



CALL FOR THE GREEN



The lush green lands ,dotted with tiny,little flowers,the pastures glowing under the glaring sun, reflecting back the freshness on to the earth.Nature is one of the many things that add glory on the land and vividly to the world around.Indeed ,nature has a great role to play in the cycle of life.It is hard to imagine a life without Mother Nature.The green lands,the blue skies,the winding forests,tower like trees,puny creatures play an important role in the growth and development of mankind.

Nature is as important as anything else I today's world but the growth in cities is pushing away nature into the deeps of the countryside and to the edges of the earth.The growth of cities,emergence of towering buildings nature has almost been forgotten. The world is almost at the brink of extreme loss of oxygen and many other problems but there isn't any slow down in the growth of urbanisation.It has spread like wild fire that people prefer the malls, spick and span roads and the

full fledged city life to that of the greens outside.People no more enjoy the cool breeze on the skin,the soft gurgle of the waters or the sweet chirp of the birds because of the hectic urban life.

The environment has played a great role in our lives today.It has everything to do for the existence of life on the earth and the freshness on the earth.Inspite of the goodness,it is hacked down for more towering buildings and beautifully tiled malls and buildings.The beauty of nature is less appreciated,her efforts are blind to the world and her glory is fading into obscurity.However, though the world grows to height unknown nature provides to the earth what machines cannot. It provides life and prosperity which is imperceptible when it comes to technology.It is high time that we preserve the nature as it is the only source that remains to depend on for life and survival.

It is upto us to preserve it's existence,grow more trees,allow the greens to spread all over and let the

beauty of nature dawn upon the people and it's charm relished by the people.We have to control the advent of urbanisation into the countryside.We have to let the nature spread her wings of prosperity and life on the earth and make people realize the importance of the Environment.Infact all our existence depends upon how well the environment is flourishing.The more it grows,the more we can bask under the sunshine of the goodness of life and the more we obstruct it's growth,the more number of years we are left to suffer without oxygen ,fresh air,water or any other resources.Therefore we have to stand for the nature and keep it alive and respect it's existence ,for what it has done to mankind and let it remain to the end of days.

"A single tree can give life, shade and happiness to the world around and a hundred trees can definitely bring about a huge difference "

- Sonia Sali

CARBON FOOTPRINTS



To many, the idea of talking about their carbon footprint is still a new one and in most cases, bearing in mind that man is a social animal, the subject of carbon footprints is rarely brought up in conversations. Yet it is important to start as early as today to have a conversation about the many ways you can reduce your carbon footprints.

The term is usually defined as the amount of carbon (usually in tonnes) being emitted by an organization, event, product or person directly or indirectly. Everyone's carbon footprint is different depending on their location, habits or personal choice. Each of us contribute to the greenhouse gas emissions either by the way we travel, the food we eat, the amount of electricity we consume and many more.

When you drive a car and burn fuel, it generates certain amount of CO2 in the atmosphere. Like it or not, every time you plug in, you are impacting the environment through carbon emissions. Power plants all over the world utilize fossil fuels, coal and alternative energies

such a nuclear, wind, water and solar. Unfortunately, there is still a carbon impact. Even discarded batteries from laptops or cell phones can leave a deadly impact in landfills. Consider unplugging for one day, or even few hours each week. Find an activity that does not involve electricity and enjoy it.

The efforts to maintain and purify our drinking water can take a huge toll on carbon emissions. The more paper you use, the more you contribute to these emissions. Try switching to paperless billing as much as possible and consider recycled paper for sending cards, letters or wrapping gifts.

Park your car once a day if possible and work from home or just walk to your destination. Carpooling is a great way to help reduce carbon emissions. In the end, it is upto you the way you manage your footprints. For it is the impact of a billion footprints (nonetheless) or the world that would lead to a better life for all of us. Start now!

- Akshita Suvarna

MORE TO LEARN FROM THE NATURE THAN CONFINED WALL PROGRAMS

Nature is our teacher. Just look around us. There is so much to learn. The lessons given by nature are valid for a lifetime and beyond. Nature teaches us how to not give up, how to stand strong and how to fight back.

A corn that grows into an oak, a cocoon that grows into a beautiful butterfly, a bud that turns out into a colorful



flower , an egg that lets out a chirping bird, a ray that struggles through the clouds and

shines on Earth... Every action in nature has something to say, something to teach. A seed buried under soil, struggles through it, fights against adversities caused by air, water other animals, birds, etc grows into a sapling, a plant and later into a tree.

Nature teaches us not to give up not to strive harder to



reach the highest level of success. It teaches us that beauty is not everything and being ugly is not a curse. Because

every beautiful thing that enraptures us in the nature is mostly a predator and ugliness is a survival instinct.

Nature gives us lessons that can change our life. All we need to do is to keenly observe and secrets are thus unleashed.

LEARN FROM NATURE , GROW WITH IT.

- Sri Lakshmi Ghate

WORLD'S FIRST FLOATING ELEMENTARY SCHOOL



LOKTAK LAKE, the largest freshwater lake in northeast India and famous for its beauty and the phumdis. Phumdis are floating heterogeneous mass of entangled vegetation, formed by the accumulation of organic debris and biomass with soil particles, which have been concentrated in solid form. The lake is located near Moirang in Manipur state, India. The etymology of loktak is lok="stream" and tak="the end". Located on this phumdi is Keibul Lamjao National Park, the only floating national park in the world. The park is the home of the endangered 'Sangai' (Rucervus Eldi or brow antlered deer) which is also the state animal.

The lake is also home to many small islands like thanga, ithing, sendra etc. It plays a very important role in the economy of Manipur as

it serves as a source of water for hydropower generation, irrigation and drinking water supply. It is the habitat of 57 species of water birds and another 14 species of wetland associated birds including 28 species of migratory water flow. 425 species of animals-249 vertebrates and 176 invertebrates are also found in this lake. Fish yield from this lake is reported to be about 1,500 tonnes i.e. 6,600,000 lb a year.

To add to the beauty and uniqueness of this freshwater lake, it is now home to the first floating school named Loktak Elementary Floating School. The school was inaugurated at Langolsabi Leikai of Champo Khangpok Village in Manipur. It aims to provide education to drop outs students, who were made homeless due to the evacuation of families who settled on

the Phumdis. The school accommodates 25 students and two teacher. The teachers will also teach the illiterate adults around the area. The hope is to expand the classes and then take them up to eight standard. Contrary to its outlook, the school affords all the modern amenities like solar generated electricity, computers and internet connectivity.

Loktak Lake is not just a lake, it is a way of livelihood for the people, a source of great economic sustenance, a natural treasure of flora and fauna and a major tourist attraction. Just as the Taj Mahal of Delhi, Golgumbus of Karnataka, Golden Temple of Tamil Nadu, the people of Manipur take pride in the beauty and the uniqueness of "LOKTAK LAKE".

- W. Niki Chanu

SWACHH BHARAT ABHIYAN



Swachh Bharat Abhiyan (SBA) is a campaign in India that aim to clean up street, road and infrastructure of India's cities, small towns, and rural areas. The objective of Swachh Bharat including eliminating open defecation through the construction of household-owned and community-owned toilet and establishing an accountable mechanism of monitoring toilet use. Run by the government of India, the mission aims to achieve an open-Defecation Free (ODF) India by 2 Oct 2019, the 150th anniversary of the birth of Mahatma Gandhi, by constructing 12 million toilets in rural India at a projected cost of 1.96 lakh crore (US\$30 billion). The mission will also contribute to India reaching Sustainable Development Goal Number 6 (SDG 6).

The campaign was officially launched on 2 Oct 2014 at Rajghat Modi, New Delhi by Prime Minister Nar-

endra Modi. It is India's largest cleanliness drive to date with 3 million government employees, school students, and college students from all parts of India participating in 4,041 statutory cities, towns and associated rural areas.

The mission contains two sub-missions:

Swachh Bharat Abhiyan ("Gramin" or 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.

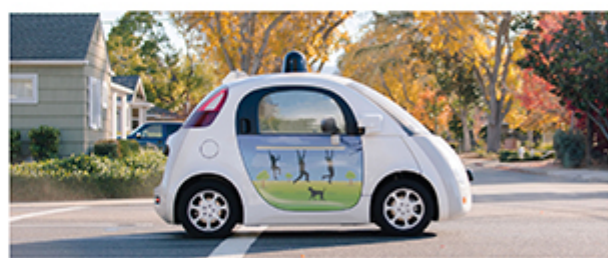
The mission includes ambassadors and activities such as national real-time monitoring and updates from non-governmental organisations (NGOs) such as The Ugly Indian, Waste Warriors and SWaCH Pune (Solid Waste Collection and Handling) that are working towards its ideas of Swachh Bharat.

-Deepak.S

LOGICAL INNOVATIONS TO REDUCE AIR, NOISE AND WATER POLLUTION

From passenger vehicles to heavy-duty freight trucks to railways, the use of world transport energy has more than doubled over the last years. It is little wonder that use has grown so rapidly; modern transportation has completely changed the way people live and work. For example, rather than working in a big city and living nearby, people can now live in the suburbs an hour away and take transportation to the city. Crops grown on one side of the country can be quickly and easily transported to a location that could never grow that produce before it has time to wit. Consumers can order a product online and have it same day delivered to their door same day from a location hours away.

Although they are convenient, these activities can also lead to carbon monoxide and global carbon dioxide emissions that are linked



to pollution, respiratory and cardiovascular problems, and irreversible climate change. With increased use, the effects on soil, water and air quality will only continue to worsen.

Unfortunately, most government are not getting involved in the problem regarding environment, meaning that as road traffic will likely double again by 2050 if there are no changes, these issues will become problems. Since most of the growth is predicted to be in use of light-duty, passenger vehicles in developing countries, including people moving from one rural areas to urban zones, It is important to consider the ways

that advancing technology can be used to improve these issues.

The evolution of wireless connectivity, mobile apps and the EVs means that there are more options than ever before to change the way that transportation energy is consumed and expended. Perhaps most excitingly, there is a real push for the more widespread integration of driverless cars. With companies like Ford and General motors' already investing in automated parking, driverless cars seem to be the next natural step as these auto manufacturers and companies like Uber, Google -vehicle and vehicle-t ways to improve

vehicle-o-infrastructure communication with the goal to have autonomous vehicles on the road between 2020 and 2025.

Such innovation could be logical companion to car sharing and ride-hailing services like Ola and Uber that are currently providing driving services for individual. In fact, seeing the future of travel could be why advancement from the beginning of the process. A recent report examine is predicted upheaval of car sharing, vehicle electrification, and autonomous vehicles.

These factors, combined with the trend for people moving towards urban regions is increasing the demand for more mobility options and on-demand services that has provided success for Uber, Ola an other options. This means that tech companies and car manufacturers will have to start considering

that personally owned vehicles may be a thing of the past as self contained, on demand, electric mobility becomes the norm.

The future of public transportation and its relationship to the environment continues to be a driving force behind transportation innovations. With the idea of driverless transportation on the horizon a the best approach to reducing air, noise and water pollution, there will likely be a gradual reduction in the number of individual owned vehicles on the road by the 2030's. For even more environment impact, these future vehicles should run on electricity produced by either wind or hydro power option are still under investigation and experimentation. No matter when these innovations come about, one thing is for certain: we are living in exiting times of world of transportation.

-Ramyia Nagishetty

CHANGE FOR A CHANGE FOR A CHANGE

Change in climate is nothing sort of a new topic to almost everyone. In a history of about 6,50,000 years, the change in the earth's climate has been caused by small minute variations in the earth's orbit that change the amount of solar energy our planet receives. But now it is terrifyingly significant because the cause, researched and agreed by climate scientists, is 95% human activities since the mid-20th century and the rate is horrifying.

THE BIG BLUE BALL



There has been an alarming rise in global temperature of 2.0 degrees Fahrenheit (1.1 degrees Celsius). In the late 19th century the most significant cause for rise in global temperature is carbon dioxide and other harmful HUMAN-made emissions. In the past 35 years there has

been significant increase in the temperature with 16 of the 17 warmest years on record occurring since 2001.

HEATING WATERS

The oceans have absorbed the increased heat in the atmosphere and the top 700 metres (about 2300 feet) of it shows an increase of 0.302 degrees Fahrenheit since 1969.

MELTING CREAMLESS ICE



Significantly the Antarctic and Greenland ice sheets have been increasingly melting away into the ocean. NASA's data shows that Greenland has been losing 150 to 250 cubic kilometres (36 to 60 cubic miles) of ice per year from 2002 to 2006, while the former has been at it for 152 cubic kilometres (36 cubic miles) between 2002 to 2005.

STRIPPIN' MOUNTAINS

It has been revealed by NASA's satellite observations that the amount of spring snow cover in the Northern hemisphere of the planet has decreased over the past five decades and that the snow is melting away rapidly giving us deadly peeks of the naked peaks.

SWIMMIN' AWAY



In the last century, the global sea level has risen about 8 inches (which will possibly rise further and submerge some islands in the coming year of 2018). The rate of increase in the sea level in the last 2 decades is double that of the whole of the last century which is highly alarming and only goes to show that we have not been going the right way.

OCEAN ACIDIFICATION



It's a real thing. It's salty (that's basic Chemistry) but since the beginning of the Industrial Revolution, the acidity of the surface of ocean waters has increased about 30%. This is, in the most possible and probable, the result of human activities. It is mainly due to the carbon dioxide emissions into the atmosphere and the ocean absorbing it from the atmosphere with contact. The amount of carbon dioxide absorbed by the upper layer of the oceans is increasing by about 2 billion tons per year.

RESPONSE BY NASA AND OTHER GLOBAL ORGANIZATIONS: MITIGATION AND ADAPTATION.

Mitigation is the process of reducing climate change, reducing the flow of heat and trapping greenhouse

gases from getting dispersed into the atmosphere. It reduces sources of harmful gases and enhances the 'sinks' that accumulate and store these gases. The goal of mitigation is to avoid significant human inference with the climate system and "stabilize greenhouse gas levels in a timeframe sufficient to allow ecosystems to adapt naturally to climate change to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner."

Adaptation is basically adapting to life in a way which reduces the harm to the environment. It involves adjusting to actual or expected future climate. The goal of adaptation is to reduce our bad activities which contribute to the harmful change in climate. It also encompasses making the most of any potential beneficial opportunities associated with climate change.

THE OLD SAVING FORESTS WORKS WELL TOO. TREES STAND FOR US, ITS TIME WE STAND FOR THEM. #STANDFORTREES

- Ruda Kh.

PRODUCING ELECTRICITY FROM OCEAN CURRENT



Tidal power is an ocean based technology with the high potential of providing us with clean and free energy for the future. Tidal power involves taking advantage of kinetic energy stored in the movement of incoming and outgoing tides, as well as the daily differences between the high tide and the low tide at a given location. One of the oldest ways used to harness tidal power for the generation of electricity involves building a dam across a suitable bay or estuary that has large differences in the elevation between high and low tide. Today there are many tidal power projects around the world using tidal barrages

and dams etc for small scale electricity generation within the shallow and deeper water around different coastal areas. There are approximately 20 locations on earth where power can be generated from tides and India is one of them. In a bid to curb the country's carbon emission levels, India will experiment with generating power from tidal waves. In 2016, there was news that the government will tie up Israeli firm to set up tidal power plants in Goa. If the operation is successful India will be the only fifth country in the world which to have operational tidal power plant.

-Akshita Suvarna

THE FADING AWAY WILDLIFE

The wildlife is one of the many things that we ignore today. It is thrown behind and practically no one is interested in discussing about wildlife and preserving it, though there are a few good souls here and there. Today people are so busy in building up their modern living that they are forgetting the fact that the wildlife is at danger and is fading away gradually. Many of the rare plants, animals, birds and insects have entered the list of endangered and extinct species and can be seen only in pictures anymore. Shortly the animals that we see today would come to this stage if we go on exploiting our fading away wildlife. Wildlife is found in different areas viz deserts, rain forests, plains etc. It refers to animals which are untouched by the human beings but most of the wildlife is exploited by the most "Intellectual Species" of the nature that is the human beings. As stated earlier there are a

group of people who worry about the future of the planet. The sanctuaries are an important means through which the wildlife and other vegetation are preserved. It has protected many animals, birds, insects and plants which are at the brink of extinction. There are many sanctuaries that protect different kinds of plants and animals in India and abroad. The sanctuaries are different from the zoos as they don't cage the animals but they are left into the wild with a huge

boundary that limits these wilds. There are many animals and plants which have been preserved so far because of the sanctuaries. Some of the important sanctuaries of India are Gir Wildlife Sanctuary in Gujarat, Kaziranga Wildlife Sanctuary in Assam, Corbett National Park in Uttarakhand, Bandipur National Park in Karnataka and the others. These play an important role in preserving the ecosystem of our planet.

-Sonia Sali



TOP MOVEMENTS WHICH SUPPORTED ENVIRONMENT

Chipko movement, 1973



The 1980s saw the debate on environment move from just deforestation to the larger issues of depletion of natural resources. Chipko movement in the Garhwal Himalayas, shoved aside urban armchair naturalists. Led by Chandni Prasad Bhatt and Sunderlal Bahuguna, it was a people's revolt against mindless deforestation and they did it simply by hugging trees when the woodmen came to axe them.

The Silent Valley Project, 1978

The Silent Valley hydroelectric project was to dam the Kunthipuzha River. It was a battlefield of personal agendas, between the then prime minister Morarji Desai, the Kerala government and

the environmentalists. The Silent Valley hydroelectric project was to dam the Kunthipuzha River, submerging the entire biosphere reserve and destroying its four-million-year-old rainforests.

In 1980, the M.G.K. Menon Committee set up to review the project, came out with a recommendation to scrap it. With 40 per cent of its so-called surplus power being supplied to other parts and many villages of Kerala waiting to be electrified, this grassroots movement became the bedrock of Indian environmental activism.

Jungle Bachao Andolan, 1980s

Jungle Bachao Andolan, that began in Bihar and later spread to states like Jharkhand and Orissa. The tribals of Singhbhum district of Bihar bubbled up a protest when the government decided to replace the natural sal forests with highly-priced teak, a move that was termed "a greed game, political populism".

Navdanya Movement, 1982

Whether it's about empowering women or anti-globalisation

campaigns, environmental activist Vandana Shiva has always had an upper hand in her fights against the authorities. Her ecofeminist movement reinstated a farming system centred on engaging women, changing the current system. She founded Navdanya in 1982, an organisation promoting biodiversity conservation and organic farming. The organisation has not only helped create markets for farmers, but also promoted quality food for consumers, connecting the seed to the cooked food.

Development Alternatives, 1983

Labelled The Green Doer, Ashok Khosla empowered people by creating jobs. Through Development Alternatives, an NGO that he found in 1983, he began work towards financial, social and environmental sustainability at the grassroots level. Over the years, his 15 environmentally-sound and commercially-viable technologies have generated more than three lakh jobs across India.

Narmada Bachao Andolan, 1985



Medha Patkar has been the important activist through her fasting and strikes.

Narmada Bachao Andolan announced the arrival of the India Greens, protesting against destructive development.

One of the largest and most successful environmental campaigns, Narmada Bachao Andolan began with a wide developmental agenda, questioning the very rationale of large dam projects in India.

Tarun Bharat Sangh, 1985 In Alwar's Hamirpur village,

Rajinder Singh, founder of Tarun Bharat Sangh and winner of the 2001 Ramon Magsaysay Award. He brought water to about 850 parched villages in Rajasthan and motivated villagers to harvest rainwater. He advocated small ponds and check dams but did not oppose big dams or canal networks blindly.

Saving the Western Ghats, 1988

Home to sanctuaries like Bandipur and Nagarhole, Western Ghats, a biological treasure trove, was struck by an epidemic—deforestation in the 1980s. "The Union Government's Forest Department estimates that within the last three decades, 4.5 million hectares of forests or an area the size of Tamil Nadu has vanished in March 1982. The Kailash Malhotra led Save the Western Ghats march, a 100-day padayatra across the hills, succeeded in imparting the message of environmental degradation and human rights.

Appiko movement

In 1983 people of Uttara Kannada, Shivamoga district of Karnataka came together to strike against felling and commercialization of natural forest. It was inspired by Chipko movement. The locals embraced the trees which were to be cut. Panduranga Hegde is one of the important leaders of this movement. Various techniques like marching, slide shows, folk dances and street plays were used to create awareness.

-Varun Raj

Houses on Top of Shopping Mall



A developer called Zhuzhou Jiutian Real Estate, from Zhuzhou in China, Hunan province's second largest city, decided to bring a bit of suburban living style into the smoggy city life.

This opens a door for everyone who would like to enjoy the life of suburban neighborhoods, with greenery and yards, but still has professional or other needs to live in the city centre, or simply likes

the perks of vivid social life and loads of amenities that a big city offers.

The developer built four villas on the roof of a five-story shopping mall in one of the fastest growing cities in China.

All four of them are surrounded by large green spaces that offer the opportunity to create some truly wonderful scenery in the middle of the city.

The entire project is not new. Beijing passed a law that requires any building that has been built in the last 20 years, that has fewer than 12 floors and less than 45 meters of height to have live vegetation on their rooftops. Although this is the law only in Beijing, for the time being, many other cities have decided to join in on the action.

-Varun Raj

Multicolored Canopy Composed of 1,500 Recycled Bottles



Garth Britzman is a talented designer who decided to create a beautiful canopy using 1,500 recycled soda bottles.

Dubbed Pop Culture, the Nebraska-based work features plastic bottles that hang from cord of various lengths. Each bottled has been filled with water. The latter was colored differently for every bottle.

Just like most of artworks make of recycled materials, this one was made with the

goal of making people aware that it is necessary to recycle the goods we use everyday.

Together with a team from the University of Nebraska students, Britzman spent 200 hours on the project that was funded by Fulbright Canada and the University College of Architecture.

The canopy not only looks very nice with different bright colors catching attention, but is also practical.

-Varun Raj