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**CEE**  
Centre for Environment Education



# South Asia Youth Environment Conclave

## From Dialogue to Action



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### Introduction

Youth have both special concerns and special responsibilities in relation to the environment. A number of environmental risks and hazards disproportionately affect young people, who have to live for many years with the deteriorating environment bequeathed to them by earlier generations. We foresee that, rather than wait for the future, the younger generation, will be compelled to begin right now to engage in new forms of action and activism to generate effective responses to ecological challenges.

The South Asia Youth Environment Conclave was envisioned with this in mind. It aimed to engage, empower and encourage youth to take action to build awareness about environmental issues (such as climate change) in their educational institutions, homes and communities. The aim was also to establish bridges of friendship between youth from different countries and thus keep alive and growing, the momentum to work for the environment.

The Conclave was sponsored by the U.S. State Department and organized by Earth Day Network India, with support from the Centre for Environment Education (CEE) and South Asia Youth Environment Network (SAYEN). It was held at the American Center, New Delhi, over September 29-30, 2015. The Conclave saw participation from 70 motivated youth from five countries: Bangladesh, Bhutan, India, Nepal and Sri Lanka.

A contest to select participants to the Conclave was first held. Over 200 youth applied from all the five countries. They described in details, the 'green' projects they proposed to undertake in days preceding the Conclave. A jury consisting of representatives from the organizing partners shortlisted the finalists based on how well thought out the proposal was, its likely effectiveness, and the

innovative strategies that the applicant proposed to adopt. The selected participants met in Delhi to strategize on ways to replicate the best practices that emerged and to network so that individual or local efforts could grow to be a movement across borders as well.

The Conclave marked just a beginning. Continued efforts and a vision for a way forward are imperative. To work toward that, we present some of the examples of strategies adopted by the participants. We hope that many others will be encouraged by the examples to also become stewards for the environment.

Based on the focus of the projects completed by the Conclave participants, the E-book has been divided into the following themes. These are:

- Build Awareness in Campuses
- Create Community Movements
- Communicate Effectively
- Protect Natural Resources
- Be Energy Efficient
- Build the Green Cover
- Manage Waste

While we have illustrated each theme with a few examples, we also provide at the end, short notes on all the participants. Each has done tremendous work.

If you have also worked to better the environment in your campuses, homes, or communities, do share that information with us at [enviroconclave4youth@gmail.com](mailto:enviroconclave4youth@gmail.com). Perhaps others could also benefit by learning about these.

We look forward to building the movement begun by 70 students into a wave that reaches many.

# Build Awareness in Campuses

The participants agreed that the energy of each, when amalgamated with that of others, was effective in broadening and deepening awareness about environmental concerns. 'Together we succeed' was a winning formula, they found. And, to enable that, working through Eco Clubs was recommended.

## Eco Clubs:

A participant from the National Capital Region of India formed 'Tears of the Earth', a community of like-minded people who believe that environmental conservation is only possible if everyone plays their



part in it, even if it is just a small effort. Volunteering their time to share knowledge about complex environmental issues in simple terms to those less fortunate than them is what the group focused on. 'Once people understand why trees are beneficial, and how global warming will play havoc by melting the snows, for example, we are sure they will do their bit for a more sustained Earth.' They also demonstrated ways to conserve resources, as for example by using non-disposable writing instruments such as metal mechanical pencils. In Guwahati, India, participants shared their knowledge with students of primary schools, as they believe that environmental education, whether formal or informal, must begin at an early age. To keep the students engaged in eco-friendly activities, they organized poster-making, and other attention-catching activities.

## Identify solutions:

Students at technical organizations developed innovative solutions to address issues such as the efficient use of water and energy. This was done by the Group for Environment and Energy Engineering (G3E) at the Indian Institute of Technology, Kanpur, India. 'Enviro Cham', their signature campaign, had G3E take students on campus tours to see first-hand, the food wastage that sometimes took place in the canteens and dining halls, and also the wastage of electricity, water and other resources in the hostels and other areas. G3E also organized visits to nearby villages. Students saw the on-the-ground environmental problems faced by the locals and brainstormed on ways their expertise could help resolve these.



### Commemorate special days in special ways:

In Bhutan, youth chose to commemorate the Bhutan King's birthday in a novel way. 'This year, we wanted to do something different, rather than the usual cultural program' our participant from Phuentsholing said. So what did they do? The group organized a clean up campaign for the town. 'The campaign was very successful. It helped draw the attention of many citizens to stop littering. It resulted in a cleaner city and added to Bhutan's Gross National Happiness.'



There are so many different days right through the year. Students can think of 'green' ways to commemorate the many special days right through the year. One example is Founder's Day. At Diwali, Eid, Christmas time, students can organize drives to collect old clothes and have tailors turn these into useful bags. On World Music Day, concerts can be held that feature songs about nature. On Teachers' Day, students can present their educators potted plants.

### Conduct Green Audits:

In Delhi, India, we have a young college student who, along with her friends, has conducted a census of

trees in her college campus. The students count the trees and identify the species. Each tree is then labeled with both the scientific and popular names. On a regular basis, 'tree discovery' walks are conducted for students to help them learn about the wonderful flora that is present around them. 'This has been very successful in building awareness and an appreciation for the trees on campus. I am sure this will help protect the trees as well.' Another participant took auditing beyond his college campus to other colleges as well. He also shared cost-effective solutions for greener campuses.

In Bengaluru, India, students of Public Policy aimed to improve the green quotient of their university's campus. They examined different Solid Waste Management systems to evaluate the efficacy of each. The various options were put through a Cost-Benefit Analysis to examine how much funding would be needed to install and maintain each. The short-listed strategies were then presented to the university authorities for their decision. Segregation of waste at source and an internal composting mechanism emerged as the most efficient methods.

### Build Campus and Community Linkages:

Students at the Nepal Engineering College, Kathmandu have set up a site within their campus where waste collected from the largest market in Kathmandu is turned into compost. In this way, space availability and a desire to work for a cleaner city supported municipal efforts to manage the garbage generated. The recent fuel crisis in the country has slowed down this process, as limited numbers of trucks are available to transport the waste from the collection site, to the composting one. In the meantime, the students, with assistance from the Kathmandu Metropolitan City Authority, are distributing compost kits to households and are running programs on the best way to use these.



# Create Community Movements

The participants opined that winning trust was essential for effective outreach to communities and spoke about several ways of achieving this. Convincing those who represent the community, or are members of boards that administer complexes was one recommendation. Partnering with an NGO that is recognized in the area as trustworthy was another, as it helped open doors. In places where no organized groups operated, it was necessary, the participants said, to connect with the locals directly with repeated visits and face-to-face interactions to establish credentials and confirm commitments. In areas that are remote, and thus not easy to visit, it was noted that collaborating with local stakeholders helped.

## Convince authorities:

Our participant from Ahmedabad, India, and his college's Eco Club members worked to organize improved waste disposal in residential colonies and societies. 'Burning waste can lead to many dangerous health conditions caused by inhaling or ingesting even small amounts of toxic pollutants,' he said. A particular housing colony was identified to run a pilot project. Realizing that all residents needed to come together if the campaign was to be effective, the group first met the authorities of the residential colony, and appraised them about the harmful effects of burning waste. This 'blessing' from the authorities was essential to open doors to individual homes, and to ensure that all the members of the colony participated. Once the campaign began, the students



also helped by providing information on efficient ways to manage the garbage generated and provided lists of waste collection agencies for the administrators to consider.

## Have recognized NGOs as partners:

In Patna, India, our participant worked with support from the NGO TaruMitra to expose the false notions that tap water at railway platforms was undrinkable,



and that bottled water was always the purest. During the participant's frequent travels, he observed that people regularly bought packaged water in trains and on railway platforms. Empty bottles, he noticed, lay littered in the trains, were flung onto tracks or discarded here and there. He wondered whether these could be illegally filled and sold. When trying to fill his bottle from the platform tap, he was warned by locals that the water was not fit for drinking. The

person advised him to buy mineral water bottles instead. With help from the NGO TaruMitra, he decided to find out the level of impurity in water supplied at ten platforms in Patna. The team took samples of water from taps, and from packaged water bottles sold at platforms. These were sent to laboratories for testing. The results were a revelation! The tap water was healthier than bottled water on many counts! They had the results, but could they convince the people about this? Trust had to be built. It was an uphill task. In order to make the public aware of the misinformation, road shows, and rallies, workshop for students, teachers and professors, flash mobs, and press conferences were organized. Having a recognized partner helped with the campaign as it put the stamp of trust on the activities.

### **Take locals into confidence:**

Our participant from Bilaspur, India, is an active member of 'Zidd for a Change'. Every Sunday, this continually growing group works to clean up and beautify dirty, unhygienic and garbage-laden spots. Once a spot is zeroed in on, then the first step is to win the trust of those who own it, or live around it.

Many hours of talking and spending time is necessary before any work can begin. 'People need to be reassured that we are not representing a realtor that wants to grab valuable space in the guise of cleaning it up,' the participant says. 'They also want to know what the end result of the beautification would look like.' 'The best method of convincing people is to draw their attention to examples of what has been done earlier'. Energy, determination, patience, coupled with hours of time are the necessary requirements. Building bridges with the communities also helps in the maintenance of transformed areas. Zidd members did this with regular visits. They designed a newsletter to widely reach out to people. 'Till now we have done over 40 spot fixes in Bilaspur city. Our cleaned up walls generally have a background of maroon with Indian motifs painted on these. This has become our signature design and we are often approached by people who have seen these walls, to clean and paint their walls as well. Our major problem is ensuring that the walls continue to remain pristine. This is a challenging issue, but with help from the locals, this is also getting resolved,' the participant said.



# Communicate Effectively

Communication channels need not be limited to the printed word, radio, or to TV, the participants discovered. Alternative forms also worked well for specific target audiences. 'Think out of the box' was recommended.

## Art forms:

A participant from Kakinada, India, organized a South Asian Environmental Poetry Competition for youth as he is convinced that poetry is one medium that reaches the hearts of many. He agrees with Robert Frost who says that 'a poem brings in delight and ends in wisdom.' The competition drew many entries. Some of the poems were in praise of nature, while others addressed pressing environmental issues. Once all the entries came in, social media was effectively used to share the poems with a larger number.



In the same way, other forms of literature (such as short-stories and novels), cartoons, comics, make for effective means of communication.

## Invisible Theater:

'Invisible Theater' is a form of theatrical performance that is enacted in a place where people would not normally expect to see one, for example in streets or in shopping malls. Often, the performers attempt to disguise the fact that it is a performance from those who observe and who may choose to participate in it,

thus leading spectators to view it as an un-staged event. This means of communication was effectively used in Udaipur, India, by our participant to build awareness about the need to keep public places free from litter. The venues chosen by the participant and his friends included bus stops, local markets, and other public places that see a large footfall, and are thus more prone to people littering the area.

Working with students to develop scripts that they can then enact, is also a useful way of utilizing the medium of theater. While working on the scripts, the students develop a good understanding of environmental issues and are able to pinpoint what would be meaningful messages to share via their performances. This is the project a participant from Delhi, India, conducted with help from the social enterprise [banglanatak.com](http://banglanatak.com). The scripts developed were enacted by students, many from lesser privileged backgrounds. The performances took place before peers, at street corners and at other venues in several cities of India.

## Visuals:

A participant from Rinchending, Bhutan, convinced that before you ask people to do anything, you must make them understand its importance, put together an exhibition to explain the necessity to manage waste. It included illustrative and innovative models on the themes of reduce, reuse, recover and recycle, ways to use discarded plastic for road paving, how to compost, turn waste paper into useful items, etc.

Photographs are another very vivid form. This was evidenced by the posters that all participants put up at the Conclave. Posters had snaps that depicted the work done by the participant. These photographs started many a conversation and a lot of networking.



Videos on environmental issues made excellent resource material which the participants used to build awareness about environmental issues. In addition, videos served to document work done, which was then given exposure by placing on social media sites for wider exposure.

The visual impact of people participating in marathons and rallies is also very effective, as was the experience of our participants from Hyderabad and Mumbai, India. 'The sight of people running, or walking together evoked interest in knowing what the cause was. Once interest was caught, banners along routes, and pamphlets that provide information were used to build awareness' they said.

### **Speaking Walls:**

Green messages painted on prominent spaces, such as the walls of educational institutions, is an effective way to reach out to multitudes. People read these as they pass by repeatedly, sometimes even daily. All the participants pledged to develop Eco Murals, the product of this means of communication for a huge Earth Day 2016 campaign that would run simultaneously in all the 5 countries from which the participants came. At the Conclave, discussions were held and it was decided that members of Eco Clubs would first go to schools and talk to students about environmental issues. They would then help them isolate green messages to paint on the school boundary walls. Local artists and paint companies would be approached to collaborate for the project.

### **Music:**

Whether you hear a song whose words keep reverberating in your head, sing and bring words alive, or create a song for others to sing, music is an effective way to communicate. A participant from Rampur, Nepal, thought so, and organized a concert that brought in many different groups that sang or played music that focused on nature. Interspersed with the performances, interesting bits of information were provided such as how many species have been lost over the past decade.

Students can utilize this powerful means of communication in their campuses to organize concerts, competitions, etc.

### **Simulation:**

A participant from Chitwan, Nepal, organized a mock United Nations session to discuss and debate 'The Role of Youth Stakeholders in Changing Climate'. Student delegates from universities across Nepal were assigned roles that represented the youth, businessmen, researchers, farmers/indigenous people, political leaders, NGO representatives, etc. Each had to present their case, and then negotiate to reach a global agreement to halt Earth's temperature rise below 2 degrees Celsius by 2050. The use of advanced technologies and the effective monitoring of the Green Climate Fund were put forward as solutions. This proved to be a fantastic way of understanding the different concerns groups have, and also learning ways to bring differing parties together to form one common voice.



# Protect Natural Resources and Biodiversity

The diversity of life on Earth - from genes to ecosystems, and the ecological and evolutionary processes that sustain it - is what we term biodiversity. It provides us food, drinking water, fuel, shelter, medicine, and much more. Over the past three decades alone, biodiversity has declined by more than 25 percent. While Earth has always experienced changes and extinctions, the current changes are occurring at an unprecedented rate. Some put these down to the increasing human domination of the planet and the growth of populations as well as consumption levels. The good news is that it is within human power to change our actions and help ensure the survival of species and natural systems and ultimately, ourselves.

A large body of evidence attributes improved health, particularly in youth, to nature and early exposure to the natural environment. In addition, childhood experiences with nature are associated with increased environmental awareness, which is linked to environmentally responsible behavior.

Participants at the conclave spoke about ways they had worked toward conserving nature.

## Revive:

A participant from Kolkata, India, and his colleagues work to rejuvenate diminished water bodies in West Bengal. They identified a neglected pond that they pledged to clean up. Realizing that nothing would work unless the locals cooperated, the team zeroed in on a local club, and motivated its members to adopt the pond. 'We utilized a participatory approach to bring in all the beneficiaries of the pond' the participant said. The team held sessions to sensitize the local people about the benefits of maintaining the pond. They also met with those in positions of influence so that there was all-round cooperation.



In Dindugal, India, our participant spearheaded the cleaning of a pond in her native village. She was surprised at the blasé attitude of the villagers to a clean water resource. Knowing that local concurrence was essential, she first met with the Panchayat (Local Self Government) officials. Once the officials understood the efficacy of cleaning up the pond, it was easy for them to help with cleaning and maintaining the pond. To ensure that garbage was not chucked into the water (a practice that was usual till then), dust bins were placed prominently around the pond area, and youth volunteers placed around the pond to explain to the locals why throwing rubbish into the pond would ultimately harm them.

In Sriperumbudur, India, a group that was short-listed to attend shared how they had artificially recharged dry bore wells. 'This not only improves the underground water levels, but also helps lower the temperature of the area around. The method used is to dig a pit around the existing dry bore well and fill the pit with layers of filter material. Surface run offs from upstream catchment areas is diverted towards this recharged structure. Water passes through this filter material and clear water enters the bore well and directly reaches the underground aquifers.'

### Benefit from expertise:

Pampore is the beautiful saffron-growing area of Kashmir, India. Our participant from there has grown up with amazing wildlife around him. He is saddened that this is diminishing day by day. A particular favorite of his is the Hangul (Kashmiri stag). Realizing that a lone effort would not go far, our participant joined the 'Wildlife Conservation Fund's' 'Hangul Conservation Project.' He participated in drives to build awareness about this endangered species, gathered relevant information, and learnt how to make presentations so that his fellow citizens could understand how the species is threatened with extinction and ways they could synergize to safeguard the small numbers of Hangul that remained.

### Use multiple methods:

Our participant from Colombo, Sri Lanka, shared information on ways the organization 'Youth Outreach Union' (YOU) focused on coastal restoration. He says 'growing urbanization and population is dramatically ruining the environment of the 1700 km coastline of my beautiful island country.' YOU members selected an approximately 10 kilometer, densely populated stretch to pilot test strategies to

make people reflect on coastal degradation and the effect it would have on human lives. With guidance from their professors, informative handbills were developed for distribution. These included information on the importance of the coast line, the causes of coastal pollution and consequence of coastal degradation. Beach cleanups were held where



the locals were encouraged to join. Social media was used to widen awareness about the problem and reach out to others to join the effort as well. In this way, the expertise of academics, the manpower of youth, and the outreach of electronic media, combined to make for a successful program.



### Encourage naturals:

Our participant from Sasaram, India, is leading a major drive to share scientific knowledge with farmers, so that those who till the soil understand how the use of chemical fertilizers is actually turning their agricultural land unproductive. 'This was no



easy task, as people tend to carry on what they have been doing over the past years, and sellers of chemical fertilizers and pesticides never really speak about the disadvantages of chemical use' he said. The participant questions whether anyone tells the farmers that the most effective way of reducing the impact of pesticides is by reducing their use. The participant and his group, 'Young Farmers for Sustainable Agriculture' have begun regular interactions with some 300 farmers. Armed with scientific data, and often accompanied by agricultural

scientists from Patna, they patiently explain to the farmers why chemicals are bad. To answer the question 'but what is our alternative' the youth provide information on the excellent natural fertilizers that are available. 'My team has already convinced a number of farmers about the benefits of a switch to composting. We are so happy to see the current paddy crop sprinkled with natural fertilizers that we helped develop. The results are fantastic. The soil is not ruined, and at the same time, productivity remains high', he says.

### Develop new techniques:

In Pantnagar, India, our participant, who is working on her thesis topic 'The Effect of Climate Change on Farm Households' has prepared a model that helps farmers understand the advantages of newer, planned and sustainable agricultural practices over traditional methods of farming. For example, she has introduced the farmers to the concept of solar energy-run pumps for drip irrigation. The participant regularly visits the villages and holds interactive sessions at which she explains climate change issues in simple terms and helps them identify what they can do to minimize these. Brainstorming sessions are also held during which the farmers bring up the problems they face. Importantly, the participant also leads them through the financial implications of adopting the newer techniques. She clearly demonstrates the cost reductions that would result.



# Be Energy Efficient

Energy Conservation is unquestionably of great importance to all of us, since we rely on energy for everything we do every single day. Energy supplies are limited and, to maintain a good quality of life, we must find ways to use energy wisely.

Reducing the amount of energy that we use is a good way to save money, and there are also other benefits to decreasing energy consumption. For example, a large portion of the energy we use is derived from oil. Some experts claim that we will run out of oil in just a few decades. As natural resources used to produce energy become scarce, the cost of energy will most likely increase. Also, toxins and other pollutants are released into the atmosphere during the production and consumption of carbon-emitting fuels. Not only are we running out of some valuable natural resources, but we are also destroying the environment in the process of using them!

With this in mind, participants at the Conclave had worked diligently towards energy management. In many cases they developed new technologies, or built on already existing ones to enable this.

## **Put technology to use:**

A cheap and effective light made from empty PET bottles is powering efforts in Bangladesh, to cope with electricity shortages and to protect the environment. 'Botol Bati' (bottle lights) are illuminating areas that have no electricity, or where long power outages are regular features. These low cost lights are also environment-friendly as they reduce carbon emissions. Our participant from Dhaka, Bangladesh plays a big role in providing 'Botol Bati'. He is the founder of the organization 'Change' that has a special campaign ongoing to encourage the recycling and reuse of discarded bottles. To enable this, members of 'Change' have placed fifty bins at different locations around his university campus. Social media sites encourage students to deposit used bottles only in these. The collected bottles are converted into 'Botol Bati' using a method inspired by the Brazilian Alfredo Moser. The method refracts sunlight in bottles that contain water and chlorine. These bottles are embedded in the roofs of buildings to produce at least 55 watts of light in the room below. 'Change' has taken the campaign further by organizing several workshops and seminars in other universities as well so that more and more awareness is generated and many youth come together to help collect discarded bottles and turn these into 'Botol Baties'. This is something that

can be easily replicated by students in other campuses as well.

'Would you exercise if your mechanical energy can charge your phone?' asks our participant from Pune, India. She explains that 'the muscle energy of humans is a huge, largely untapped energy resource, and the potential for extracting energy from it is considerable. Ironically, when we move around with our portable devices we produce a lot of energy. But a lot of this energy is lost as heat. If that mechanical energy is converted into electricity, our very mobility could charge our mobile devices, or any other appliances for that matter.' Her idea is to liberate electrical devices from the wall socket. This is an example of how technical knowledge opens the mind and has students develop technologies that reduce our dependence on traditional energy sources.

## **Help change habits:**

Our participant from Phuentsholing, Bhutan, believes that bad habits that lead to environmental woes can be broken with innovative technological solutions. 'If turning on lights and air conditioners are reflex actions, shouldn't turning these off be reflexes too?' she asks. For a start, her colleagues and she used their knowledge to develop and install in their campus, Automatic Light Sensors, and Air

Conditioner controllers. These were a novelty that generated much interest. Once attention was caught, the group explained why it was necessary to give up the usual habit of leaving lights on and the benefits that would accrue from using electricity wisely.

**Be the bridge:**

A participant from Kolkata, India, who interned with a social enterprise, helped improve the lives of urban poor by providing them access to solar fans and lights the business made available at reduced rates. Doing this, she was projecting the organization's aim to decrease the lack of access to modern energy services, or energy poverty as it is referred to. Going with the organization's belief that the absence of household access to electricity and clean cooking facilities is 'a fundamental barrier to human well-being and to economic development' she worked to bridge the gap between those with need, and those who had products to supply. Her actions go a long way in helping some among the approximately 300 million in India without access to electricity.



# Build the Green Cover

Trees reverse the impacts of land degradation and provide food, energy and income, helping communities to achieve long-term economic and environmental sustainability. Trees also filter the air and help stave off the effects of climate change. With the reality of increasingly unpredictable weather patterns and more frequent and violent storms and floods, tree cover to prevent devastating soil erosion has never been more important. Sadly, tree cover, in particular in urban areas is diminished. Participants came up with novel ways to increase green cover. The conclusion they arrived at was that while planting was good, it was not enough. Nurturing the saplings was just as crucial as planting to ensure that a large percentage survived.

## Plant trees:

'As Kathmandu, the capital of Nepal is an over populated city, plentiful availability of water is always a challenge' says our participant from that city. Not to be deterred, he decided to help build the green cover of the city, knowing that he would have limited water available for the plants. What he developed was a shift from traditional watering techniques to an innovative, water efficient drip system. 'This turned out to be a significant way of mainstreaming climate change adaptation to agricultural systems, in particular, keeping in mind that Kathmandu faces erratic rainfall patterns, and that Urban Heat Islands have been rapidly increasing over the past decade,' the participant said. Implementation of the project was begun on traffic islands. The participant explained that the greenery resulting from the drip irrigation also helped trap moisture. 'This reduced, to some extent, the effects of Kathmandu's dry season conditions that are exacerbated by the black-topped, radiation-trapping roads that crisscross the city. The carbon footprint of water-supply trucks also gets reduced as less water is needed to water the green patches,' he explained. He emphasizes that the work doesn't stop at just planting. It includes regular, on-the-ground inspections and coordination with several stakeholders. These two additional points ensure that post planting as well, plants are cared for. Future plans include promoting the drip irrigation system to business entrepreneurs and asking for special taxes to be levied on goods imported from distant markets so that carbon footprints are reduced.

Our participant from Jodhpur, India, also worked to increase his city's green cover. His method of achieving this was by planting saplings in road dividers and then importantly, entrusting responsibility for each plant to nearby residents. 'This model can be easily adopted in any city,' he says. 'Plant trees instead of railings and save a lot of government expenditure,' he recommends. 'Schools, hospitals and corporate bodies can take responsibility for greening and maintaining urban spaces. This will make neighborhoods not only more pleasant to the eye, but cooler and healthier as well,' is what he suggests.

Meerut, India, was another city that saw innovative projects to green it, as conducted by the participant from there. The participant believes that a picture speaks louder than words, and when it is a series of illustrations it is even louder. With this thought in mind, the participant developed special illustrations that succinctly explained the benefits of planting trees. These were used to generate interest among school students about trees in general, about the species of trees that grew in Meerut, and about ways to nurture these. Realizing that reaching many students directly was best done during schools hours, the participant's first step was to meet principals of various schools to garner their support. 'I then selected local NGOs to help me develop material for programs,' the participant says. 'We soon conducted fun-filled, tree planting programs that were a huge success with the students. But just doing that is not going to solve the problem. I speak to the students

and tell them that they must pick a particular plant, one that they will identify as their own and watch over it as it grows year by year, just as they grow. The nurturing of the plant is as important as planting it,' I tell them.

**Grow plants:**

Our participant from Goa, India, strongly believes in the efficacy of plants. That is why all her gifts to teachers and friends are green gifts - pots of plants. To benefit the general public as well, she plants Soursop (Anon muriatic) in parks as well as in her institute's campus. 'Soursop has very good medicinal properties, in particular as a deterrent to cancer,' she says. So that more people are aware of these beneficial properties, she creates colorful posters that describe the plants and their benefits. The posters also have contact information that tells people where the plants can be procured from. A number of students help her with outreach. She first works to ensure that the volunteers better understand why it is important to care for the environment. She also explains the benefits of increasing the green cover. Once the volunteers have clearly understood these issues, they go out to spread the message wider of 'Green is Best'.





# Manage Waste

All living organisms create waste, but humans create far more waste than other species. To prevent damaging the Earth's ecosystems and maintain a high quality of life for the planet's inhabitants, humans need to manage and store waste efficiently and safely. It is estimated that in cities alone, waste produced by growing urban populations will triple by the 22nd century. Such a level of waste will have serious consequences on the health of citizens, on the environment, and will drain governments that are tasked to manage it.

So what can we do to avoid this? Participants came up with several strategies.

## Reduce:

Our participant from Gangtok, India, is an active member of the 'Zero Waste Himalaya Group' of Sikkim. Many of the programs he has volunteered for, help build awareness on ways to tackle solid waste, a problem that he says, is a major issue in his state. Along with others he has designed a mobile exhibition that focuses on zero waste. This aims to make people aware of the need to take individual responsibility to reduce waste as well as manage what is generated. He has also worked on campaigns to reduce the use of plastic bags and has been part of the group that approached the state government to ensure that the ban on plastic bags is enforced. To enable this, the participant first undertook shop to shop surveys to understand the status of disposable plates and cups being used by shops in Gangtok.



## Upcycle:

Our participant from Delhi, India, worked on an alternative to the use of poly-bags that cause environmental degradation. She helped upcycle old clothes into useful grocery bags and even fashionably-designed accessories. The concept has

caught on and people in her locality willingly come forward to have tailors turn their old clothes into bags for personal use. Many ladies have expressed their delight, she says, at the beautiful bags and proudly carry these as fashion statements.



Others are happy to see their unwanted items transformed into something useful. Still others distributed cloth bags to shop keepers to use instead of plastic ones. This green campaign is successful in making people understand the concept of putting things to better use, rather than sending them to fill already overloaded landfills.

Water Hyacinth (*Eichhornia crassipes*) is turned into something useful by participants from Guwahati, India. 'Dried stems of the Water Hyacinth result in strong fiber that can serve as a substitute for jute, and at 1/10th the price of the latter. Creatively weaving these fibers produces beautiful objects, the sales of which supplement the income of women from lesser privileged sections of society'.

## Develop business propositions:

A Delhi college participant is part of 'Enactus', an international non-profit organization of students in

some 39 countries. In Delhi 'Prakriti' is an initiative of its members to turn organic waste into saleable compost, a profitable venture that provides rag pickers with an additional income, thus empowering the lesser privileged sections of society. The youth have set up a composting machine inside a rag picker settlement near the college. The rag pickers collect organic waste from the centers with whom 'Prakriti' has tied up. The rag pickers crush the waste and feed it into the machine. Youth teams inspect the site regularly and interact with the rag picker community to know if any problems have cropped up. 'Prakriti' has plans to set up additional machines close to other college campuses as well. The project has now expanded to the recycling of waste paper, as well as the collection of e-waste. The latter two initiatives are in their initial stages and 'Prakriti' is looking for collaborators.

### **Go full circle:**

Our participant from Noida, India, is very enterprising. Believing that waste generated in residential complexes can be efficiently managed, she has put together an initiative to accomplish just that. The participant first approaches members of resident welfare associations and organizes workshops to explain to them why it is so important to segregate waste. Once she has helped them understand, the members are generally open to her approaching individual residences within the complex, and sensitizing the people who live there about the same. It takes time for her to convince families to segregate household waste into compostable and non compostable. To households that agree to segregate waste, she distributes green ribbons to tie up the bags that contain compostable items. This helps with easy identification. The participant also works with the municipal corporation sweepers to alert them to the need to ensure that green ribbon-ed bags go to the waste compost pits only. Her hard work has paid off and today the waste from many households in Noida is getting composted.



## Notes on Conclave Participants

**AZM Arman Habib**  
South Asian University  
New Delhi



Arman, from Bangladesh, studies in Delhi. All his holiday time he spends on campaigns to protect the rich biodiversity of his county. He has researched to identify the country's biodiversity status and the major policies and legislations that support the conservation of biodiversity. He has also analyzed how effectively the

recommendations of the UN Convention on Biodiversity are implemented in the country. In addition, he also works to identify the impact of human-induced climate change on fragile ecological systems. To support these efforts Arman has developed innovative strategies to encourage students to help in the conservation of biological diversity.

**Aadil Ahmad Bhat**  
Sri Pratab's College  
Srinagar, Jammu & Kashmir



Over the last couple of months, Aadil organized 30 awareness camps in his state. The areas he worked in included Pampore, known for the cultivation of saffron, Dachigam National Park, and Srinagar, where his college is located. While the major focus of his work is to build awareness about the importance of conserving

flora and fauna, he is also proud of the success he achieved in the banning of polythene use in these areas. Ask Aadil about his favorite event, and he says 'organizing Global Tiger Day at my college.' 'It was the first time that this event was organized in the state.' 'Aadil is also working with the Wildlife Conservation Fund to save the endangered *Hangu* (Kashimiri stag).

**Abhishek Kumar**  
Jaipur Engineering College  
Jaipur, Rajasthan



Abhishek is part of 'Filth Free India', an NGO that meets regularly to clean up *Kukas* (neighbourhoods). The NGO is inspired by the '*Swachh Bharat Abhiyan*.' 'Our target', Abhishek says, 'is to clean Jaipur. We have begun by placing 50 permanent dustbins in an industrial area. We ask people to use dustbins instead

of haphazardly throwing things around, to clean their own courtyards at the very least, and to consider bags made from natural products instead of plastic.' The management of his college has helped them with their efforts. The NGO has been the recipient of awards that recognize their efforts for a cleaner India.

**Aakash Gahlawat**  
Ramanujan College  
New Delhi

Aakash enthusiastically participates in his college's



Eco-Club. He has helped conduct a census of the trees on the campus and has also helped with E-waste collection drives. Aakash recently visited the Aravalli Biodiversity Park around Delhi where he got drawn towards the beauty of natural ecosystem systems. He now wants to create awareness about these and has begun doing so among the

students of his college.

**Adityaraj Srivastava**  
Awadh Bhagwan Ram Mahavidyalaya  
Sasaram, Bihar



Adityaraj's major drive is against the use of chemical fertilizers that are turning agricultural land unproductive. His group, 'Young Farmers for Sustainable Agriculture' aims to reach out to over 300 farmers to help them understand that there are excellent alternatives to chemicals. 'My team has already convinced 50 farmers whom we met

for the first time, and an equal number of farmers who we had spoken to earlier (but who were undecided) about the benefits of a switch to

composting. We are so happy to see the current paddy crop sprinkled with natural fertilizers that we helped develop with assistance from agricultural scientists at Patna. The results are fantastic. 'The soil is not ruined, and at the same time, productivity remains high', he says.

**Advaita Parashar**  
**Janki Devi Memorial College**  
**New Delhi**



Advaita reaches out to women in her residential complex and asks them to donate old cloth for recycling. Tailors turn these discarded items into useful grocery bags. With the help of classmates, Advaita distributes the cloth bags to people in localities of Rajendra Nagar and Amrit Kaur Puri Tank Road. Advaita's green campaign is successful in making people understand the concept of recycling. Just as importantly, it helps keep waste material from overloading landfills. The campaign also provides people a handy alternative to plastic bags. Advaita says that the ladies who use these bags tell her how delighted they are to use such beautifully designed, fashionable bags.

**Aish Lohiya**  
**Jai Narain Vyas University**  
**Jodhpur, Rajasthan**



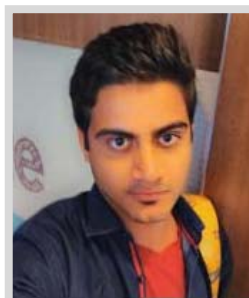
Aish's dream for Green Cities in India is planting saplings inside road dividers and entrusting the responsibility of each plant to those who live nearby. He says 'this model can be easily adopted in any city of India. Trees can be planted instead of railings and will save a lot of government money. Schools, hospitals and corporate bodies can take responsibility for greening urban spaces around them and maintaining these. This makes neighborhoods not only more pleasant but cooler and healthier' Aish advises.

**Akash Lalwani**  
**Raja Balwant Singh College**  
**Agra, Uttar Pradesh**



Akash works to protect avian species. On World Sparrow Day, he begun a movement to switch off mobile phones for at least an hour in a bid to reduce the radiation from mobile towers that often have a harmful affect on birds that perch themselves on these. He has also conducted programs to commemorate Global Tiger Day. Akash volunteers with the state forest department in its campaigns against snake catchers. Earlier this month, Akash actively worked for an eco-friendly Ganesh festival.

**Aman Narang**  
**Ramanujan College**  
**New Delhi**



Aman is an avid debater. His inclination toward environmental conservation has led him to participate in various environmental debates held in his school. He also participated in and won the Wipe Out Waste Award, for presenting ideas on reducing the generation of waste.

**Ananya Naidu**  
**IAM - Institute of Hotel Management**  
**Margao, Goa**



Ananya is a strong believer in the efficacy of plants and that is why all her gifts to teachers and friends are green gifts – pots of plants. To benefit the general public as well, Ananya plants Soursop (*Annona muricata*) in parks as well as in her institute's campus. 'Soursop has exceptional medicinal properties, in particular as a deterrent to cancer' she says. So that more people are aware of these beneficial properties, Ananya has created colorful posters that describe the plants and their benefits. The material also has contact information telling you where the the plants can be procured. Many students help with outreach . She teaches them about the importance of caring for the environment and taking hands-on action such as planting trees and flowers.

**Ang Dawa Sherpa**  
**School of Environmental Management and**  
**Science**  
**Kathmandu, Nepal**



Ang Dawa is working on a drip irrigation system for urban areas. He sees this as a way to green cities, and reduce water demand in cities. He says 'the greenery resulting from the use of drip irrigation will trap moisture and will counter-balance the dry season that is exacerbated by black-topped, radiation trapping roads.' 'The carbon footprint of water-supplying trucks also gets reduced' he says. Ang Dawa has chalked out an excellent plan that includes on-the-ground inspections and coordination with key stakeholders.

**Ankit Raj**  
**Catalyst Institute of Management & Advance**  
**Global Excellence, Patna, Bihar**



Ankit thinks that a more efficient disposal of our day-to-day waste through segregation and composting is much needed. He proposes one by which treated waste provides useful byproducts: compost from decomposable parts that can help grow organic produce and the production of items for sale from non-decomposable ones. The added advantage of recycling, as Ankit rightly points out, is that we reduce what goes into landfills. Ankit is convinced the strategies he suggests can self finance the initiatives suggested. To generate greater awareness of these advantages, Ankit has put together pamphlets for distribution.

**Aparna**  
**Janki Devi Memorial College**  
**New Delhi**



Aparna is a student of Sociology. She runs a campaign in the local vegetable market to reduce the use of plastic bags, and instead, use environment-friendly cloth ones. Aparna believes that poly-bags are the major cause of environmental degradation in cities. She reaches out to housewives in her residential complex and to others in different Delhi localities through friends and classmates. Aparna has observed

that the use of cloth bags has certainly caught on. 'The next step now is to design more fashionable cloth bags' she says, and so is busy with rallying her friends to design these. Aparna is excited about the fact that several orders have already come in.

**Ashutosh Choudhary**  
**KIIT School of Rural Management**  
**Bhubaneswar, Orissa**



Ashutosh, along with Rashmi Raina, of KIIT School of Rural Management conduct awareness programs as part of the 'Swacch Bharat Abhiyan' (Clean India Mission). They utilize their free time to reach out to youth in several states of India - West Bengal, Odisha, Rajasthan included – to help them understand basic hygiene. 'Open defecation is unhealthy.' 'You must wash your hands before eating' are some of the focus points of their outreach. In rural areas, Ashutosh and his team work with the help of 'Anganwadi Sahayikas' (those with the government's Integrated Child Development Services program) to spread these green tips

**Avinash Kumar Singh**  
**St. Xavier's College of Management &**  
**Technology**  
**Patna, Bihar**



Avinash and other St. Xavier's College students, along with the NGO TaruMitra, are campaigning to prove that tap water in Patna is safe for drinking. The team took samples of water from taps at ten railway platforms. These were analyzed to see the level of contamination at the Sri Krishna Gyan Mandir Lab. To their surprise, the results that emerged showed that the water tested had no signs of contamination, either chemical or biological. On the contrary, the water was healthier than bottled water on many counts! 'Was it really necessary to go in for Reverse Osmosis machines, or was it just a sales gimmick created' they wondered. Armed with these laboratory findings, his team and he are making people aware that the water is drinkable.

**Bhawani Shankar Nirola**  
**College of Science and Technology**  
**Phuentsholing, Bhutan**



Bhawani believes it is essential to make people understand the importance of segregation of waste and to encourage people to practice this. He has put together an exhibition that explains this need very succinctly. Along with several other fellow students, Bhawani has developed illustrative and innovative models on the themes of the 4'R's - Reduce, Reuse, Recover and Recycle. The models include ideas on ways to use discarded plastic for road paving, how to compost, turn waste paper into useful items, etc.

**Bhupender Yadav**  
**Echelon Institute of Technology**  
**Faridabad, Haryana**



Bhupender is a member of 'Tears of The EARTH', a group that works to save our environment. His specific focus is to look after animals and birds such as pigeons, monkeys, dogs, and cows in different localities. Conducting quizzes for students and organizing photography competitions in colleges are also part of what he does.

**Bindu Bhandari**  
**Institute of Agriculture and Animal Science**  
**Chitwan, Nepal**



Bindu has three major work foci: helping students prepare a 'Green Plan so that environmental values and leadership qualities develop from a young age; encouraging the growth of green cover in areas such as Chitwan and Bharatpur; and developing a Model United Nations to discuss and debate Climate Change issues. Earlier this year the Model United Nations was held on 'The Role of Youth Stakeholders in Changing Climate'. Student delegates from universities across Nepal were assigned roles of stakeholders such as youth, businessmen, researchers, farmers/indigenous people, political leaders, NGO representatives, etc. At the end of debates and negotiation sessions a unanimous resolution was adopted.

**Chitranshi Charu Dhama**  
**Govind Ballabh Pant University of Agriculture**  
**and Technology**  
**Pantnagar, Uttarakhand**



Chitranshi utilizes the outreach of the Community Radio to run awareness-building programs about the need to protect and conserve nature. Chitranshi advocates a switch to renewable energies, in particular, solar, and also the benefits of composting. Maintaining clean surroundings is another of her pet projects as is the development of kitchen and terrace gardens. Chitranshi began her campaigns by reaching out to family and friends. She then asks these people to share 'green' tips with those they interact with. And so, the circle of awareness grows wider and wider.

**Digvijay Singh**  
**Jawaharlal Nehru University**  
**New Delhi**



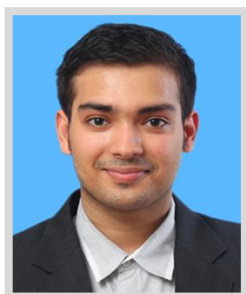
Digvijay's interest area is the study of environmental federalism and climate control. He has worked with the NGO 'Jhatka' for the Save Ganga Campaign. Digvijay says he has developed and performed several street plays on environmental issues. He has been a part of Eco Clubs since his schools days. He is a strong believer in industries getting proper clearances before they are set up.

**Divya Sharma**  
**Indira Gandhi National Open University**  
**Meerut, Uttar Pradesh**



Divya works for a greener Meerut. This she is doing by leading tree-planting campaigns and by speaking to school children about climate change and the immediate need to do something to save Earth from its ill effects. 'I started by meeting principals of various schools to garner their support. I then joined hands with local NGOs who helped me develop and conduct programs' says Divya. The students had fun planting trees, and we got tremendous support from the schools to ensure that the activity remains continuous.

**Eskandh Sharma**  
**Vellore Institute of Technology University**  
**Vellore, Tamil Nadu**



Eskandh has strong leadership qualities, as is evident from the many campus programs he runs. To name a few, he is Founder and Chairman of HelpMyPrep, an educational management Start Up. He has been selected to be the KPMG-Henry Harvard India Campus Ambassador. Eskandh's current project focuses on the utilization of the Water Hyacinth (*Eichhornia crassipes*). He says, 'I have experimented on ways this could be turned into something useful. Dried stems of the Water Hyacinth result in strong fiber that can serve as a substitute for jute, and at 1/10<sup>th</sup> the price of the latter. Creatively weaving these fibers can produce beautiful objects, the sale of which could supplement the income of women from lesser privileged sections of society,' Eskandh says.

**Fergus Mark Anthony**  
**Guru Ghasidas Vishwavidyalaya**  
**Bilaspur, Chhattisgarh**



Fergus is an active member of 'Zidd for a Change'. Every Sunday, the group works to clean up and beautify dirty, unhygienic and garbage-laden spots. During the monsoon season 'Zidd' also started a plantation program. The group has already planted over 250 saplings in schools, government offices and other areas. Fergus is also part of a village survey team from his college that conducts analysis of forest resources and the socio economic lifestyles of people. In village schools, he and his teammates conduct classes on environment awareness.

**Gaurav Madan**  
**Indian Institute of Technology Delhi**  
**New Delhi**



Gaurav is a PhD Research Scholar at the Department of Atmospheric Sciences, IIT Delhi. He volunteers his time to be a Communications Coordinator. For the Indian Youth Climate Network, Gaurav is a volunteer trainer. Gaurav says, 'I've done eco-restoration work in villages around Alwar in Rajasthan and Pune in Maharashtra to help support sustainable farming. In Udaipur, Gaurav and his friends have conducted 'Invisible Theatre'

programs to build awareness about cleanliness in markets, bus stops and other public places. These theatrical performances were enacted at malls and street corners – not at venues where people normally expect to see theater. The team has also helped work out solid waste management techniques.

**Himanshu Kumar**  
**Cochin University of Science and Technology**  
**Alappuzha, Kerala**



Himanshu is Mission Director, Core Committee Member and Technical Head at U-Genius International. Himanshu was selected as the Paris Summit Officer for the International Paris Climate Change Summit Program [COP 21], and the Campus Ambassador for Rio +22 Power India Program 2015 conducted by IARC-UN. He was one of the finalists of the Young Reporters for the Environment, India, 2015. Himanshu co-founded 'In-Waste, Investing in Waste Management', a social enterprise that provides door-to-door service in the field of waste management and aims at creating job opportunities for 'In-Wasters'.

**Ishita Jalan**  
**Delhi Technological University**  
**Delhi**



Ishita has interned at the Goa State Pollution Control Board. Under the National Water Monitoring Program, she has visited sites that helped her develop practical knowledge on environmental issues. She is a part of her college's social entrepreneurial society, Enactus. Their project, Prakriti turns organic waste collected by the ragpicker community into compost. The profits are shared with the ragpickers. As a participant in the Integrated Water Resources Management competition by TERI, she analyzed the problems and developed solutions related to surface runoffs during the rains that causes water logging inside the slum settlements.

**Jainil Shah**  
**Hargovandas Lakshmidand College of**  
**Commerce**  
**Ahmedabad, Gujarat**



Jainil and his fellow students of the Eco Club of his college are working towards creating awareness about the dangers of burning waste. 'Waste must be properly disposed in residential colonies and societies. Burning waste can lead to many dangerous health conditions caused by inhaling or ingesting even small amounts of toxic pollutants,' Jainil says. The students met authorities of residential colonies and societies, explained to them the harmful effects of burning waste and then assured the societies of their support by connecting them with efficient waste collection agencies. As an acknowledgement of their commitment to NOT burn waste, a tree sapling was gifted to each colony/society.

**Jedesh Chandrasegaran**  
**Northshore College of Business and Technology**  
**Colombo, Sri Lanka**



Jedesh has been instrumental in forming the 'Youth Outreach Union.' The work they aim to do is focused on the promotion of biogas as a reliable alternative energy source, the development of public transport, shaping social mindsets so that people manage waste responsibly, and the promotion of Energy Star appliances. The team has launched a Facebook page that has already got 450 likes, with people in over ten countries reading the blogs. Other projects include conducting a survey to better understand public opinion and levels of awareness about climate change related issues.

**Kamaldeep Singh Wraich**  
**Galgotias College of Engineering and Technology**  
**Noida, Uttar Pradesh**



Kamaldeep aims to commemorate each day as Earth Day. To do this, his programs focus on the conservation of Earth's precious natural resources. 'Water is one of the most important resources we have on Earth. We are using it so rapidly that in 10-20 years. There will be wars over water. My family and I have a 5 minute shower rule. The water we use is recycled to water plants and for

other purposes.' Kamaldeep started a community with his friends called Tears of The EARTH to create environmental awareness through workshops in schools, building societies, villages and on the streets. 'I even write inspiring songs about Earth and we perform those before many.'

**Kavita Gala**  
**Kishinchand Chellaram College**  
**Mumbai, Maharashtra**



Kavita firmly believes that 'youth can make a difference by adopting green methods.' To encourage them to do so, she has run several programs. These include poster-making and essay competitions, classes to make paper bags and recycle unused pages from used notebooks, workshops on climate change, rallies, street plays, tree plantation campaigns, demonstrations on ways to make vermicompost, and programs to distribute solar lamps. 'My teammates and I, all students, prepared and enacted a street play 'Climate Aaj Kal' at street corners, in college campuses, at bus stops, and at railway stations. '

**Koushik Mukhopadhyay**  
**Indian Institute of Social Welfare and Business**  
**Management**  
**Kolkata, West Bengal**



'Wetlands are important areas that need our protection', Koushik says. He, and others from his institute, helped rejuvenate a neglected pond in West Bengal. Once the pond was identified, Koushik and the team motivated a local club to adopt it. 'We utilized a participatory approach to bring in all the beneficiaries of the wetland.' The team held sessions to sensitize the local people about the benefits of maintaining the pond. They also met with those in positions of influence so that there was cooperation all around.



**Krithiga N**  
**Sri Venkateswara College of Engineering**  
**Chennai, Tamil Nadu**



Krithiga has spearheaded the cleaning of a lake in her native Ellapatti village, Natham Taluk, Dindigul district. 'The villagers', she said, 'were unaware of the consequences of doing so. With the help of Panchayat (Local Self Government) officials, I have been able to persuade the locals to keep the pond clean. Dustbins have also

been provided to ensure that garbage is thrown into these, and not into the lake.' Krithiga has also created a Facebook page 'The Biggest Oven Earth' which she updates with information on 'why' and 'how' to preserve lakes. Krithiga has also put together a very informative report on the condition of Katrambakkam Lake and Chitlapakkam Lake in Tamil Nadu state.

**Malabika Basu**  
**Indian Institute of Social Welfare and Business**  
**Management**  
**Kolkata, West Bengal**



Malabika believes that we really need to work for greener and cleaner spaces. She is working diligently to raise awareness among the general public about the great benefits of planting more trees and not strewing garbage around. 'We really need to help people understand and adopt environmentally-responsible

practices' she says. Malabika has also been a supporter of efforts to maintain wetlands in West Bengal. Along with other students, she has travelled to rural areas where ponds that are dead or dying are identified and rejuvenated with the help of those who live along the periphery of the water body, and local clubs.

**Niraj Kumar**  
**National Law School of India University**  
**Bengaluru, Karnataka**



Niraj is part of 'Team Sanjeevni' that works toward achieving a cleaner, greener, sustainable campus for their university. Being students of Public Policy, the team organized brainstorming sessions that had students put forth their ideas on ways to evaluate their waste management

systems. Segregation of waste at source and an internal composting mechanism emerged as the most

efficient methods to recommend to their university authorities for implementation. Before doing so, a Cost- Benefit Analysis was applied to different Solid Waste Management systems to ensure that the ones recommended were price-easy as well.

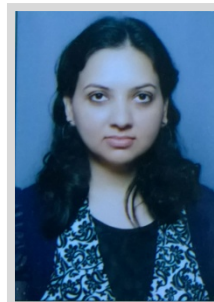
**Niraj Sapkota**  
**Sikkim University**  
**Gangtok, Sikkim**



Niraj is an active member of the 'Zero Waste Himalaya Group of Sikkim.' Many of the programs he has volunteered for, help build awareness on ways to tackle solid waste, a problem that he says is a major issue in Sikkim. Along with others he helped design a mobile exhibition that focuses on zero waste. This aims to make people

aware of the need to take individual responsibility to reduce waste and manage what is generated. He has also worked on campaigns to reduce the use of plastic bags and has been part of the group that approached the state government to ensure that the ban on plastic bags is enforced. Niraj has also undertaken shop-to-shop surveys to understand the use of disposable plates and cups being used by shops in Gangtok.

**Nivedita Niram**  
**Indian Institute of Social Welfare and Business**  
**Management**  
**Kolkata, West Bengal**



Nivedita's focus is on 'Green Buildings.' She is very interested in widening awareness about ways that structures can be made environment friendly. With this in mind, she identifies techniques that even residents of existing structures can adopt. These include: rainwater harvesting, growing potted plants on rooftops and terraces,

composting kitchen waste, switching to solar, recycling grey water, etc. Nivedita has developed posters to showcase these strategies. Along with her peers, she then uses this material to explain the benefits of green buildings to wider audiences.

**Pragati Shukla**  
**Ramanujan College**  
**New Delhi**



Pragati is a nature enthusiast. She firmly believes in the benefits of conserving nature. As an integral part of the Eco-Club, as well as the National Service Scheme of her college, Pragati has worked shoulder-to-shoulder with other members to inspire a wide circle of youth to be stewards for the environment.

**Pralayasimha Yedida**  
**Institute of Cost Accountants of India**  
**Hyderabad, Telangana**



Pralayasimha regularly volunteers with several organizations to organize campaigns on issues such as waste management, the conservation of natural resources, cleaning up of neighborhoods and other green initiatives. His persistent sensitization campaigns have helped reduce the use of plastic in his village. Pralayasimha

keenly participates in many 'Runs' in Hyderabad to collect donations for environment protection. He also volunteered with the NGO Waste Warrior to collect waste and send it for recycling.

**Prasenjit Paul**  
**Indian Institute of Technology Kanpur**  
**Kanpur, Uttar Pradesh**



Part of the 'Group for Environment and Energy Engineering', member of the Presidential Council and the Student Gymkhana are just some of the posts Prasenjit holds. He has organized awareness drives against climate change and environmental pollution and for renewable energy as well among others. On a regular basis, he helps

put together programs to commemorate days such as Earth Day and World Environment Day on campus. In order to bring about change at an individual level, Prasenjit has helped organize programs that showcase ways to stop food wastage in the canteen and curtail the unnecessary wastage of electricity, water and other resources in the residence halls and other areas. Prasenjit is also collaborating with other students to have the Indian Institute of Technology (Kanpur) campus turn 100 percent energy efficient by 2020. This they hope to do with funding from alumni that will help install additional solar panels.

**Prashant Bhandari**  
**Agriculture and Forestry University**  
**Bharatpur, Nepal**



Prashant has designed a unique concert that will focus on biodiversity. This came alive after Prashant spent hours consulting not just with his seniors, mentors and teachers, but also juniors and friends. His committed efforts have resulted in 'One Song for Conservation, One Dance for Biodiversity'. The concert has

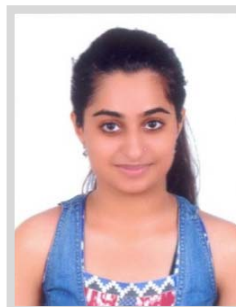
participants share their emotions, experiences and ideas through poetry and songs.

**Pratibha Yadav**  
**Harishchandra Ramkali Institute of Pharmacy**  
**Ghaziabad, Uttar Pradesh**



Pratibha's main focus is to make people understand why changing regular bulbs to LED ones is important for the environment. Building complexes are a major target area for her. Pratibha also uses innovative methods to make students aware of the need to save electricity.

**Priya Chawla**  
**Kamala Nehru College, University of Delhi**  
**Noida, Uttar Pradesh**



Priya believes that waste generated in residences can be efficiently managed. With the 'go ahead' from Residents' Welfare Associations, Priya organized workshops to explain 'What is Climate Change', 'The Importance of Segregating Waste,' and 'What Can Be Composted' was explained in these sessions. Priya also goes from

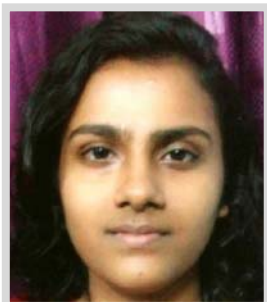
house to house, sensitizing families that couldn't make it to the workshops. She distributes green ribbons to each household that agrees to take part in the project and tells them to tie it on the bags containing green waste. Today, 17 families are segregating waste and sending it for composting. Priya has also sensitized sweepers so that they identify bags that contain waste for composting. The target is to get 100 families actively participating in composting. Plans are afoot to install a used Tetra Pak cartons recycle bin as well.

**Priyanka**  
**TERI University**  
**New Delhi**



Priyanka is a Climate Counselor. She is part of the International Centre for Culture and Education's 'Green (R)evolution Global Program-Action Against Climate Change' program. Earlier this year, Priyanka participated in TERI's regional round of the inter-university competition on 'Water Resource Management'. She has been awarded the second prize in TERI's Poster Competition at the SWASH program they organized in March 2015.

**Radhika Modi**  
**Indraprastha College for Women**  
**Delhi**



Radhika is part of a Green Audit team. 'We have taken the initiative to conduct an audit in our college and video-document this entire auditing process' she says. This video-documentation was showcased in an international competition hosted by the United Nations Framework Convention on Climate Change. 'We are happy to share that our video was shortlisted as the top 24 videos on Youth and Climate Action from around the world,' Radhika proudly announces.

**Rashi Jain**  
**Indraprastha College for Women**  
**Delhi**



Rashi is a student of Political Science. She has participated in the United Nations Competition that focuses on fighting against Climate Change. 'Our team video showcases a Green Audit conducted in our college. We also ran a campaign to have citizens sign pledges to ensure a healthy environment. Her friends and she have also produced a video that demonstrates the hazards of cigarette smoking. 'No Plastic' is another campaign that Rashi has helped generate. This campaign has been very effectively run using social media.

**Ravi Kiran Junjupelli**  
**Indian School of Mines**  
**Dhanbad, Jharkhand**



Ravi and other students enthusiastically commemorated Earth Day with a 'Total Waste Solution Campaign' that included cleaning and greening their surroundings. They have also organized a 'Liter of Light' workshop to develop low-cost, solar-powered, lighting solutions. The concept uses discarded PET bottle filled with water and liquid bleach. The prepared bottle is hung through the roof of a home with one-third of it above the roof. When sunlight falls on the upper part of the bottle, water refracts the light and the solar bottle illuminates, equivalent to a 55-watt bulb! These they have successfully installed in nearby villages and in slum schools.

**Reeny Modi**  
**Indraprastha College for Women**  
**Delhi**



Reeny says she is part of a team that is carrying out a Green Audit of their college campus. 'As part of this project, we are studying the various environmental aspects of our campus. We work to ensure that within the college, best practices for sustainability and environment protection are followed. We calculate how much waste is generated and how it is disposed off. We also observe whether or not energy and water resources are used efficiently, and record the number of trees in the college, among other things,' Reeny says.

**Rishabh Sharma**  
**Vivekananda Institute of Technology & Science**  
**Ghaziabad, Uttar Pradesh**



Rishabh is a keen nature photographer. He enjoys taking pictures of plants, animals and other living creatures. His teammates have formed a group which they call 'Tears of the Earth'. The team spends hours putting together videos that build awareness about environmental concepts. These are then uploaded on social media sites. The 'Tears of the Earth' Facebook page also provides information on solar energy, water conservation, car pooling as a means to reduce fuel consumption, reducing the usage of poly-

bags, planting trees and other such issues. Rishabh also organizes quiz competitions that provide opportunities for students to expand their knowledge about several environmental issues.

**Ruchi Saini**  
**Indraprastha College for Women**  
**Delhi**



Ruchi is helping with the census of trees at her college campus. She is part of a group of students who count the trees and identify their species. Each tree is then labeled with both the scientific and popular names. Ruchi is also part of the college's team that audits water management. 'I look for answers to the following questions,' Ruchi says. 'What is the water source for our college? How much are we consuming? How much are we saving? Is there any wastage? Is the water safe for drinking? Is the water for our swimming pool recycled? Can we implement a rainwater harvesting system?'

**Rumit Walia**  
**Harishchandra Ramkali Institute of Technology**  
**Ghaziabad, Uttar Pradesh**



Rumit and his teammates plant trees, promote the use of renewable energy resources and work with local communities to appraise them about simple ways to save water, manage waste, reduce the use of plastic, and other such 'green' initiatives. Rumit's passion is to increase local green cover. Along with others, he regularly plants in available vacant spaces. On special days dedicated to trees in particular, the group plants along street curbs, in road dividers, on rooftops, etc. Rumit is also a strong advocate for solar energy. He has convinced his father to install solar in their home and also persuaded his uncle to open a solar panel shop. These are just some of the many green initiatives Rumit is part of.

**Sahil Singh Kapoor**  
**TERI University**  
**New Delhi**



On Climate Diplomacy Day (June 17), Sahil organized a panel discussion on 'Climate Change as a Threat Multiplier to Human Security'. This was held in conjunction with the Indian Youth

Climate Network. Sahil has also organized programs for the Climate Action Network South Asia. These were held both at regional and national levels and addressed issues pertaining to climate change. He is also actively engaged with programs for the Climate Reality Project, 2015 that focuses on helping communities understand and respond to climate change in India.

**Sajid Iqbal**  
**North South University**  
**Dhaka, Bangladesh**



Sajid is the founder of the organization 'Change.' In collaboration with 'Earth Club of North South University' and '4Matters' he helps organize campaigns in educational campuses to collect used plastic bottles. This 'Green in a Bottle Campaign' aims to encourage the recycling and reuse of discarded bottles. He and his team placed fifty bins at different locations, and used social media to encourage students to deposit used bottles in these. The bottles that were collected were converted into amazing pots for the garden, penholders, and decorative items.

**Sanjib Talukdar**  
**Cotton College, Guwahati, Assam**



Sanjib says his love for nature comes from the rural setting he grew up in. In the city he lives in presently, he misses the open spaces and the green expanses that were so much a part of his childhood. To try and block out the vista of concrete, excessive traffic and unmanaged garbage, Sanjib has brought together a group of youth who work to make their city greener and cleaner. The group is also active in recommending the installation of rainwater harvesting on campus. Sanjib also volunteers with the environmental NGO 'Wild Roots' and conducts several programs with them. In rural areas, where he says water is available, Sanjib helps the people test the waters to ensure that iron, fluoride and arsenic are not excessively present.

**Satyansh Singh Tomar**  
**Lovely Professional University**  
**Phagwara, Punjab**



As a part of LPU-NSS for the past two years Satyansh has organized and volunteered in tree-plantation drives. "We organize Earth Day activities in which we motivate the youth of our society to keep their surroundings clean and green. Our cultural performances like '*nukaad natak*' have environmental messages. In university and in parts of Jalandhar and Phagwara region I organized cleanliness drives to make the neighborhood clean and healthy. We promote the use of dustbins to keep the city clean. I also organize events like 'Best out of Waste' in which we take old material and recycle it into something useful.'

**Sayanee Das**  
**Indian Institute of Social Welfare and Business Management**  
**Kolkata, West Bengal**



Sayanee is currently interning with 'Pollinate Energy.' The company is working to improve the lives of India's urban poor by giving them access to sustainable products that could make their lives better. For example, Sayanee works to provide solar lights and solar fans at reduced rates to the lesser privileged in Kolkata. On a personal front, Sayanee is keen on water conservation campaigns and hopes to set up a rain water harvesting system in her home.

**Sayanti Basak**  
**Bhola Borooh College**  
**Guwahati, Assam**



Sayanti has been able to connect effectively with school students who she found to be keen to know and understand environmental issues. Teachers of several schools, where she went for first visits, have asked her to come back and conduct more programs so that the school students remain engaged in eco-friendly activities. 'My best achievement has been in being able to connect with the people at the grassroot level and see the problems of the environment through their eyes,' Sayanti says.

**Shaik Afsha**  
**Indian Institute of Human Rights**  
**New Delhi**



Shaik Afsha is associated with *banglanatak.com*, a unique organization that uses theater and folk arts as effective communication strategies. Over the recent past, she has been active in channelizing youth talent for the '*Shehar Green Karo- It's our turn to lead*' campaign. She reached out to youth and motivated them to do something for the environment. Shaik Afsha also worked for 'Green Angle', a photography competition that focused on our beautiful planet. She has also reached out to women *Panchayat* leaders to help them identify policies that would benefit the environment of their constituencies.

**Shashikamal Madusanka Kodithuwakku**  
**Open University of Sri Lanka**  
**Colombo, Sri Lanka**



Shashikamal tells us that his beautiful island country has a long coast line that extends over 1700 kms. 'The growing urbanization and population' he says 'is dramatically ruining the environment of these areas.' Shashikamal and his teammates selected a strip from Mt. Lavinia to Moratuwa, an area with intense population pressure, to develop strategies to help people reflect on this coastal ruination, and the effect it will ultimately have on their lives. With guidance from Professor SA Norbert (Department of Geography, University of Colombo), informative handbills were developed for distribution. These included information on the importance of the coastline, the causes of coastal pollution and consequence of coastal degradation.

**Shrey Ajmera**  
**Ramanujan College**  
**New Delhi**



Shrey has been working for environmental conservation since his school days. He has participated in numerous competitions that help focus on environmental issues. These include essay writing and theatre. Shrey is also an ardent quizzer who puts his skills to test in several environmental quizzes. His interests have continued through his college years.

Shrey is an active part of his college's Eco-Club. He participates in the Club's plantation and E-waste collection drives. He has also helped build awareness both on campus and off about the need to conserve biodiversity.

**Simran Kalra**  
**Indraprastha College for Women**  
**Delhi**



Simran is another crusader for green campuses. She has played an active role in conducting a 'Green Audit' at her college. The judicious use of water, the management of waste, and the curbing of power wastage are some of the programs she has worked on. She also conducted a Tree Census wherein she counted and named the trees with their local and scientific names.

**Sudeep Ghimire**  
**Jawaharlal Nehru Technological University**  
**Kakinada, Andhra Pradesh**



Sudeep has done something unique. He has organized a South Asian Environmental Poetry Competition for students as he thinks that poetry is a medium that reaches the hearts of many. The competition drew many entries. Some of the poems were in praise of nature, while others addressed pressing environmental issues. Sudeep effectively utilized social media such as Facebook to expand the reach of the poems to a larger number of youth. Even the Media helped his endeavors by providing press coverage. The poems are available at [www.sanosansar.org](http://www.sanosansar.org)

**Suraj Tiwari**  
**Ramanujan College**  
**New Delhi**



Suraj is passionate about working to get people to switch to renewable energy. He ardently works to raise awareness about the benefits of solar and other renewable energies. This he does among his peers in college, and among other youth as well. Suraj is actively involved in helping his college's Eco Club put together plans to install solar panels in his college campus.

**Surbhi Jain**  
**Delhi College of Arts & Commerce**  
**New Delhi**



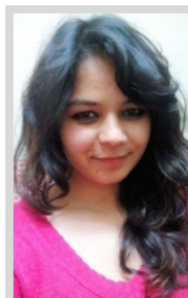
Surbhi raises awareness among people about how changes in everyday lifestyles can make a huge difference to the environment. 'The excessive use of plastic, for example' she says, 'is a huge problem everywhere.' 'I am creating awareness on how to minimise its usage.' She encourages the use of real cups and silverware at functions, instead of plastic ones. She has also convinced her classmates to bring their lunches wrapped in aluminium foil that can be used repeatedly. Surbhi has widened awareness about ways to reuse plastic bottles among several segments of society – slums included.

**Suyog Giri**  
**Nepal Engineering College**  
**Kathmandu, Nepal**



Suyog runs the 'Solid Waste Management by Natural Ways' project in Nepal. He has developed a waste collecting center in the biggest market in Kathmandu – Kalimati Market, and has also chosen a site where this waste would be taken and worked upon – the compound of the Nepal Engineering College. Suyog is proud of the fact he had the opportunity to share his project details with the Secretary of the Ministry of Science, Technology and Environment.

**Swati Rautela**  
**Govind Ballabh Pant University of Agriculture**  
**and Technology, Pantnagar, Uttarakhand**



A PhD student, Swati is doing her thesis on 'The Effect of Climate Change on Farm Households.' With help from her department colleagues, Swati has prepared a model that helps farmers understand the advantages of planned and sustainable agricultural practices over traditional methods of farming. Swati has introduced the farmers to the concept of solar energy-run pumps for drip irrigation as well other practices. She leads them through the financial implications of adopting these and clearly demonstrates the cost reductions that result. Swati has also helped conduct brainstorming sessions that help explain in simple terms, the effect humans have on climate change. She helps people understand simple ways to minimize these.

**Tejaswani Jaglan**  
**Cummins College of Engineering for Women**  
**Pune, Maharashtra**



Tejaswani is studying Mechanical Engineering. Her aim is to 'liberate electrical devices from the wall socket. 'Ironically, when we move around with our portable devices we produce a lot of energy. But a lot of this energy is lost as heat. If that mechanical energy is converted into electricity, our very mobility could charge our mobile devices, or any other appliances for that matter,' Tejaswani says. As she explains, the Muscle Energy of humans is a huge, largely untapped energy resource, and the potential for extracting energy from it is considerable.

**Thinley Wangmo**  
**College of Science and Technology**  
**Phuentsholing, Bhutan**



Thinley's college has contributed to make Phuentsholing clean and green. On His Majesty's 34th Birthday in Bhutan, Thinley, as part of the student body of her college, organized a cleaning campaign in Phuentsholing town, rather than a cultural program. 'This year, we wanted to do something different, keeping things simple but effective and unique. The campaign was a successful one as we were able to draw the attention of local residents and were able to create awareness about waste management. Conserving energy is also essential and we can start small by turning off lights, fans or ACs when not required. If turning on the lights and ACs are now a reflex shouldn't turning these off be a reflex too?' Her classmates have done a mini project on automatic lighting and AC control-based on passive infrared sensors.

**Vinayak Mishra**  
**Lovely Professional University**  
**Phagwara, Punjab**



Vinayak is a green activist who regularly takes part in plantation drives, awareness rallies, seminars, workshops to demonstrate how to get the best out of waste, and so much more. The programs he participates in are not limited to just his college campus or surroundings, but are conducted in other parts of Punjab as well – both in cities, and in villages. Earth Day was commemorated widely by Vinayak and his peers. They planted saplings, organized lectures, and even held a fashion show of natural fabrics.

**Vishwaas Choudhary**  
**School of Energy and Environmental Studies**  
**Indore, Madhya Pradesh**



Vishwaas believes that we can keep Earth clean by following the rule of 'reduce, reuse, recycle.' He hopes that we can be green citizens by reducing use of resources like water or gasoline. It is more responsible to find ways to reuse jars, plastic bags, and boxes rather than throw things away. His college's annual Earth Day commemoration included tree planting, gardening and various go-green activities in which the staff and students participated included cleaning the drains of garbage and making the surroundings green and clean. These events inspire students to adopt simple ways - 'If everyone takes a small part we can make Earth Day Every Day!'

**Yogesh Bhandari**  
**TERI University**  
**New Delhi**



Yogesh's *mantra* is solar energy for rural areas so that students benefit. Yogesh has spent months studying the rural electrification scenario in India. His findings are that even in villages where electric lines have been drawn, energy supply remains meager. 'Added to that', he says 'more than one lakh villages in India are still to be electrified.' Yogesh has drawn up a plan for a small district in Jharkhand called Latehar. 'Getting solar energy to this area will likely see a reduction in absenteeism in schools, resulting in a rise of literacy levels, that at the moment are sadly very low.

**Zuhair Ahmed Kowshik**  
**Institute of Disaster Management and Vulnerability Studies**  
**Dhaka, Bangladesh**



'Teen for Green' is an environment-friendly project that Zuhair is a part of. It is conducted in educational institutions in Kaukhali Upazila and Pirojpur. 'The project has helped develop a culture of good environmental practices in my community. It has reversed negative behavioral practices and created a consciousness for the environment among teenagers. The project has also been successful in helping students recycle waste items into beautifully-crafted decorative pieces. A major achievement has been the 'discovery' of green and environmentally-conscious teenagers that has in turn resulted in the development of an environmentally-friendly generation for the betterment of Earth,' Zuhair says.

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