

Green Vision 2019

Writing for a Better Tomorrow



Aligned with



EnvEco

LOGIC

Spearheading Sustainable Growth

Table of Contents

Foreword by Dr. Fawzia Tarannum, TERI SAS	3
Editor's Note by Kritika Mathur, Envecologic	5
About Green Vision	6
Our Motivation & Endeavor.....	7
Topics	8
Best Essays	10
Adrija Mitra	11
Syona Agnihotri	14
Angel Johnson	17
Bhavya Anand	20
Special Mention Essays	23
ANGEL SIDHU	25
BHAVYA SHARMA	27
KUHU AEIJAAZ	28
DHAANI THAKUR	30
NAVYA GANDHI	32
SHREYA SHOKEEN	33
SOURISH BHAT	34
TIJIL MINOCHA	36
BHUVI BAGGA	39
LAVANYA KAPOOR	41
PARI GARG	42
REEVA GANDHI	43
SHREYA PANDAY	45
VIJEYTA PANJWANI	47
JAPNEET KAUR JAGGI	49
KENISHA THUKRAL	54
TAANISHA MURARKA	56
MAHIKA SINHA	58
SANYA NARANG	60
GANANT AWASTHI	61
About Envecologic.....	63
Our Endeavours with the Youth	64

Foreword



In the latest report released by the United Nations, India's population has touched 1.37 billion and is likely to overtake China by 2027. To feed the millions being added every year, India needs to grow at a much faster pace. This isn't difficult, as India, after all, has been the world's fastest growing middle size economy for quite some time. The challenge lies in that the world does not know of any long-term low-carbon, high growth strategy. High growth, as we know, comes at a cost, especially if the country is trying to emerge from poverty.

In the biennial Environmental Performance Index Report of 2018, published by Yale and Columbia University, India is ranked 177 out of 180 countries, down from 141 in just two years. In Environmental Health, it ranks last and in Air Quality it ranks 178 out of the 180 countries that have been listed. In Water and Sanitation, India ranks a lowly 145. If that was not alarming enough, according to Greenpeace and AirVisual in their latest report published in 2019, 22 of the world's 30 most polluted cities in terms of Air Quality are in India. If one was to consider only PM 2.5, then as per WHO, India has 9 of the 10 most polluted city. The health of the environment has a downstream impact on its inhabitants. In the World Health Index, India ranks 120 in the list of 169 nations, whereas on the global healthcare access and quality (HAQ) index India ranked 145 in the year 2016. The figures are stark and ominous if not downright scary!

It is as clear as day, that issues related to environment can no longer be viewed in isolation. People who place pressures on the environment, through the lifestyles they lead, businesses they practice and the values and beliefs that they carry with them, are at its core and their participation in managing environmental issues is critical. The window for action is shrinking very fast and the world at large and India in particular, needs to take decisive action for intergenerational equity. It is in the context of these alarming statistics, that the initiative of EnvEcoLogic, the Delhi based environment and sustainability think tank, to mainstream the discourse on environment and sustainability issues, needs to be appreciated. The online essay writing competition viz., Green Vision 2019- Writing for a Better Tomorrow, organized by EnvEcoLogic was a unique attempt to engage with the young minds on issues related to pollution, health, sustainable development and their interplay. The competition was intelligently themed under sections that were not only inter-related but also subtly nudged the participants to delve into the nexus of development, environmental degradation and health.

EnvEcologic needs to be commended for the overwhelming response to the essay competition and for their great effort in channelizing the energy of the youth towards environmental issues. This report is a treasure of thoughts of young minds, a key stakeholder in sustainable development. I sincerely hope that this initiative will create a ripple effect by influencing and goading the public to take meaningful action.

Dr. Fawzia Tarannum
PhD, Assistant Professor
TERI School of Advanced Studies



Editor's Note



Green Vision 2019 – Writing for a Better Tomorrow was Envecologic's inaugural inter-school competition and it tried to break free of the regular structure of school competitions, focusing on research and learning in a non time bound manner while encouraging participants to research and understand the various Sustainable Development Goals better. First of the many events in the offing, the competition was a resounding success.

The motive of the competition, like every other activity that Envecologic is undertaking towards youth engagement, was to draw the youth out of the comfort of what they already know, challenge knowledge barriers and make

education more sustainability inclusive. We understand that sustainability is the driver and the anchor of the new world order – a world which is struggling to grow at a high pace while dealing with environmental challenges. The entries received were a clear indicator that the young people of today are not only driven to be future corporate leaders, but are also sensitive to the present day environment and sustainability challenges.

Huge congratulations to the winners. Besides publishing the essays in this report, we will also be publishing your essays in the inaugural issue of *Sustainability GenNxt* – the monthly sustainability e-magazine created and designed specifically for our young readers. The e-magazine is going to be a one stop destination for students to understanding environmental challenges such as climate change, getting acquainted with global sustainability endeavours being undertaken by their counterparts globally, as well as a platform for networking with schools from across the country and showcase their own environmental sustainability endeavours. Besides this, Envecologic is also initiating the *Sustainability School Network (SSN)*, which shall become a central network for schools across India for activities pertaining to environmental awareness.

I believe that this is the best time that for Indian education system, and am personally extremely excited to see the evolution over the next few years. For us, this competition is just the beginning, and with our future endeavours, we hope to engage with many more of you.

Kritika Mathur

Program Head, Green Vision 2019

About Green Vision

Envecologic launched **Green Vision 2019** to engage with young adults from schools and university level on environmental issues in a meaningful manner. **‘Green Vision for School – Writing for a Better Tomorrow’** resonates with this objective to sensitize and orient the youth at the school level so that they can go beyond academics to delve into sustainability challenges and develop problem-solving sensibilities.

This essay writing competition aimed to encourage young minds to think and brainstorm on sustainability topics that impact them the most and are intricately linked with the **United Nation’s Sustainable Development Goals as stated in the 2030 Agenda for Sustainable Development.**



Our Motivation & Endeavour

In this age of excessive consumption and skewed distribution of resources across the globe, adopting a sustainability centric approach is our only salvation. And with this end in mind, the United Nations has come up with a list of Sustainable Development Goals as “**the blueprint to achieve a better and more sustainable future for all**”.

EnvEcoLogic believes that the most critical aspect is the involvement and engagement of youth in every discourse on sustainability and climate change. We understand that the present younger generation AND their future generations will be most affected by damage wrecked by present global unsustainable practices, and the resulting impacts of these, such as global warming, climate change and unavailability of critical resources.

Recognizing the critical role young people have to play in this scenario, we believe there's a need for a platform which allows them to become a part of the sustainability discourse and encourages them to compliment their unique ideas with research.

Green Vision 2019 – Writing for a Better Tomorrow was a uniquely designed online essay writing competition which provided participants the chance to delve into the world of sustainability and hone their knowledge.

In the daily schedule when it's absolutely difficult to actually put ideas together and assign any time to thinking about the planet, the economic disparities around the world and evils born out of economic growth across the world, this competition rewarded their impetus to do the same.

Topics

Green Vision created a comfortable and unique space for the students to add thought to their strong sense of sustainable justice for the planet. **The participants were given 3 different topics related to unsustainable practices and environmental challenges prevalent in the urban areas and directly aligned with the SDGs.** The shortlisted topics were such that the students found it easy to relate to. With the focus on research and writing their own version of the environmental challenge, they were encouraged to do so in the comfort of their own chosen space (home or school) in a non-time bound manner, thus putting the onus on their creativity and giving structure to their thoughts instead of memory and time limits.

The process thus ensured that the students read about the various relevant SDGs and became more socially aware of the challenges currently impacting every one of us.

Essay Topics

1. Air Pollution, the silent killer

Delhi is among the world's most polluted cities in the World. One out of every two Delhi's children are growing up with irreversible lung damage. Delhiites develop smokers' lungs by the age of 35.



2. Good health & well-being becoming a challenge in urban cities

Over the years people residing in the cities have increased and have gone up to 4.2 millions. How are cities coping? Does urban life = Good Health & Well-being?



3. My Vision for a Cleaner & Greener India

India generates over 150,000 tonnes of municipal solid waste per day. Where do you think all this waste is going and how can we move towards a cleaner India?

Best Essays



**Adrija Mitra,
Loreto Convent School
(1st Prize)**

My Vision for a Cleaner & Greener India



*"Jo sarhad par toh ja na sakey
par apna farz nibhate hain,
Aswacchata namak shatru se Bharat desh bachatey hain
Do pal watan ke aaj unke naam karti hoon
Jo sadak-naale saaf karte hain, unhe salaam karti hoon."*

(Though not qualified to be at the border to safeguard the country
But knows his responsibility very well
And safeguards our country from dreaded uncleanness
Let us dedicate few moments for them
And salute those unsung heroes-cleaners of our roads and drains.)

Let the above stanza of a soulful poem on cleanliness written by a ninth standard schoolboy, Apurba Bikram Sah, lay the foundation of my vision for a cleaner and greener India. Clean and green, both are most important parameters while deciding Human Development Index of a country. But especially in cleanliness factor, we Indians have an abysmal record. Indian society, in general, bears a gross negligent attitude towards garbage disposal and has out and out disregard for the poor garbage collectors. In the same breath, being blessed with abundant natural greeneries, we are irresponsible in preserving this invaluable natural gift. But, I strongly believe that in the context of a cleaner and greener India, there is no more neutrality, either I have to be a part of the problem or a part of the solution. Definitely, I shall dedicate myself for the cause of a cleaner and greener India, not merely by words but through my actions.

"So long as you do not take the broom and the bucket in your hands, you cannot make your cities clean." These timeless words of Bapu have significant role in transmuting our beloved country into cleaner and greener. I do believe that almost all the merits of a clean and green surrounding, are either told or written. Now, the need of the hour is to religiously follow those in our day to day life. "The scavenger's work must be our special function in India." Mahatmaji insisted that "Everyone must be his own scavenger."

My vision for a cleaner and greener India must not be an initiative which looks brilliant on paper, creates a lot of buzz but fails to create any sustainable impact. Rather, I do have a very clear and specific road-map for my vision to be fulfilled. Awareness, On-ground activities and enacting rules to sustain the development are three important guiding factors to fulfill my vision.

Awareness among the common people about the merits of clean and green surroundings is very important. Awareness programmes and activities should not be limited to schools, colleges and office boundaries. Instead, number of workshops should be initiated by each and every educational and government institution in the localities, emphasising special concern to nearby unauthorised colonies/slum areas. Innovative ways like songs, street plays will be much more effective than poster and speeches. Local youth should be roped in and encouraged to take part in these activities.

A sustainable awareness programme should pave the way for ground-level activities. There should be weekly cleaning programme for every locality. Prominent people of the

area will lead from the front in these cleaning activities. A monthly meeting would evaluate past activities, problems faced and take up further necessary steps to accomplish the work. In every three month, a local level cultural programme should be organised where various dignitaries like District Magistrate/BDO/Municipal Commissioner/School and College Principal will hand over prizes/certificates to selected local youth for their achievements. During monsoons, we will organise plantation activities. Each planted tree should get a family name in a small function. Thus, every grown plant will be regarded as a family member and an emotional attachment will develop. Thus a belongingness will be established and those planted trees in the area will grow with protection and honour.

I do believe that being a religious country, we can use religion effectively to maintain our surroundings clean. Walls of dilapidated buildings where people used to litter need to be cleaned and after cleaning, various religious figures/symbols of different religions are to be drawn. This will prevent a large number of people from littering again on that spot.

We should not forget that we are the ones who had well developed drainage system even 2500 years ago. We should also proudly remember we Indians have inherited the one among the oldest civilizations from our ancestors. With active participation of people, enacting relevant rules, spreading hope and awareness among people, motivating people to shun their few common bad habits like spitting, urinating and throwing garbage on roads and public places, could definitely bring a sustainable change in our neighbourhoods.

Furthermore, we should actively promote the inspiring success story of the village, Mawlynnong of our Meghalaya state, adjudged as the cleanest village in Asia. Government at various level should largely promote those people who are not keeping mum about the filth around them, like Sunil Chaudhary of UP, Kumud Baruah of Assam, Temsutula Imsong of Nagaland, Debjani Majumdar of Kolkata, Chandra Swami of Tamilnadu, Saalumara, Jadhav Payeng, Abdul Karim, who are constantly creating a better tomorrow for everyone in different parts of this country.

“When the last tree is cut down, the last fish is eaten and the last stream is poisoned, you will realise that you cannot eat money.” When we do not act looking at heaps of garbage around us, abuse our greeneries for little personal gain and the environmental protection agencies are mere spectators, we might remember that cleanliness and preserving greens is not a luxury but a matter of long-term survival movement for our society. So it is now or never for me and I have to become the change which I want to see around me. I do believe to start with the power of one, I will start my activity in my colony and take my message out there and bring a change not only for my city but for my beloved country.

**Syona Agnihotri,
Venkateshwar Global School
(2nd Prize)**

Good Health & Well- being a Challenge in Urban areas



To earn their bread and butter, to fulfil their dreams or simply lured by the charm, thousands of youngsters get drifted to big cities every day. There is no dearth of opportunities in these cities for deserving, daring and hardworking enthusiasts, so they are welcomed with open arms and become a part of the mechanical life style forgetting their own life force, that is health.

This is the story of most of us living in metro cities like Delhi. We become so mechanical that we fall asleep using an app on our smartphones and wakeup using the alarm. The morning goes in applying multiple layers of chemicals on our skin followed by branded clothes and accessories to get that healthy glow. Now comes the time for a hearty and healthy breakfast which we enjoy partly at the dining table, partly in the staircase and gulping the last bite in the cab. Mission accomplished! Throughout the day we work faster than the needle of the clock fuelling our bodies with cups of tea, coffee and packaged drinking water fortified with micro plastics. Occasional smoking and drinking are a must to relieve stress. Lunch is often skipped, and dinners is not cooked but ordered. We go for continental cuisines, neglecting the fact that we have inherited our digestive system from our grandparents who have never tasted these foods. Weekend is consumed in washing, shopping and stocking the refrigerator with food, ignoring the fact that more than half of the nutrients would be lost in chopping, storing and reheating. Soaking lentils for hours? Let baking soda and the pressure cooker do the needful.

Chemical composition of food changes when cooked at high temperature and high pressure leading to the formation of many compounds like oxalates which settle here and there in our body intoxicating and hampering the functioning of the organ where they settle. Mobile is another organ in the bodies of the urbanites which keeps showering radiations on the body mind and souls eventually resulting in headaches, decreased attention, bouts of short temper, sleep disorders, spondylitis and depression. We sincerely read health messages on social media, like them and religiously forward it to our loved ones but hardly follow them.

More than half of the world's population lives in cities, and urban life is taking a toll on our health and well-being unknowingly. We get easily fascinated by the well illuminated streets and shopping malls and try to use the latest cutting-edge lighting devices at our homes and work place too. Little do we know that too much light can damage our eyes and even harm the hormone melatonin which is responsible for regulating diurnal and nocturnal visions. This can result in sleep disorders and other health implications such as stress, exhaustion, headaches, increased anxiety, and some forms of obesity may develop.

Air Pollution is making our life even more miserable. Some 3.8 million premature deaths annually are attributed to outdoor (ambient) air pollution. About 80% of those deaths are due to heart disease and stroke, while another 20% are from respiratory illnesses and cancers related to exposure to fine particulate matter, the most health-harmful air pollutant. Worldwide this fine particulate matter is blamed for 2.1 million premature deaths annually. It is found that on exposure to PM_{2.5}, the heart gets larger, its performance decreases, increasing morbidity and mortality from heart disease amongst the Metro sapiens. Ground-level ozone, produced by the atmospheric interaction of a mix of air pollutants, is another health risk, raising rates of asthma and

chronic respiratory illness as well as other sorts of breathing problems, and reduced lung function.

Ironically the Metro sapiens feel that they can quickly get adapted to the changing air quality and those who cannot fall out of the race following Darwin's law of survival. One out of eight falls out of this race but if it is not me, carry on! By 2050, around 70% of humanity will reside in cities, and as this number swells, so do the ramifications. Learning to make cities liveable will be one of the greatest public health challenges of this century.

Big problems often have simple solutions; an antidote to most of the problems faced by city dwellers is both delightful and affordable: trees. Trees not only provide aesthetic pleasure but also have many health benefits. They soak up air pollution, create cooling and provide a brain tingling array of colours, textures and scents. The birds they shelter provide us with birdsong, which in turn is linked to feelings of wellbeing. A 2015 study at Toronto showed the higher a neighbourhood's tree density, the lower the incidence of heart and metabolic disease. In India we should revive the Panchavati culture in our society and restore its glory and value. These five trees, Bilwa, Shami (Banni), Ashwatha (Arali), Margosa (Neem) and Audumbara (country fig) should be planted around our learning centres, hospitals, cultural centres, court buildings, public and private offices, parks, gardens and play grounds and wherever there is a high degree of pollution. These trees, besides providing the needed thick shade, exude a variety of secretions which are capable of cleaning environmental pollutions and mental pollutions of human beings, in addition to having high herbal and medicinal qualities.

While trees are doing their part, we should also redesign our routine prioritizing health. Including activities like yoga, nature walk, meditation and spending more time with family members will definitely boost health and increase longevity. All of us have the right to live a healthy and happy life; the following these mantras will make it happen.

Materialism to contentment!

Synthetic to Natural!

Solitary to Social!

**Angel Johnson,
St. Thomas' School, Mandir Marg
(3rd Prize)**

Air Pollution, The Silent Killer



Earth is the only place in the universe that can support human life. It is very important that we realize this fact and take very good care of it. Various human activities cause harm to earth. Human beings can live a few days without food and water but can last only a few seconds without oxygen. Various human activities lead to the aggravation of the quality of air. Gases produced by human activities, mainly due to exploitation of resources and industrialization, cause air pollution.

Air pollution is the most devastating and single biggest environmental health risk according to a report by the World Health Organization. It is caused by any kind of contamination to the atmosphere by excessive carbon dioxide and other harmful gases. At present, 90 percent of the humans living in cities are inhaling high doses of poisonous polluted air every day. Air pollution causes heart diseases, chronic conditions, lung cancer and acute lower respiratory infections in children. These are some of the major diseases that air pollution causes. Air pollution has increased in unimaginable magnitudes, especially in developing regions with a growing population. India and China perfectly fit into this description and fittingly have the highest levels of urban air pollution ever recorded in human history. The main reason for the increase in air pollution are the large number of vehicles leading to high carbon emissions, mining activity (legal and illegal), increase in population, etc.

For the sake of our future generations, we should create necessary preventive methods and form proper goals to combat air pollution. Most importantly, air pollution is destroying our vital ozone. The ozone layer is a thin layer located in our upper atmosphere which protects the earth from the sun's deadly rays. Chlorofluorocarbons (also known as CFC's) which are found in refrigeration systems, fire extinguishers, and propellants for aerosol cans are the main ozone destroyers. As the ozone is depleted, it will only cause greater problems for humans, plants and other animals living on earth. First of all, the hole in the ozone allows the sun's deadly rays to enter the earth's atmosphere and reach us. These ultraviolet rays can kill plants and agriculture, and more importantly it can harm humans as they have been found to be responsible for some forms of skin cancer.

For the sake of our future generations, we should create necessary preventive methods and form proper goals. At present we are almost reaching a critical point from where there is only one result, our destruction. Following are few things that every individual should keep in mind:

- Avoid using your cars unnecessarily
- Use water and electricity wisely
- Prevent littering
- Recycle and encourage recycling
- Prevent the usage of plastic
- Educating people about pollution
- Creating awareness from a very early age
- Better waste management
- Use public transportation more frequently
- Using bio friendly fuels, solar energy, wind energy and other non-exhaustible energy sources

Mass awareness campaigns involving local bodies, voluntary organizations, students and others may be initiated educating people about the health impact of air pollution. Moreover, air quality management and air pollution mitigation measures taken up by the government at the state or central level may be widely promoted through educational and information programmes. In many cases pollution victims are not beneficiaries of the polluting facility, such as a pedestrian who is affected by the exhaust fumes of a moving car. 'The polluter should pay' philosophy should be introduced as well. Consumer awareness should be promoted about air quality benefits. Individuals can do many things to protect themselves but we know that reducing other risk factors - diet, physical activity, stress, and smoking - will also reduce the impacts of air pollution. For those who can afford them, room air filters are also effective and some studies suggest that diets high in antioxidants can also provide some protection. Yet, nothing should stand in the way of reducing air pollution so that everyone can benefit.

**Bhavya Anand,
Kulachi Hansraj Model School
(3rd Prize)**

**Good Health and Well-Being Becoming A Challenge In
Urban Cities**



Dramatic images from some of the world's largest and fastest-growing cities make visible the impact of urbanisation on people's health and well-being. But what the headlines do not capture is the full scope of the profoundly negative human consequences of unplanned urbanization. Urban development and its adverse affect on health are co-related with each other. Trees are being cut; automobiles are being used at a rapid speed which creates a lot of pollution and intern affecting our health. Problems of health are not limited in urban cities. Depression, sleeplessness, and other health problems are common among city natives. Potential urban hazards with associated health risks include substandard housing, crowded living conditions, contaminated food, unclean water, inadequate sanitation, poor solid waste disposal services, air pollution, and congested traffic etc . More than half of the world's population are urban natives and is increasing rapidly; this is also becoming a big problem in cities as more land is required to settle up these migrants and to provide them employment is also a big task. All problems are interrelated. In order to meet the increasing demands of the population, more and more industries and factories are being set up. These factories produce a large amount of pollutants which create pollution. Also, these factories use various harmful chemicals that are quite hazardous to our health.

A quite famous saying is there, LOVE IS IN THE AIR , BUT THE AIR IS QUITE POLLUTED. Air pollution is a major threat to a person's life in urban areas. Motor cycles, cars, etc. create a lot of pollution which causes many diseases like asthma, bronchitis, and even cancer. The increase of PM2.5 is becoming a death sentence for many people. Also, poorly planned or unplanned urban housing, transport, and food systems, along with social and lifestyle factors, are drivers in the epidemic of diseases which are linked to risks and hazards such as air pollution, poor diet, physical inactivity, traffic injury and domestic injury.

Everyone say that urban life is a fat moving life where people are in a great stress to move in this big race and where people often face many health problems like heart diseases, brain diseases, etc. Most of the diseases are lifestyle diseases like diabetes, blood pressure, obesity, etc. Nowadays mobile networks are becoming as important in urban life as eating food, and this has resulted in increased installation of mobile network towers in residential areas. A recent study revealed that these towers radiate harmful radiations that are cancerous. And a disease like cancer is becoming common in urban areas.

Good health and wellbeing have also been impacted by climate change. Cities both impact climate change and are impacted by climate change in a cycle that also generates multiple health effects, as described briefly here. Cities are only responsible for climate change by causing global warming and then in turn getting affected themselves. Many problems are being faced by people in urban areas, the eating habits of people and children are also a major cause for ill health. Improper eating of food or not having food due being indulged in work or being a couch potato makes our body a place for diseases. And the cherry on the cake is that people don't indulge themselves in any physical activity or get exposed to some green areas or fresh air.

Green spaces such as parks and sports fields as well as woods and natural meadows, wetlands or other ecosystems, represent a fundamental component of any urban ecosystem. Green urban areas facilitate physical activity and relaxation, and form a refuge from noise. Trees produce oxygen, and help filter out harmful air pollution,

including airborne particulate matter. Water spots, from lakes to rivers and fountains moderate temperatures, but they are also being removed to either make land settlements or put up malls or commercial buildings.

City life is hectic where people don't even have time to maintain or work on their body, or to eat properly, or even have a relaxed mind to get a good sleep. Compared to this, rural life can be considered a better life than that in urban areas. Good health and wellbeing are becoming quite uncommon in urban areas. In fact leaving adults aside, even children are also becoming entangled in the net of unhealthy practices. And this may even be because of poor urban living conditions. Poorly planned or unplanned urbanization patterns represent a major public health challenge. This is most vividly represented by the persistence of urban slums which are home to an estimated 828 million people, one third of the world's urban population. From 2000 to 2012 the global proportion of people living in slums decreased from 39% to 33% of the urban population. However, the absolute number of slum dwellers grew over this period from 700 million in 2000 to 863 million in 2012. And such living conditions are a storehouse of illness. If we keep on moving with such lifestyle, then I truly feel that we will never be able to achieve a good health. Only a healthy body can keep a healthy mind, and so the factors such as pollution, harmful radiations, stress, unhealthy lifestyle, etc. need to be overcome. What would we do with such development if we are not well enough to use it? And, now in order to make people lazier and more dependent, robots have also come up that would perform all functions of a human being, and would do everything for us. So I truly believe that a hectic life such as urban life does not allow a person to remain healthy and well, so a person should take care of himself in order to live healthy and happily.

'HEALTH IS LIKE MONEY,

WE NEVER HAVE A TRUE IDEA OF ITS VALUE UNTIL IT IS LOST.'

Special Mention Essays



AIR POLLUTION – THE SERIAL KILLER

ESSAY #1

ANGEL SIDHU, VENKATESHWAR GLOBAL SCHOOL, ROHINI

There are many prominent threats to our planet and the most important one to discuss is POLLUTION. To start with, what is pollution? Pollution is introduction of harmful substances or products in the environment. It could be air pollution, land pollution, water pollution, noise pollution, etc. Today we are discussing air pollution. So, what is air pollution? Air pollution is the presence of, or introduction of harmful or poisonous substances in the air which include chemicals, fumes and some other harmful gases. Air pollution is a silent killer because without any noise or sound it is capable of killing an organism and even those affected are unaware. The main cause of this problem is the growing industrialization and the developing technology in urban areas. The growing industries, especially the plastic and rubber ones are contributing to the pollution. They use harmful chemicals which at the time of production are released into the air as gases which serve as pollutants. The increase in the number of vehicles on road is directly linked to an increase in the level of air pollution. Sulfur dioxide which is emitted when the combustion of fossil fuels takes place, combines with water to form sulphuric acid, leading to acid rain. Nitrogen oxide is another harmful gas released by vehicles and which reacts with water to form nitric acid which causes acid rain.

The unburned hydrocarbons or suspended particulate matter produced by incomplete combustion and released in the air can cause eye irritation, respiratory tract problems and skin problems. Carbon dioxide emanated by vehicles increases the greenhouse effect and induces global warming. One of the most harmful gases that is emitted is carbon monoxide. It is a poisonous gas that combines with the haemoglobin in our body and decreases the oxygen carrying capacity. Long exposure to this gas can silently lead to death because of suffocation. Acid rain, which is an output of air pollution, damages standing crops and changes the pH of soil leading to farmers' deaths and scarcity of food. It reacts with metals and damages buildings. It can also cause many skin problems and harm the aquatic life. The most polluted countries in the world are Qatar, Pakistan, Afghanistan, India and Bangladesh. The term silent killer can be justified for air pollution as it harms our lungs and causes about seven million premature deaths per year. According to WHO (World Health Organisation), about 90% of the world's population survives in polluted air and is affected by it in some or the other way. In India, particularly in the metro cities, the air quality index has gone up to 400, causing many environmental hazards and health problems to the locals.

The only cause behind these innumerable problems is actually humans. Robert Swan rightly said that "the greatest threat to our planet is the belief that someone else will save it" because we humans continuously contaminate the air but perceive that someone else will cure it. Therefore, we should take some steps to purify the air which will lead to our good health and wellbeing. We should, on the personal front, plant trees which increase the oxygen levels, try to carpool and walk or use bicycles to commute to nearby places. We can also spread awareness regarding air pollution on social media because a hashtag can garner a lot of power and influence for itself. People should also be encouraged to use gaseous fuels because they do not emit harmful gases which the solid and liquid fuels do. In many rural areas women still cook food on traditional

chulhas from which smoke and gases are released. They should be provided with gas stoves so that the air pollution can be decreased. Attention should be paid to sanitation because piling up of garbage can lead to fire which is caused by the gases released from the heap. There should be water sprinklers on the top of buildings which would make the pollution particles settle down. Air purifiers that run on green electricity should be set up on busy roads to improve the air quality index. Also, the diesel using vehicles should be banned and cars with old engines should be dismantled because this causes a lot of pollution and in turn destruction to the environment.

Let us discuss the efforts of some countries for curtailing air pollution. In China, cloud seeding is being carried out. In this process, condensation of water which leads to rain is artificially generated by planes. The condensation is increased by seeding the clouds with silver iodide or dry ice. It was used in 2008 in Beijing. In Mexico, a hospital building has used tiles coated with titanium oxide in its construction. After the activation of the tiles the ultra violet rays convert the pollutants into less harmful substances. In India, the idea of MIT graduate Anirudh Sharma should be implemented on a large scale. According to him if soot from chimneys is captured and made to go through a chemical process then it can be transformed into raw material for printing and ink industries. These ideas should be adopted by various countries and the processes should particularly be carried out in highly polluted areas. Anirudh Sharma's idea can be carried out in normal households by putting the containers which can capture soot.

So after this discussion we can conclude that air pollution is a very major issue affecting many people in many areas in many forms, and that too silently. Now, it becomes necessary for people to understand that if they keep on becoming the cause of this problem then this problem will become the cause of their destruction. This cause and effect should be seriously taken note of and be discussed on various platforms to eradicate this environmental hazard. Let us not waste time and join hands towards making this world a pollution-aware and eventually a pollution free world.

ESSAY #2

BHAVYA SHARMA, KULACHI HANSRAJ MODEL SCHOOL, ASHOK VIHAR

'Hell is empty and all the devils are here' is a very famous quote by William Shakespeare. The quote might seem too small but it has a deep meaning which to me means that all devils who reside in hell have come to destroy and demolish our beautiful mother earth with the help of pollution.

POLLUTION is a frequently used word but who knew that this word could contaminate whole world in many forms as air pollution, water pollution, land pollution, noise pollution. The deadliest of all is the AIR POLLUTION. It is a silent killer. It defiles our mother earth with exhaust from industries, chimneys, vehicular smoke, combustion of gases, etc. It has become a grave problem in today's world. Air pollution is mainly caused by human carelessness – it is because of human beings that our earth is prone to so many diseases, problems and disasters. We are harming the air. The causes are the exhaust from chimneys and industries which mix with the air, causing a number of diseases such as asthma, lung cancer, cardiovascular problems, Chronic Obstructive Pulmonary Disease (COPD), leukaemia, pneumonia, birth defects leading to premature deaths. The most affected ones are the aged and children because they are more sensitive to their surroundings. The air pollution not only affects human beings but nature too in numerous ways such as the depleting ozone layer. Ozone layer protects the earth by not allowing ultraviolet rays to enter atmosphere which may affect many life processes. Some harmful gases like CFCs react with ozone particles and break the ozone chains. Recently, three big holes in the ozone layer were discovered over Australia which were caused by air pollution. The usage of CFC producing machinery like air conditioners (AC), refrigerators, etc. also leads to air pollution.

The exhaust of automobiles mixes with the fog in winters. This mixture of smoke and fog forms smog which is very harmful for infants. Another nature hampering effect is global warming, which is caused by the blanket of air pollution that traps heat around the earth. Global warming leads to melting of ice glaciers which in turn leads to rising of water on the surface of earth. If the current air pollution increases, the future generations will have to face many problems and come across shortage of clean water, polluted air, respiratory diseases etc. At least for the sake of coming young minds, we have to prevent air pollution. At present, we have reached a point where there is only a path to destruction. As every single act counts we should always strive to keep our environment clean and green by afforestation, avoiding private vehicles which would reduce the harmful gases coming out of cars, recycling of resources so that resources don't get finished for the future generation, industries to let only harmless gases to escape, using public transport which would reduce dependency on public transportation and reduce air pollution also, by carpooling, using bio-friendly fuels which would not lead to exposure of harmful gases in air. We are only left with a single chance to make our world more beautiful and a better place to live in. Without the attitude of making our mother earth clean and neat, nothing can happen. We are responsible for the defiling our mother earth directly or indirectly. We have made a mistake. So we have to repair it too. We are the sons and daughters of the mother earth. Take an oath, not to defile the resources of earth, not to contaminate the beautiful, artistic sculptures of the world.

ESSAY #3

KUHU AEIJAAZ, SPRINGDALES SCHOOL, PUSA ROAD

All poetic beauty in literature talks of the fresh winds, mirror-clear waters and the cherished life that blooms with the elements of nature. Ironical then that we can appreciate it in lines, not in life! The erosion in the quality of environmental resources has been recent – coincident with intensification of the industrialization process has been degradation in natural resources of unprecedented magnitude, leaving them at abysmal levels. Unbridled economic activity, with almost no institutions to support to incentivize the proper usage has led to overexploitation of resources. Concerned as it has been, the world community has attempted strategies, policies and instruments to make a dent on the problem.

The problem of air pollution technically means the count of particulate matter in the air exceeding the safe limits. The prime reason this happens is that air, and the environment are public goods – goods that everyone owns on a community basis. And as they say, everybody's job is nobody's job, the caretaking of the common resource is done by no one. Therefore, policies to save the environment in general and to minimize air pollution in particular, must generate proper incentives to make people behave in a more responsible way.

However, the origin of the problem can have a different face for different places, each specific to the development status of a country and the institutions that work in a particular context. E.g. the largest source of pollution in an advanced country could be industrial activity, while that in a poor country could be more related to fuel burning, and the use of unclean fuel. While it is generally proposed in literature that poverty is the biggest polluter, there have been many studies refuting such a link.

It has been documented across various studies that urban city centres are more vulnerable to the severities of air pollution. The idea of belongingness to a city is always a less revered idea than that of belonging to a native place, the village. Thus, the emotion towards saving the city is usually missing. Also, cities get settled on the migrations of workers coming in search of work opportunities. Thus, even when the urban city may be a less happy place and a more suffocating space, the migration decision becomes irreversible. A person is faced with a difficult trade-off of earning a livelihood and an unhealthy life versus starvation in the village life. This makes the vulnerability look ostensibly "chosen" and binding.

Whatever the cause, the problem of air pollution is especially of negative value to human life because of several and obvious reasons. One, that there are severe limits on the possibility of escaping it – one cannot stop breathing. Two, that the spread of the pollution has no boundaries, so that people not responsible for the activity may well be the victims. Third, that the coping mechanisms may be only available to the well off in the society (e.g. air purifiers) leaving the poor to face the brunt of the pollution.

Common pollutants (e.g., carbon monoxide, lead, chloro-fluoro-carbons, etc) may cause a variety of disease burden on the population – cancer, birth defects and a million other disabilities and impairments. Air pollution has been the seventh main killer in India after high blood pressure, diabetes, tobacco smoking and poor nutrition. India's toxic air

claimed a staggering 6.7 lakh lives, with more than 51 percent of the deaths being those of people younger than 70. Simulations suggest that healthy air would have prolonged the average life expectancy by 1.7 years in a year.

In recognition of the severity of the problem and its impact on human life, several national and international agencies have tried to come up with solutions trying to fix the problem. Significant and pioneering steps have been the Brundtland Report, which tried to bring in the idea of sustainability of natural resources by bringing to the table the altruistic idea of bequeathing a safe Earth to our next generations. The Kyoto Protocol, the carbon tax and trading have been other important measures. At the national level agencies like the Central Pollution Control Board (CPCB) and the National Environment Engineering Research Institute (NEERI) have devised measures that are more localized and suited to the nature of the problem closer home. For example, if unclean fuels and their burning becomes a proximate cause of the pollution in India, it is imperative that a policy that targets clean fuel use should be encouraged.

While there has been no disputing the fact that air pollution remains a silent killer, it is ironic that the steps taken to minimize it have come in much too late and have been much too slow. Since air pollution has varied faces, in terms of the origin and composition, it will take various unorthodox policies to address it in those many different ways. The real challenge then, is to recognize the specifics of the pollution matrix in our own economy and devise indigenous policies that work best for us.

ESSAY #4

DHAANI THAKUR, KULACHI HANSRAJ MODEL SCHOOL, ASHOK VIHAR

“If we pollute air today, it will pollute our lungs tomorrow”

Air pollution can be defined as the presence of toxic chemicals or compounds in the air which is highly risky for humans and environment. In broader sense, air pollution means the presence of chemicals in the air which are usually not present and which lower the quality of the air, or cause detrimental changes to the quality of life.

Air pollution is usually caused by either primary pollutants or secondary pollutants. Primary pollutants are pollutants that are put directly into the air by humans or natural sources. Examples of primary pollutants are exhaust fumes from cars, soot from smoke, dust storms and ash from volcanic eruptions. Secondary pollutants are pollutants that are made from chemical reactions when pollutants mix with other primary pollutants or natural substances like water vapours. These cause air pollution directly through use of fossil fuels and vehicles. Fossil fuels are a major contributor to health-harming air pollution. The emission of carbon monoxide gases from cars and trucks is the most commonly cited example. The combustion process also creates nitrogen oxides that lead to the creation of smog. These materials can cause bronchitis and pneumonia. Power-plants and transportation-related activities are equally responsible for nitrogen oxide emissions. Fossil fuels also produce by-products that hang in the air and irritate the lungs. Such by-products are dust, soot and smoke. Air pollution caused by cars is one of the biggest causes of air pollution. Emissions from a car that are put into the atmosphere can be directly connected to human health issues. The exhaust on a vehicle is what produces these emissions. Once they leave the exhaust and enters the air they can be breathed in and enter the bloodstream and into the body's major organs.

Diesel fuel vehicles seem to be more of a problem to the environment, but they can also have major effects on the human body. Some of these harmful fumes that are put out into the atmosphere by a vehicle are carbon monoxide, nitrogen dioxide, sulphur dioxide, benzene, formaldehyde, polycyclic hydrocarbons, and lead. Although studies have clearly connected emissions to a wide span of health problems, the risk to each individual is very difficult to grasp as it varies. Air pollution is also caused by forest fires, burning of crackers and usage of air conditioners and refrigerators. Forest fires release pollutants like smoke, sulphur dioxide, nitrogen dioxide, ozone, particulate matter and carbon monoxide into the atmosphere. Bigger the forest fire, bigger the emissions.

When the firecrackers are lit, chemicals are released into the air, reducing air quality so drastically that it makes matters worse. The halocarbons in refrigeration appliances contribute to the greenhouse effect. These gases prevent heat escaping from the earth and deplete the ozone layer that filters the sun's rays. The greenhouse effect and ozone layer depletion contribute to global warming. Air pollution has an atrocious effect on our environment. Air pollutants can travel long distances and do not respect any boundaries or regions of a special ecological significance. Harmful particles emitted from power plants, cars or mining sites are easily carried

hundreds of miles away from their original source and then pollute pristine natural areas. Throughout the years, scientists have observed numerous examples of this. worrisome phenomenon. For example, endangered Florida

Panthers in Everglades National Park suffer from poor reproductive success due to high levels of airborne mercury. Similarly, plants in Great Smoky Mountains Park suffer from leaf injuries due to the increased levels of ground-level ozone (a human-made pollutant). This pollution largely affects the functioning of the whole ecosystem by decreasing capacity of plants to sequester carbon and retain water in their bodies. Air pollution has led to rapid increase in global warming which hence leads to increase in earth's temperature which leads to melting of glaciers at great speed which can cause destructive floods in near future! the impact of air pollution must not be taken lightly. Data published by United Nations last May shows that nine out of ten people in the world breathe polluted air. Called a 'silent killer', the polluted air we breathe causes around 7 million deaths a year worldwide.

According to WHO, it has the worst effect on human health. The immediate effects of air pollution are hard to ignore. Watery eyes, coughing and difficulty in breathing are acute and common reactions. An estimated 92 percent of the world's population live in areas with dangerous levels of air pollution. Children who breathe in higher levels of pollutants also face a greater risk of short-term respiratory infections and lung damage. Other conditions associated with high levels of air pollution include emphysema and chronic bronchitis, as well as lung cancer.

We can end air pollution by doing efforts at ground level also. We should do carpools, afforestation. Use public transportation. We should try to minimise the usage of fossil fuel and should depend on non-conventional sources of energy. We should recycle things like paper. With air pollution being so widespread epidemic, it's imperative that we come together as Earth's inhabitants to become part of the solution, instead of continuing to be the problem. We can make the choice to drive less toxic automobiles. We can choose how much energy we consume on a daily basis. We can also choose to reuse our old materials instead of dumping them into the environment. Air pollution can have some devastating impacts on our bodies and the planet if left untouched.

'Be a part of SOLUTION, not the part of POLLUTION!'

ESSAY #5
NAVYA GANDHI, BAL BHARTI PUBLIC SCHOOL, PITAMPURA

We humans are bizarre creatures, not scared of anything but death. Sometimes, we invite death to our doorsteps but then we get just too afraid to face it. The previous year, 1.2 million people died because of air pollution. Celebrating special occasions are a magnificent way to show and express one's happiness and delight, although bursting crackers is no way to celebrate. It only causes harm for the human body and pollution in the air. It is not good for any of us. Smoking, bursting crackers and all other means which cause air pollution are paths leading to death. Air pollution is one of the biggest problems caused by us, and we should overcome it to see a tomorrow and guarantee our descendants a healthy life. There are many environmental concerns for communities around the world to address. We should always remember that pollution problems affect each of us and unbalances the ecological balance of this beautiful planet we call home.

Air pollution is a significant risk factor for multiple health conditions including breathing problems, heart disease, lung cancer, and a lot more. The health issues caused by air pollution may include difficulty in breathing, coughing and existing respiratory conditions. All these result in increased medication use, increased doctor or hospital visits and premature death. The human health effects of poor air quality are far reaching, but principally affect the body's respiratory system and the cardio-vascular system. Air pollution can harm us in ways we might never even have thought of.

Each and every kind of pollution is harmful and toxic for us in every way possible. Air pollution though, is like a silent killer. It gets in our body and damages each of our organs. If air pollution increases, survival chances will start decreasing to a critical stage. Air pollution is becoming a major issue for the whole humanity. We are continuously adding more ways and impurities to the environment unknowingly through our careless activities. Air pollution affects the natural process and lives of more than a billion living creatures. We are playing with the balances of nature forgetting what the consequences might bring us. But no one really seems to care! We are forgetting and not caring about the challenges nature might bring us. The human cycle and the cycle of the nature are dependent on each other. If we pollute the air, we're creating problems for ourselves to survive.

So, let's be smart and not play with Mother Nature and our lives! Let's all take initiatives to clean the nature and not pollute the air. Let's live a longer and healthier life with clean and pure air!

ESSAY #6

SHREYA SHOKEEN, MOUNT CARMEL SCHOOL, DWARKA

Sometimes you can't even see it, but air pollution is everywhere. Perhaps you think that air pollution does not affect you because you don't live in a city surrounded by smog. You are most likely wrong. Air pollution occurs when harmful or excessive quantities of substances including gases, particles and biological molecules are introduced into Earth's atmosphere. Both human activity and natural process can generate air pollution.

In an even broader sense, air pollution means the presence of chemicals or compounds in the air which are usually not present and which lower the quality of the air or cause detrimental changes to the quantity of life (such as the damaging of the ozone layer). Like a silent killer, air pollution suddenly comes out of the blue. It can damage our long term health which can include chronic respiratory disease, lung cancer and heart disease, and even cause damage to the brain, nerves, liver or kidneys. Continuous exposure to air pollution affects the lungs of a growing child and may aggravate or complicate medical conditions in the elderly. Especially in morning when I go to school, at times I can feel that my throat goes bad and I cough. I can realise that air around me is not good, and on such days sky looks black like soot instead of bright blue in colour.

Not only does it cause dreadful diseases but also a variety of environmental effects such as acid rain, which is precipitation containing harmful amounts of nitric and sulphuric acids. It is said that acid rain not only kills animals and plants but also destroys buildings, monuments, etc. The air pollution causes global warming and damages the ozone layer. The ozone layer protects us from the harmful rays of the sun called the UV rays, which are quite harmful. If the ozone layer is demolished then there is nothing stopping the UV rays from entering the Earth's atmosphere. Once the UV rays start to pass through, it causes global warming which can lead to rise in water levels. It can drown the Islands and affect the lives of people living in the coastal areas.

Nowadays there is increased awareness of air pollution within city dwellers and governments are taking deliberated steps to control air pollution. In my city, Delhi government is planning vacuum cleaning of roads, there was a very big drive sponsored by state government to plant lakhs of trees, motivating people to use Delhi metro for rides instead of cars, diesel cars beyond 15 years are banned and national highways are constructed in ways that heavy vehicles do not enter city and can take a detour. Whenever there is any initiative like this we all should participate whole heartedly and contribute to the cause.

ESSAY #7

SOURISH BHAT, ST. FRANCIS SCHOOL, INDIRAPURAM

Pollution is the introduction of contaminants into the natural environment that cause adverse change. Pollution can take the form of chemical substances or energy, such as noise, heat or light.

An Air Quality Index is used by government agencies to communicate to the people how polluted the air currently is or how polluted it is forecast to become. "Good" AQI is 0 to 50. Air quality is considered satisfactory, and air pollution poses little or no risk. "Moderate" AQI is 51 to 100. People who are unusually sensitive to ozone or particle pollution may experience respiratory symptoms. Oxygen supports burning and is necessary for living organisms.

Air Pollution is a mixture of solid particles and gases in the air. It is usually caused by smoke or other harmful gases, mainly oxides of carbon, sulphur and nitrogen. Air Pollution has been classified as a danger to human health. Many pollutants go into the air from natural sources. Burning of fossil fuels, agriculture related activities, mining operations, exhaust from industries and factories, and household cleaning products entail air pollution. The effects of air pollution are global warming, acid rains, respiratory and heart problems.

Air Pollution can also exist both indoors as in closed ventilated areas that we surround. This makes the air that we breathe indoors inescapable and the pollution exists both indoor and outdoor. For example, hair spray usage indoor is polluting the air inside because of the emissions of toxic chemicals used to create the product are present in a spray of it. Cooking and heating with solid fuels on open fires or traditional stoves results in high levels of indoor air pollution. Indoor smoke contains a range of health damaging pollutants, such as small particles and carbon monoxide. The air pollutants indoors and outdoors differ in characteristics, types, absorptions and sources. The most important air pollutant is radon gas.

According to World Health Organisation (WHO), "air pollution is defined as limited to situation in which the outdoor ambient atmosphere contains materials in concentration which are harmful to human beings and its environment." Air Pollution causes damage to the environment. Stratospheric ozone depletion due to air pollution has long been recognized as a threat to human health as well as to the earth's ecosystem. The main pollutant is chlorofluorocarbons (CFCs), the major cause of depletion of the ozone layer.

Impure air causes diseases and impairs our health. The smoke that is discharged from industries, automobiles and kitchens is the mixture of carbon monoxide, carbon dioxide and methane, etc. According to Central Pollution Control Board (CPCB), "burning CNG has the highest rate of potentially hazardous carbonyl emissions. Methane, a greenhouse gas, is a key contributor to climate change.

Coal contains varying amounts of sulphur, which, on burning produces sulphur dioxide. Diesel engine exhaust fumes can cause cancer in humans and belong in the same potentially deadly category as asbestos, arsenic and mustard gas. Pollution due to biomedical waste is likely to spread diseases dangerous to life. Ozone depletion is

referred to as the ozone hole. Chemicals and particulates are released into the atmosphere as a result of air pollution.

According to a research by America's Health Effects Institute (HEI), more than 42 lakh people died in 2015 due to air pollution. Air Pollution has become the fifth largest cause of death in the world. The effects of air pollution are obvious: rice crop yields in southern India are falling as brown clouds block out more and more sunlight. The brilliant white of the famous Taj Mahal is slowly fading to a sickly yellow due to air pollution. Vehicle emissions are responsible for 70% of the country's air pollution. Bangalore holds the title of being the asthma capital of India.

Acid rain refers to a downpour that has been made acidic by pollutants in the atmosphere. Acid rain results when sulphur dioxide and nitrogen oxides are emitted into the atmosphere and transported by wind and air currents. The sulphur dioxide and nitrogen oxides react with water, oxygen and other chemicals to form sulphuric and nitric acids.

Ways to reduce air pollution are as follows-

- Keep the smoke emanating from house, factory, vehicle within permissible range.
- Do not burn firecrackers.
- Do not burn garbage; keep it in a fixed place.
- If necessary, use flowing drains for spitting.
- Run tree plantation drives.
- Conserve energy.
- Curb unbridled Industrialization.
- Do not cut trees.

The health of the public, especially those who are vulnerable, such as children, the elderly and the sick, is at risk from air pollution. As we have seen, there are considerable uncertainties in estimating both exposures and effects and their relationships. Reason for action on air pollution is that we do not know the contribution which exposure to air pollutants may take to death from, for example, Asthma. However, the old and the young, and especially those suffering from respiratory or heart diseases, are the groups who are most vulnerable to the effects of air pollution. It is only right that cost effective action should be taken to provide them with clean air. Air Pollution is a threat to human beings as well as environment. We should prevent air pollution as it can harm our future generations too.

ESSAY #8

TIJIL MINOCHA, KULACHI HANSRAJ MODEL SCHOOL, ASHOK VIHAR

'AIR POLLUTION IS NOT MERELY A NUISANCE AND A THREAT TO HEALTH BUT IT'S A REMINDER THAT OUR MOST CELEBRATED TECHNOLOGICAL ACHIEVEMENTS – AUTOMOBILES, JET PLANES, POWER PLANTS, AND THE MODERN CITY ITSELF ARE, IN THE ENVIRONMENT, FAILURES.'

- BARRY COMMONER

Increasing concentration of the harmful and virulent materials within the contemporary air of the atmosphere is inflicting pollution. Variety of foreign particles, toxic gases and different pollutants released as a result of varied human activities are affecting the fresh air, and have an adverse impact on all living beings – people, animals and plants. The level of pollution depends on the sort and amount of pollutants freed from varied sources. Topographical and meteorological conditions are increasing the concentration of the pollutants. The raw materials utilized in the production method in industries are increasing the quantum of emissions of harmful gases. Increasing population density is demanding an increase in the requirement of a lot of manufactured goods, and that ultimately causes pollution.

The main causes of air pollution are the burning of fossil fuels such as coal, petroleum and other factory fuels. The air pollution is also caused by a variety of smoke emissions from cars, buses, motorcycles, trucks, jeeps, trains, aircraft, etc. Increasing numbers of industries release toxic industrial smoke and harmful gasses (such as carbon monoxide, organic compounds, hydrocarbons, chemicals, etc.) to be released into the environment from factories and mills. Some people's indoor activities such as cleaning products, washing powders, paints etc. emit different toxic chemicals into the air. Other sources of air pollution are decomposition of garbage in landfills and disposal of solid wastes that are emitting methane. Ascension of population, industrialization, exaggerated use of vehicles, airplanes, etc has created this issue a heavy environmental drawback. The air we breathe every moment is full of pollutants going to our lungs and whole body through blood, causing uncountable health problems. Contaminated air is inflicting harm to the plants, animals and people at large in several direct and indirect ways. Air pollutants are classified as particulate and gaseous in general. Solid and liquid particles are included in particulate substances. The gaseous substances include substances at normal temperature and pressure in the gaseous state.

Air pollutants adversely affect people, animals, vegetation and buildings. Air pollutants also change the climate on earth. Air pollution is the leading cause of respiratory diseases. Exposure to air pollutants can cause asthma and even lung cancer. Asthma can lead to death if not well treated, as it might cause difficulty in breathing. A prolonged exposure to pollutants can cause lung cancer. Emission of harmful gasses such as sulphur dioxide and nitrogen into the atmosphere leads to the formation of acid rain. It is quite common for rain water to have sulphuric acid due to rampant cases of air pollution in the modern times. Acid rain is a major threat to the aquatic life as well as human beings. The rise in sea level, rising temperature in the world, and the melting of ice glaciers are the evidence of global warming. Global warming is a direct effect of air pollution in the world.

The only way to curb this increasingly destructive menace is to reduce air pollution. The greenhouse effect, which includes the release of chlorofluorocarbons into the atmosphere, has led to depletion of ozone layer. This layer is important in shielding the earth from the destructive ultraviolet (UV) radiations. We can on our end reduce emissions by looking for the ENERGY STAR label while purchasing home or office equipment, carpooling, using public transport, biking or walking when possible. We should make sure that tires are properly inflated. Paints and other cleaning products that are used around the house should be environmentally safe. Instead of wood, we should try using gas logs.

Plant more and more trees as NASA recently discovered that many household plants, such as gerbera, daisy, peace lily and English ivy, etc. contribute to the removal of carbon monoxide from the air. The use of these natural air filters in homes or offices can significantly reduce indoor air pollution and help to eliminate recurrent colds and respiratory problems. It is important to check the car regularly to ensure that it does not consume extra fuel. Instead of regular power, consider using solar power. Solar energy can save a ton of energy. These measures can be taken to reduce and minimize air pollution. As a student many ways can be taken by us like avoiding burning of crackers, undertaking programmes to initiate afforestation, making people aware and helping them in changing their attitude towards air pollution, to reduce or decrease the amount of pollutants in the air. At the end I would like to conclude with a beautiful quote –

‘POLLUTION IS NOTHING BUT THE RESOURCES THAT WE ARE NOT HARVESTING. WE ALLOW THEM TO DISPERSE BECAUSE WE’VE BEEN IGNORANT OF THEIR VALUE’

A group of men are engaged in a community cleanup activity on a paved surface. In the foreground, a large pile of white plastic waste and other debris is being swept. Several men are using large, traditional brooms made of natural fibers. One man in a blue patterned shirt is bent over, actively sweeping. Another man in a light blue shirt stands nearby, also holding a broom. In the background, other men are standing and observing. The scene is set outdoors with trees and a white wall visible in the distance.

MY VISION FOR A CLEANER
& GREENER INDIA

ESSAY #9

BHUVI BAGGA, ST. THOMAS' SCHOOL, MANDIR MARG

It's popularly said that "cleanliness is next to godliness". It is a habit of keeping ourselves physically, mentally, spiritually clean. First and foremost step is to imbibe the change within one's self. You can start by keeping homes, the surrounding areas, and public places clean. Work is worship and no work is big or small. A person should not be ashamed of picking a broom to clean. A small step from every Indian citizen can be a big step for fulfilling the purpose of our Prime Minister Shri Narendra Modi's 'Clean India' campaign. We should teach the purpose and importance of cleanliness in daily life to our kids and people in general.

Cleanliness is not a work which one does forcefully. It's a good and healthy way of living. Cleanliness is very necessary for our well-being. Every aspect of it – personal hygiene, environmental cleanliness or workplace cleanliness, adds value to our mental and physical growth. We should never compromise on cleanliness. It is as necessary as food and water for us. It should be practised from childhood, which can only be initiated by each parent. Image of unclean India, becomes a matter of embarrassment. Dirty Habits also become the reason for spreading diseases like diarrhoea, dengue, jaundice, malaria etc. Fatal and dangerous epidemics, infectious diseases spread to vast areas. To prevent these, we should take care of cleanliness on a regular basis. We should wash our hands thoroughly with soap whenever we eat or visit public parks, toilets, railway stations, always wear washed cloths, etc. Cleanliness plays a vital role in preventing air, land and water pollution. We should always use dustbins in public places. Factories should be away from cities to control impact of air pollution. Rivers like Ganga should not be polluted by effluents of factories. We should say NO to polybags and should avoid crackers, and other pollutants. Use of electronic items has no doubt changed the lifestyle of people, but it has made the life miserable by dumping the junk of hazardous mobile phones, ac, etc. Concepts like "Reduce Reuse & Recycle" should be followed. One of the new R's is "Refuse". It means saying "no" to the things you do not need or those which harm the environment. We can start by producing less waste that is generated in our homes. Each type of the waste should be put in the correct garbage bin. This makes the process of recycling very easy. Kitchen or organic waste can also be collected in compost pits. Also, bio-degradable waste and non – biodegradable waste should be classified. Try to inculcate the habit of gifting plants to your friends on special occasions rather than giving bouquet of plucked flowers. One should donate old clothes, shoes, books and toys to needy people. Even the hawkers should carry small dustbins with them.

Various programmes and civil laws have been run and implemented by Government of India in order to promote the awareness about cleanliness among the common public. We all should take a cleanliness oath to be clean and promote being clean. People should neither litter, nor let others litter. My vision for clean green India is with mantra of "*Na gandagee karenge, na karne denge* (Neither will I litter, nor let others do so)". Eco-friendly way is the best way to survive and protect our environment. Growing more trees will make the land green and green land will itself make the land clean. In other words my vision of clean and green India can be sorted out by growing more and more trees. A clean and green India should be our "Dream India".

Last but not least I feel it's a task of teamwork. My individual dream cannot realise the mission of "Swacchh Bharat". It is necessary that we all should come together and be involved in executing this mission successfully in whatever way we can. The hands of few responsible hearts joined can save the next generation and can make the Swacchh Bharat Mission successful.

ESSAY #10

LAVANYA KAPOOR, KULACHI HANSRAJ MODEL SCHOOL, ASHOK VIHAR

Environment greatly influences the growth of individuals. But unfortunately, today we breathe in a polluted and contaminated environment which is producing health hazards including severe diseases and ailments amongst all. So all out attempts must be made to have a clean environment. A green environment is a result of the cleanliness which should be achieved by planting more and more trees to maintain ecological balance, decrease pollution level and global warming. As Margaret Mead said "It was not until we saw the picture of earth from the moon that we realized how small and how helpless this planet is – something that we must hold in our arms and care for." Corresponding with Mead's ideology, one cannot deny the fact that we are recklessly deteriorating the natural resources by polluting them. No matter how ubiquitous a resource is, it's high time for all of us to adopt eco-friendly ways. These tactics make sure that the environment is not harmed by any of the chemicals and effluents. Among all the god gifted commodities, the most indispensable proves to be our environment. It serves us as our very second home, where we live, respire, raise our offspring, and endure our existence. From the very beginning we used to revere our environment as our mother because it nurtures us as its own children, and therefore there is a need to return the similar respect and care.

Environment not only refers to the natural beauty but also our surroundings. And when our environment starts getting polluted, it affects us too. When toxins are not disposed and treated well, they end up making the surroundings difficult places to sustain. Eutrophication is a common phenomenon seen in most water bodies. Polythenes are dreadful for the cattle but still many people don't mind using them instead of a paper or a jute bag. The odd-even scheme initiated by the Delhi government motivated people to use CNG vehicles and practice carpooling to minimize the release of pollutants. Reduce, Reuse, and Recycle are the famous 3 R's of Sustainability that can help keep our environment clean. Reducing the usage of harmful materials, recycling items such as paper and glass, reusing goods that can be reused will reduce the pollution levels. Planting more trees will increase the oxygen level in the atmosphere. This way there will be increase in total oxygen level resulting in cleaner air to breathe.

Many people tend to litter their surroundings. Instead of throwing garbage on the roads, there should be recycling bins on every corner of the road so that people do not litter. Cigarette is another harmful item that increases the air pollution. Clean India campaign or Swachh Bharat Abhiyan is one of the most recognized projects. It was kickstarted by honourable Prime Minister Shri Narendra Modi on 2nd October'14 at Rajghat. Being one of its kind it received recognition at the national level. Its driving aim was to make every nook and corner of India clean and whether rural or urban, free of open defecation. Besides that, it also encouraged the habit of cleanliness and maintenance of hygiene at all levels in public and private sectors. Best aspect of this campaign is the building of toilets in metro stations, roads and public places.

There is a remarkable difference in cleanliness levels between India and other western countries. Of course, we need to learn a lot from them and embark on the same path if we want India to be counted amongst the developed nations of the world. Over three million public personnel, including school and college students came forward to become

a part of this campaign. The chief goal of this mission is to clean our country's 4,041 towns and cities with a budget of 1.96 lakh crores which nearly comes down to \$31 billion. No sector has remained untouched of its influence. Even the film industry took this project seriously and made a blockbuster movie TOILET: Ek Prem Katha. It is really nice to see the cleanliness campaign gaining huge momentum and bringing in a sweeping change in our society for good. We humans are fortunate to have been endowed with a boon that is the sole reason for our existence – environment. Doubtlessly, it is the need of hour and we need innumerable ways through which we can protect our environment and keep it clean. A major step is awareness, after all “awareness is the first step towards change”. If we are aware, only then can conservation of resources be practiced. This can be as simple as turning off the lights as you leave a room or repairing a leaking tap in your house. Every small initiative taken up by us can have a huge outcome.

Another important resource is water, which is undoubtedly like salvation to every organism. So, it is pivotal to conserve water. Reducing the use of fossil fuels is another crucial way to keep our environment clean, as it will safeguard us from the nauseous air pollution. We do have come a long way but still there is a longer path to tread on, holding our hands together. It is in this context that the clean India mission is worth applause. Cleanliness in India had always been the most dormant topic earlier. However, now we see more and more hands coming forth to volunteer for the cause. Time for introspection – do your hands always work towards a better future? Let's not talk about the mammoth approaches towards this cause. Let's start by the tiniest of efforts. Let's pledge not to litter around, not even our houses because as they say charity begins at home. Let's pledge to condemn people who damage public places. Let's pledge to start with one little step at a time. As a drop makes an ocean, so will our efforts drive the nation towards holistic progress. Always remember, “The frog does not drink up the pond in which it lives”, similarly we should not be impudent enough to ruin the domain in which we reside.

ESSAY #11

PARI GARG, KULACHI HANSRAJ MODEL SCHOOL,, ASHOK VIHAR

It is rightly said, 'Look around, walk around, to breathe clean air, do not litter the ground.' India is a land of great resources, left by our great ancestors for us to preserve and cherish lifelong. There are not enough words for an individual to speak to epitomize the prodigiousness of India. As we speak of the topic, we understand about making India a land free from garbage and full of herbage. Every Indian wants to transform India into a beautiful and competitive nation. It's the vision of every young and innovative person to make India a better place to reside. My vision for a better India mainly aims at mobilizing people at every single level towards cleanliness. As the youth of this wonderful developing country, it is our prime duty to take a step forward and to guide the nation to become a greener place. A cleaner place only can lead to a greener place. It is deeply interlinked. One can get fresh air in a place full of trees and grass. Trees and grass can grow in clean places only. Greenery not only promotes cleanliness, but it also promotes sustainable development of an area.

Sustainable Development stands for development that takes place without harming the biotic life. It is very necessary for a country to work in accordance with the visions set for its development. In India, about \$50 billion is spent every year in the treatment of hygiene related diseases like skin diseases, diarrhoea etc. Many diseases in India are caused due to low number of toilets. According to a report by WHO, 626 million people practice open defecation in India. Areas where the toilets have been installed are inefficacious as they are not cleaned and are in a very poor condition. In rural India, where 61% of the population defecates in the open, it is practiced among all the socioeconomic groups. More than half of the children living in the slums in Delhi don't use toilets.

World Toilet Day, celebrated on November 19, aims to end open defecation completely. It promotes Sustainable Development Goal No. 6, that is, to promote sanitation and to end open defecation. These are not only facts but the reality check of India's position in the ranking of cleanliness and hygiene. This is because of the lack of awareness among people regarding the different and efficient ways to dispose garbage. Even though India's population is merely 17 percent of the world's total population, Indians form 60 per cent of the people across the world who lack access to sanitation. India is a country where more people have access to mobile phones than to toilets. While this is seen as a failure of the market, it in fact means that the telecom sector performs better than the heavily regulated housing sector. People are trying to fit in the fast forward and developed world, but they are not ready to meet their own basic hygiene needs which they themselves are not aware about. Diarrhoea is the most prominent disease in India, which is caused due to lack of sanitary conditions.

Our government has launched several projects. One of the top missions running through the country is 'Swachh Bharat Mission' or 'Clean India Mission'. This mission was started on October 2, 2014. This mission aims to make India clean by October 2, 2019 on Mahatma Gandhiji's 150th Birth Anniversary. Our Father of Nation dreamt of a clean and green India. Our honourable Prime Minister Shri Narendra Damodardas Modi continued this dream. The campaign covers as many as 4,041 towns and aims at cleaning streets, roads, and infrastructure. Our PM has also called this campaign

‘Satyagraha se Swachhagraha’ in reference to Gandhiji’s Champaran Satyagraha launched on April 10, 1917. The mission has two thrusts: Swachh Bharat Abhiyan ‘rural’, which operates under the Ministry of Drinking Water and Sanitation; and Swachh Bharat Abhiyan urban’, which operates under the Ministry of Housing and Urban Affairs. It is the largest cleanliness drive of India. Another inspiration taken from Clean India Mission is the ‘Swachh Everest Mission’. This mission was taken up by the Indian National Army after getting inspired by Narendra Modi’s Clean India Mission.

The toilet building mission was a major step towards a clean and disease-free India. Open defecation was the root cause of the starting of this mission. People in rural areas practiced open defecation as they believed toilets as an obstacle in their religious practices. But if we don’t focus on it now, there would be an age which would be known as the garbage age. This garbage age would be the result of the ignorance of people towards sanitation at present. To reduce such chances, we must wake up from the dream world in which we have been living in since a long time.

With changing time, people are getting sensitized now towards the critical need of toilets for women especially. As the young generation we can step forward and begin the protest for making India a cleaner and a greener place. The windows are many, but we must choose the right one to make a door from it. It should be big enough to carry the whole Indian population. There are many ways to achieve cleanliness, but to choose the right one is tough. It should be carried out by the whole population. This is my vision for a cleaner and greener India which includes all other visions. It is easy to achieve any goal if all would believe that “It all starts from within and withal...’.

ESSAY #12

REEVA GANDHI, VENKATESHWAR GLOBAL SCHOOL, ROHINI

Jacques-Yves Cousteau rightly said that water and air, the two essential fluids on which all life depends, have become global garbage cans. When a child is born in the world the first thing we expect him to see is cleanliness and happiness, but the thing we he sees is pollution and hatred in the world. After 70 years of independence from British we say that we are free, but is it true? Even today we are trapped in a world of pollution, poverty, and living in a world where people do not have fresh air to breathe.

It is the harsh reality of our world that even after being educated, we are the ones causing the pollution, and the ones we consider dirty or poor, despite being uneducated, are the ones who probably care more about the world. We always show off our new clothes, new cars, but why don't we talk about the one who has given us everything, our mother earth? Instead of flashing expensive things we should make our India a place that we can show to everyone as one of the greatest treasures.

It has been proven that of the world's top 20 polluted cities, 13 are in India, compared to just three in China. Air pollution slashes life expectancy by 3.2 years for the 660 million Indians who live in cities, including Delhi. Also, according to a report published by Central Pollution Control Board, only 13.5 % of the sewage in India is treated. This shows a dismal status of sewage treatment in our country. This report indicates that more than 80% of the sewage is left untreated. It is one of the main causes of pollution in all rivers and lakes in the country. When we go to countries like USA or China we are smitten by the beauty of their country and complain about the garbage in our country, but we do not see that instead of complaining we should try and make our country better.

Mahatma Gandhi correctly said, "Be the change you want to see in the world". If we are the only ones who can bring a change in the world, then why not work for the change. We should never think that an individual cannot be responsible for a change that even hundreds have failed to make. We should make India a place where people are, instead of wearing masks, wearing smiles on their faces. We should make India a place that we can preserve for our future generations. When we enter India the first thing we should see is the greenery of our country instead of the pollution. We humans are a perfect example of a virus, for just like a virus replicates itself and kills the cells in a body, we replicate each other's mistakes, and in the process destroying our nature day by day. According to the Global Burden of Disease (GBD) report, outdoor air pollution is the fifth largest killer in India, very close to high blood pressure, tobacco smoking, and poor nutrition. It causes around 62,000 premature deaths because of pollution-related diseases. Also, Food and Agriculture Organization (FAO) has said that around 10.4 million hectares of tropical forests have been destroyed every year between years 2000 to 2005, and that too permanently. It was a shocking increase from the year 1990-2000, where 10.16 million hectares of forest were reported lost. Hence, when we celebrate Earth Day we should not only celebrate it, but also understand the true meaning behind it and take care of our environment.

We should take serious action against this problem of deforestation, or else there would be no green place for us left to live. I believe three days in a month should be celebrated

as 'sapling days', in which every student should plant a tree in their school or in parks near their schools. Planting saplings should not be a once in a blue moon case, but should be practiced regularly. More such campaigns should be launched for the environment.

Talking about the problem of waste, instead of throwing waste just anywhere, we should mix it with the soil so that manure is formed and that soil becomes more fertile, and can be used for various purposes like agriculture. The government should put a check on factories and once in a month go to see that the factories are treating the waste before throwing it in the rivers or are not treating the waste. Besides this, the government should shut down the factories that are not treating their waste. A 2015 report by the Centre for Science and Environment, a Delhi-based NGO, says the decline in the country's overall environmental standards was because of river pollution, which is worse now than it was three decades ago, piling garbage in cities and increasingly toxic urban cities.

I think that instead of running from our responsibility of taking care of our earth we should fulfil our responsibility and take care of earth. I think that if the current behaviour continues, one day we would be standing in lines to get water as now today we stand in lines to get petrol and the cost would be reaching the sky. I conclude by saying that I think that this is my vision towards a cleaner and greener India which I think would be only fulfilled if we work together for our mother earth.

ESSAY #13

SHREYA PANDAY, LORETO CONVENT SCHOOL, DELHI CANTT.

“Cleanliness is Godliness” is the mantra of Mahatma Gandhi, Father of Nation. He demonstrated, propagated and insisted for individual and community cleanliness for better surroundings and healthy environment throughout his life. Cleaner and Greener India is all about making them protect green by increasing the natural greenery and reducing the cutting of trees, that is, lesser use of raw material from the forests, as well as avoid superfluous use of natural resources and increasing the number of trees by growing small plants. My vision for cleaner and greener India is “cleanliness is a clean habit which is very necessary to all of us”. It is a habit of keeping ourselves physically, mentally, socially and intellectually clean including our homes, pet animals, surroundings, environment, ponds, rivers, schools, railway stations, bus stops as well as public places etc. We should keep ourselves neat, clean and well-dressed at all times. It helps in making a good personality and impression in the society as it reflects a clean character. We should maintain the environment and natural resources (water, food, land, air, forest, etc.) for a healthy and prosperous life. Clean and green environment helps in reducing “global warming” and the greenery helps to overcome the number of greenhouse gases in the air.

India has a population of over one billion, in which most people want to live in towns and cities. Unfortunately, as a result of stressed environmental conditions, most of towns and cities are unable to cope with the rapid pace of urbanisation. Consequently, increase of water pollution, air pollution, sound pollution, inadequate sanitation, open dumping of waste, etc. have serious consequences on the health of the people as well as the environment and are also an economic burden to the country for reducing awful effects of these types of contamination.

At the moment, the situation demands immediate intervention in the management of rapidly growing urban environmental problems. Furthermore, the quality of the environment needs to be monitored regularly and nation-wide programme focused on environmental assessment, awareness, advocacy and action on school children who are the future citizens. Every parent should logically describe and discuss with their kids the benefits, purpose, necessity, etc. of cleanliness and its good and bad effects on health and environment. They must explain that cleanliness is the first and foremost thing in our lives like food and water.

To fulfil Mahatma Gandhi’s dream of a clean and green India, Shri Narendra Modi, Prime Minister of India, himself initiated the cleanliness drive/mission. Picking up the broom to clean the dirt and making Swachh Bharat Abhiyan a mass movement across the nation, he gave the mantra of na gandagi karenge, na karne denge. This initiative was met with widespread support and has made ground-breaking progress thus far. Some great initiatives have also been taken by students from schools, colleges, universities, and other educational institutions as well as government offices.

Cleanliness does not require each and every one of us holding brooms, but the very act of caring for cleaner surroundings can provoke individuals into action. It is the duty of

us as Indian citizens to just need to clean all the dirty places in our environment to make them spotless and beautiful.

With the above pillars and domains, one can predict the bright future of India. But the goal is very far away from the reality. What we need is not only new plans but also their implementation; both strongly and forcefully (if necessary) should be made within lawful ways. Moreover, it is our duty and responsibility, being the citizens of India, to be a role model to accomplish the vision for “Green and Clean India”.

“Hum sab ka yahi sapna, hara bhara swachh bharat ho apna”

“Clean India, Green India is my Dream India”

ESSAY #14

VIJEYTA PANJWANI, KULACHI HANSRAJ MODEL SCHOOL, ASHOK VIHAR

**'Maintain cleanliness, be plasticless,
Make green forests as Earth's dress,
Otherwise it will all be a big mess.'**

The above statement is the ecumenical veracity of the present times. Nature has bestowed upon us the most precious resources, whether it is the beautiful blue waters, the exquisite trees or the irreplaceable land resources. Our nation especially has a rich variety of innumerable precious natural resources. But with proceeding time, we Indians are becoming increasingly selfish, and that too just for individual profits. In this race to move ahead of others, we humans are leaving the care for our beloved blue planet behind. We are moving ahead crushing the green gold and the nation is the sufferer of the sin committed by its citizens.

The growing industrialisation and urbanisation is leading to irreversible destruction of forests. The water and land is also getting polluted due to various reasons during the process of development. The growing use of plastic and CFCs is not just polluting our environment but is also adding to the already existing hole in the ozone layer which is leading to a subsequent increase in global warming. Another problem is of the increasing garbage and pollution in India. The waste from industries, use of non-biodegradable products, unchecked deforestation, disposal of waste in water bodies, smoke from vehicles, suspension of unburnt carbon particles etc. are causing widespread air, land and water pollution. The root cause of all these growing problems of India is the growing population. We rank 7th in world in terms of land area and 2nd in terms of population. The ratio describes the seriousness of the problem well enough. The growing population is leading to the overuse of all natural resources and is thus eventually causing their degradation too.

It's high time we realise the importance of keeping our environment clean and green. Taking care of the serpi verdant forests is the best way to maintain cleanliness and to take care of the beautiful natural bounties of India. We don't just have to grow more trees but we also have to prevent the existing trees from being brutally murdered by rigorous cuts of sharp axes and the growing greed of human beings. Most importantly, we have to take all possible measures for population control. We have to become intelligent enough to leave behind all our own ulterior motives and take small but significant steps towards the welfare of India in aspects of cleanliness. We have to begin reusing and recycling waste products to increase cleanliness, and if you can't reuse it, refuse it! We have to reduce the use of CFCs and start using HCFCs or HFCs. Industrialisation and urbanisation should take place but not at the cost of reduction in forests and pollution of rivers. Forests should not be cut for clearing the land for purpose of agriculture, housing and industrialisation. Rather, population control should take place so as to make best use of the otherwise available land. Thus, industries should be placed away from water bodies. Waste should be thoughtfully disposed so that it does not harm the nature – the giver.

India had loads of gold in terms of the precious metal as well as in the terms of the green gold which has all been insensibly destroyed by us indians. We have to be prudent enough not to cut trees, not to harm the environment, clear the garbage, reduce the

pollution and avoid all that is harmful to protect the alluring natural beauty of India. Otherwise, the time is not far when India won't be left with these green forests, and water bodies. The only things that will be left would be tears in the eyes and regret in the hearts of the future generations. We have not inherited India's natural bounties from our ancestors, rather we have borrowed them from our successors. Thus taking care of nature is the first and foremost responsibility of every citizen of India. We have to become wise, green citizens of India, and make it 'The GREEN GOLD sparrow'

An aerial photograph of a densely packed urban area, likely a slum or informal settlement. The image shows a vast expanse of multi-story buildings, many of which are constructed from brick or concrete and appear to be in various states of completion or disrepair. The buildings are tightly packed together, with very little open space visible between them. The colors of the buildings are varied, including shades of brown, grey, blue, and yellow. The overall impression is one of extreme population density and limited resources.

GOOD HEALTH AND WELLBEING BECOMING A CHALLENGE IN URBAN CITIES

ESSAY #15

JAPNEET KAUR JAGGI, LORETO CONVENT SCHOOL, DELHI CANTT.

In words of Mahatma Gandhi “health is the real wealth and not pieces of gold and silver.” Healthy citizens are the greatest asset any country can have. Health is the crown on the well person’s head that only the ill person can see. No amount of money can buy you good health. Most of us do not value health until sickness comes. So keeping good health is of paramount importance if you want to live a happy life. The mind and body are not separate. What affects one, affects the other too. Health conditions vary with variations in air quality, water quality, nutrition and sanitation. So there are a lot of differences in rural health and urban health. City life appeals to most of us – the high rise buildings above and vibrant streets below. There are millions of people with millions of stories and millions of dreams – dreams to prosper and dreams to succeed. So, for the first time in history there are more people living in urban areas than in rural areas. In 1950, 30% of the world's population lives in cities. By 2014, the percentage increased to 54% and it is estimated to reach 70% by 2050. Amazing, right? But little do these dreamers know that success comes with a compromise and a not so easy compromise.

Cities have a lot of things crammed into small spaces. Have you ever thought how hectic city life can be? People race against time to get their jobs done. Such an irony, isn't it! So when the city people get stressed, they get really stressed. The sections of the brain that regulates that fight or flight mentality becomes overactive when presented with minimum levels of stress. A big reason behind these increased anxiety disorders is overcrowding, so people tend to forget the biggest capital asset in their lives – good health. “The foundation of success in life is good health”. That is the substratum of fortune. It is also the basis of happiness.” A person cannot accumulate a fortune very well when he is sick”, this is what PT Barnum says but also what nobody listens to. So, good health is decreasing day by day in urban lifestyles. People work 18 hours a day. Some are rushing around or most of them are glued to their laptops, macbooks or whatever latest technology offers. Their life is like the survival of the fittest but only without concentrating on actual fitness. The world is rapidly urbanizing with significant changes in our living standard, lifestyles, social behaviour and of course health. Health changes particularly evident in cities relate to environment, water, sanitation, nutrition, non communicable and lifestyle diseases (like cardiovascular diseases, cancer, diabetes, respiratory diseases etc.).

Healthy diets, physical inactivity, alcohol and drug abuse are also causative factor of diseases. Urban air pollution kills around 1.2 million people. In the Democratic Republic of Congo 83% of the people with TB live in cities. Urban lifestyle also causes mental health problems and the inability to control stress, mood disorders have increased. Addiction to heroin and cocaine has increased. Suicide rates have increased. And guess what has decreased? Happiness and contentment. We hear about the increased rate of TB, cancer, asthma everywhere. Nowadays the word cancer can be heard everywhere which has made people apathetic to the word.

So what causes these diseases? Overcrowding results in increased spreading of airborne diseases. It also leads to housing and sanitation problems. In developing countries, about a third of urban inhabitants live in pathetic conditions in slums and squatter

settlement. Slums are very heavily populated and have substandard housing with poor living conditions. Overcrowding also makes availability of clean water a challenge. 780 million people live without clean drinking water. Over the past 40 years the world's population has doubled and use of water has quadrupled. 25 to 33% Chinese who live in urban cities do not have access to safe drinking water. Overcrowding causes excessive fuel burnt in a small space and so does air pollution. Some 3.8 million premature deaths annually are attributed to ambient air pollution. About 80% of those deaths are from heart disease and stroke while another 20% are from respiratory illnesses. Some 20% households in less developed cities are reliant on solid fuels for cooking and therefore face double impact of air pollution. Obesity causes cancer, heart diseases, diabetes and hypertension. So a proper diet is a must for an urban inhabitant. Overweight people lose a year of life on average and being severely obese can cost you as much as 8 years of your life. Oh God! There are a lot of problems.

Now what about the necessary precautions and solutions? We are at a key turning point in history where we can make concrete decisions to address health issues. Cities need to promote urban planning for healthy behaviour and safety. The government can improve sanitation and shelter conditions in urban areas and make them better equipped to deal with emergencies and disasters. But on a small scale what can we children do? Well a very good example is holding Model United Nations to discuss prevailing problems in the world. We can have peace marches and awareness campaigns. We can go to slums and demonstrate how to make water filters and distribute air masks. We need to educate people like our domestic help or people in our neighbourhood about how to lead a healthy life. We can have laughter shows to reduce the stress level urban people go through. We can hold awareness campaigns about saving water and using alternative fuel so that we can reduce the world's suffering.

No democracy works without compromise. So in cities stress level is all encompassing. But it is up to us not to follow the crowd and live a happy life. The cells in our body replace themselves in a very short period of time. So what we eat is literally what is used to build our body. We need to live a healthy life, as a healthy body is the key to success. So let us make an effort to live healthy. Live and let live. Remember, a healthy body is the best fashion statement you can make.

ESSAY #16

KENISHA THUKRAL, MOUNT CARMEL, DWARKA

Many times, in our daily life, we come across a set of actions which do not seem related in any way whatsoever but still are more similar than you might think. So, let's take a guess. What does reading, drinking water, yoga and sleeping have in common? They all are essential in some way or the other to make the road to being healthy easier and well, healthier.

Technically, 'health' is a state in which a person is not suffering from any illness or injury. But if we have to really describe health, it is so much more than just the absence of an illness. Health is a state of physical, mental and social wellbeing. It is to be assured that when you wake up in the morning with good health, and you won't have any physical handicap, no mental instability or any social anxiety. Being healthy gives a sense of relief, satisfaction and happiness. More importantly, it provides the structure for living a disease free and a happy long life.

Having said that, it's safe to give a simple statement – being healthy is good. But unfortunately, studies show that it's not so easy to be healthy. Nearly 30% of the world's population is obese. According to WHO, 300 million people in the world have depression. In the US alone, social anxiety disorder affects 15 million adults. Some might argue that at least, we're progressing but that's not entirely true. If we compare today's world with the world a hundred years ago, we find that we're still dying of the same diseases that killed us before like heart disease, stroke, cancer and suicide, highlighting the lack of physical and mental welfare still prevalent in our modern society. So why is it that there's this scarcity of healthy wellbeing in our current lifestyle?

One of the major causes is the lack of willpower. You want to eat healthy, but junk food is so much tastier. You want to start exercising, but it's so much more relaxing to sit on the couch and watch TV. Another important reason is the shortage of awareness and the hesitance to talk about these diseases. Sure, people can easily talk about obesity and why it is so bad but it becomes way harder and uncomfortable to talk about the anxiety issues that might come with it.

This is becoming a rising issue in urban cities, pointing straight to the uncountable fast food restaurants scattered all over. Advertisements play a huge role in what we desire. It's important to remember that advertisements only show junk food. That is a major reason because of which it is so hard being fit in metropolitan cities.

So, what can we do to make this scary-movie worth reality into a positive healthy society? First of all, start with yourself. If you are suffering from a disease, try to get medication and don't lose hope. But whether you have a disease or not, it's important to start eating real, healthy food and not just take supplementary pills. It's also really essential to engage in some kind of physical activity. Try to find ways to be physically healthy by adding a personal hobby. For example, if you love cooking, challenge yourself to make your favourite foods in a healthier way. If you love to dance, do it. If you're more into spiritual connectivity with exercise, start yoga. Making a boring activity into a fun and interesting one will not only make you do that particular job, but will also give you a sense of enjoyment, making you happier. If you are feeling anxious, tell someone

you trust about what's bothering you. Do what you love, and if anyone mocks you for that, try not to get affected by it. The same goes for you, try not to joke about someone else's condition, because you might never know what they're really going through. Last but not the least, it's better to spread awareness about all illnesses, even 'uncomfortable' ones, than to suffer later from ignorance.

So, to conclude, let me ask you a question. What does today and tomorrow have in common? Well, both are perfect opportunities to start being healthy and fit because, at the end of day, nothing looks better than what healthy feels.

ESSAY #17

TAANISHA MURARKA, VENKATESHWAR GLOBAL SCHOOL, ROHINI

Urban cities have been a crowd-pleaser for long now. People have been often drawn here because of the many opportunities, jobs or services they offer. But not many are aware of the health risks that follow. It is like a nightmare dressed like a daydream, especially for the slums that constitute nearly upto 40% of the urban growth. From airborne diseases such as tuberculosis resulting from crowding and lack of adequate ventilation; waterborne and vector-borne diseases such as dengue linked to unsafe water storage and poor waste management; acute respiratory diseases from indoor air pollution and mouldy housing interiors; and diarrhoeal diseases from unsafe drinking water and sanitation, these closely-packed, highly-populated areas have become a house to many diseases. For instance, outdoor air pollution alone is responsible for 3.7 million deaths annually. Furthermore, physical inactivity is responsible for 3.2 million deaths annually, and traffic injuries cause some 1.3 million deaths annually. These statistics are proof of why 'good health and well-being are becoming a challenge in urban cities.'

There are many factors which contribute to this global problem. The reaction of the government, the awareness of people, the implemented policies and programmes – all have a hand in this.

Primarily talking about the government and its role, its principal objective is to enforce schemes that target the well-being of not only the rich but also the poor. But, the implementation of these policies usually lags behind. This is either because not enough was done to enact them or the people for whom these are made, were not aware of them. Thus, it is also the awareness among people that can bring a mammoth change obviously because of the fact that if the public themselves will not know about these, there is no point to actually make these policies.

Another important factor as mentioned earlier is the people themselves. In many cases, even when the government plans do something good for the country, the ignorance of their initiatives leads to utter chaos and drives people away from its benefits. As a matter of fact, it is also the casual attitude of the people that harms them. For example, Government of India launched the Swachh Bharat Mission in 2014 but the people still are found littering roads, throwing away loose garbage, etc.

This issue of health and well-being not only affects the people but also harms the country in terms of economic progress. This is because if people will not be in a condition to work, their income levels will reduce, thus, bringing down the economic growth and development, and the nation will thus suffer as a whole. One major effect of this state will be on our future generations. Clearly, if the present will not be mentally and physically strong, the future generations will be impacted. For example, it is often seen that especially in slum areas, the new-borns are delicate and often face the door to early deaths. "Actions speak louder than words", and talking about the effects and reasons of the challenges to the 'good health and well-being in urban cities', it is high time that some steps are taken to save the world from becoming a dead land. Evidently, just talking won't help. Following are some examples where delayed action cost peoples' lives. In Delhi, the National Capital and one of the major metropolitan cities, the

Supreme Court banned the sale of firecrackers and stipulated a time frame of 8 pm to 10 pm. for burning crackers during the Diwali festival of 2018. Still, many people indulged illegal activities. As a result, the air quality index was as bad as 'a severe plus emergency' which was 1.7 times bad as that of 2017. As a result, at 2.5 million, all such events make India the top most country of pollution-linked deaths.

Egypt, the land of pyramids and pharaohs, has the highest the death rate internationally. With being the second most polluted country in the world, this country too faces difficulties due to the high pollution rates that are present. This pollution is so severe that it results in loss of lives thus making it the most life-threatening country.

Thus as a conclusion, with enough proofs to justify, it is the health that matters the most. Only actions taken now will help combat the solution and make the world a better place. "A stitch in time saves nine"

ESSAY #18

MAHIKA SINHA, LORETO CONVENT SCHOOL, DELHI CANTT.

Growing industrialization and modernization has brought about rapid urbanization and new technology. This has given rise to numerous facilities. These facilities have given human beings a comfortable life. Human beings have settled near and around these industries and facilities providing us with the wonders of new inventions. These have come to be known as urban areas. Camera, printing press, music records, textile mills, synthetic fabric, engines, railways, and motor vehicles – all these are considered signs of progress not only because they are novel and fascinating ideas but mainly due to them providing higher living standards and improved quality of life.

However, every coin has two sides and so does urbanization. The increased use of machines has led to pollution, new fast food joints have replaced home cooked healthy food and electronic devices have increased screen time and loneliness. Urban areas are a hub of all economic and social activities. It is the finishing centre of all industries. The motor and automobile industry has gained extensive popularity in today's time. These are used by all people residing in the urban and sub-urban areas. These vehicles release harmful gases and soot particles of partially combusted fuel which cause pollution in the atmosphere. These unwanted, toxic particles in the air are breathed in by all living beings and have detrimental effects on their health. The pollutants harm the lungs, the brain and the nervous system leading to diseases, birth defects and can even be fatal for some. The increasing trend of eating out is also a cause of worry for people living in urban areas. The food joints offer packaged and canned eatables and beverages that are flushed with preservatives for longer shelf life. Although these chemicals aid the manufacturing industry, they deteriorate human health in the long run. Not just fast food, even homemade foods are not completely safe for consumption. The vegetables and fruits delivered to urban households and the markets are brought from far off areas. They are cultivated in areas with suitable climate and are transported to marketplaces. To prevent rotting due to transport delays, these vegetables are sprayed with pesticides and insecticides. Fertilizers are also sprinkled for faster growth of plants in the cultivation season. These chemicals get accumulated in the soil and the concentration increases progressively in each set of crops. The chemicals are poisonous and carcinogenic to humans. The third problem associated with human well-being is the excess use of electronics. The growing dependence on devices is turning our youth into couch potatoes. Screen viewing affects our emotional, physical and mental health. Reducing family time and social life leads to loneliness and in turn depression, and other psychological disorders. Outdoor activities have lessened by a huge margin due to the availability of alternate sources of entertainment on-screen. The increased lack of physical exercises has also led to an obese and lethargic population. Radiations from screens of electronic devices such as smartphones, televisions and laptops are harmful to the eyes of the user. These gadgets and gizmos are causing distraction and reduction in book-reading habit. People are unaware of their surroundings and engrossed in the screen activity. The issue of utmost concern is that of waste generation in towns and cities. More usage, more waste generated. In recent years, there have been major improvements in our lifestyle. Most things are disposable and the packaging non-

biodegradable. This is the primary reason for the huge amount of waste generated and the large dump yards taking up the space for more economical activities.

As preventive measures, we can substitute fuel-using modes of transport with battery-based or low polluting fuels. Advanced technology ensuring efficient use of fuels needs to be created. Organic foods and milk should be grown and consumed. Fast foods should be strictly avoided. Outdoor activities for a minimum of two hours must be included in every individual's schedule. Even screen-time should be fixed. Book and newspaper reading habits should be inculcated. Packaging of products must be made biodegradable. At an individual level, waste generation can be managed by separating and sorting recyclable, dry and food waste. Recyclable waste must be deposited to the concerned industries.

There is no fixed solution for such problems. Innovative methods should be thought of by the growing generation, keeping in mind the idea of sustainable economic development. The government too must consider these action-oriented plans should be created and implemented. Urban life with its multiple benefits comes with its negative impacts as a whole. It is our, the citizens' responsibility to strike a balance and extract the positive effects for our own welfare and in the interest of the future generations.

ESSAY #19
SANYA NARANG, BLUEBELLS MODEL SCHOOL, GURGAON

What's the best thing in life? Is it how long you live or for how long you enjoy it and experience what you live? The greatest pleasures of life are satisfaction and well being. In today's busy world everybody is hustling to create an indelible mark on the pages depicting great personalities and trying their best to get ahead and upgrade. In this pressure, people forget to consider their health a priority despite knowing that they can become the masters of their life only by putting their health, well being and priority first, and not merely by gaining money or fame. In the rattle and hoot of traffic, noise and struggle you need to rejuvenate your mind and soul whenever you feel fatigue. However this seems quite impossible in today's scenario, where urban cities are no more the areas where you may consider yourself a valuable entity.

The main focus of people living in urban cities is on having a luxurious life, which becomes the primary reason for them to overwork themselves each day, risking their own health. Also, working at a job is more like having a whole lot of stress in your mind. Therefore, the primary reason for why people living in urban cities do not lead a healthy life is STRESS. Focusing on other parameters, we see that because of constant increase in the population of developed cities due to a plethora of job opportunities, phenomena such as adulteration of food and increased usage of chemicals in food production have also increased. Though some people do take health into consideration, everybody needs to understand that leading a healthy life is not just about staying fit, it's about staying happy.

Now here's the question – which life is better; rural or urban? Obviously the quality of life is better in urban cities. However, stress and pressure are things that accompany your urban life, making it somewhat remorseful in some aspect or the other. On the other hand life, a rural life is tranquil, peaceful and with significantly less stress, even though there are less opportunities of leading a comfortable life with good facilities of transport, communication, etc. If you can't give up your urban life, at least make it worthy of not giving it up. That's what needs to be conveyed to all the people out there working very hard for the betterment of their lives.

Prosperous living cannot be possible without good health and well being. Success will have no meaning if you attain it by the time you become incapable of celebrating it. To get going in life, you ought to take your health and well being as a priority. You must have heard the phrase that conveys the fact that smart work works better than hard work. Apply this as a formula in your hectic routine and you'll see visible results. Give yourself some time, and indulge yourself not only in work but also in things that make you feel happy. Of course you should exercise and eat good food, but besides that, stay happy. These, according to me, are some key points in order to understand the importance of leading a healthy life.

ESSAY #20

GANANT AWASTHI, KULACHI HANSRAJ MODEL SCHOOL, ASHOK VIHAR

In today's modern and competitive world, each one of us is working hard so that we can achieve a comfortable and happy life. But we are not realizing that this competition is having an adverse effect on our health. Excessive work results in stress and also in lack of proper sleep. Scientists say that lack of sleep can cause problems like memory loss, lack of concentration, poor immune system, high blood pressure, etc. According to a study, lack of sleep considerably increases the chance of diabetes, and what say about stress, stress is the fountainhead of many diseases like Alzheimer's disease, obesity, headaches, depression etc. Due to work people also are unable to spend time with their family. They leave home when others are sleeping and come back when others have slept. This keeps them away from the world's most effective stress buster and problem solver – their FAMILY. Sometimes people get too stressed and tensed due to failure in some task or inability to do something and when they cannot find any way out they commit suicide. According to a study in recent years, suicide rates have considerably increased.

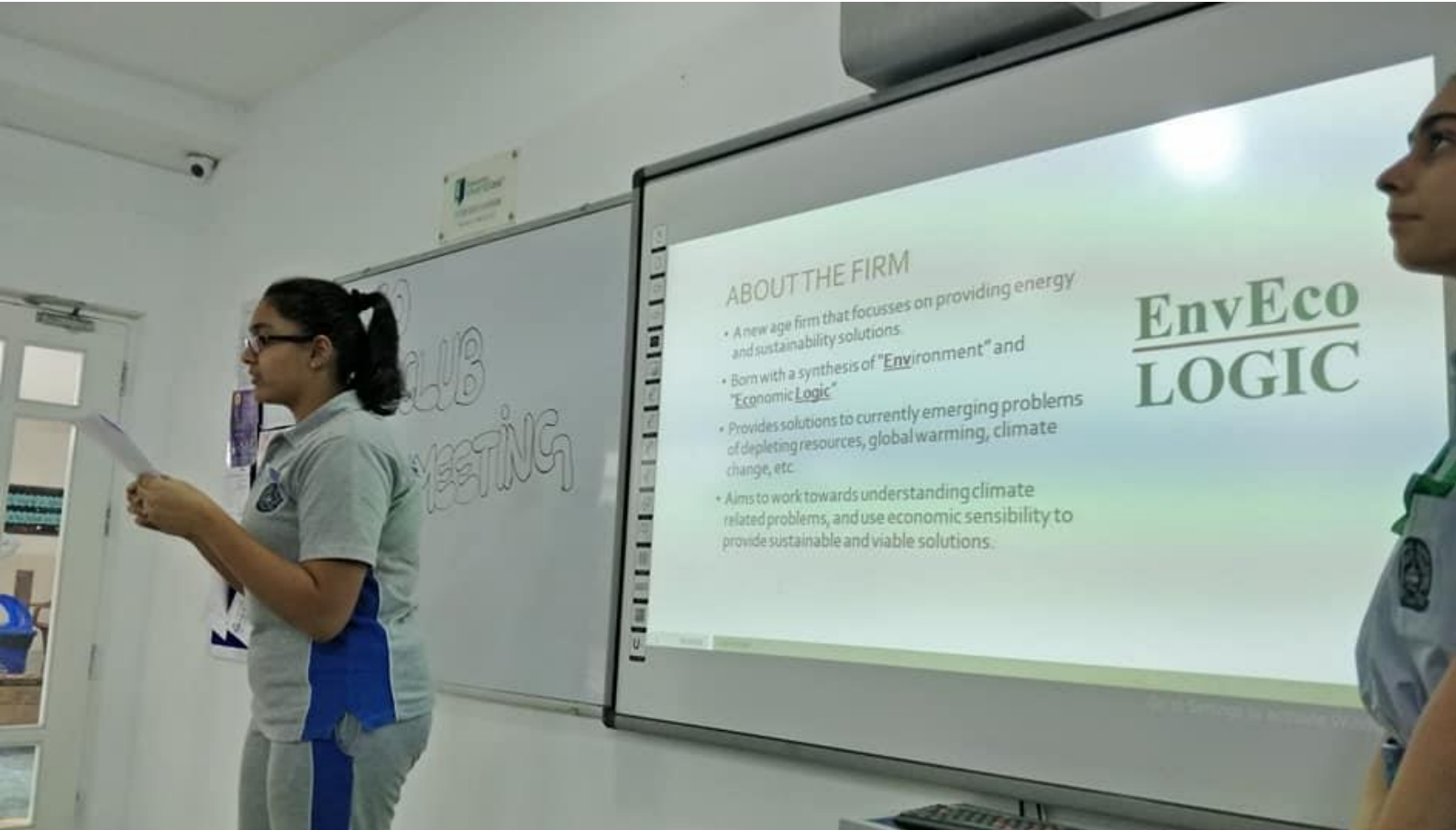
Besides these problems, urban people are suffering from other problems as well. Due to the increasing population and lack of employment there has been a large scale migration of people from rural areas to urban areas. These rural people mainly migrate in search of work. This migration causes the population of the urban areas to shoot up. An excellent example of this is the city of Bangalore. After the establishment of IT industry in Bangalore, the population exploded from 24,76,355 in 1980 to 42,92,223 in 2001 with influx of 18 lakh immigrants within two decades. This increase in population causes many problems. For example, Urbanization leads to an increased demand for land bank which pushes the property prices. It's no wonder that a large percentage of city-dwellers are poor, with an estimated 1 billion living in slums. As a result people cannot afford houses which leads to encroachment of pavements and creation of slums. Also, increase in the urban population increases the demand and consumption of water. Thus it becomes a challenge to supply drinking water for humans living especially in the slum areas. Limited access to drinking water poses serious health hazards and easy spread of waterborne diseases across the masses.

Another problem in the urban cities is of public transport and traffic. Cities and towns have depended heavily on ground transport for the movement of people and goods. Thus, the increase in urbanization throughout the world has been accompanied by a sharp growth in urban traffic and the public transport system of the urban cities is choked. However, such a situation has resulted in a large number of accidents. Some 500,000 people are killed in traffic accidents each year, two thirds of which occur in urban or peri-urban areas. Although urbanization allows more accessibility to health services, it also creates health hazards. In such urban areas the air, land and water are often contaminated, spreading diseases. The burning of fossil fuels from transportation, industry and energy production is the main culprit regarding outdoor urban air pollution. Another health hazard common in the cities is connected to lifestyle and consumption patterns, including dietary changes and obesity.

Now the question is how to tackle these cons of urbanisation. First of all to tackle stress and to have a good mental health people should start spending more time with their

family. People should try to be positive as much as they can. When too tensed or stressed, people should have some 'me time'. During this time people should do all the things that they like doing. Yoga is another efficient stress buster. Multiple studies have shown that it can decrease the secretion of cortisol, the primary stress hormone. Practicing yoga can lead to decrease in symptoms of anxiety. As far as physical health is concerned, there also yoga is a very good choice. Multiple studies have confirmed the many mental and physical benefits of yoga. Incorporating it into your routine can help enhance your health, increase strength and flexibility. Besides yoga, there are others ways as well to keep yourself fit and healthy even if you are living in an urban city. Avoid going out on days when Air Quality Index is very poor. Keep exercising regularly. Avoid junk food. Install water purifier in your house and only drink potable water.

To conclude, urbanisation is very important for a country's development but everything has its pros and cons. If we want to enjoy the pros we will also have to face the cons.



About ENVECOLOGIC

Envecologic is a multidimensional firm focused on providing energy and applied sustainability solutions. We provided services in the areas of research & advisory, workshops & trainings, and thought leadership.

Our name 'Envecologic' is a synthesis of 'environment' & 'economic logic', thus highlighting the principles governing all our endeavours – providing solutions which aren't only economically feasible, but also environmentally sustainable. In a world progressively driven by materialism and dreams of economic growth, following the path of sustainable development is the only solution.

Our aim is to bring sustainability concepts into the mainstream, and introduce them into various diverse aspects of our everyday life, in order to help build a more balanced narrative, be it economic, academic, or policy oriented.

Our Endeavours with the YOUTH

While Envecologic is extensively working in bringing sustainability discourse into the economic mainstream, we also realize that it's equally important to take this discussion to the people it affects most – our present younger generation. We believe that the youth today is the BIGGEST stakeholder as they're the ones most impacted by the cascading problems arising out of the various global uncertainties such as climate change, stratospheric depletion, fresh and ground water scarcity, air pollution, depletion of natural resources, etc. These environmental uncertainties are now prevalent at a global level, and have influenced our development discourse in an unalterable manner. This changing world order makes participation in the sustainability conversation important not only to survive, but also to thrive.

Green Vision 2019 – Writing for a better tomorrow

A uniquely designed online essay writing competition, *Green Vision for Schools* gave young minds the chance to delve into some of the most critical sustainability challenges which affect us. This competition resonates with our objective to sensitize and orient the youth in schools, so that they can go beyond academics to delve into sustainability challenges and develop problem-solving sensibilities.

Green Vision 2019 – Think. Adopt. Adapt

Envecologic conducted *Green Vision for Colleges*, a competition aimed at encouraging college students to think and brainstorm on topics that impact them the most. It encouraged them to express their opinions, ideas, thoughts, and suggested action course on the given topics, and share them with us. The authors of the top essays have been given an opportunity to intern with us. **Currently, 4 of these students are working with us.**

Envecologic Youth Ambassadors Program (EYAP)

With this program, we are engaging with young sustainability enthusiasts from colleges across India, giving them an opportunity to develop their leadership skills. In this age where sustainability conservation is a key area of focus of every corporate, every social and government initiative, we believe that developing a better understanding of integration of economic logic and business practices into sustainability is an essential key to success. **Our inaugural batch of EYAs has 15 young ambassadors.**

Sustainability School Network

We believe it's necessary to create a network which connects the sustainability centric efforts of schools across the country, and helps them grow further with mutual understanding, cooperation and exposure. **The Sustainability School Network, first of its kind of network in India, seeks to connect various schools spread across India, by providing the students AND schools a platform to integrate education with sustainability and environment centric discourse, showcase their efforts in the area of sustainability, besides preparing students for a future where every aspect of life would require a balanced, sustainable approach – personal, professional and academic.**

Sustainability GenNxt – Sustainability Today for the younger people

Our new offering, *Sustainability GenNxt*, is a subscription-based e-magazine which endeavours to bring sustainability education in the Indian schools at par with the global standards. Designed specifically for the age group of up to 18 years, it takes various issues related to environment, sustainable living, climate change, biodiversity, general sustainable awareness and so much more to the students, BESIDES making them aware of the sustainable practices being taught and implemented across the globe. **In times where every country is integrating environmental protection and climate change mitigation in its discourse, every corporate is striving to establish itself as climate conscious and upgrading its technology accordingly, education is now revolving around sustainable development practices and energy efficiency. And in a world where specialized MBA / Engineering or Science courses are being designed around these areas, there is nothing more important than understanding these skills from an early age to attain that competitive edge.**



**For any query or
comment, reach
out to us via:**

Web: www.envecologic.com

Email: info@envecologic.com

Phone: +91 836 856 4982, +91 981 165 4229

ENVECOLOGIC is a fast-growing new age research and consulting firm focusing on providing energy and sustainability solutions. The name itself, which is a synthesis of 'Environment' and 'Economic Logic', conveys our area of expertise.

The present age is characterized by multi-dimensional problems emerging everyday due to depleting resources, global warming, climate change and an unstable energy sector. We seek to deep dive into understanding those challenges and find solutions which make economic sense.

Note: Green Vision Competitions 2019 are Envecologic's initiatives to spread awareness. Images used from various sources are meant to enhance understanding of sustainability challenges and they do not endorse or demean any individual, entity, or community. In case you have any objection to the images used, do notify us using contact information provided alongside.

EnvEco
LOGIC **Spearheading Sustainable Growth**