conserve the gene pool of traditional crops that can be also used for developing new varieties of crops; and agriculture as a resilient sector ensuring food, nutrition and health security. More than 70 local farmers attended the celebration.

Rajouri: The IBD was celebrated at the Government Model Higher Secondary School, Rajouri, where about 233 students and 10 teachers took part in various events and were cheered by the Principal of the School, Mr. Ghulam Qadir, who along with Mr. Riyaz Ahmad Mir highlighted the importance of biodiversity and how students can contribute to saving biodiversity.

During the celebration, three competitions were held: Painting, Essay Writing Speech on the theme 'Biodiversity and Sustainable Tourism'. In the painting competition, 40 Students took part and covered various aspects on how

biodiversity can be conserved. In the essay writing and speech, students addressed the main issues challenging biodiversity and also ways to conserve by taking small steps.

Deythang, West Sikkim: IBD was celebrated at the Government Secondary School, Deythang, West Sikkim. The school itself sets a very good example in promoting environmental awareness through various activities. They have incorporated environmental consciousness as a part of education. Post Graduate students of Tata Institute of Social Science, Guwahati, and Nalanda University who were doing their internship with CEE, spoke to the students about the concept and importance of biodiversity. The theme of IBD 2017, 'Biodiversity and Sustainable Tourism', was also explained to the students and teachers.

Bahraich: In May 2017, CEE's Bahraich team conducted an event on the occasion of IBD to sensitise the youth of the village towards Biodiversity and Sustainable Tourism. CEE team visited Bhattah Bagh of Baundi village with youth members. Bhattah Bagh is popular among villagers as a mini forest and is rich in biodiversity with several varieties of plants, birds and a wetland which is directly connected with Ghaghra river during flood time. CEE team, with the help of a bird chart, interacted with the participants to observe and identify birds found in the area and discussed with them about their qualities and how they help in the conservation of our environment. CEE team conducted a plant trail where the youth was helped to identify various plant species and their medicinal properties.

18.3 World Environment Day (WED) – June 5

Lucknow: Tata Projects organised an Environmental Programme on World Environment Day, 2017 to create the awareness among the staff and workers associated with Tata, in association with Vigyan Foundation and CEE. Over 100 staff members of Tata Metro project attended the event which was held in the evening. A group presented a nukkad natak on the core theme of caring for the environment, which was appreciated by the audience. An interactive session was conducted by CEE team with the participants, while a session on sanitation and hygiene was conducted by Vigyan Foundation team. Sets of stickers with environment conservation messages that can be followed by all were distributed by CEE.

At another programme organised by Lucknow Metro Rail Corporation, CEE team conducted a half day workshop for a

group of 30 management trainees on WED theme, which included activities, screening of films and presentations.. CEE team conducted activites and screened films and sessions through presentations.

An exhibition was set up by CEE North at the state level World Environment Day programme organised by UP Forest Department. Various government officials, ministers, visitors, NGOs and media personnel visited the CEE exhibition and interacted with the team. An Ecomap on the biodiversity of Uttar Pradesh was also released by the Chief Minister of UP during the formal ceremony.

Varanasi: A World Environment Day event was organised at Assi ghat by CEE's Varanasi office in Varanasi. Students, vendors, youth and visitors took part in the event and were given an orientation on the WED theme. The participants took a pledge was taken by all to care for the environment and river Ganga.

Bahraich, Uttar Pradesh and Bettiah, West Champaran, Bihar: Under the community component of the Ganges River Dolphin Conservation Education Programme, CEE field team celebrated World Environment Day at Pakhnaha Panchayat in the dolphin cluster of Bettiah and Baundi of Bahraich District. CEE team introduced the purpose of celebrating WED and the theme of the year – connecting people with nature – to the audience. Community members were encouraged to take responsibility for conserving nature by adopting eco-friendly methods and approaches. A discussion was

Dolphin club interface with communities at Pakhnaha

held on the importance of agro forestry and organic farming in the conservation and protection of the river and its ecology, and how it is helpful in conserving the endangered species of Ganges River Dolphin. CEE demonstrated a fuel efficient cook stove which community members showed an interest in using.

CEE East: CEE East celebrated WED 2017 with students from Tiljala High School and from Aasrya Sadan. Aasrya Sadan is an institutional care home for children of rag picker families from Kolkata looked after by Tiljala Shed, a registered NGO. The representatives from CEE and CESC Ltd. made the students aware of the WED

theme, i.e., 'Connecting with Nature', and encouraged the young children to save the environment.

A drawing competition based on theme 'My Dream City - Kolkata' was held for these children. About 32 children expressed their ideas in the form of drawings and sketches. The young participants were encouraged to recite poems, share stories and experiences related to nature. The children planted fruit tree saplings (guava, mango, lemon, etc) within the premises of the shelter home and pledged to take care of the plants. Towards the end, the winners were felicitated by the volunteers from CESC Ltd. volunteers who judged the drawings. The other participants were given consolation prizes to motivate them to continue their efforts towards caring for nature.

Another programme on WED was conducted in the American Consulate General's house, in which students from eight schools of Kolkata interacted with the Consulate General Mr. Craig Hall and his team on sustainability aspects and air pollution related issues in the region. The functioning of the online air pollution monitoring system installed by the American Consulate in Kolkata was also demonstrated to the students.

18.4 International Mountain Day – December 11

CEE Himalaya: celebrated International Mountain Day (IMD) 2017 at Ghaghara Ghat, Jarbal Block, Bahraich District, Uttar Pradesh. The participants included 126 school children and four teachers of the Government Primary School, Khasepur; and over 110 villagers from three villages (Khasepur, Tapesepah and Behrampur). The Gram Pradhans and other representatives of the Panchayati Raj Institutions (PRIs) of the three villages were also present. The activities and deliberations during the celebration focused on disaster risk reduction, environment protection and livelihood improvement of the people affected by the Ghaghara river floods. The villagers shared their problems which have been noted for passing them on to the concerned authorities and taking up advocacy. The Gram Pradhans and other representatives of the PRIs also shared their problems and challenges on behalf of the people and their respective PRI. Representatives from Fisheries Entrepreneurship Training Centre spoke about the support their Centre can provide to flood affected people including livelihood options. The event was video recorded and the short film is available on YouTube (https://youtu.be/_ZIAIA5XVmI). School children took part in quiz, drawing and painting, rangoli making competitions, and went through the IEC material provided to them on DRR, water, sanitation, health and hygiene and environmental protection.

18.5 World Wetlands Day – February 2

CEE North: In February 2018, World Wetlands Day was observed by Paryavaran Mitra schools of Uttar Pradesh by

organising a visit to a nearby wetland with the students. CEE North facilitated the visit of school groups to the wetlands in Bareilly and Jalaun districts. A group of 22 students and five teachers from Shri Guru Nanak Rikkhi Singh Girls Inter College, Bareilly, visited the wetland known as Chuka beach, a part of the Pilibhit Tiger Reserve. Students observed the aquatic flora and fauna like Cormorant, Darter, Common Coot, Spotted Duck, Lapwing, Kingfisher, Little Egret, Grey Heron, Open bill Stork, Black Ibis, Turtle, Frogs, variety of fishes, Paila, Leech, many ducks and several water plant species in the wetland.

From Jalaun District, two schools - Government High School, Mohana, Orai and Kasturba Gandhi Balika Vidyalaya, Dakor, Orai - conducted a visit to a nearby pond. Over 46 students and seven teachers visited the wetland to explore and make observations. Educational material provided by CEE was referred in identifying birds such as Cormorant, Water Hen, Common Coot, Red-wattled Lapwing, Common Kingfisher, Little Egret, Pond Heron, Grey Heron, Open bill Stork, etc. Students also observed fishes, water grasses and frog species in the pond. They were given an orientation on the role of wetlands and its importance.

CEE Kolkata: observed World Wetlands Day with 85 participants (including students) at Akshar School. The school had organised an organic haat within the campus on the same day and an awareness session on Wetlands (with focus on East

Kolkata Wetlands) and its importance was conducted by CEE East team. The emphasis was on taking small steps towards conservation. A quiz competition was conducted on existing Kolkata wetland systems in which students, educators and stall owners participated enthusiastically.

18.6 International Women's Day – March 8

CEE Himalaya: International Women's Day 2018 was celebrated with over 200 people including representatives of the Gram Sabha, women, men and children in the village of Rithaura, which has one of the youngest Gram Padhans, the 25 year old Sonu Chaudhry. The village has over 400 households, about 1050 voters and a population of over, 2,500 people. The day-long programme in the village focused on DRR preparedness, improving WASH and skill development. Resource persons from the fields of DRR, Environmental Conservation, Water Sanitation & Hygiene, Livelihood Support and Entrepreneurship addressed the gathering and discussed various opportunities that the villagers can

IWD, 2018 celebration with Womens at Rithaura Village, Bahraich, U.P

take advantage of. Discussions were held with the Gram Sabha members and the villagers to prepare a road map for future action plan to be taken up by CEE in the area. Women participated through making Rangoli, drawing the map of their village, risk mapping; pledge writing, playing Riskland game and preparing a checklist of resources and safe places to use in case of disasters. The handicraft materials prepared during the skill development programmes conducted by CEE were kept on display.

18.7 World Water Day – March 22

CEE Himalaya: World Water Day 2018 was celebrated at Gyan Convent School, Dhobhinpurwa, Tapeshipah, Jarwal Block, Bahraich District, Uttar Pradesh. About 200 people including students, school staff, Village Development Committee members and villagers participated in the celebration. The programme focused on saving water, improving water, sanitation & hygiene (WASH), using toilets and avoiding open defecation. Awareness was

raised among students through activities like painting, pledge writing, play cards, rallies and exhibition. Opportunities for skill development and boosting traditional knowledge which connects with livelihood options were discussed. Fishery, poultry, mushroom culture and bee keeping were identified as areas for future interventions. Discussions were held with the staff members and the villagers to prepare a road map for future action plan to be taken up by CEE in the area. Issue related to soil health, low cost rain water harvesting systems, improved irrigation systems, modifying agricultural practices, crop rotation, less water demanding crops during summer and water demanding crops for the monsoon season were explained.

Manikarnika Ghat, Varanasi: CEE Varanasi observed World Water Day at Manikarnika Ghat of Varanasi in March 2018, with community members of Kasera society who reside near ghat in Kotwali zone. The purpose of the event was to discuss the role of the public and their participation in keeping Ganga clean, adopting water conservation practices,

behavioural changes aimed at avoiding wastage of water and various water related issues. The ward committee members of Gadwasi tola ward, Kaalbhairav ward and members from various committees of Kotwali zone and the local community from Manikarnika Ghat were present at the event. CEE team facilitated a discussion encouraging the community members to share their thoughts and ideas towards stopping water pollution and promoting water conservation. Over 150 community members participated in the event and took pledge for saving water.

CEE Kolkata: celebrated World Water Day amidst 40 farmers at the Sagar Shanti Sporting Club in Uchopota, Khanaberia at Dhapa - an expired landfill site. The students and the teacher representative from Baidyapara High School shared their ongoing efforts in their school towards conserving ground water by harvesting rain water during the rainy season. CEE used flipcharts and posters to draw the participants' attention towards the need to conserve water and harvest and use rainwater whenever possible. The farmers stressed on the problem of water scarcity during the period between January and May and shared information about their harvest. The programme culminated with the distribution of zeoline bottles to the local farmers.

World Water Day with local farmers

Facilitation, Networking and Participation

19

19.1 Facilitation

19.1.1 Information and Facilitation Centre, CEE Ahmedabad

The Information and Facilitation Centre (IFC) was set up in January 2008 to serve as an interface with the people of Ahmedabad and to visitors at CEE and its sister organisations, providing an opportunity to orient them to Environment and Sustainable Development, including information on various schemes and programmes of the Ministry of Environment and Forests, Government of India.

The IFC has a menu of programmes and activities which include orientation and hands-on experiential learning opportunities for various age-groups through three hour to week-long packages. The IFC also conducts a month-long summer programme for children, culminating on June 5 which is the World Environment Day. Outdoor activities include nature trails on campus, bird watching and field trips to natural sites. IFC has been actively involved in developing a campaign around the theme of 'Safe Festivals'. It also promotes eco-friendly products, displays environmental publications and information about latest publications. A database on participants to IFC's various programmes and visitors to the IFC is prepared and updated on a regular basis. It has over 3700 addresses listed to whom event information and other updates on special programmes at CEE are sent.

Orientation to Environmental Education Packages: These were offered to a varied group of visitors to CEE. Generally planned as sessions of three hours, these include a nature trail, environment education activities and games, and a film. Special components get added to this main package based on the profile of the group taking the package.

School groups: The IFC facilitated visits from many schools of Ahmedabad. The students' group vary as they include very young children from pre-primary to those from senior secondary classes. The number of groups who have undergone the orientation programme facilitated by IFC during the reporting period:

Group	Number of groups	No. of participants
Schools	22	2500 plus
University/ Architecturestudents and trainees	9	500 plus
Groups supported by NGOs	4	100 plus
Summer Programme	1	85
students		
Walk in Visitors		500 Plus

Besides offering the orientation package, IFC facilitated field visits to nature education sites developed by CEE, namely, the Manekbaug plot and Sundarvan. IFC facilitated linkages with other programmes within CEE such as connecting colleges to the SAYEN network in Ahmedabad.

IFC also played a major role in garnering media coverage for many of the CEE and Nehru Foundation for Development (NFD) programmes.

Birthday Package: IFC organised birthday celebrations for children at CEE's 14 acre lush green campus. The package includes a nature trail, bird watching, film screening, quiz and lots of games focusing on the environment. The birthday girl or boy plants a sapling and has her/his name tag on it. Friends were given educational products developed by CEE as return gifts.

Safe Festival Campaign

Diwali Safe Festival Campaign: Posters were put up at various places talking about safe festival celebration. Mailers were sent to people making them aware about the health hazards and pollution created due to crackers.

Holi: The campaign was conducted to propagate the use of natural colours and create awareness about the harmful impacts of the synthetic colours sold in the market. Natural and herbal colours were sold from H.B. Kapadia School, St. Kabir School, K. K Shashtri Govt. Science College, B. K School of Management, Mahatma Gandhi International School (MGIS), Zydus School for Excellence, Nurture Pre School, and IFC. The colours were procured from AURA Herbal Wear - organic products entrepreneurs in Ahmedabad. Posters were put up at different locations. Pamphlets with tips on making homemade colours were distributed. How to make natural colours at home were also demonstrated at schools and colleges.

Makar Sankranti Festival Campaign - Save our Birds: Mailers were sent to friends of CEE and other colleagues regarding the need to celebrate the kite flying festival safely so as to avoid hurting birds. Helpline numbers were provided so that people could contact in case they find injured birds.

'Go Green Ganesh' Campaign: CEE celebrated eco-friendly Ganesh Chaturthi with 'Go Green Ganesha' campaign. The two-day campaign included workshops for primary and pre-primary school students. Traditionally Ganesh Chaturthi was a small and intimate family affair where people used the fertile soil from river banks to create their own Ganesh idols. With time however, the festival became a large-scale commercial and community-based event involving Ganesh idols which can be as tall as 70 feet and made of Plaster of Paris. These are later submerged in the river water and, since they are non-biodegradable, they cause extensive pollution. The 'Go Green Campaign' at CEE was an attempt to make children realise the impact of celebrating Ganesh Chaturthi in an ecofriendly manner. Through presentations and stories, they were acquainted with the story of Lord Ganesh and taught the value of enjoying the festival without harming the environment. They were also taught to make small Ganesh idols out of clay.

Summer Programme for Children: A special vacation programme for children of

age group 5-13 years was conducted by IFC in May 2017. The month long programme was divided into different themes, each coordinated by a subject specialist from CEE. This was scheduled under the main theme "Connect with Nature", which was the World Environment Day 2017 theme announced by UNEP.

The programme included field trips, film screenings, theoretical and practical sessions, activities and games. Participants were given certificates at the end of the month long programme. The children set up an exhibition of the products and materials they developed during the summer programme and conducted puppet shows on World Environment Day.

World Environment Day: IFC supported the programme by sending mailers and invites to the general public. An exhibition of products made by children was also set up for the public to see what they did during the month long summer vacation programme.

Products like paper bags, candle stands, lampshades and traditional diyas were also exhibited and sold at the IFC. These were procured from organisations like UTTHAN, SEWA and Blind People Association (BPA); some of the products were made by mentally challenged children and visually challenged people.

Information Counter for MoEF &CC: The Ministry of Environment and Forests has as one of its important activities, the collection and dissemination of environmental information and creation of environmental awareness among all sectors of the country's population. While the ENVIS centres set up by the MOEF&CC carry out this function at a national level, a lot of relevant information on the Ministry's programmes are being made available through the Information and Facilitation Centre (IFC).

IFC Memberships: IFC offers membership to the citizens of Ahmedabad that will entitle them to participate in various activities; get invited to popular lectures and events; and provide access to CEE's facilities like the library.

19.1.2 Summer Workshop in Jaipur

Vacation workshop is an opportunity to expose children to new activities and experiences that they are not familiar with in a fun way and provide them a chance to explore and try new things and also develop skills like sharing, team work and desire to participate.

With this view, Lady Bamford Charitable Trust (LBCT), a social arm of Joseph Cyril Bamford (JCB) Limited organised a summer vacation workshop at Government Secondary School, Tilawas, Jaipur. On the invitation of LBCT, CEE Rajasthan supported the workshop as the knowledge and implementation partner. The main objectives were to strengthen the students' efforts of learning with fun, develop skills like creativity, team work, expression, etc. in students, and enhance their understanding in science, maths, sanitation

and environment. Activities organised in the workshop emphasised joyful learning.

Hands-on activities were carried out on five themes: sanitation and personal hygiene, fun with science and maths, my surroundings and nature, fun with colours and connecting to nature (biodiversity). The thematic and hands-on sessions held on each day helped the young participants to explore, discover and think on new concepts and underlying principles, which are generally abstract for them.

The effectiveness of the activities carried out in the summer camp was assessed through a questionnaire. The findings revealed that, besides enhancing knowledge, these activities also helped in sensitising them about their role as an individual in the conservation of the environment. They also developed skills related to waste management (eg. waste segregation) and sanitation and hygiene (eg. hand washing). It was observed that these activities helped them to participate in conversations, use imagination (creative thinking), complete tasks, express their feelings, co-operate with others and follow rules. These findings were a positive feedback to the approach of 'learning by doing'.

19.2 Networking

19.2.1 MGIEP's Rethinking Schooling for the 21st Century

CEE Himalaya participated in the South Asia launch of Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP)'s Rethinking Schooling for the 21st Century: The State of Education for Peace, Sustainable Development and Global Citizenship in Asia, which was officially launched on November 2, 2017 at the 39th session of the UNESCO General Conference..

Building on the content analysis of 172 official documents in 18 languages based on a common coding scheme and extensive literature review on Asian schooling, this report seeks to assess how far the aims and values encapsulated in SDG 4.7 have been incorporated into the educational policies and officially-mandated curricula of 22 Asian countries. By analysing current policies, curricular frameworks, subject syllabi and textbooks, it aims to create a baseline against which further progress towards SDG 4.7 can be monitored. At the same time, it sets out to change the way we talk about and act upon SDG 4.7, and argues that a broader vision of education's nature and social role is essential to our chances of achieving a peaceful and sustainable future for Asia and the world.

19.2.2 CEE Himalaya Chosen Partner for ICHCAP Project 2017

The International Information and Networking Centre for Intangible Cultural Heritage in the Asia-Pacific Region (ICHCAP) under the auspices of UNESCO announced CEE Himalaya as partner for 2017 Project for Promoting ICH Safeguarding Activities of NGOs in the Asia-Pacific Region (Project PINA).

19.3 Participation

Mr. Satish Awate

- Contributed an article towards the international publication titled 'Teaching the Sustainable Development Goals', developed by the Materials Working Group of ESD ExpertNet. (ExpertNet is a network of ESD practitioners from the four countries of Germany, India, Mexico and South Africa.) Mr. Awate is a member of the ExpertNet.
- Participated in the annual meet of ExpertNet held in Bonn, Germany, in November 2017. He is also a mentor as part of the International ESD Mentoring programme and provided inputs during the National Mentoring Workshop held in February 2018 in New Delhi.
- Represented CEE, who had been invited to provide inputs to India's Sixth National Report to the Convention on Biological Diversity, and presented the inputs in a workshop organised by UNDP on behalf of the Ministry of Environment, Forests and Climate Change (MoEFCC) in February 2018 at New Delhi.
- Was invited as panel member for a Climate Smart Village workshop organised by ITC in August 2017. He made a presentation on sustainability, biodiversity, and climate change and communication strategy and participated in a panel discussion.
- Along with Mr. Baswant Dhumane, Mr. Yuvraj Shingate and Mr. Abhijeet Kamble from CEE Central, Pune, participated in a consultative meet towards developing the Maharashtra State Biodiversity Strategy Action Plan (MSBSAP), organised by the Bharati Vidyapeeth Institute of Environment Education and Research (BVIEER), Pune, in June 2017. The team contributed to Communication, Education and Public Awareness (CEPA) for biodiversity education.
- Participated in the review workshop for the draft MSBSAP document, held in February 2018, and provided feedback and suggestions to improve the draft.
- Along with other members of the CEE team, collaborated with the Indian Institute of Science Education and Research (IISER), Pune, to provide inputs for the thematic areas of crops genetic diversity, domesticated animal diversity, grassland biodiversity, freshwater biodiversity, forest eco-restoration and information management, education and communication for biodiversity conservation. These were based upon experiences and learnings from the Maharashtra Gene Bank (MGB) project supported by the Rajiv Gandhi Science and Technology Commission of Government of Maharashtra.

Mr. Sujeetkumar Dongre

- Has been designated as the National Operator, Blue Flag India. He attended a three-day National Operators' Meet at Netanya, Israel, in October 2017.
- Has been appointed Member, Goa State Wildlife Advisory Board, by the Government of Goa. He coordinated the studies on Carrying Capacity Study of Dudh Sagar Water Falls, in the Western Ghats of Goa.

Dr. Abdesh Gangwar

- Participated in the Regional Workshop for North Eastern Region (NER) of India on Climate Adaptation Programme and Sustainable Ecosystem in NER, held during April 25-26, 2016 at Imphal, Manipur; this was organised by Manipur Directorate of Environment with support from Swiss Development Cooperation and Department of Science & Technology, Government of India.
- Was invited to The Sirindhorn International Environmental Park (SIEP), 1281 Rama VI Camp, Cha-am District, Phetchaburi, Thailand, from June 25 to July 4, 2016, where he participated in (1) the International Conference on Climate Change, Biodiversity and Ecosystem Services for the Sustainable Development Goals (SDGs): Policy and Practice, in Celebration of HRH Princess Maha Chakri Sirindhorn's 5th Cycle Birthday Anniversary during June 26-29, 2016; (2) the 9th Asia-Pacific RCE Meeting on held on June 30, 2016; and (3) the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) Capacity Building Workshop on Policy Support Tools during July 1-2, 2016.
- Attended the International Conference on 'ESD for Transforming Education for Children and Youth', organised by CEE from 16-18 September 2016 at Ahmedabad and coordinated the Sub Thematic Session on 'ESD in Youth and Higher Education'. He also participated in some of the sessions of the General Assembly meeting of the Foundation for Environmental Education (FEE) held simultaneously during the ESD Conference.
- Was invited by the United Nations University - Institute of Advanced Studies (UNU-IAS) to attend the 10th Global RCE Conference held at University of Gaja Madha & RCE Yogyakarta, Indonesia and the IPBES capacity building workshop organized by IPBES with UNU-IAS, November 22-25, 2016.
- Visited Nepal from January 1-8, 2017 for making a need assessment to develop CEE's 'Rebuilding Nepal' programme post Nepal earthquake.
- Was invited to attend the 3rd Indian Freshwater Turtle and Tortoise Strategic Conservation Action Planning

and Red List Assessment Workshop held from February 16-18, 2017 at New Delhi.

- Attended the 'Mainstreaming Grassroots Innovations: Community Action, Global Impact', the SGP India Meet organised by CEE with UNDP March 15-17, 2017 at CEE Ahmedabad.
- Was invited and supported by Give2Asia to attend the Disaster Preparedness and the Power of Local Leadership workshops organised by Give2Asia and IIRR (International Institution of Rural Reconstruction), Philippines during March 6-10, 2017, held at IIRR, Cavite and Asian Institute of Management in Manila, Philippines, respectively.

Mr. Bijoy Shankar Goswami

- Attended the Wetskills Amsterdam 2017 programme in Amsterdam, Netherlands from October 17 to November 2, 2017. The Wetskills Programme focuses on finding creative solutions for water as well as waste water treatment challenges by teams of international students and young professionals. Bijoy was the winner of Chasing Water Dreams organised by the National Water Partnership and Wetskills Foundation, Netherlands. As part of the programme, he also attended as a Young Water Professional in the Amsterdam International Water Week held from October 30 to November 1, 2017.

Ms. Madhavi Joshi

- Participated in a research meeting regarding regional revitalisation based on ESD and also spoke on the topic, bringing in the Indian perspective and experience. The event followed by a study tour to northern Japan to study the DRR related ESD work being undertaken in the region, which was conducted November 8-15, 2017.

Preeti R. Kanaujia

- Represented CEE in the executive and steering committee under the State Compensatory Afforestation Fund Management and Planning Authority (CAMPA), Uttar Pradesh, and as a member, she provided inputs on planning of conservation education interventions in the State.
- Was invited as member in the Environmental Science Advisory Committee Meeting organised by the State Council of Science and Technology, UP, Lucknow, held in July 2017, to review proposals by universities and institutions.
- Was invited as expert in a talk programme 'Global to Local' organised by Isabella Thoburn College under the Climate Impact programme of Swecha and US Embassy in July 2017.
- Was invited as guest speaker in a consultative meeting organised by Shohratgarh Environment Society and CUTS on 'Safer and Sustainable food

for all', focusing on organic farming, held in October 2017 in Lucknow. She made a presentation on the theme at the workshop.

- Attended the CBSE Regional Science Exhibition 2017-18 at Lucknow Public School as judge member to review projects and models under waste management, working models and robotics held in December 2017.
- Was invited as one of the judges for an Innovation Festival event organised by the Regional Science City in January 2018 to encourage schools and colleges of the state to showcase innovative models and projects.

Mr. Saquib Khan

- Represented CEE in the state level workshop on Integrating Alternate Livelihood in Aquatic Wildlife Conservation Strategy in Uttar Pradesh, held at Uttar Pradesh Forest Department, and shared CEE's experience from the dolphin initiative of working with the community.

Mr. Apurva Rai

- Was awarded the three month long Sejahtera Fellowship 2017 funded by Sejahtera Centre, Republic of Korea. He worked on promoting Disaster Risk Reduction Preparedness in the Asia Pacific Region through the RCEs Network with the support of the fellowship. The fellowship was from October 13, 2017 to January 10, 2018.

Ms. Priyanka Sinsinwar

- Supported the residential summer camp organised under the Rashtriya Madhyamik Shiksha Abhiyan by the Directorate of Education, and conducted environment activities during the camp at Silvassa.
- Participated in the Rajasthan CSR Summit held at Jaipur on February 6, 2018, organised by the Department of Industries, Government of Rajasthan, and shared the programmes of CEE with the representatives of the CSR section of corporates at the event.
- Participated in the Wipro Earthian Award ceremony organised in Bangalore on February 3, 2018. She represented CEE at the event as the partner for the Earthian programme which is being implemented in partnership with CEE's Paryavaran Mitra programme in schools of seven states: Assam, Bihar, Chhattisgarh, Gujarat, Maharashtra, Rajasthan and Uttar Pradesh.

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Chairman
Shri Kartikeya V. Sarabhai
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Phone: +91-9419069589, +91-7006037700, +91-9415104125 E-mail:
ceehimalaya@ceeindia.org

7. CEE Hazira
CEE Project Office, Bunglow No: 70 A, Om Sai Residency, Nr. Sanjivni School,
Damka, Choryasi Taluka, Surat 394 510,
Gujarat, India.
E-mail: ceehazira@ceeindia.org

8. CEE Kalawad
CEE Project office, Sardar Park, Shivam Nagar, Dhoraji Road, Kalavad 361 160, Jamnagar, Gujarat, India.
Phone: +91-9773048911,
E mail: mahesh.taviya@ceeindia.org

9. CEE Khadir
CEE Project Office, Ram Krushnadev Vidya Sankul, Ratanpar (Khadir),
Bhachau 370 165, Kutch, Gujarat, India.
E-mail: ceekhadir@ceeindia.org

10. CEE Khambhaliya
CEE Project Office, Mithoi Patiya Bunglow, Jamnagar – Khambhaliya Highway, Mithoi Village, Jamnagar 361 280, Gujarat, India.
Email: ceekhambhaliya@ceeindia.org

11. CEE Varanasi
CEE Project Office, K 66/1-Q-3, Narharpura, Varanasi 221 001, Uttar Pradesh, India.
Phone: +91-7037205361
Email:ceevaranasi@ceeindia.org

12. CEE Jorhat
House of Prasanta Buragohain (Ground Floor)
Baliagohai Pukhuri. Na-Ali
Jorhat - 785 001
E-mail:
bijaylakshmi.borpuzari@ceeindia.org/
ceenortheast@ceeindia.org
Contact No.: 08133911474

Nature Discovery Centre & Campsite Offices

1. Sundarvan
Nature Discovery Centre, S.M. Road, Jodhpur Tekra, Ahmedabad 380 015, Gujarat, India
Phone: +91-79-26923148/26921838, Fax: +91-79-26858010, E-mail: sundarvan@ceeindia.org, Website: www.sundarvan.org

2. Sundarvan - CEE Bakore Forest Campsite
Bakore Taluka, Mahisagar District, Gujarat, India. Phone: +91-9426487261, +91-9825243813, Email: sundarvan.camps@ceeindia.org

3. Sundarvan - CEE Beyt Dwarka Marine Campsite
Via Okha Port, Dev Bhumi Dwarka District, Gujarat, India.
Phone: +91-9426487261, +91-9825243813, Email: sundarvan.camps@ceeindia.org

4. DéCee
CEE's Information Facilitation Centre, Nehru Foundation for Development, Thaltej Tekra, Ahmedabad 380 054, Gujarat
Phone: +91-79-26858002-8009, 26844872, Fax: +91-79-26858010, E-mail: decee@ceeindia.org

For Product Sales:

1. Paryavaran Edutech,
Centre for Environment Education, Thaltej Tekra, Ahmedabad 380 054, Gujarat, India.
Phone: +91-79-26853739, +91-79-26844870, Telefax: +91-79-26853739,
E-mail: edutech@ceeindia.org

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, 2010
vide registration no. 041910044 with Ministry of Home Affairs, Govt. of India)

FINANCIAL STATEMENTS
2017–2018

of expressing an opinion on whether Society has in place an adequate internal financial controls system over financial reporting and the operating effectiveness of such controls. An audit also includes evaluating estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Emphasis of\Matter

Without qualifying our opinion, we draw attention to the following-

1) Note no. 1.2a to the Notes on accounts schedule "B' wherein amounts advances to various governmental & nongovernmental agencies for projects and programmes are subject to adjustement on approval of respective fudnign agencies.

2) Note no. 1.2b to the notes on accounts schedule "B" wherein debit balaces of project grants are shown which are subject to project closure reports and confirmation from respective funding agencies.

Opinion

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 31st March, 2018 and its deficit for the year ended on that date.

For Ramanlal G. Shah & Co.
Chartered Accountants
F.R.No.108517W

CA Vivek S. Shah
Partner
Membership no. 112269
Date: 25th September 2018

Ramanlal G. Shah & Co.
Chartered Accountants
Tel.: 079-26578819, 26575530
Fax: 079-26575401
E-mail: ramanlalgshahhandco@gmail.com

Shreeji House
Behind M J Libarary
Ellisbridge
Ahmedabad-380 006

INDEPENDENT AUDITORS' REPORT

Report on the Financial Statements

We have audited the accompanying financial statements of **NEHRU FOUNDATION FOR DEVELOPMENT - CENTRE FOR ENVIRONMENT EDUCATION - AHMEDABAD ("Society")** which comprise the Balance Sheet as at March 31, 2018, the Income and Expenditure Account and the receipt and payment Account for the year then ended and summary of significant accounting policies and other explanatory information.

Management's Responsibility 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 responsiblity also includes maintanance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Society and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgements and estimates that are reasonable and prudent; and design, implementation and maintanance 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.

Auditor's Responsiblity

Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence @about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to Society's preparation of the financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose

Receipts and Payments Account for the year ending on 31st March 2018

RECEIPTS	Rs.	Rs.
OPENING CASH AND BANK BALANCES		63219116
PROJECTS AND PROGRAMMES		
Out of Grant from Ministry of Environment & Forest, Government of India, New Delhi.		
Sponsored Projects/Programmes		3557976
Out of Grant from Locally Funded/Foreign Funded and Own Programme		
Sponsored Projects/Programmes	209128921	
Out of Foreign Contributions	57078358	
Own Programmes	14061255	280268534
OTHER RECEIPTS		
Interest on Bank Accounts (Net)	2344390	
Misc Income	2962481	
Services & Products	103333	
Royalty and Infrastructure Receipts	7486428	
Donation	45500	
Consultancy, Overhead recoveries & Reimbursements.	62984758	75926890
Recovery against Loan to staff		262383
From NGO's & Othres (Net)		549474
Security Deposite (Net)		286400
From Debtors & Others		4871174
BANK OVER DRAFT		
Bank over draft from IOB	5069030	
Bank over draft from Axis Bank	29786858	
	34855888	
Less: bank over draft from SBI- Repaid	-502386	34353502
Total Rs.....		**463295449**

D. N. Surati
Chief Accounts Officer

Date: 15th September 2018

Kartikeya V. Sarabhai
Director

Date: 15th September 2018

Receipts and Payments Account for the year ending on 31st March 2018.

PAYMENTS	Rs.	Rs.
MOVABLE & IMMOVABLE PROPERTIES		
Acquired during the year out of		
Immovable Properties	617800	
Movable Properties	1785944	2403744
PROJECTS AND PROGRAMMES		
Out of Grant from Ministry of Environment & Forest, Government of India, New Delhi.		
For Infrastructure Development & Augmentation	426272	
MoEf Project & Programmes	3557976	3984248
Out of Grant from Locally Funded/Foreign Funded and Own Programme		
Own Activity / Own Project & Programmes	15867240	
Locally Funded	207643710	
Foreign Contributions	55948215	279459165
ESTABLISHMENT AND OTHER OFFICE EXPS		
Salaries	92124124	
Other Administrative Expenses	19574829	
Travel	995	
Honorarium to Consultants	538886	
Micro Processor Maintenance	576020	112814854
Other Payments		
Change in balance of Project Program grants	1380772	
Project Expenses Recovered	2820727	
Tax Deducted @ Source (Net)	832087	
Products/Services	1343478	6377064
Payment to Suppliers for Project & Other Exps.		4894000
CLOSING CASH AND BANK BALANCES		53362374
TOTAL		**463295449**

We have examined and found correct the above account as per the books of account, vouchers etc. produced before us and as per the information and explanations given to us.

As per over report of even date.

For Ramanlal G. Shah & Co.
Chartered Accountants
F.R.No.108517W

CA Vivek S. Shah
Partner
Membership no. 112269
Date: 27th September 2018

Balance Sheet as at 31st March 2018.

31-03-2017 Rs.	FUNDS & LIABILITIES	Rs.	Rs.	31-03-2018 Rs.
	CORPUS FUND			
1288000	Balance as per last Balance Sheet			1288000
	OTHER EARMARKED FUNDS			
	Depreciation Fund			
18430741	Balance as per last Balance Sheet		20094079	
1663338	Addition during the year		1037538	
20094079				21131617
	ANY OTHER FUND:			
152385145	Balance as per last Balance Sheet	163611393		
7538925	Addition during the year	2892497		
7475536	Add: Transferred from Income & Expenditure A/c for Infra.Deve. Fund	0		
167399606		166503890		
3788213	Less: Fund reduced by the cost of Assets written off/disposed off/transferred during the year	0	166503890	
163611393				166503890
	GRANT BALANCES:			
	Ministry of Environment & Forest, Government of India, New Delhi.			
773454	Balance as per last Balance Sheet	457442		
105450000	Grant for recurring expenditure credited during the year	0		
106223454		457442		
105450000	Less: Amount of grant transferred to Income & Expenditure account to meet the recurring expenditure incurred during the year	0		
316012	Less: Amount of grant transferred to Income & Expenditure account to meet the renovation expenditure incurred for Sundarvan	426272		
457442			31170	31170
50073919	**Projects, Programmes, Workshops, Seminars etc.,**			63515214

Balance Sheet as at 31st March 2018.

31-03-2017 Rs.	ASSETS	Rs.	Rs.	31-03-2018 Rs.
	MOVABLE AND IMMOVABLE PROPERTIES:			
	Immovable Properties (At cost)			
	Buildings:			
53784010	Balance as per Last Balance Sheet	57535376		
3751366	Addition during the year	617800		
57535376			58153176	
	Movable Properties (At cost)			
	Office equipments, Vehicles, Library Books etc.,			
75703284	Balance as per last Balance Sheet	75508254		
3593183	Addition during the year	1843200		
79296467		77351454		
3788213	Less: Written off/Disposed off/ transferred during the year	0		
75508254			77351454	
133043630				135504630
1642834	Vehicles on loan from Dy. Collector, Gulbarga for CHAMP Project		1642834	
1642834	Less: Liability for vehicle-Dy. Collector, Gulbarga for CHAMP Proj.		1642834	
0				0
	DEPOSITS			
4125999	For Services, Rent Projects etc.,			3914099
	LOANS:			
446110	To Staff & Others			183727
	ADVANCES:			
1339857	To Staff (One year old Rs. 4,86,542/-, Previous year Rs.3,67,461/-)		1420039	
2193912	To NGOs, (One year old Rs. 10,19,820/-, Previous year Rs. 5,10,800/-)		1138475	
6120579	To Suppliers and Contractors for Projects expenses (One year old Rs. 20,26,852/-, Previous year Rs. 12,44,535/-)		4743291	
8428968	To Others (One year old Rs. 21,64,066/-, Previous year Rs. 49,41,381/-)		4854900	
18083316				12156705
10219715	**Income Tax deducted at source (TDS) receivable** (One year old Rs. 60,60,675/-, Previous year Rs. 66,25,141/-)			11051802

Balance Sheet as at 31st March, 2018.

31-03-2017 Rs.	FUNDS & LIABILITIES	Rs.	Rs.	31-03-2018 Rs.
	Bank Overdraft (Secured against pledge of FDR as Collateral Security)			
1677087	Indian Overseas Bank, Thaltej Branch		6746117	
502386	State Bank of India Satellite branch		0	
0	Axis Bank Crporate Credit branch, Navarangpura		29786858	
2179473				36532975
	LIABILITIES			
40993855	For Expenses		54581473	
474078	For Security Deposits		548578	
926593	Amount payable to NGOs		420630	
19756113	For Others		18514093	
62150639				74064774
	INCOME & EXPENDITURE ACCOUNT			
1117366	Balance as per last balance sheet		1544667	
427301	Add: Excess of Income over Expenditure transferred		0	
	from Income & Expenditure Account During year		1544667	
1544667				
0	Transferred as par Contra		1544667	0
1544667				
301399612	**TOTAL**			**363067640**
2495681	**Contra (Rs.)**			**1476188**

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.

D. N. Surati
Chief Accounts Officer

Date: 15th September 2018

Kartikeya V. Sarabhai
Director

Date: 15th September 2018

Balance Sheet as at 31st March 2018.

31-03-2017 Rs.	ASSETS	Rs.	Rs.	31-03-2018 Rs.
125548	Interest Accrued on FDR		242847	
	AMOUNT DUE/RECEIVABLE			
44229658	For Projects, Programmes, Workshops, Seminars etc.		59051725	
20720237	Grant receivable (since received)		19592676	
1246342	Project Expenses Recoverable		4067069	
5939941	Receivable on Sale of Products and Services etc.		7283419	
72136178				89994889
	CASH AND BANK BALANCES			
63219116	As per Schedule "A"			53362374
0	INCOME & EXPENDITURE ACCOUNT			
	Balances as per last balance sheet (as per contra)		(1544667)	
	Transferred from Income & Expenditure A/c during the year		58201234	56656567
301399612	**TOTAL**			**363067640**
2495681	**Contra (Rs.)**			**1476188**

As per over report of even date.

For Ramanlal G. Shah & Co.
Chartered Accountants
F.R.No.108517W

CA Vivek S. Shah
Partner
Membership no. 112269
Date: 27th September 2018

Income and Expenditure Account for the year ending on 31st March 2018.

2016-17 Rs.	EXPENDITURE	Rs.	2017-18 Rs.
	EXPENDITURE ON OBJECTS OF THE SOCIETY		
	On Programmes and Projects (Own activity as well as sponsored by Governmental and Non-governmental organisations)		
30194836	Own Activities	15867240	
176295258	Out of Local Funding	211201686	
53580749	Out of Foreign Contribution	55948215	
260070843			283017141
	ESTABLISHMENT EXPENSES		
	Salary:		
127165397	Staff Salaries	109363710	
12	Remuneration to the Office Bearers	12	
127165409			109363722
25247108	Administrative and other Expenses	20046195	
	Professional Fees:		
102737	Legal Fees	526535	
118000	Audit Fees	118000	
26467845			20690730
316012	Infrastructure development expense out of MoEFCC Grant		426272
1663338	**DEPRECIATION**		1037538
	AMOUNT TRANSFERRED TO RESERVE OR SPECIFIC FUND :		
5075536	Earmarked for Immovable/Movable Properties		915951
2400000	Earmarked for Gratuity		0
427301	Excess of Income over Expenditure carried over to Balance Sheet		0
422586284	**TOTAL**		**415451354**

Notes on Accounts as per Schedule "B"

D. N. Surati
Chief Accounts Officer
Date: 15th September 2018

Kartikeya V. Sarabhai
Director
Date: 15th September 2018

Income and Expenditure Account for the year ending on 31st March 2018.

2016-17 Rs.	INCOME	Rs.	2017-18 Rs.
	INTEREST EARNED:		
1834228	On Savings Bank Accounts and Term Deposits with Nationalised and Scheduled Banks	1684047	
212212	Other Interest	512797	
2046440		2196844	
501636	Less: Interest allocated to Special Funds and Projects	166652	
1544804			2030192
14710456	**OWN PROJECTS & PROGRAMMES**		14164588
	AMOUNT TRANSFERRED FROM:		
105450000	Grant from Ministry of Environment, Forests & Climate Change Government of India, New Delhi to meet the recurring expenditure	0	
316012	Grant from Ministry of Environment, Forests & , Climate Change, Government of India, New Delhi, to meet the infrastructure development expenditure	426272	
229876007	Grants from GO/NGOs for sponsored Projects and Programmes	267149901	
335642019			267576173
	OTHER INCOME:		
635100	Donation	45500	
3908824	Sale of Educational Material & EE Products	0	
9973317	Fees, Royalties & Other Contributions	7486428	
52132757	Recoveries/Reimb. of Exps.from Project/programmes	62984758	
4039007	Other Income including sale proceeds of Assets	29622481	
70689005			73479167
	Excess of Expenditure over Income over carried over two Balance sheet		58201234
422586284	**TOTAL**		**415451354**

For Ramanlal G. Shah & Co.
Chartered Accountants
F.R.No.108517W

CA Vivek S. Shah
Partner
Membership no. 112269
Date: 27th September 2018

Schedule 'A' attached to and Forming Part of the Balance Sheet as at 31st March 2018

Total 31-3-17	Sr. No.	CASH AND BANK BALANCES	CEE-CORE & Projects	CEE-FC Projects	TOTAL 31-3-18
A.		**CURRENT ACCOUNTS**			
		In the name of Nehru Foundation for Development Centre for Environment Education with:			
234119	1	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad	638929	-	638929
2313397	2	ICICI Bank Ltd. Pune	3070038	-	3070038
36739	3	ICICI Bank Ltd. Hyderabad	36739	-	36739
147559	4	ICICI Bank Ltd. Bangalore	117646	-	117646
72098	5	CBI, S.M.Road Branch, Ahmedabad.	31479	-	31479
47433	6	BOI,- Gulbarga (CHAMP)	45350	-	45350
2405117	7	BOI,- Gulbarga (CHAMP) A/c 406	402646	-	402646
0	8	Union Bank of India. Lucknow	0	-	0
523707	9	SBI, Bangalore Branch	1162628	-	1162628
1293437	10	SBI, Lucknow Branch	22277	-	22277
7073604		**Sub-total "A" Rs.....**	**5527732**		**5527732**
B.		**SAVINGS BANK ACCOUNTS**			
		In the name of Nehru Foundation for Development-Centre for Environment Education with:			
71235	1	BOI, Basaveswaranagar Branch, Bangalore.(A/c 6056)	73848	-	73848
29577	2	BOI, Cantonment Branch, Bangalore.(A/c 8435)	310943	-	310943
115769	3	BOI, Gulbarga	120207	-	120207
118446	4	SBI, Satellite Road Branch, Ahmedabad-Core	2261486	-	2261486
853923	5	SBI, Satellite Road Branch, Ahmedabad-Projects	265243	-	265243
39724	6	SBI, Satellite Road Branch, Ahmedabad-SDF	41204	-	41204
516346	7	SBI, Satellite Road Branch, Ahmedabad-SWF	805111	-	805111
161439	8	SBI, Satellite Road Branch, Ahmedabad-CAPART	767291	-	767291
1842238	9	HDFC, Drive in Road Branch, Ahmedabad	2331855	-	2331855
37704	10	Corporation Bank, Virajpet Branch, Virajpet.	37704	-	37704
30764	11	SBI, Dharampur Branch	30764	-	30764
67	12	ICICI Bank Ltd. - name of CEE-ICEF Project Account, Delhi	67	-	67
79740	13	ICICI Bank Ltd. - DEL-RHSDP Project	79740	-	79740
358939	14	CICI Bank Ltd. - Guwahati	105518	-	105518
82468	15	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad(CMU & Zoo)	209958	-	209958
217612	16	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad(Do Future)	1087923	-	1087923
1234202	17	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (Industry)	270020	-	270020
180894	18	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (NCB)	544729	-	544729
2301615	19	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (RPG & West)	564043	-	564043
205813	20	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (Studio)	38884879	-	38884879
547583	21	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (YEN & PM)	2349384	-	2349384
171658	22	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (WARM)	2346929	-	2346929
44174	23	ICICI Bank Ltd. Drive-in Road Br, Ahmedabad (Society)	587980	-	587980
1093100	24	ICICI Bank Ltd. Pune	1112194	-	1112194
193311	25	ICICI Bank Ltd. Lucknow	1784955	-	1784955
27663	26	ICICI Bank Ltd. Bhubneshwar	61500	-	61500
269688	27	ICICI Bank Ltd. Delhi	226279	-	226279

Schedule 'A' attached to and Forming Part of the Balance Sheet as at 31 st March 2018

Total 31-3-17	Sr. No.	CASH AND BANK BALANCES	CEE-CORE & Projects	CEE-FC Projects	TOTAL 31-3-18
812047	28	ICICI Bank Ltd. Guwhati	479276	-	479276
9730	29	ICICI Bank Ltd. Coimbatore	9730	-	9730
103141	30	ICICI Bank Ltd. Goa-Panaji	14979	-	14979
27017	31	HDFC Bank Ltd. - Srinagar Branch	4679	-	4679
5873422	32	HDFC Bank Ltd. - Delhi Branch	1404270	-	1404270
5776623	33	SBI, ESS Project	403456	-	403456
22608	34	SBI, WG Project	23450	-	23450
888706	35	ICICI Bank Ltd. Delhi (CSR A/c)	67176	-	67176
201362	36	Kotak mahindra Bank Nfd Cee A/C Camps	1439569	-	1439569
1031977	37	Kotak mahindra Bank Nfd Cee A/C West	461849	-	461849
2849511	38	Kotak mahindra Bank Nfd Cee A/C Gulbarga	2311858	-	2311858
		In the name of Centre for Environment Education A/c. Foreign Contribution with:			
8220684	1	Indian Overseas Bank, Thaltej Branch, Ahmedabad		6192377	6192377
3467407	2	SBI, Satellite Road Branch, Ahmedabad-R T T		421093	421093
47183529		**Sub-total "B" Rs.....**			**41023248**
C.		**FIXED/SHORT TERM DEPOSIT ACCOUNT In Term Deposit Account in the name of Centre for Environment Education with:**			
8137116	1	SBI, Satellite Road Branch, Ahmedabad	2666522	-	2666522
5000000	2	IOB, Thaltej Branch, Ahmedabad	5294387	-	5294387
1237282	3	ICICI Bank, Aundh Branch, Pune	1578217	-	1578217
300000	4	BOI, Gulbarga, South	300000	-	300000
D.		**In Term Deposit Account in the name of Centre for Environment Education A/c. Foreign Contribution Fund with:**			
0	1	Indian Overseas Bank, Thaltej Branch, Ahmedabad	2500000	-	2500000
0	2	State Bank of India, Satellite Road Br. Ahmedabad	0	-	0
14674398		**Sub-total "C & D" Rs.....**	**12339126**	**-**	**12339126**
1361189		E. CHEQUES ON HAND	0	-	0
		F. CASH ON HAND	0	-	0
70292720		**TOTAL "A" TO "F" Rs.....**	**53362374**	**6613470**	**53362374**

As per our report of Even Date

For Ramanlal G. Shah & Co.
Chartered Accountants
F.R.No.108517W

D. N. Surati
Chief Accounts Officer
Date: 15th September 2018

Kartikeya V. Sarabhai
Director
Date: 15th September 2018

CA Vivek S. Shah
Partner
Membership no. 112269
Date: 27th September 2018

Schedule "B"

Notes Attached to and forming part of the Accounts for the Year 2017-18

1 **Significant Accounting Policies followed:**

1.1 The accounts are maintained on accrual system of accounting subject to following exceptions.

a. In respect of insurance premium, rent and annual maintenance contracts, entry for expenses paid in advance is made whereas such other expenses are accounted for as and when paid.

b. Liabilities in respect of employees benefits such as gratuity, leave encashment, LTC etc., are accounted for as and when paid.

c. Advances given to employees for travel, for project expenses and LTC are accounted for as and when bills for respective expenses are submitted by concerned employees.

1.2 a The amount advanced to various Governmental and Non-Governmental agencies for projects and programmes activities are shown under the head "Advances to NGOs and Others for Project expenses" and the same will be adjusted in the books on receipt of the statements of accounts from respective agencies. The amount of such debit balance of Rs. 10, 19, 820/- be adjusted against pending grant balances on approval of funding agencies.

1.2 b The debit balances of projets grants ae shown subjects to the project closure reports and confirmation from the funding agences.

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.

1.5 **Investment**
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.

D. N. Surati
Chief Accounts Officer

Date: 15th September 2018

Kartikeya V. Sarabhai
Director

Date: 15th September 2018

For Ramanlal G. Shah & Co.
Chartered Accountants
F.R.No.108517W

CA Vivek S. Shah
Partner
Membership no. 112269
Date: 27th September 2018

Centre for Environment Education

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