**Submission by
Centre for Environment Education
Intermediate Review of the Doha Work Programme on
Article 6 of the Convention**

CEE
Centre for Environment Education

Centre for Environment Education (CEE) India appreciates the opportunity to submit its experiences, views and recommendations on the intermediate review of the Doha work programme on Article 6 of the Convention, Action for Climate Empowerment (ACE).

CEE, a Centre of Excellence of the Ministry of Environment, Forest & Climate Change, Government of India, is a national institution with the mandate to promote environmental awareness and education for sustainable development. CEE develops innovative programmes and educational material, and builds capacity in the field of education and communication for sustainable development. Through a variety of programmes, CEE engages communities, children, youth, women, farmers, policy makers, educators, practitioners, business and public sector, and focus work on different thematic areas including climate change and biodiversity. CEE has applied its approach to projects across India, including the Science Express Climate Action Special, a state of the art exhibition mounted on a 16-coach train, to create widespread awareness about climate change and enable climate action. Since the beginning of this train's journey (October 2015), over one million visitors have seen this exhibition. Through its school programmes and youth network, CEE enhances the understanding of sustainability issues among children and youth and encourages them to take positive actions. Several methods of community engagement such as public consultations and *Samvaad* (dialogue) have enabled the organization to put forward a diversity of voices and influence the policy making process.

CEE has been actively participating in the Article 6 Dialogues since 2013 as well as in the first Education Day in 2015. We are looking forward to further involvement in the fourth Dialogue on Article 6 and the second Education Day at COP22 in 2016 seeking to strengthen education's political relevance in the UNFCCC process and to life climate change education to the next level for meeting the agreed targets for a low-carbon and resilient society.

Identification of good practices and lessons learned

CEE shares selected examples of its work on climate change education for sustainable development as good practices including lessons learnt:

A. Science Express Climate Action Special

On 15th 2015, Science Express Climate Action Special (SECAS) - a unique exhibition mounted on a train - started its journey across the subcontinent India to educate, aware, motivate and provide platform to generate dialogue and action among school children's and youths on climate change.

This mass awareness programme is a joint initiative of the Ministry of Environment, Forest and Climate Change (MoEF&CC), Department of Science and Technology (DST), Ministry of Railways,

Department of Biotechnology (DBT), Centre for Environment Education (CEE) and Vikram A. Sarabhai Community Science Centre (VASCSC), reflecting cooperation between ministries, NGOs and other actors for climate change education.

The programme reflects that for an efficient climate change education; innovative, culturally sensitive planned and engaging practices are required. For effective engagement the complex concepts should be communicated in a relevant, simple, humoristic and emotional manner.

This unique approach has already to reach out to more than a million people: till date more than 1.4 million people including over 3500 schools/colleges, around 353 000 students, 18 000 teachers, and nearly 800 000 general public have visited the train exhibition and its activities. The real challenge is to measure the effectiveness and the level to which it has impacted the visitors' behaviour, while the anecdotes and feedbacks based on consultation with teachers seems to indicate that SECAS is an effective medium. We are in the process of conducting detail analysis. See http://www.sciencexpress.in/

On a larger scale, SECAS connects to CEE's ESD and climate change programme Paryavaran Mitra that reaches out to 200 000 schools across India on the five topics of water, energy, waste, biodiversity and climate change to create a network of young leaders, who have the awareness, knowledge, commitment, and potential to meet the challenges of environmental sustainability in their own spheres of influence. See http://paryavaranmitra.in/

Project/Programme title		Science Express Climate Action Special
Implementation period		2015 - ongoing
Nature of activity	Education	x
	Training	x
	Public awareness	x
	Access to information	x
	Public participation	
	International cooperation	
Outcome, Output, Outreach (scale)		• Mobile train exhibition on climate change travelling through India with till date more than 1.4 million people including over 3500 schools/colleges, around 353 000 students, 18 000 teachers, and nearly 800 000 general public have visited the train exhibition and its activities.
Learnings		• For an efficient climate change education; innovative, culturally sensitive planned and engaging practices are required
Gaps and constraints		• Long-term engagement of visitors on climate change after they have visited the exhibition
Recommendation to overcome challenges		• Inclusion of platform activities to the train visit that engage visitors in games and action
Indicator to measure the success of project/ programme		• Increased understanding of scientific facts, impacts of and solutions to climate change • Understanding the need to and showing willingness to act • Realizing the options in personal action and cooperation for tackling climate change

B. International Conference on "Education as a driver for Sustainable Development Goals"

The international conference titled 'Education as a Driver for Sustainable Development Goals' was organized by the CEE, in partnership with UNESCO, UNEP and the Government of India. The Conference was organized from January 11-13, 2016, at CEE in Ahmedabad. It aimed at bringing together global experience and expertise to highlight and strengthen the role of education in realizing the SDGs. It was an opportunity to build upon the learnings from the UN DESD and recognize education as a key enabler.

The objective of the Conference was to bring together the global experience and expertise of using education as a way of achieving SDGs. It is recognised that policy instruments or technological solutions are not enough and that behavioural change was critical to achieving Sustainable Development. Thus the role of education in its broadest sense including training and capacity building, communication and creating public awareness, scientific research, sharing and access to information and networking; and partnerships becomes a key strategy for achieving the SDGs.

The Workshop on Goal 13 'Combating Climate Change and its Impacts' was held in partnership with the UNFCCC Secretariat. It discussed several aspects of the role that climate change education for sustainable development plays in meeting the climate change SDG and its targets as well as the Paris Agreement:

a) up-scaling climate change from awareness raising to education within climate mitigation and adaptation projects as well as education for encouraging political action
b) the role of education for implementing the Paris Agreement and how to strengthen education at the UNFCCC negotiations (Article 6)
c) the role of education and communication by media and advertisement for impacting lifestyles
d) effective climate education for empowering children and youth
e) required means of implementation of climate change education for sustainable development.

The most central recommendation that emerged from the workshop discussion suggests that the national climate plans (Nationally Determined Contributions, NDCs, and the next round of Intended Nationally Determined Contributions, INDCs) should include an educational component to implement the targets (see recommendations in this submission). See http://ceeindia.org/esdg/Goal%2013.html

C. Case Studies - Climate Education for Action

The research project 'Climate Education for Action' identifies and presents case studies from across the globe where climate change education has played a significant part in making climate change mitigation and adaptation projects a success. The types of selected projects include; making smart choices with respect to transportation, energy and life style choices, education leading to community taking initiatives on leapfrogging from conventional fossil fuel based energy supply to renewable based energy systems, education leading changes in tourism sector and other similar case studies, which leads to effective reduction in emissions or supporting adaptation where education helps reducing vulnerability. The case studies help creating evidence for education - including communication and training - being an essential part of any climate action that is meant to be effective and long-lasting.

The initial outcomes of the research were presented at the official Side Event at SB40 in Bonn, Germany and at COP20 in Lima, Peru. Currently, the case studies results are fed into a paper on 'the role of education in sustainable development and climate change mitigation' for the United Nations Educational, Scientific and Cultural Organization (UNESCO). This paper will contribute to the UNESCO's Education for All Global Monitoring Report for the year 2016.

D. Parampara : India's culture of climate friendly sustainable practices

The Parampara catalogue, developed by CEE for the Ministry of Environment, Forest and Climate Change, Government of India is a study to identify and document climate friendly traditions and practices. It showcases sustainable practices from across the Indian subcontinent in the categories energy, agriculture, biodiversity, food, health, shelter, water and textile, clothing and lifestyle products. The catalogue serves as a tool to enable and promote sustainable lifestyle options, sustainable consumption and production practices across India. See http://www.ceeindia.org/cee/Parampara.html

E. Participatory Urban Governance for Green Federalism

The urban context in India is generally characterized by, on the one hand, rapid growth and attendant issues of shortage of civic services and amenities, and changes in patterns of municipal finance and governance on the other. A key challenge is in responding to development and aspiration pressures from different stakeholder groups, yet ensuring environmental quality.

The overall purpose of this initiative is to share experiences about Participatory Governance in urban areas, understand what is enabling / becoming a barrier to it, and work with municipal authorities and civil society actors to improve both the institutional structures that enable participation, and the practices of participatory processes. The aim is also to explore how concerns of poverty and the environment may be addressed in an integrated manner within a framework of participatory governance in general and through participatory budgeting in particular.

In partnership with Pune Municipal Corporation, CEE has evolved WISE index, which stands for Ward Infrastructure Services and Environment (WISE), a method of grading different areas of the city on the basis of about 26 indicators that include population, area, slum population, status of infrastructure and services related to solid waste management, street lights, roads, sanitation, drainage, and public amenities. This information was used to allocate public funds more judiciously. Wards, which have larger areas or slum population and are deficient in infrastructure, have been allocated higher budgets so that the deficiencies can be overcome.

The WISE information can also be used by citizens in the Participatory Budgeting process. Citizens can come to know the status of infrastructure and services in their ward as well as the budget allocations made. This information will be helpful to citizens to identify meaningful projects. Citizens can also undertake social audit of the projects in their neighbourhoods. WISE index and methodology has been appreciated by the stakeholders and it is a step towards data driven objective decision making in urban area.

Project/Programme title		Participatory Urban Governance for Green Federalism
Implementation period		2008 to 2016
Nature of	Education	X

activity	Training	X
	Public awareness	X
	Access to information	X
	Public participation	X
	International cooperation	
Outcome, Output, Outreach (scale)		• Outreach to more than 5000 citizens every year and website OurPuneOurBudget.in • Creation of WISE information base and index • Development of a menu card for citizens on neighbourhood infrastructure beneficial for the city's environment Outcomes • Improved and simplified budget information presentation • Strengthening of a platform for citizens engagement in preparation of municipal budget • Preparation of a resource allocation framework based on level of services and infrastructure
Learnings		• Public participation supports good governance and help allocating funds in an efficient manner • Improvements in public / municipal governance are essential for enhanced environmental outcomes • Education of city managers is critical for engaging citizens in urban governance • Research around effective tools and techniques of high quality deliberation should be strengthened • Cities have large opportunities for climate change adaptation and mitigation education. • Engaging citizens in urban areas needs crisp and clear communication strategy
Gaps and constraints		• The notion of citizenship is not clearly understood. • City administration is not geared up to deal with the challenges posed by climate change. There is no clear communication strategy towards adaptation and mitigation. • There is need to build in competencies in city administration and civil society to deal with the challenges posed by climate change
Recommendation to overcome challenges		• Policies, guidelines, and capacity building to strengthen participatory planning and budgeting processes • Reform and reorientation of planning frameworks and processes to incorporate the informal sector is a must, as well as the peri-urban and regional in order to integrate climate change concerns • Development of city specific citizens' action plans through multi stakeholder high quality deliberations • Need to set up clear guidelines and policies on local specific data collection which would help develop evolve local specific climate change adaptation and mitigation

	strategy
Indicator to measure the success of project/ programme	• Type of information available in analyzable form in public domain • Locale specific action plans and action taken reports Integration of CC adaptation and mitigation in development planning processes

F. Promotions and Outreach Programme for Rainbow Bus Rapid Transit, Pune

Rainbow Bus Rapid Transit System was launched in Pune and Pimpri Chinchwad in 2015, with three corridors of about 30 kilometers of dedicated bus lanes serving a combined ridership of more than over 100,000 persons per day. It is being developed as a high quality, customer-oriented public bus transport service, a stark contrast to the ageing existing city transport service. It is managed by Pune Mahanagar Parivahan Mahamandal Ltd and developed with the support of Pune Municipal Corporation and Pimpri Chinchwad Municipal Corporation. Pune Traffic Police is providing the support for management of traffic for smooth operation of Rainbow BRTS.

In Pimpri Chinchwad, the project is supported by the Ministry of Urban Development (Government of India) along with the Global Environment Facility (GEF), United Nations Development Programme (UNDP) and the World Bank (WB) under the Sustainable Urban Transport Project, funded as part of GEF 5. In Pune too, the project has received grant funding from the Ministry of Urban Development in addition to municipal resources.

Considering the scale and complexity of the project and the number of direct or indirect beneficiaries of the project, a Promotions & Outreach Program (POP) was supported as a consultancy project, awarded by both municipal corporations. IBI Group (IBI) along with Centre for Environment Education (CEE) was entrusted the task of implementing the Promotion and Outreach Program for the BRTS in Pune region.

The Promotions and Outreach Program aimed to promote the new BRT as well as provide a smooth transition from the existing regular bus services to the BRT system. The outreach was conceived as having the aim to 'Attract, Inform, Assist and Engage' different stakeholders including the passengers, the general public, the institutional entities, media, NGOs etc. The communications programme developed the brand identity 'Rainbow' for the BRT system with the tagline 'Pravas Nava, Paryay Nava' (a new journey, a new alternative). Apart from outreach, a comprehensive information and way finding signage system was developed for the stations and terminals.

The outreach to schools, colleges, community groups, at workplaces and to media and elected representatives etc through slide show presentations, films, social media, print materials, street exhibitions, and tours on the system helped to create a favourable atmosphere prior to launch of the system in the twin cities. Detailed community meetings and with political leaders were organized to address issues related to physical infrastructure and access on the corridors. Information on routes changes was provided through newspapers, flyers and the website and Facebook page. Free rides were provided for a few days post launch to attract citizens to the new service. After launch, passenger feedback was sought through personal interactions on buses and at stations, through email, website and Facebook. These provided inputs for specific improvements in operations, which were communicated to the bus utility and municipal authorities.

A significant increase of 6-8% in bus ridership in the first few months of operation wherein a shift from motor vehicles to BRTS was observed Three more corridors are under development, and the future proposed network would be about 147 km across the two cities. Rainbow BRTS has received recognition from the Volvo Sustainable Mobility Awards 2015 for 'Outstanding Contribution to Sustainable Mobility'.

Project/Programme title		Rainbow Bus Rapid Transit – Promotions and Outreach Programme
Implementation period		Dec 2013 to continuing
Nature of activity	Education	X
	Training	
	Public awareness	X
	Access to information	X
	Public participation	X
	International cooperation	
Outcome, Output, Outreach (scale)		1. Communication strategy, range of communication assets and materials developed, including brand identity, and signage system developed for a public bus system serving over 100000 passengers everyday in an urban area of about 6 million population 2. Feedback system partly developed 3. Direct outreach to about 7000 individuals through structured personal interactions like presentations, tours, exhibitions 4. Online reach to about 150000 through website and social media 5. Improved Image of an Operational Bus System
Learnings		A structured interface with the public and other stakeholders is an essential element of public transit. Public transport utilities must develop strong capabilities for public communications management in addition to physical infrastructure, to be successful.
Gaps and constraints		Communications and outreach was conceived of as a project developed and implemented by an external consultant with a specific deliverable and time period of implementation. Instead, the communications function should have been conceived of and developed as an integral element of the public transit utility.
Recommendation to overcome challenges		1. A communications department (with clarity on its role and function for improving operations and management through stakeholder interface) should be set up within the public transit utility. 2. This element should be addressed in future initiatives for strengthening public transit systems in India.
Indicator to measure the success of project/ programme		For outreach • Substantially enhanced understanding about Rainbow BRT benefits, as assessed through direct outreach sessions • High brand recognition (over 80%) as assessed through post outreach survey • Improved reportage in print media

	• Number of hits (over 150000 and range and nature of interactions on online media, which include substantive comments appreciating the service, indicate mode shift, and suggestions for improvement of services which indicate engagement of the public with the communications interface developed For the system • Improved customer ratings for the BRT system (3.6 out of 5) as compared to the regular bus service (2.6 out of 5) • Increase in ridership of about 6-8%

Recommendations on further steps for improving the effective implementation of the Doha work programme

CEE likes to make the following recommendations that we believe would further improve the work to achieve the objectives on Action for Climate Empowerment:

1. **Up-scaling the CCi:Net**

   The existing CCi:Net should be up-scaled to a more user-friendly, better organized website providing more relevant information for practical work. It should provide more specific information about research background, policy work, classroom activities, non-formal and in-formal activities appropriate for different target groups (not only children and youth). It should become a vibrant, central and comprehensive platform for seeking climate change education information, providing and sharing of best practise examples including an analysis of undertaken projects. It should also inform about different countries climate education policies, latest research on climate change education and useful hints to implement climate change education. Cross-cutting issues like gender aspects should be better reflected. This would enhance international cooperation.

2. **Further fostering international cooperation**
   The work of the Doha working programme should further emphasise on the objective to foster international cooperation between Parties, non-state actors, research institutions, NGOs, youth and faith organisations, businesses and other stakeholder groups. A network of active institutions and organisations should be formed that can exchange experiences and form new cooperation for climate education project and programme activities.

   The UNFCCC Secretariat could invite selected institutes that could work closely with it and strengthen the Secretariat on Article 6 through an extended Secretariat.

3. **Develop Article 6 Focal Points guidelines**

The structure of Article 6 Focal Points is considered as very helpful. Further support of their work could be provided by guidelines. The UN Alliance under the Doha working programme should development such guidelines to clarify the role and work of the Focal Points. These could among others include the objectives of the focal points' work and its modalities. A discussion on the Focal Points guidelines during the annual dialogue on Article 6 could support this process.

4. **Moving beyond BAU in climate change education (CCE)**

The goals of climate change mitigation and adaptation of low-carbon and climate-resilient societies are primary goals for the planet to become sustainable. The causes of climate change are very closely connected to our lifestyles and the current paradigm of development. Change in the way people live their lives involves change in their attitudes and behavior. Education is a key driver for such change. Yet, the priority given to it during international discussions remains marginal and the business as usual on climate change education is insufficient for achieving the targets.Climate change education should not limit itself to only raising awareness not leading to action but should utilize methodologies to empower people to build low-carbon and resilient societies. Climate change education for sustainable development should enable everyone from decision makers to laymen to consider climate change and sustainability in their action. CCE should empower people to become active citizens.
This requires re-thinking of objectives and methodologies for climate change education towards hands-on (learning through action) and solution-oriented learning where a teacher becomes a facilitator and empowers the learners to think critically, take decisions and lead. One such methodology is the Handprint - Action towards sustainability: Handprint is a measure of positive action; action that is directed to decrease the human footprint and make the world more sustainable. Handprint is the symbol of, measure for, and commitment to positive action towards sustainability. Handprint also stands for caring, and working together towards a sustainable future. While the Footprint is a measure of human pressure on earth's resources, the Handprint is a measure of what we can do individually, and together, to restore the balance between consumption and the planet's carrying capacity. See http://handprint.in/

5. **Helpful processes for Parties to develop national strategies for CCESD**

The work of the Doha working programme should assist countries to establish their national strategies for climate change education for sustainable development.
Comprehensive national education strategies that tackle challenges and solutions of climate change and sustainable development in mainly the formal education systems are required. Several Parties have already worked on their strategies but this is not yet a global undertaking. Countries should be supported in developing their strategies - also by the UNFCCC providing a platform for exchange and learning from each other for Parties.

6. **Educational component in NDCs and next round of INDCs**

While education is recognized as being important for climate change mitigation and adaptation, it is rarely seen as a key driver to achieve these goals. Most policy makers see education as a "soft" subject that does not lend itself to accountability and seeing results in the same way as other instruments such as financial mechanisms, introduction of new technologies and systems and several others. This is very unlike the business sector where communication in terms of better ways of doing things in the organization, or in-house training or advertising for consumers is directly seen as having an impact on their sales and profit. They see the results of these "educational" investments in terms of returns, and as a result invest in these. Along these lines, it should be recognized that education is a central element to a successful implementation of mitigation and/or adaptation activities. Thus, all climate action plans like NDCs should incorporate climate education for fulfilling their targets. While education must be integrated in the detailed implementation plans of the current NDCs, the next round of INDCs should consider education in its importance from the first planning.

7. **Sufficient means of implementation for education**

In order to fulfil the role that education can play to implement the Paris Agreement's objective it is essential that the required means of implementation are provided for educational measures. The multinational support schemes must therefore consider educational activities as key elements for target implementation and provide support. Moreover, the financial investment into educational activities should also be as sufficient as national circumstances allow for the national educational strategies. Investing in education is the best way to tackle climate change and address sustainable development.

8. **Developing indicators of success**
Indicators for successful climate change education should be developed in order to guide and improve the climate change education activities. Indicators of success support the management of the action and give important understanding for improving, up-scaling and replicating the action in different contexts. They also help building evidence of the key role that education has in combating climate change.

9. **Encourage research and publishing on climate change education**
It is important that the process of the Sixth Assessment Report (AR6) takes cognizance of the experience of education playing a significant role in combating climate change as the IPCC process looks at information and data published largely in peer reviewed journals.
The Doha work programme should encourage and facilitate publishing good practices on climate change education that leads to behaviour change or influence/shift toward sustainable lifestyle into journals so that these can be reflected in AR6.