

EduFOCUS



Special Issue for Women's Day 2022 | Private Circulation Only



ZERO OUT CARBON!

TUE 8TH MARCH, 2022 · 4 TO 6 PM

VENUE : ST ANDREW'S CONFERENCE HALL BANDRA



Andean Network of Dynamic and Inspired Educators (ANDIE) and Grand Academic Portal (GAP) are proud to present **ZOC 2070 Zero Out Carbon**; an evening to introduce you to the hottest topic of the century.

ZOC 2070 Zero Out Carbon is part of the **Bandra She-Link Project** which was inaugurated on 8th March 2018 by Bishop Barthol Barretto. Just as Bandra Worli SeaLink connects two parts of Mumbai, the Project aims to connect the common people to 'she-roes' from across the country who have overcome obstacles and have triumphed. It is important to raise awareness about the issues they have faced (domestic violence, gender discrimination, environmental issues, etc.) as well as embrace the spirit of these women who carry on and help others despite the odds.

We believe in the words of the well-known environmental activist, Vandana Shiva, who quotes, “We are either going to have a future where women lead the way to make peace with the Earth or we are not going to have a human future at all.” We truly propagate the same and so, on the wonderful occasion of Women's Day, we introduce you to our theme, ZOC 2070 Zero Out Carbon, which India wishes to achieve by the year 2070. We believe that a woman plays a very vital role in making changes in the household, thus affecting the community... society... country and the world at large. Today, every woman is a 'she-ro' as she leads the way towards a carbon neutral world.

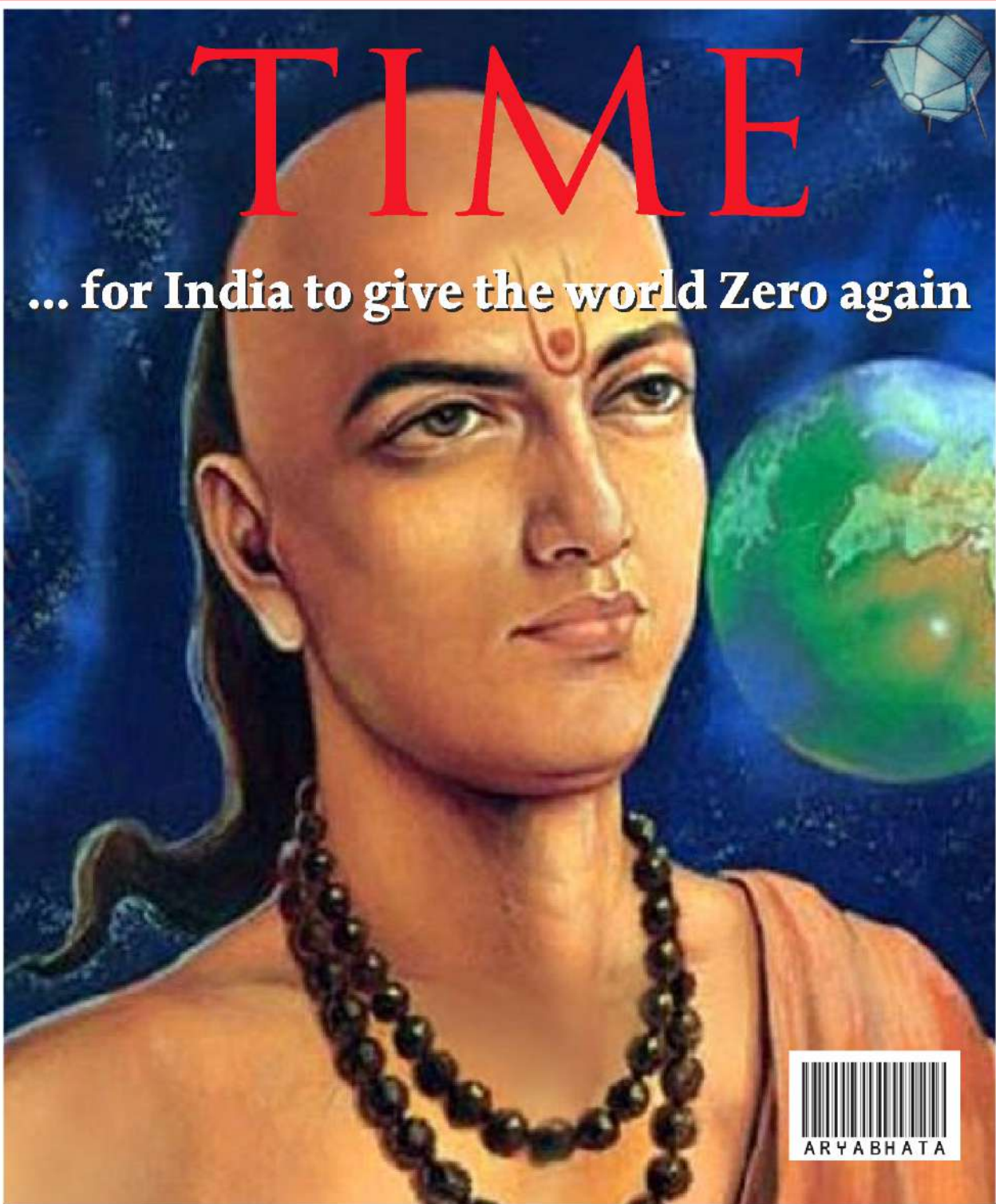
Andean Network of Dynamic and Inspired Educators (ANDIE) is the latest offering from St. Andrew's Educational Foundation. The brainchild of Rector Fr. Magi Murzello, ANDIE was set-up in June 2019 after the success story of St. Andrew's Centre for Philosophy and Performing Arts (SAPP); another brainchild of Fr. Rector. ANDIE aspires to be a network that will inspire educators to be out-of-the box thinkers – to be creative and ideate – and then share their passion and enthusiasm with their personal universe of co-educators and students. Through seminars and workshops, participants are given the space to freely exchange ideas and new developments in the field and also seek guidance on tackling the various challenges they face. But ANDIE is not all work and no play. There are events galore that refresh principals and teachers and have them raring to go back to work fully recharged. In a nutshell, ANDIE wants to ignite the passion in educators to take education to a higher level.

Grand Academic Portal (Gyan-Adhyayan-Parampara) is an initiative started by Dr. Gurudutta P. Japee and Dr. Preeti Oza to provide a supplementary and complementary element to the existing formal higher education system in India. The founders have collectively envisaged a platform to provide an innovative, free, equal, equitable, collaborative, sustainable, and all-inclusive teaching-learning-pedagogy environment to all the stakeholders of higher education in India. GAP is present in more than five Indian states and is growing in popularity in foreign countries too. GAP is a network group functioning in the field of higher education in India. It is a platform with more than a thousand direct and indirect stakeholders who are professors, faculty members, researchers, industry patrons, lawyers and other highly esteemed professionals from India and abroad. GAP is operational in many areas of higher education like research, consultancy, publication of books and journals, project management, resource mobilization, faculty development and training and mentoring. There are many sub-bodies under the umbrella of GAP like ISAC (International Society for Applied Commerce) which cater to these individual verticals.



TIME

... for India to give the world Zero again



It's time for ZERO CARBON



COP26



PM MAKES FIVE PLEDGES

- 1 India will increase its non-fossil energy capacity to 500GW by 2030
- 2 India will meet 50% of its energy requirements from renewable energy by 2030
- 3 India will reduce the total projected carbon emissions by one billion tonnes from now to 2030
- 4 By 2030, India will reduce the carbon intensity of its economy by 45% (from a previous target of 35%)
- 5 By 2070, India will achieve the target of net zero

WHAT IS NET ZERO?

Net zero refers to a balance where emissions of greenhouse gases are offset by the absorption of an equivalent amount from the atmosphere. Experts see net zero targets as a critical measure to successfully tackle climate change and its devastating consequences



PLEDGES BY TOP THREE EMITTERS

-  **CHINA:** Beijing announced no new pledges on Monday. It previously pledged net zero by 2060.
-  **UNITED STATES:** The US touted domestic legislation to spend \$555bn to boost renewable power and electric vehicles. It has pledged net zero by 2050.
-  **INDIA:** The country's economy will become carbon neutral by the year 2070

ZERO-DITORIAL

The invention of Zero, the most exquisite jewel in India's crown and its biggest ever cultural product, revolutionised the world of science. It was proudly exported to the rest of the world and its impact is seen even today in smart phones and computers (binary language). Aryabhata, credited with the invention of the 'game changer' Zero, is acknowledged as the Father of Indian mathematics as he made major contributions in the fields of trigonometry and algebra. He was also responsible for a new school of astronomy in ancient India. India's first satellite launched in 1975 *Aryabhata*, the lunar crater *Aryabhata*, and *Bacillus aryabhata*, a species of bacteria discovered in the stratosphere by ISRO scientists in 2009, are a tribute to one of ancient India's greatest mathematicians and astronomers.

However, one wonders – how did the concept of Zero escape the genius minds of Archimedes and Apollonius? This is best understood by listening to the fable-ous story about Alexander the Great's visit to India shared by the acclaimed mythologist, Devdutt Pattanaik, in his TED talk. The unbeaten young conqueror, Alexander the Great, apparently encountered a yogi, whom he referred to as a gymnosophist (naked wise man), sitting on a rock in deep meditation. Alexander asked, “What are you doing?” The yogi replied, “I'm experiencing nothingness. What are you doing?” Alexander proudly said, “I am conquering the world.” Both men laughed because each thought the other was a fool. The yogi must have thought, “What a waste of effort to conquer the world!” On the other hand, Alexander must have brushed off the yogi as a time-waster sitting around doing nothing. The world may applaud Alexander the G.O.A.T. (Greatest of All Time like footballer Lionel Messi) but, for India, he is a goat who did not understand the philosophy of emptiness or *shunyata* which fuelled the invention of Zero (*Shunya* in Sanskrit).

On 1 November 2021, modern India made a bold pledge at COP26 in Glasgow – to give the world another diamond from her crown... Zero Carbon! A very ambitious 2070 target for India because we are the world's third-biggest emitter of greenhouse gases. While India prepares the Zero Carbon roadmap of downward trajectories, it is the duty of every citizen to participate in the decarbonisation journey – from *shunya* India to *shudh* India. On this Quit Carbon Emission pathway of collective global interest, each of us has to be conscious of our carbon footprint. Our schools must be at the heart of this Zero Carbon transformation because schools spark and galvanise community change. They are well positioned to harness the positive and resilient energies of young minds and keep them focussed on the Earth's health each time a decision must be taken. In fact, young people have been the driving force of climate action around the world as they must safeguard their future.

Team EduFOCUS invites all schools to join hands in educating and empowering our students to secure a Zero Carbon India. St. Andrew High School, Bandra has become the first school in India to kickstart a decarbonisation project – Zero Out Carbon through the fifth edition of the 'Yeh-lo Santa' campaign!

His Eminence, in his message, has highlighted another reason why Mumbaikars have a “particular responsibility” towards becoming Zero Carbon schools. Mumbai witnesses a bleak future... flooding and rising sea levels. Time is running out and we have to get our institutions involved in the Mumbai Climate Action Plan (MCAP). Be inspired and see amaz(ero)ing things happen through the Zero Out Carbon campaign.

Jai Zero! Proud to be an Indian!



*Fr. Magi Murzello,
Member of Senate,
University of Mumbai, at
the Convocation
Ceremony on
27 December 2021.*



Speak the Zero Out Carbon Language

Here's a guide to some Climate Change related lingo



Abrupt change

Definition: Abrupt climate change refers to a large-scale change in the climate system that takes place over a few decades or less, persists for at least a few decades, causing substantial disruptions in human & natural systems.

Translation: A change in climate that happens faster than it normally would.

Example: Increase in wildfires, coral reefs dying due to warming of oceans.

Adaptation

Definition: Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Translation: Making changes to live with the impacts of climate change.

Example: Planting trees to help people stay cooler or building sea walls to protect against floods.

Carbon neutrality or Net zero CO2 emissions

Definition: Carbon neutrality is achieved when anthropogenic CO2 emissions are balanced globally by anthropogenic carbon dioxide removals over a specified period.

Translation: Adding no net carbon dioxide into the air.

Includes using both "mitigation" & "carbon dioxide removal" to avoid a serious climate crisis.

Carbon dioxide removal (CDR)

Definition: It refers to processes that remove CO2 from the atmosphere by either increasing biological or geochemical sinks of CO2 or using chemical processes to directly bind CO2.

Translation: Taking carbon dioxide out of the air.

Example: Planting trees & restoring grasslands.

Mitigation

Definition: Mitigation (of climate change): a human intervention to reduce emissions or enhance the sinks of greenhouse gases.

Translation: To stop climate change from getting worse.

Example: Using fossil fuels more efficiently or switching to solar energy/wind power.

Sustainable development

Definition: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs and balances social, economic and environmental concerns.

Translation: Living in a way that is good for people alive today and for people in the future.

Tipping point

Definition: For the climate system, it refers to a critical threshold when global or regional climate changes from one stable state to another stable state.

Translation: When it is too late to stop the effects of climate change.

Example: Collapse of the West Antarctic ice sheet.

Unprecedented transition

Definition (Transition): The process of changing from one state or condition to another in a given period of time. It can be in individuals, regions or nations, and can be based on incremental or transformational change.

Translation: Making big changes in a way that has not been seen before.

Example: Quickly shifting the world to renewable energy.



Oswald Cardinal Gracias

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Chairman's Message

Then God looked over all he had made, and he saw that it was very good! ... (Gen. 1:31)

I am delighted to learn that Archdiocesan Board of Education (ABE) newsletter, **EduFOCUS**, post COP26, is focussing on "Zero Carbon Schools" in the January issue. Becoming a zero-carbon school means that the use of energy involved in the running of the school does not cause carbon emission. Every individual, every institution and every community must be involved in the protection of the environment. Educational institutions have a particular responsibility in this because of their capability to help students imbibe values that will accompany them for life. The editorial team has been choosing topical and relevant themes. Care for creation is a vital issue that needs the attention of all. We, in Mumbai, have a particular responsibility because, if we do not act fast, our city faces the threat of sinking under water in the not-too-distant future.

Pope Francis led dozens of religious leaders on the feast of St. Francis of Assisi on 4 October 2021 in making an appeal to all people of good will to protect the environment, warning that "Future generations will never forgive us if we miss the opportunity to protect our common home."

I congratulate Fr. Magi Murzello, Editor, and his dedicated editorial team for choosing this very appropriate theme. I wish you all God's blessings.

My hearty congratulations to one and all for this unique initiative!

✠ Oswald Cardinal Gracias
Archbishop of Bombay &

President, Catholic Bishops' Conference of India

3 February 2022



**Bishop
Allwyn D'Silva**

AUXILIARY BISHOP, ARCHDIOCESE OF BOMBAY

"Blessed are those who protect and care for our common home"

Message

Waste segregation and management, recycling, renewable energy use, rainwater harvesting, water and energy efficient appliances, sewage treatment and reuse, native trees and gardens, local and seasonal food, public transport and carpooling, avoiding single-use items - by now most of us are familiar with what we need to do to reduce our carbon footprint and tread lightly on the earth. Enough experts, correct information and pathways for schools to become carbon neutral are available.

Rather, what we need, as Pope Francis tells us, is an ecological conversion that enables us to move past our mental barriers and limitations and live harmoniously while renewing and healing the world, both as individuals and as a community. Without this ecological conversion, we risk not doing enough to avert a planetary crisis - at present our collective global actions to avert catastrophic climate change in this century are inadequate; and commitments and pledges to reduce emissions must be actualised to really make a difference in the global warming trajectory.

What better place to achieve, undergo and demonstrate ecological conversion than our schools? Schools are the loci for transformation, where students understand values, relationships, rights and duties just as much as they learn concepts and subjects. Many of our schools already unearth and impart ecological values, and the possibilities are endless: a Math class doubles as a lesson on economic inequalities and why we have to share, language classes deepen appreciation for the natural world, history shows how important adequate resources are for a stable civilisation, and so on.

In a carbon neutral school, these ecological values are brought to life right from the crucial formative years. A student who routinely disposes waste in segregated bins and gleefully observes compost forming in the campus will earnestly replicate the set-up in society. Children who routinely switch off appliances when not in use and learn under natural lights and well-ventilated spaces are healthier, more tolerant to weather changes and less likely utilise electricity-guzzling air conditioners. Those who ride the school van or bus or cycle together with friends to school are more likely to adapt to public transport and campaign for bicycle spaces in the city. Children who play under trees are keenly aware of the loss of birdsong in sterilised apartments, and are motivated to act against biodiversity loss. Students who are constantly encouraged to find alternatives to paper, plastic and polystyrene for school projects are getting trained in lateral thinking and for exercising their creativity in solving ecological challenges as adults. Ecological practices become the norm, as it ought to be.

As adults, we are guilty of 'stealing' from our children through disproportionate resource use, leaving the next generation an increasingly unequal, chaotic and disordered future. By undergoing and imparting

ecological conversation, we begin to restore right relationships with God, each other and nature.

We may find it difficult to bring about a change because of the challenges brought about by the COVID-19 pandemic, but not committing to renewing the earth is tantamount to condemning our children to abject misery as adults who will spend their lives in a constant struggle for food, water and shelter from climate disasters. The world is much larger than our present suffering, selfishness, greed, pettiness and short-sightedness. Through ecological conversion brought about in our carbon-neutral schools, may we not let our children fall to these fallacies.



✠ **Bishop Allwyn D'Silva**

Bishop In-charge of the Archdiocesan Office for Environment
Auxiliary Bishop of Bombay

21 January 2022

Bishop Allwyn D'Silva is an Auxiliary Bishop of the Archdiocese of Bombay since 2017 and is in-charge of its Social Apostolate. He has taught Human Rights, Social Realities, Conflict Transformation and Ecology at the diocesan seminary for nearly 40 years, besides publishing and presenting numerous papers on these topics. His extensive hands-on experience in organising and empowering slum people in Mumbai resulted in the establishment of community centres throughout the Archdiocese. Bishop Allwyn was appointed the Chairperson of the Commission of Ecology of the Conference of Catholic Bishops of India in 2019, and among other honorary posts, also served as the Executive Secretary of the Office of Human Development and the Climate Change Desk of the Federation of Asian Bishops' Conferences. He has been recognised and awarded for his promotion of human rights, social development and universal harmony, and has a post-graduate degree in Political Science from the University of Bombay.



**“It is urgent
to develop policies
to reduce emissions
of carbon dioxide
and highly
polluting gases”**

Pope Francis





Secretary's Message

We often hear this well-known quote by Mahatma Gandhi – “Be the change you want to see in the world.”

People want a change: in our neighbourhood, in our society, in our world. To bring about this change, we must change ourselves. 'Transformation is a goal of education.' Therefore, this transformation must begin with ourselves.

Today, all over the world, the climate change movement to protect our Mother Earth is spreading. People are talking about zero carbon emissions. My first thought was – it is not meant for us. The big business houses, industries and the government should take care of this.

We know we should reuse certain things, switch off lights and gadgets when not in use, use public transport, plant trees, etc.... which most of us do. We are encouraged to do certain other things which are good for Planet Earth. Let me express my opinion on the same:

1. **Use solar energy in our schools:** Well-wishers come to our institutions and offer us government subsidies if we install solar panels on our school terraces. The electricity generated would be used in the school and any surplus would be bought by the electricity company. I request these well-wishers to rent out our terraces for the same: pay us a monthly rental, and let the electricity department install the solar panels and take all the electricity generated. But no one is ready to take up this suggestion. In the long run, the schools lose money – solar panels stop working, maintenance becomes expensive, and the panels need to be replaced. Why should the school spend money on these projects instead of the Government?
2. **Use of electric transport:** We are aware of air-conditioned buses in Mumbai. It is a very good project as it reduces pollution. But, because of 'no conductor policy' these buses run empty. Passengers wait at the bus stop but drivers do not allow them to enter the buses. Therefore, fuel is wasted as these buses run empty. It would be better to let passengers travel free rather than wasting precious fuel like diesel and petrol which are non-renewable sources of energy.
3. **Plant more trees:** Every year, students request their principal to permit them to plant trees on their playground. I would tell them to plant only flowering shrubs. If we plant trees that grow very big, in a few years, we shall end up with a jungle in place of our playground. The periphery of most school compounds anyway comprises sufficient big trees.

4. **Fly Less:** Most Indians, out of habit, only travel when necessary. In the villages, the poor walk many kilometres just to save Rs. 5. They do not travel for pleasure or picnics. Most migrate to the big cities or even go abroad to work else their families back home could starve. While we are being told to reduce flying, my request to our Indian brethren is: Please take that flight. You need to look after your families.
5. **Have fewer children:** Even though this is the norm now, I hope we Catholics will not forget church teaching and always maintain our respect for life especially for the unborn. If we do not, one day, the earth may be carbon neutral as there will be no life on it.

There may be many other points that could be made but I will stop here. The common man has a limited awareness and understanding of these terms – climate change, carbon footprint, net-zero carbon emissions, carbon neutrality. While we are aware that industrialisation is causing climate change, we still need to take responsibility to protect our Mother Earth. Let us begin early by educating children in our schools so that future generations may reap the benefits.

Fr. Dennis Gonsalves
Secretary, Archdiocesan Board of Education.



Becoming Carbon Neutral Schools



Carbon neutrality has become a major buzzword in society today. From global conferences called for by the United Nations, to local meetings of business houses and civic bodies, carbon neutrality has become the trendy topic of discussion. But what exactly is carbon neutrality? Is it really achievable? Could our schools become carbon neutral? These are not just questions that need answers, these are decisions that we need to make in order to ensure a safe and sustainable future for ourselves.

Carbon neutrality is defined as reaching a balance between emitting carbon and absorbing carbon from the atmosphere. Or again, carbon neutrality is described as arriving at net zero emissions, as a result of the balance between carbon emitted and carbon absorbed.

Returning to the question I posed earlier, would it be possible for us to have carbon neutral schools? Well, while this would definitely be challenging, it is certainly not impossible. With the right mix of policies and practices, it would be possible to achieve this grand ideal.

The first step in working towards carbon neutral schools would be carrying out a '**Carbon Audit**' of the entire school. A term that we need to comprehend in this context is '**Carbon Footprint**'. A carbon footprint is the total greenhouse gases (GHG) emissions caused by an individual, event, organisation, service or product. Hence, with regard to a school, it would be the total greenhouse gases emitted by the daily running of the school, through all its activities and events.

Calculating the Carbon Footprint of the school

Fr. Savio Silveira SDB

will not only tell you the amount of GHG the institution emits annually, it will also help you understand the sources of these emissions. Typically, the largest source would be the energy consumed for the running of the school – electricity for lighting and other needs of the school, and fuel used for travel connected to the school. There are several online Carbon Footprint Calculators that are now available, which could be effectively used to get a good picture of the amount of carbon that the school is putting into the atmosphere. There are also professional agencies that can be hired to do a comprehensive and scientific carbon (energy) audit of the school.

Once you have carried out a carbon audit and have a clear understanding of the school's Carbon Footprint, the obvious next step would be to reduce this footprint. The audit process itself will throw up areas of concern and their corresponding solutions. However, let me suggest a few general practices that will help to reduce the school's carbon emissions.

Energy Efficient Products: Lighting of classrooms, offices and other spaces in the school is a major consumer of energy, and consequently a major source of carbon emissions. Hence, using energy efficient products is critical. An energy efficient product consumes less energy without affecting its final output or user comfort levels. Energy efficient lighting implies getting the required illumination level while consuming the least amount of energy. This can be achieved by replacing traditional incandescent lamps with CFL or LED lamps. The same principle needs to be applied to other products used in the school, such as computers, air conditioners, etc.

Renewable Energy: Coal burning is one of the biggest sources of carbon dioxide emissions. It is considered the most environmentally harmful fuel to burn for power generation. Hence, given the fact that 65 percent of India's electricity still comes from coal-fired thermal power plants, moving to cleaner sources of energy is absolutely important. Fortunately, we are witnessing a steady shift

towards renewable energy. Many schools in Mumbai have now installed solar power systems to meet their energy needs. This is easily one of the biggest steps towards becoming carbon neutral.

Reduce and Reuse: It's good to remember that every product we use has its own carbon footprint, i.e., the amount of carbon emitted to produce that item. The carbon footprint of each of these products adds up to the carbon footprint of the school. Hence, reducing the amount of stuff used in the school, or reusing items, obviously helps reduce the carbon footprint of the school. Cutting down on waste is an effective way of cutting down carbon emissions.

Eliminate Single-use Plastic: Single-use plastic items, such as disposable cups, spoons and drinking straws have sadly become very common today. While there is a government ban on these items, they continue to be sold and widely used. These single-use plastic items require energy to produce and to recycle. When these items are used in school, they all contribute to its carbon footprint. A complete ban on the use of all such disposable plastic items is a major step in reducing your carbon footprint.

Walking and Cycling: It's not just what happens in school, but how we get to school, that also adds to its carbon footprint. Walking and cycling are two of the most environmentally friendly ways to travel. And, not only are they good for the planet, but they are also good for your health. If walking or cycling to school is just not possible, then use the school bus or public transport. And talking about travel, the school should also be sensitive about its carbon footprint when planning picnics and other school trips. Unnecessary long travel implies huge unnecessary carbon emissions.

Well, after having taken all the above steps, and also implementing other eco-friendly practices, it is quite unlikely that you would have brought down the school's carbon emissions to zero. Hence, after carrying out a carbon audit and working on carbon reduction strategies, the final area to work on, in order to become carbon neutral, is **carbon absorption**.

Carbon absorption happens through a '**carbon sink**'. A carbon sink is anything that absorbs more carbon from the atmosphere than it releases – for example, plants, the ocean and soil. Creating a robust carbon sink, which absorbs carbon from the atmosphere, is a good way of compensating for the carbon emissions of the school.

An effective carbon sink that a school can create and sustain is a 'scattered forest' – a substantial plantation of trees in the school campus and in its neighbourhood. Besides the trees planted in the school campus itself, it is pertinent to get students, ex-students, and other supporters to plant as many trees as possible, so that a robust carbon sink is created, that absorbs significant amount of carbon from the atmosphere. If schools in the city cannot find sufficient space for plantation, it is also possible to find partners in rural areas, who could provide possibilities to carry out plantations.

Becoming a carbon neutral school is certainly an attainable objective. The political will of the management, supported by the active participation of the staff, students and parents, will definitely ensure the achievement of this goal.

And so, it's time to get going! Get down to a Carbon Audit, work on Carbon Reduction strategies, start creating a Carbon Sink... and voilà... you are well on the road to becoming a Carbon Neutral School!

Fr. Savio Silveira SDB is a passionate environmentalist and an expert in environmental education. A staunch supporter of Laudato Si', he firmly believes that "caring for our common home" should be a key global priority. In the typical Salesian manner, he focuses on getting young people involved in environmental action. Fr. Savio holds a Master's in International Cooperation & Development from the University of Pavia, Italy, which has helped him gain a global perspective on various environmental issues. He is currently Provincial, Province of St. Francis Xavier, Mumbai.



Unleashing the Creativity of Teachers to Reduce Carbon Footprint

Berges Santok

Not just a wake-up call but an assertion that education is key to climate change



Is enough being done?

Climate change is a reinforced reality. It is that tragic truth that needs dire attention on a mass scale by not just governments, politicians or bureaucrats, but by every single citizen. As soon as possible. Immediately! Movements, both domestic and international, have created a huge uproar as well as widespread attention. But at the end of the day, ask your friend or family member what their contribution to reducing climate change is (You could also pose this question to yourself!), and the most common response would be — Using different coloured bags for garbage disposal.

Would this huge global concern end with only this practice? Of course, I don't intend to trivialise the use of coloured bags at the grassroots level.

The purpose of my question is — Is this all? Is climate change an immediate action item only for those smoky industries and glass buildings. Is it only about keeping ourselves informed of our government's response in international climate sessions? Is climate change an issue only worth being pensive about? In your head, you know that the answer is a 'no'. Then why the collective pondering? It is time for action. RIGHT NOW. And, perhaps, the first hurdle that all of us could cross is ignorance.

Educationists could usher positive steps in the direction of reducing carbon footprint. The Earth has a promising future only if we collectively take a responsible step. Every day, every hour, every minute of our life.



But first, a ready reckoner for the less informed

Ask yourself if you really understand the relationship between carbon footprint and climate change. If you don't then it makes sense to read through this section and apprise yourself. If you fall on the other side of the fence then congrats! Feel free to skip this part and move to the next segment. But a little knowledge refresher would harm no one. :)

What is a carbon footprint?

The total amount of greenhouse gas emissions that any entity — a person, an organisation, an event or a product — has produced. Greenhouse gases are the gases in the atmosphere that produce the greenhouse effect. These gases contribute to global warming and climate change.

Are greenhouse gases only due to human activities?

The U.S. Energy Information Administration states that greenhouse gases keep heat in the Earth's atmosphere. These gases occur naturally, but human activity contributes immensely to greenhouse gas emissions. Your carbon footprint — or your impact on the environment — measures the greenhouse gases that you are responsible for creating through daily activities such as using electricity or driving a car.

Is an individual carbon footprint a reflection of one's lifestyle?

Yes! It measures the environmental impact your lifestyle has. For example, if you drive to work every day, your carbon footprint may be higher than the one who works from home throughout the week.

How is carbon footprint calculated?

Sum up the emissions from all your activities, right from what you eat to how much TV you watch. Carbon footprint is measured in CO₂e — carbon dioxide equivalent. In other words, you are taking any quantity or type of greenhouse gas and expressing it in the amount of CO₂ that would have the equivalent impact on climate.

How can you know your carbon footprint?

You could refer to online calculators to figure out your carbon footprint. Try the calculator by The Nature Conservancy or the US Environmental Protection Agency. You could even download the Cool The Globe app created by Prachi Shevgaonkar from Pune. Look out for her interview further in this issue.

“Why study for a future that is being taken away from us?”

Greta Thunberg

Empowering the students of 2022 or the leaders of 2052?

Circa December 2018. Greta Thunberg stunned the Conference of the Parties (COP) Climate Conference in Poland with her profound statements to the UN: “You say you love your children above all else, and yet, you're stealing their future in front of their very eyes.”



It is impressive to see a teenager then have such clarity and vocalise the truth. On the other hand, it is a matter of significant challenge for an educationist to convince bright minds like hers that all is not lost yet. But outspoken souls like hers are not willing to hear merely words of assurance. They have clearly pointed out that our posterity can only be fit to live in the world of tomorrow if we understand the criticality of minimising our carbon footprint today. This is the only way forward.

Since it is we humans who have been responsible for the emission of most greenhouse gases and their adverse effect on the environment, we should be the ones who strive to effectively reduce, if not eliminate, their carbon footprint from the planet. The need of the hour is to actively reduce and eventually work towards eliminating carbon footprint as soon as possible to preserve the sanctity of our environment and our planet.

Greta and her friends are students today. Thirty years later, they could be world leaders. They are looking up to their adults today to address this environmental crisis. Who could be better able to mould young minds like theirs with the flight of knowledge, armoury of commitment and spark of creativity than educationists?

Education is key to addressing climate change

Education is a critical agent in addressing the concern of climate change.

A research article on 'The role of climate change education on individual lifetime carbon emissions' (published in PLOS One, a peer-reviewed open access scientific journal published by the Public Library of Science) reveals that if only 16 percent of high school students in high- and middle-income countries were to receive climate change education, we could see a nearly 19 gigaton reduction of carbon dioxide by 2050.

Education could help students develop a strong personal connection to climate solutions, as well as a sense of personal agency and empowerment. Teachers can teach students the impact of global warming and ways to adapt to climate change. This knowledge would kindle the light in the air of gloom and mindless fear. The outcome would be a favourable impact on students' daily behaviours that could reduce their overall lifetime carbon footprint. Leveraging the power of education could be equally or potentially more powerful than solely increasing investments in activities that generate a lesser carbon footprint. And where else could the beginning be made than at school?

Schools and colleges must realign their way of functioning to reduce carbon footprint, right at the source. But how? Here are seven ways in which teachers could come to the forefront to tackle the concern and exemplify hope and commitment to young minds.

Teachers know it all; they can do it all

1] Develop a culture of sustainability

Teachers must enquire and discuss what climate action means to their school or college. This charter of awareness must be circulated across all departments — teaching and non-teaching — to get the fundamentals in place. For example, teachers could encourage students to brainstorm in class or outside the school with parents or friends or contacts so that students gain a wider perspective on sustainability. This source of red-hot data would give an overview of where on the scale of sustainability does every stakeholder stand. This exercise would be the starting point of reducing the carbon footprint on the campus, as well as lighting the torch for expansive activities outside the campus.

2] Craft the mission and vision for a sustainable school culture

It all begins with writing down. After every stakeholder agrees to the list of activities that spike up the carbon footprint, teachers will structure an agenda to attain a vision. This vision will be black in white, specifying the goal in the SMART format (Specific, Measurable,



Achievable, Realistic and Timely). Consequently, teachers will frame the mission to achieve this vision. This exercise is the cornerstone of credibility and seriousness of the project. It is herein that the students will seriously kickstart the project of reducing the carbon footprint. This is the beginning of undertaking a goal-based project in the real world.

3] Involve the entire school community

Teachers will involve every stakeholder in this cause. For instance, teachers could begin with mentoring sessions, making students and non-teaching staff understand how to take part in climate action. Principals and administrators would champion the teachers' vision and values for climate action. Additionally, teachers could plan and lead climate action projects at intra-school and inter-school levels.

4] Run an eco-friendlier school system

This would mean:

- Conducting sessions and lessons on developing knowledge about climate change.
- Cultivating skills to investigate possibilities for action.
- Urging every stakeholder in school to take part in low carbon footprint initiatives.
- Reinforcing expectations for low carbon footprint-friendly behaviour, such as turning off the computer when not in use.
- Suggesting changes in the school campus to reduce the school's ecological footprint.
- Teaching non-teaching staff and students to sort waste properly.
- Making energy-saving changes to the school's heating, cooling and lighting systems.
- Educating on the plantation of trees in the school garden.
- Conducting tree-plantation drives and inviting admirable personalities to be part of the initiative for larger media traction and inspiration within the student fraternity.
- Adopting and promoting sustainable ways of working. For example, reducing prints, using minimal paper, printing on both sides of the paper, using computers with higher efficiency and less energy consumption, etc.

- Establishing a trust to collect donations to support the school's low carbon footprint projects.
- Inviting experts to educate the students on mitigating climate concerns.
- Making compost trash can for non-animal-based organic matter. This compost can be put to good use in the school garden.
- Involving students in workshops where they participate in environmentally friendly projects within the school. They can learn how to monitor and report energy consumption while setting targets towards reducing the rate of energy consumption in school.
- Recycle more. Recycling is a great way to reduce the carbon footprint in schools.
- Teachers could demonstrate how to separate wastes and identify items for recycling.
- Teachers could make this entire activity interesting and engaging by video-documenting the entire process and publishing it in the school archives or on the school's social media pages.
- Conducting climate action campaigns in every quarter of the academic year, involving students. Teachers could choose a theme and urge and encourage students to present novel ideas to mitigate the concern.
- Helping students to actively design and lead



projects aimed at curbing and/ or adapting to climate change. For example, students could map and monitor local environmental challenges and design a sustainability plan that addresses the concern. This opportunity could encourage the students to tap into their entrepreneurial temperament to aid climate action.

5] Action, reflect, improve. Repeat.

Teachers will form an eco-action team that will review the school's efforts to reduce the carbon footprint on a daily level. This team will then map the results against the planned objectives to understand any gaps and close them with concrete and constructive feedback. This eco-action team would be committed to ensuring continual progress through meticulous planning, action and reflection. Teachers could have a certain percentage of this team's membership comprising students so that students learn to introspect and improve from an early age.

6] Involve the community

Teachers will encourage students to work holistically with members of society — from all walks of life — to get a comprehensive understanding of climate action. They could introduce students to the rural folk (or the adivasis) who are climate action heroes in their region. Getting the students to engage with these communities at the front line could lend a unique perspective to their efforts. This interface will present students with interesting opportunities to network with like-minded individuals, organisations and communities, and give wider exposure to the school sustainability culture efforts.

7] Inspire students to build partnerships and make new connections

Teachers will encourage students to reach out to and connect with other schools and environmental organisations, locally, domestically and internationally to learn and work together. This feeling of bonhomie will present students with novel challenges and opportunities, and put their learning on an elevated pedestal. These experiences will help

inculcate creative, critical and future thinking skills in students. Concomitantly, it will satiate their yearning to make real positive progress on a bigger plane in lowering carbon footprint. Moreover, they will represent themselves as ambassadors of climate control and represent their school as a model of climate action.

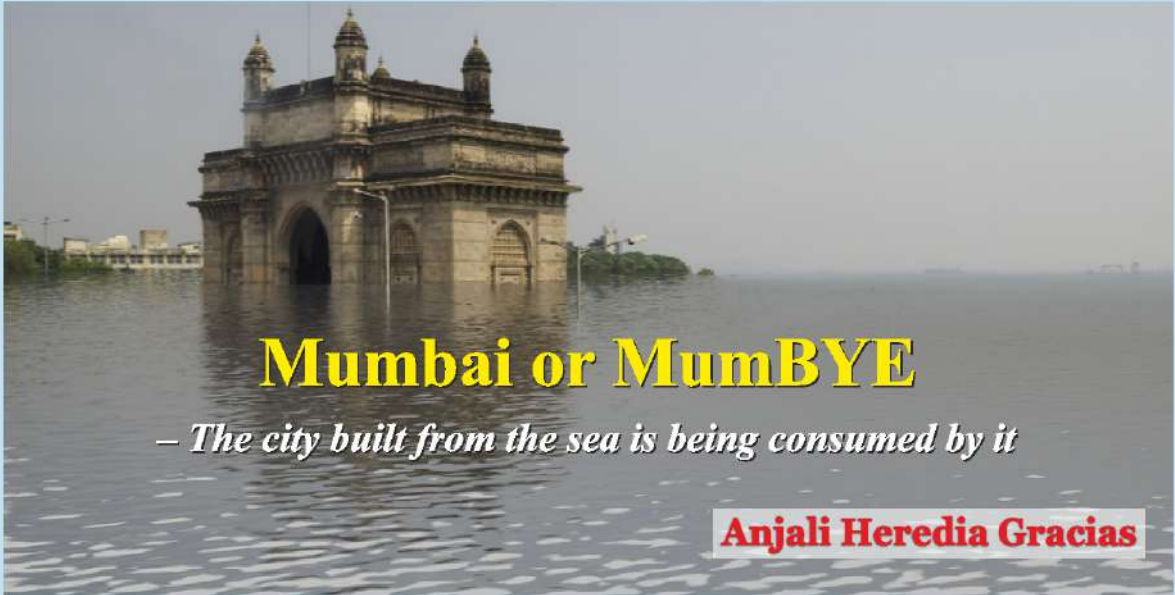
The future is climate change. In the classroom.

Unleashing the creativity of teachers to help students combat climate change through community-based climate action projects — This is what success probably looks like. Such a teacher-led initiative would go a long way in improving the overall quality of education for the 21st century. After all, the real purpose of education is to produce active, engaged citizens, and make our world a better, fairer, more sustainable place to live in.

Teacher intervention is the need of the hour. When done at a scale across the millions of school districts globally, we could be well on our way to achieving net-zero emissions by 2050 and to ensuring a better quality of life for future generations on this planet. With great responsibility comes great power to yield a change more massive than any thought in the world. And, today, perhaps no long-term concern could be as massive as lowering the carbon footprint. The survival of the human race rests upon this outcome; it rests upon the teachers.

Berges Santok loves telling stories and works as a content writer on a freelance basis. He aspires to make movies someday.





Mumbai or MumBYE

– *The city built from the sea is being consumed by it*

Anjali Heredia Gracias

Bom Baim – a collection of islands

This city, before it was a city, was a sprinkling of seven islands in the briny waters off India's western coast. In 1661, the islands changed ownership when King John IV of Portugal gifted them to King Charles II of England on his marriage to Princess Catherine of Braganza. Realising these islands were not even eighteen square miles of land and that communication from one island to another was a problem, King Charles II palmed them off to the English East India Company for a paltry sum of £10 a year. This suited the East Indian Company just fine as it was looking for a new base on the west coast of India.

These islands, named Bombay, Mazagaon, Parel, Worli, Mahim, Little Colaba (or Old Woman's Island) and Colaba, had varied topography – from low hills to tidal flats, and mangrove forests to salt pans. There were three great breaches or inlets through which the seawater gushed in during the high tide in the space between the islands. When the water receded, it left behind swamps of salty water. While it

was possible to cross over from Bombay to Mazagaon during low tides as the sea was very shallow in that area, the gap between other islands was navigated by boats.

Over the next two hundred years, the East India Company built embankments, flattened hills, and dumped the rubble into the marsh to join these seven islands. Building these embankments was no mean feat as it meant

fighting a battle against the mighty Arabian Sea to give up her land. The resultant island city is what constitutes the present South Mumbai.

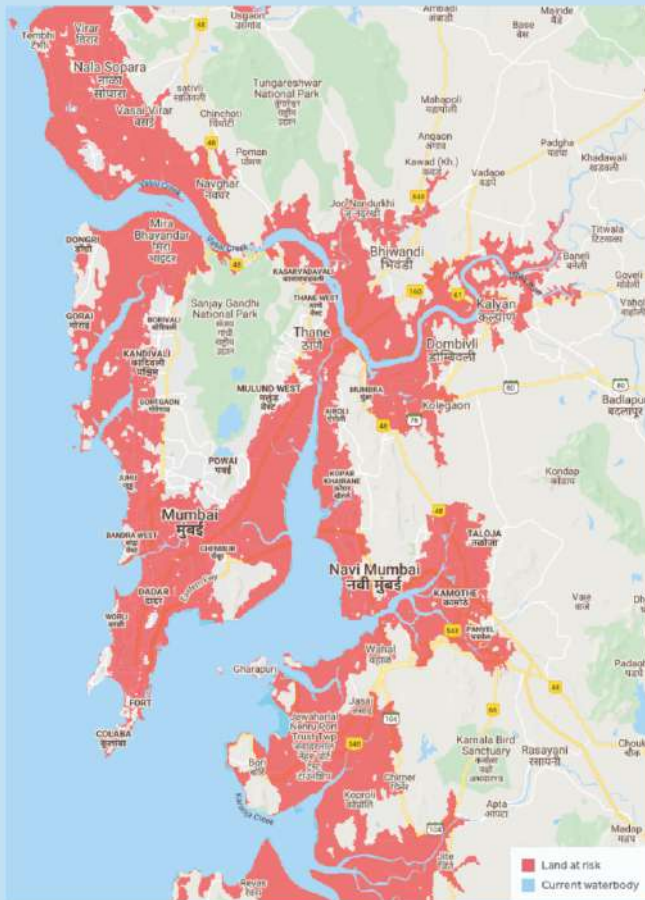


This development was not restricted to just these seven islands. Around 1760, the Portuguese gifted the Salsette taluka to the Queen of England. To accommodate the burgeoning population of the city, the eighty-four villages of this taluka were also joined together by draining inlets and reclaiming the land. Today, this area is bound by the Vashi creek on the north side and Mahim causeway on the south side. The Arabian Sea is to the west and to the east is the

boundary of Thane district. It forms the present-day Mumbai Suburban District.

Mumbai – a sinking city

As per a study conducted by the World Resource Institute (WRI) India on Mumbai's vulnerability assessment, the city faces two major climate challenges — the rise in temperature, and extreme rain events which lead to flooding.



In February 2020, a report released by McKinsey India predicted that, by 2050, Mumbai would see a twenty-five percent increase in the intensity of flash floods accompanied by a half-metre rise in the sea level. (This projected rise can be seen on a tool hosted by NASA's Sea Level Portal.) This could hit around two – three million people living within a one-kilometre radius of the coastline.

Climate scientists have warned that most of south Mumbai, including Cuffe Parade, Mantralaya, Churchgate, Nariman Point,

Umerkhadi, Mohammad Ali Road, Marine Lines, Girgaum, and Breach Candy, will face the worst of the flooding by 2050 as they are all situated on reclaimed land.

All these predictions have been corroborated by data collected by the India Meteorological Department (IMD). Since 2007, the city has seen a constant rise in temperature mainly due to concretization, lack of green cover and housing density. The average rise in temperature is up by one degree Celsius in these fourteen years.

Meanwhile, rainfall trends for the past ten years show an increase in extreme-rainfall events, resulting in frequent water logging and flooding.

The data collected from BMC departments, state and regional authorities and other agencies shows that, in 2019, seventy-one percent of Mumbai's greenhouse gas emission came from the energy sector which is mainly based on coal. At least twenty-four percent is from transport, and the remaining five percent from solid waste management.

The need for Mumbai Climate Action Plan (MCAP)

Amid warnings of climate change leading to extreme weather events in the city, on 27 August 2021, Iqbal Singh Chahal, Commissioner of Brihanmumbai Municipal Corporation (BMC), launched the Mumbai Climate Action Plan and its website in the presence of Aditya Thackeray, Minister for Environment and Tourism, as well as other dignitaries. He warned that close to seventy percent of south Mumbai would be submerged by 2050 due to rising sea levels on account of climate change. He said that nature had been giving warnings but if people do not “wake up” then the situation would turn “dangerous”. Chahal pointed out that in the past fifteen months or so, Mumbai and the surrounding areas were lashed by three cyclones, leading to waterlogging in many areas like Marine Drive, Girgaum, etc. He warned that not only would the next generation suffer from climate change but also the current one.



He said that Mumbai is the first city in South Asia to be preparing its climate action plan and acting on it. “Earlier, we used to hear about climate change events like melting glaciers, but not directly affecting us. But now it has come to our doorstep,” he added.

In December 2020, Mumbai became the sixth Indian city to join the C40 network – a network of nearly one hundred world-leading cities collaborating to deliver the urgent action needed right now to confront climate change. Following which the city's civic body began developing the Mumbai Climate Action Plan (MCAP) using the C40-developed City Inventory Reporting and Information System (CIRIS).

The MCAP looks at climate resilience with mitigation and adaptation strategies by focusing on six areas — sustainable waste management, urban greening and biodiversity, urban flooding and water resource management, building energy efficiency, air quality, and sustainable mobility.

The plan for Mumbai will be carried out in four stages. Stages one and two will focus on establishing a metric for existing vulnerabilities within the city, along with collecting demographic and tree cover data used for post analysis. Steps three and four will focus on building a climate profile for verticals like air pollution, water resources, urban flooding, urban greenery, energy efficiency in municipal buildings, transport and mobility, and waste management.

For the next couple of months, BMC and WRI India will conduct a series of stakeholder

consultations to seek feedback and recommendations from organisations and sector experts for the six key areas.

Accommodations in the Budget

In his Budget speech on 3 February 2022, Mumbai Municipal Commissioner Iqbal Singh Chahal said that the BMC would give a major push to the Climate Action Plan.

“Two new schemes have been launched for the health and well-being of every Mumbaikar. As a

member of C40, climate change mitigation is what Mumbai is looking at. How to achieve carbon neutral scenario is another aspect of it. In 2022-23, we will give a major push to the climate action plan. Total BEST fleet should be increased to 4000 buses and all will be EV (electric vehicles),” he said.

“The BMC is acutely aware of its environment responsibilities and hence it will continue work on mitigation, adaptation, carbon sequestration, and carbon neutrality to avoid getting closer to tipping point through unprecedented transition and abrupt changes. We will focus on carbon neutrality in various sectors. As a start, BMC has signed a power purchase agreement for Middle Vaitarna mixed power of hydro and solar for 100 megawatts,” Chahal said in his Budget speech.

Conclusion

While the entire concept of trying to save a sinking city may sound overwhelming, one needs to bear in mind that this is a long-term goal. It is not a sprint but a well-paced marathon that will get us gains in the long run. The BMC and various state authorities are doing their bit to reduce carbon emissions. Let us, as proud Mumbaikars, do our bit to save this maximum city.

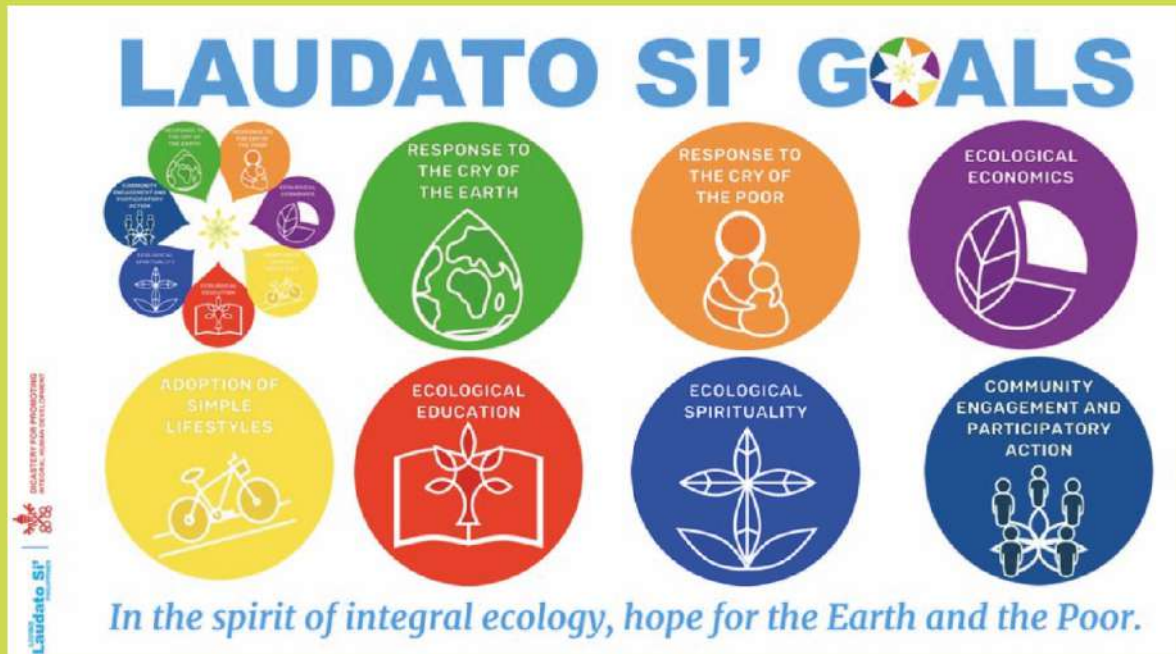
Source: Various internet sites

Scan the QR code to see the projected rise in Mumbai's sea level.



Laudato Si' – Care for Creation

Nirmala Carvalho



As humanity faces its greatest existential crisis, Pope Francis is transforming the way Catholics think of their place in Creation.

Laudato Si', Pope Francis' environmental encyclical, begins by acknowledging that "Many things have to change course, but it is we human beings above all who need to change." The path to change comes through education and spirituality. "We lack an awareness of our common origin, of our mutual belonging, and of a future to be shared with everyone," he asserts. "This basic awareness would enable the development of new convictions, attitudes and forms of life."

The problem is that compulsive consumerism "leads people to believe that they are free as long as they have the supposed freedom to consume," but "obsession with a consumerist lifestyle, above all when few people are capable of maintaining it, can only lead to violence and mutual destruction."

"Yet, all is not lost," believes Francis, "Human beings, while capable of the worst, are also

capable of rising above themselves, choosing again what is good, and making a new start, despite their mental and social conditioning." But this requires our taking an honest look at ourselves and changing our lifestyle.

Environmental education is important in developing this spirituality. It should include "scientific information, consciousness raising and the prevention of environmental risks" as well as "a critique of 'myths' of a modernity grounded in a utilitarian mindset (individualism, unlimited progress, competition, consumerism, the unregulated market)."

Education must "promote a new way of thinking about human beings, life, society and our relationship with nature," says Francis. "Otherwise, the paradigm of consumerism will continue to advance with the help of the media and the highly effective workings of the market."

Environmental education must lead to a change in lifestyle, including "avoiding the use of plastic and paper, reducing water consumption, separating refuse, cooking only what can

reasonably be consumed, showing care for other living beings, using public transport or car-pooling, planting trees, turning off unnecessary lights, or any number of other practices.”

“Inner peace is closely related to care for ecology and for the common good because, lived out authentically, it is reflected in a balanced lifestyle together with a capacity for wonder which takes us to a deeper understanding of life,” explains Francis. “Nature is filled with words of love, but

devise larger strategies to halt environmental degradation and to encourage a 'culture of care' which permeates all of society.” By addressing issues like water shortages, pollution and global inequality in stark terms, Pope Francis calls for us to change our lifestyle.

As Pope Francis pointed out, “those who are suffering the most from environmental degradation are the poor, people on the margins.” We are collectively witnessing how the COVID-19 pandemic has turned the world upside down. A darker reality, however, has simultaneously emerged – one that has always lurked in the background: it is the poorest citizens of India, the ones who already face the brunt of India's massive inequalities, who have suffered the most from this pandemic's lasting effects.

Pope Francis' ground-breaking encyclical, now six years old, evoked the need for “a renewed sense of shared responsibility for our world”, adding that “each of us – whoever and wherever we may be – can play our own part in changing our collective response to the unprecedented threat of climate change and the degradation of our common home.”

EduFOCUS, through this issue, is helping school staff and students to think more critically about their role as stewards of creation, challenging our way of life and embracing a less consumer-driven lifestyle, encouraging each one to live sustainably as much as possible. Reusing our belongings, recycling, growing a garden, and using a refillable water bottle are some things students and staff can do. Our everyday choices can make a difference.



how can we listen to them amid constant noise, interminable and nerve-wracking distractions, or the cult of appearances?”

“An integral ecology is made up of simple daily gestures which break with the logic of violence, exploitation and selfishness,” but it is also civic and political and “makes itself felt in every action that seeks to build a better world.”

“Love for society and commitment to the common good are outstanding expressions of a charity which affects not only relationships between individuals but also 'macro-relationships, social, economic and political ones,” he says. This “social love moves us to

Nirmala Carvalho has been a Crux correspondent since 2004 and, in 2006, won the Communications Award from the Catholic Bishops Conference of India for “exceptional sensitivity to the Church and minority-related issues”. She holds a bachelor's degree in philosophy and a master's degree in sociology, both from the University of Mumbai.



Pope Francis Addresses COP26

Nirmala Carvalho



Around 120 world leaders, tens of thousands of delegates and hundreds of climate activists gathered in Glasgow, Scotland, for the U.N. climate conference known as COP26, held from 31 October to 12 November 2021.

Pope Francis sent a powerful message telling COP26, “Now is the time to act, urgently, courageously and responsibly.” The message was read out on his behalf at the meeting in Glasgow, Scotland on 2 November by Cardinal Pietro Parolin, head of the Holy See delegation to the 2021 United Nations Climate Change Conference.

“As the Glasgow Conference begins, all of us are aware that it has the vital task of demonstrating to the entire international community whether there really exists a political will to devote – with honesty, responsibility and courage – greater human, financial and technological resources to mitigating the negative effects of climate change and assisting the poorer and more vulnerable nations most affected by it.

At the same time, we realise that this task has to be undertaken in the midst of a pandemic that for almost two years has devastated our human family. COVID-19 has brought immense tragedies in its wake, but it has also taught us that, if we are to succeed in overcoming the pandemic, there is no alternative: all of us must

play a part in responding to this challenge. And that, as we know, calls for profound solidarity and fraternal cooperation between the world's peoples. Our post-pandemic world will necessarily be different from what it was before the pandemic. It is that world which we must now build, together, starting from the recognition of past mistakes.

Something similar could be said of our efforts to tackle the global problem of climate change. There is no alternative. We can achieve the goals set by the Paris Agreement only if we act in a coordinated and responsible way. Those goals are ambitious, and they can no longer be deferred.

Today, it is up to you to take the necessary decisions. COP26 can and must offer an effective contribution to the conscientious construction of a future in which daily actions and economic and financial investments can genuinely protect the conditions that ensure a dignified and humane life for the men and women of today and tomorrow, on a “healthy” planet. We find ourselves facing an epochal change, a cultural challenge that calls for commitment on the part of all, particularly those countries possessed of greater means.

These countries need to take a leading role in the areas of climate finance, decarbonization in the economic system and in people's lives, the promotion of a circular economy, providing support to more vulnerable countries working to

adapt to the impact of climate change and to respond to the loss and damage it has caused.”

Since his election in 2013, Pope Francis has made protection of the environment a cornerstone of his pontificate. In 2015, Pope Francis issued his landmark teaching document on climate change – *Laudato Si'*, the first encyclical to be dedicated to the environment.

Pope Francis noted that the Vatican City State was committed to achieving net-zero emissions by 2050. He recalled that he and other religious leaders signed a Joint Appeal in view of COP26 at the Vatican on 4 October 2021 appealing for countries to achieve net-zero carbon emissions as soon as possible.

Yet, what clearly emerged was a remarkable convergence on the urgent need for a change of direction, a decisive resolve to pass from the “throwaway culture” prevalent in our societies to a “culture of care” for our common home and its inhabitants, now and in the future.

“The wounds inflicted on our human family by the Covid-19 pandemic and the phenomenon of climate change are comparable to those resulting from a global conflict. Today, as in the aftermath of the Second World War, the international community as a whole needs to set as a priority the implementation of collegial, solidary and farsighted actions.

We need both hope and courage. Humanity possesses the wherewithal to effect this change, which calls for a genuine conversion, individual as well as communitarian, and a decisive will to set out on this path. It will entail the transition towards a more integral and integrating model of development, based on solidarity and on responsibility. A transition that must also take into serious consideration the effects it will have on the world of labour.

Especial care must likewise be shown for the most vulnerable peoples, in whose regard there is a growing “ecological debt” related to commercial imbalances with environmental repercussions and to the disproportionate use of the natural resources of one’s own and of other countries.

There is no denying this. The “ecological debt” raises in some ways the issue of foreign debt, the burden of which often hinders the development of

peoples. The post-pandemic world can and must restart from a consideration of all these aspects, along with the setting in place of carefully negotiated procedures for forgiving foreign debt, linked to a more sustainable and just economic restructuring aimed at meeting the climate emergency. “The developed countries ought to help pay the ecological debt by significantly limiting their consumption of non-renewable energy and by assisting poorer countries to support policies and programmes of sustainable development.” A development in which, at last, everyone can participate.

Sadly, we must acknowledge how far we remain from achieving the goals set for tackling climate change. We need to be honest: this cannot continue! Even as we were preparing for COP26, it became increasingly clear that there is no time to waste. All too many of our brothers and sisters are suffering from this climate crisis. The lives of countless people, particularly those who are most vulnerable, have experienced its increasingly frequent and devastating effects. At the same time, we have come to realise that it also involves a crisis of children’s rights and that, in the near future, environmental migrants will be more numerous than refugees from war and conflicts. Now is the time to act, urgently, courageously and responsibly. Not least, to prepare a future in which our human family will be in a position to care for itself and for the natural environment.

The young, who in recent years have strongly urged us to act, will only inherit the planet we choose to leave to them, based on the concrete choices we make today. Now is the moment for decisions that can provide them with reasons for hope and trust in the future.”



Nirmala Carvalho supports ZERO OUT CARBON

Let's Cool The Globe Together

Nalini Sorensen



I stumbled upon the name Prachi Shevgaonkar purely by chance. But I'm glad I did. If ever there were an inspirational young person, actively doing her bit towards climate change awareness – and action – at an individual level, it is Prachi.

She describes herself on her LinkedIn profile, as – 'Founder & CEO, Cool The Globe – A Citizen Led Platform for Climate Action | Media Professional with a vision to make a difference | TEDx Speaker | Climate Entrepreneur | 4M on Quora.' I was sceptical. I mean we all know about the false hats we wear on social media. But hers is scarily true.

I've interviewed her here, in particular about her role as Founder & CEO of her app Cool The Globe, and her role as a Climate Entrepreneur. Here's what she had to say...

NS: Tell me something about your childhood that would help tie in to the passionate young lady I see today.

PS: When I was in the fourth standard, my school teacher did an interesting experiment. She asked us to write a letter to our future selves, ten years hence.

She asked us to address questions like – Where would I like to be? Who would I want to be?

I wrote that letter, and I completely forgot about it. Ten years later, I happened to find it. In that letter, a young me had spoken about making an impact. Changing the world.

Reading it was a wake-up call. I was at a very decisive point in my life. I was about to opt for becoming an engineer, like the rest of my family. Instead, I enrolled into a media school which felt more like my calling. And I started looking for ways in which I could make a meaningful impact. In a way, the vision of my younger self set me on the path that I am today.

NS: What exactly does your app Cool The Globe do? Can you please explain to our readers?

PS: Cool The Globe is a free, citizen led app for climate action. It helps individuals reduce their Greenhouse Gas (GHG) emissions to a target.

When we set out to build this app, we started thinking, to achieve anything at all, what do we need? I realized that first, I needed a clear goal

CTG

in front of me, and then, it helped me achieve things if I was able to measure my progress against that goal. So, that is exactly how Cool The Globe works.

In the app, each user is given a monthly and an annual target to reduce their GHG emissions, and progress is tracked. Then, users can make savings across 100+ customisable climate actions, embedded into their day-to-day life. Most importantly, they can see the GHG emissions they avoided with each corresponding action.

Many people question the difference that one individual can make. We believe that when many people come together, our collective impact can be extraordinary. To embody that, we have a global meter on the home page of the app, which shows in real time, the collective emissions avoided.

So far, our global meter has recorded 1000+ tonnes of avoided GHG emissions.

NS: I've heard of counting steps, and sadly, I've heard of counting calories. But I haven't heard of counting my own GHG emissions. How did you hit upon this idea? And why is it important to keep track of the numbers?

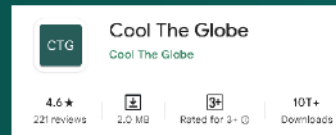
PS: Cool The Globe started as a personal quest, from a very simple question: What can I do about climate change? In the journey to answer this question, my family and I took up a simple pledge. We decided to reduce our own GHG emissions by 10% every year. So, we started researching which of our activities were leading to the most GHG emissions. Basically, we chased two questions – How can I reduce them? How can I measure them?

As you rightly said, many people these days count the calories in their food. The thinking was similar – Can we also track the emissions behind our actions? That's what we began to do. Numbers are important, because in order to change anything, we need to measure it first.

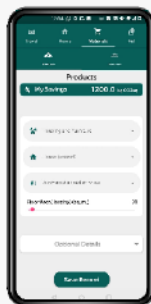
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Download Cool The Globe

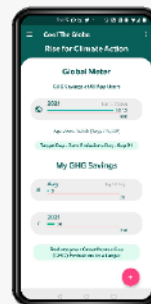
India's Fastest Growing App
for Climate Action



Set Targets



Take Action



Track Progress

When I started measuring the impact of my actions, something interesting happened. It made me happy. It felt good to know, that at least at my own level, I was doing something.

The second interesting thing was, that many of my friends and relatives took notice. People would see me take small initiatives at home and would ask if they could join too.

That's when I started thinking broader – about how I could involve global citizens on this individual quest that I had undertaken. And from this, the idea for Cool The Globe was born.

NS: So, for someone who is severely tech challenged, can you explain in simple terms what were the main steps involved in the development of your app?

PS: The first step was to conceptualize my vague idea into a concrete platform. Designing, storyboarding, mapping out the journey a user will have, drawing and ideating each screen, and brainstorming on every detail for hours on end.

The key challenge was deciding how to quantify individual actions. We considered many options, and finally zeroed on Co2e avoided GHG emissions, as a uniform metric of measuring impact.

Then it came to categorising various forms of climate actions, researching emissions factors, per capita emissions for countries, working on integrating a variety of climate actions under one platform, and simplifying them as much as possible.

Quite a lot of time was spent on the Global Meter, as we had to maintain an external database which could update on the app in near real time.



Finally, it came the actual coding, front end UI/X designing, and testing the app. 200+ students were kind enough to lend a hand in beta testing to make the platform fool proof.

NS: What are the top two biggest hurdles you face currently with your app?

PS: It was an extremely fulfilling experience to receive an overwhelming response to Cool The Globe upon the launch of our campaigns for climate action. Thousands of citizens, organisations, and leaders got in touch wanting to get involved. As a result of this grassroots, word of mouth spread, Cool The Globe turned into a citizen-led movement for climate action. So, to do justice to the well-wishers and citizen advocates who have rallied with us, our challenge is to scale up, and scale up fast. In response to support from citizens and users, there are many enhancements, exciting features, and on ground initiatives that we plan to bring to

the forefront over the next year. Rallying up the resources and the infrastructure for this, is a key challenge currently.

But, I would say this is a good challenge to have.

NS: What is the most bizarre reason you've received for rejection of your app?

PS: There was a gentleman who kept calling me, trying to convince me that climate change was not real, and that I was wasting my time and my youth working on it.

Admittedly, that was quite bizarre.

NS: Haha I saw that eye roll. That brings me to, how can we bring about a core shift in mindset about climate change? Which age group is the trickiest to convince?

PS: For the longest time, climate change seemed like this larger than life problem, beyond my control. I was hearing big words, but I couldn't see how climate change was really affecting me, or anybody around me. It was only when I met some real voices behind the catastrophic impacts of climate change, that I wanted to do something about it.

As ordinary people, we care about very simple things. We care about our food. Our homes. Our health. Our families, and the people around us. When we start talking about the big problems in the world today – problems like climate change, in the language of people, in the context of the things they care about, things they consider worth fighting for – that's when citizens can be inspired to drive change.

So the idea is to humanize climate change. To make it relatable to the common man. I feel like that's when more and more people would rise up to take action on it.

NS: How can we influence our youth about the importance of climate change and the role we all play in this? It tends to get shelved as something politicians need to put in place, not each of us individually.

PS: During this lockdown, I have been able to talk to inspiring young people from different

corners of the world. One day, a nine-year-old girl emailed me. She said that she didn't have a phone yet to use the app but she still wanted to do something. She asked me what changes she could make in her life to fight climate change.

She taught me an important lesson – Our actions matter a lot more than our words.

Whenever I interact with children in schools, I get asked the toughest questions on climate change. I am very happy to say this – I think more and more young people are already aware, knowledgeable and proactive on climate change. All we need to do is empower them, give them a platform and a voice to bring forward their thoughts and innovations.

NS: Bragging time! Have you won any awards? Has Cool The Globe received any accolades that you are particularly proud of? Tell us!

PS: Haha yes! We have received a good amount of support along the way. We received the Olive Crown Award, from the International Advertising Association, and they were kind enough to name me as the Young Green Crusader of the Year.

I had the honour of becoming the first Indian to be appointed on the advisory board of the climate leadership coalition, along with global leaders, like the former Prime Minister of Finland! And the Rotary Club conferred us with the Taru Lalvani Award for Environment Protection.

But the biggest accolade for me is the ordinary citizens who joined our mission. Through our campaigns, we were able to reach over 2 million citizens from around the world. Today, we have users from over 100 countries coming together to take action.

These awards belong to all these citizens, who have showed courage to make a difference in their day-to-day lives. They have taught me that when we come together to bring change, miracles can happen.

NS: What is the one thing you need the most to make Cool The Globe reachable to more people?

PS: The one thing that we need the most today is support from you, the reader. I have experienced first-hand the power that we hold when we take action. So hit us with your suggestions, feedback and any other way in which you could contribute to the cause. With your backing, we can realise our dream of integrating climate action in the lives of global citizens.

NS: What would be the top three easiest things for each of us to put in place, in our everyday lives, that could help us reduce our own emissions?

PS: That's a great question! The three top categories we have in the app are:

- Switching to low emission transport.
- Altering our usage of appliances.
- Reducing our usage of materials.

'Easy' would vary from person to person, but it is always great to start with what's easiest for you!

Climate action is meaningful when it aligns with other goals in our lives as well, and climate action can be consistent, when we have fun doing it. So for example, if your resolution is to become healthier, you can start cycling more instead of taking a car. If you want to save

money, you can shop less and save on materials. The most important part is to start with an action, today. And then find out the emissions you are saving by taking that action.

Then, inspire your friends to follow suit. One action has the power to influence ten other people and create a wildfire of transformation.

NS: Do you have any parting words that you want us to reflect on?

PS: The biggest lesson that I learnt through this journey is that you don't have to do anything alone. There are people who will support you, uplift you and grow with you. Cool The Globe is only the result of thousands of citizens who made it their own.

If a project I started from my dorm room can turn into a global enterprise and a movement then anything can happen.

So to other young people I want to say:

Hold on to your big dreams and the fire inside you.

And together, we will make it happen.

Cool The Globe app is available on the Android platform. The iOS version is currently under review and will launch shortly. Prachi can be contacted at prachi@cooltheglobe.org

Nalini Sorensen is an award-winning children's author, who loves spending time with children and looking at the world through the wonder of their eyes. She believes that life is too short to not laugh and seems to always attract highly humorous situations in her real life. She lives in Mumbai with her husband, two sons and dog.

Nalini has written numerous books, across various age groups, for children, and has been published by several publishers in India. She has contributed to anthologies, to children's magazines, and has written readers for schools in India. She is a TEDx speaker, and has attended and presented at numerous literary events across India.

She's on Instagram (@nalinisorensen) and on Facebook (@NaliniSorensenAuthor).





UPCYCLING

... with *Vijaya Pais*

Vanessa D'Cruz

We are a part of the environment and not apart from it. We have only one planet that we live on. The population is ever increasing and this puts a lot of strain on the existing resources, resulting in its scarcity. It is therefore unclear what future generations will find, if ever, and what life will be like for them if we exploit all the current resources. Thus, it is the need of the hour that we

find ways and means to conserve our environment. We need all to be mindful about our acts and how it effects the environment.

One such visionary who believes in sustainable living is Ms. Vijaya Pais who believes that we can reduce waste by encouraging eco-friendly and locally produced goods.

I was extremely delighted to interview this





firebrand visionary who, with her simple yet profound ways, is making an impact in the state of Goa. A Mumbai-based girl, she left the rough and tumble of city life and found her calling in the quaint town of Candolim in Goa.

Welcome Vijaya and thank you for speaking to us today.

VD: How would you describe Vijaya Pais to our audience?

VP: I've always been very sensitive towards suffering of all sentient beings. Environmentalism, conservation, animal welfare have been my areas of interest since I was a kid. It took me a while to figure out what I really wanted to do with my life, to find what really gave me happiness until I had one of those eureka moments when I realised what truly gave me happiness was not service to self but to be of service to others. I am thoroughly enjoying this journey now living and working with purpose. Though I am quite a procrastinator, I still dedicate 100% of my time and energy to the causes that I support. I run a community-centric initiative called Offbeat Goa under which are multiple initiatives

that promote sustainability like the Good Karma Treasure Shop, New Earth Gathering, Sisterhood of Goa, etc.

VD: That's great. What's special about the name Good Karma Treasure Shop?

VP: As you sow so shall you reap. That's basically what Karma is. The Good Karma Treasure Shop is an opportunity for us to sow well. It's an opportunity for us to share what we have in excess with others, to de-clutter our spaces, to consume second-hand – thereby reducing unnecessary waste that burdens our planet, part of the proceeds raised at the Good Karma Treasure Shop goes towards empowering a different local NGO/ charity every month. Karma is cyclical as is what we do at the shop.



VD: That surely makes sense. But how did you chance about that idea?

VP: The Good Karma Treasure Shop started out as a pop-up back in 2016. The idea germinated when I was clearing out my cupboard. I had a load of fabulous clothes to give away, most of which still had tags on. I had no idea to whom to give them. The orphanage or old age homes would certainly have no use for them. I figured it made sense to sell these clothes to people who would actually want them and give the money to the orphanage instead. That's how the first pop-up happened. Lots of other friends donated clothes to the pop-up and it all turned out to be a huge hit. I continued to do pop-ups every few months. I would put a post out on my Offbeat Goa platforms and the donations would come in droves. I had amazing people who would volunteer to help out and many people offered space at different locations to host the pop-ups. Hundreds of people would come in to shop. I decided to take it online in October of 2020 with the website www.goodkarmatreasureshop.com

Taking it online was a whole new learning experience but I soon realised that we also needed a physical space. That's when I launched India's first physical thrift store at 'Gratitude', a lovely vegan café in Anjuna, Goa in December 2020. The Good Karma Treasure Shop now has a baby and kids' section too at the Assagao Birthing Centre. We are looking to expand to other areas in Goa and to wherever else we are led to expand. The Good Karma Treasure Shop isn't just about shopping. It's meant to break a mindset, it's meant to make you think, it's helping you be part of the solution while also giving back.

VD: What was your motto behind this venture?

VP: We aim to promote sustainable shopping through the use of second-hand/ pre-loved. Why? Because we humans have gone totally over-board with our rampant consumerism. People have gotten used to shopping – not out of necessity but more for retail therapy, a quick dopamine hit. Shopping has become even more easily accessible thanks to the advent of the internet. Fast fashion has become the norm. In

all this excitement, we fail to consider from where these clothes come and we don't think about where they go once we are done with them. Well! Consumers throw away 60% of their clothes in the first year. In 2020, an estimated 18.6 million tonnes of clothing ended up in a landfill. It also means that fashion is a massive contributor to the 1.2 billion tonnes of greenhouse gas emissions released each year.



VD: Whoa! That's some bit of trivia that is handy knowledge. So how important is it to be a part of the environment?

VP: It may not seem like a big problem to most people now but it is going to be catastrophic in the near future. Our choices determine the kind of planet you'll be leaving for your children. It is very important that we make informed, conscious choices now before we deplete all resources.

VD: What is Upcycling?

Upcycling equals giving something that would otherwise be discarded a new lease on life. We upcycle items at the store that do not sell. Old jeans are made into hair scrunchies. Old T-shirts are made into bags. This way nothing ends up in a landfill. The old is recreated into something new.

VD: How is the idea of thrifting picking up in India?

VP: We have many cool, young, urban kids travelling through Goa who stop by at the shop. We love it when they tell us that they only buy



second-hand. We also have a lot of locals, settlers, expats and foreigners who are regulars at the shop. Thrifting is the norm in most western countries and it's definitely picking up in India too but it's still quite taboo with the general public who think things are 'jhoota' if they've been used. That's exactly the mindset that we want to break.

VD: What are the challenges you face in a venture such as this?

VP: Our team is still small so managing inventory and all the nitty gritty is sometimes challenging. But it's so rewarding in so many ways, the challenges seem trivial.

VD: If there's one thing that everyone could do today to help at protecting the environment, what would that be?

VP: Please be very conscious and mindful about your choices; from what you eat to how you consume and how you choose to live. I know it's hard with our very busy lives but take some time

out to do some research. The onus is on us to leave the future generations a planet with clean water, air, soil and plentiful resources.

VD: What are your future plans?

VP: I'd love to be the change I wish to see in this world! That would entail very many future plans, but for starters I'd love to take the Good Karma Treasure Shop national. I'm super excited to have Schulen Fernandes who was Creative Head for Wendell Rodricks as part our

team. We've got lots of plans and ideas to make thrifting easily accessible and the new normal for shoppers.

VD: What advice do you have for our readers?

VP: Find what truly makes you happy – that may not tick society's clichéd boxes but you'll be living with true passion and meaning. Don't be afraid to live your dream. You'll always be guided and protected if you are truly living in alignment with your purpose.

Thank you so much for having spent your time in sharing your insights and your work with us. It is truly inspirational and I'm sure all our readers including me will be mindful about what we buy in the future. After all, in the end only three things matter; how much you loved, how gently you lived and how gracefully you let go of things not meant for you.

Vanessa D'Cruz has been associated with education for the past 19 years and finds teaching to be a very enriching experience. She currently works as Senior Co-ordinator at Rose Manor International School. She is happy to be a member of the **EduFOCUS** Editorial Team as it gives her a preview into the latest trends in the field of education, the lives of teachers and students and allows her to interact with different intellectuals and educationists who work to meet the challenges of an ever-advancing knowledge-based society and a dynamically changing environment.





Recycled Humour

What kind of plant grows on your hand?

Palm tree



Why did the leaf go to the doctor?

Because it was feeling green



How do trees settle a disagreement?

They sign a tree-ty

What does a tree drink?

Root beer



Why are pirates so eco-friendly?

They always follow the three arrrrrrs



How do the Americans plan to fight record high temperatures?

By switching from Fahrenheit to Celsius



Why didn't the dendrochronologist get married?

He only ever dated trees

What is a tree's least favourite month?

Sep-timber



What did the tree wear to the pool party?

Swimming trunks



How can you tell the ocean is friendly?

It waves



What do you call a soldier who hates recycling?

General Waste

Why didn't the chef waste time at the sardine store?

He had bigger fish to fry



How does coal turn into diamonds?

It coal-lapses under pressure

Why didn't the miner like his job?

He found it bOREing







**Santa was glum. His home, the North Pole,
was melting from climate change**

SAVE YEH-LO SANTA!



Zero Out Carbon!



Why is coal-our-worry, coal-our-worry, coal-our-worry, dear? (2)

Our future colour-uh black-uh black-uh
Earth's fate is sad-uh with carbon emission-aa
World-uh India third-biggest-uh carbon emitter-uh
That's why coal-our-worry, coal-our-worry, coal-our-worry, dear (2)

Our future is dark-uh dark-uh. It is not right-uh.
But we have choice-uh to make-uh
We can change our ways
That's why coal-our-worry, coal-our-worry, coal-our-worry, dear
That's why coal-our-worry, coal-our-worry... aaa you see

Planet Earth we all love her
So let's take a vow vow-uh
Reduce-uh your carbon-aa footprint-uh
Pa pa pa, pa pa pa, pa pa pa pa pa ppaan

Come let us pledge, pledge together ... ZERO OUT CARBON
Then coal won't be our worry, be our worry, dear (2)

Come on... let's all pledge to Zero Out our carbon emission

(With apologies to Dhanush's Tenglish hit song in 2011 - Why this Kolaveri Di)

Do visit the YouTube channel of St Andrews High School Bandra
for the video of the Zero Out Carbon anthem - Why is Coal-our-worry Dear?





Save Yeh-lo Santa

Anjali Heredia Gracias

In December 2021, St. Andrew High School, Bandra proudly presented the fifth edition of **Yeh-lo Santa**. While the Red Santa gives gifts to children at Christmas time, the Yellow (Yeh-Lo) Santa collects gifts from children after Christmas and distributes these gifts to the underprivileged in the community. Every year, the programme sees a new theme. While in 2017 (Yeh-lo Santa) and 2018 (Santa Car-a-van) focussed on underprivileged children, 2019 (Santa SurpRice) saw sacks of rice generously given to the poor and 2020 (Santa Kaunspiracy) had students and their families reaching out to the community to ensure basic necessities for all during a COVID Christmas.

The theme for 2021 was **Save Yeh-Lo Santa! Zero Out Carbon!** Post COP26 at Glasgow, world leaders have armed their countries with new strategies to counter carbon emissions. India, the third-largest emitter of greenhouse gases, made the boldest pledge of them all – to achieve net zero carbon emission by 2070. (See page 2 for India's 5-point action plan.) While 2070 may seem too long term a horizon for most adults, for today's children, it is their future at stake. Keeping this in mind, Principal Fr. Magi Murzello chose the theme for the campaign. He also twisted the lyrics of the catchy 'Why This Kolavery Di' to 'Why Is Coal-our-worry, Dear' with apologies to Dhanush.

The students at St. Andrew's are now learning strategies to reduce and even neutralise their carbon footprint. They have already learnt the first basic rule – Reduce, Reuse, Recycle – via a pedal dustbin designed specifically for garbage segregation. These dual bins were gifted to the students in a specially designed



reusable bag that folds into a small pouch – very easy to tuck inside a handbag/ purse while out shopping. There was also a Zero Out Carbon folder with three green leaves and a special marker pen. Students were requested to write down their personal strategies to reduce their carbon footprint and return them to the School.

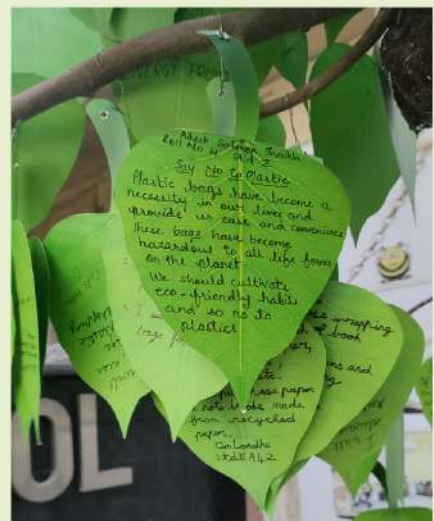
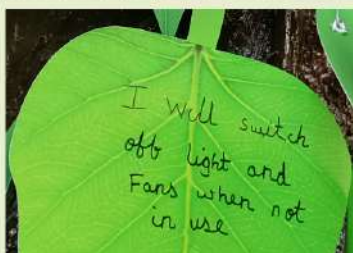
On 26 January 2022, students took a pledge to Zero Out Carbon and hung the leaves on the 'Tree of Promises'. This tree, made from

recycled plastic bottles and waste products, stands outside the School lobby. Continuing with the '26' theme, on 26 February 2022, the School will collect empty tetra packs to hand over for recycling. The benches made from these tetra packs will be sent to a rural school. On 26 March, students will collect old newspapers and, on 26 April, empty plastic bottles will be collected for recycling. On 26 May, the School will document success stories from students' homes – how the bins have helped recycling, how students have reduced their use of plastic, etc.

St. Andrew High School, Bandra is perhaps the first school in India to join the country's offensive against carbon emission. Will your school join in too so we can make this a national movement? Don't make sacrifices; make a choice... change your lifestyle! Be a Zero Carbon Hero.



ZERO OUT CARBON goes to Nashik



TREE OF PROMISES

SHE-Links – Past, Present, Future

Vanessa D’Cruz

SHE-LINKS - PAST, PRESENT AND FUTURE

 <p>SHE-lympics</p>	 <p>SHE-roes Conclave</p>	 <p>SHE-nanigans</p>
<p>Friday, 6th March, 2020 Venue: St. Andrew High School quadrangle and turf Park, Bandra (W) 4.30 pm onwards Open to all</p>	<p>Saturday, 7th March, 2020 Venue: St. Andrew's Conference Hall, St. Dominic Road, Bandra (W) 8 am onwards Open to women only Prior registration necessary</p>	<p>Sunday, 8th March, 2020 Venue: St. Andrew High School quadrangle, Bandra (W) 6 pm onwards Open to all</p>
<p>Presented by Andean Network of Dynamic and Inspired Educators (ANDIE), Grand Academic Portal (GAP) and Indian Association of Secretaries and Administrative Professionals (IASAP)</p>		



“Feminism isn’t about making women strong. Women are already strong. It is about changing the way the world perceives that strength.” – G. D. Anderson

To make an attempt to change this perception of a woman’s strength, the Andean Network of Dynamic and Inspired Educators (ANDIE), Grand Academic Portal (GAP) and Indian Association of Secretaries and Administrative Professionals (IASAP) partnered by St. Andrew’s Centre for Philosophy and Performing Arts (SAPP) and the Women’s Cell of St. Andrew Parish, Bandra proudly presented **SHE-Links – Past, Present, Future** on 6th, 7th and 8th March, 2020. The 3-day programme was beautifully planned and very well executed.



Just as the Bandra-Worli Sea Link connects Bandra to Worli, **SHE-links** aims to link the women of the present and future to ‘she-roes’ of the past who have overcome obstacles and have triumphed. It is important to raise awareness about the issues they have faced



(environmental issues, gender discrimination, domestic violence, human trafficking, honour killings, etc.) as well as embrace the spirit of these women who carry on despite the odds. The Project, with the tagline 'Built to Inspire', was inaugurated by Bishop Barthol Barretto on 8th March, 2018 at St. Andrew Church, Bandra (West).

On Day 1 (Friday, 6th March), we had the **SHE-lympics** organised. 13-member all-girls' teams (the future of women) from schools affiliated to the Archdiocesan Board of Education (ABE) participated in a fun evening of tele-games spread across St. Andrew High School quadrangle and St. Andrew's Turf Park from 5 pm onwards. The new basketball court (on the School quadrangle), conceptualised



and designed by Adidas and curated by a Delhi-based artist, was transformed with an innovative typographic design that embedded the message of equality '*Girls = Boys*' and '*Sport doesn't care*' and was inaugurated by Bishop Barthol Barretto. The brain behind the games, Ms. Suzie D'Silva, was also the compere for the evening and brought the whole crowd alive as she took the teams and their mascots dancing through the quadrangle. The mascots, who were teachers or the students' parents, presented their perception of a woman. The entire place looked colourful and the crowd danced to the foot-tapping music of DJ Delon D'Souza. The girls enjoyed themselves and gave it their best. Apostolic Carmel High





School, Bandra (West) was the winner for the day. St Anne's High School, Bandra (West) was the first runner-up while Auxilium Convent High School, Bandra (West) won second runner-up. The Auxilium team was also the winner of the 'Best Mascot'. The teams were awarded trophies, cash prizes as well as certificates and tons of give-aways that were sponsored by **ColorBar**, our gifting partner for all 3 days. The highlight of the day was the smile on the faces of every participant who left with her hands filled with a goodie bag and a snack box.

The **SHE-roes Conclave** on Day 2 (Saturday, 7th March) brought together women from different walks of life and different strata of society who have fought or continue to fight for change in the status quo of women. We had a room filled with women across different age groups who were present to witness

the she-roes of the present, past and the future. It was amazing to watch the young and budding future - Ms. Licypriya Kangujam, an 8-year old social activist who spoke with such confidence on being instruments of climate change, Ms. Zen Sadavarte – a 12-year old who presented a National Bravery Award by Prime Minister Narendra Modi for saving the lives of 17 people, including her parents, when her building caught fire in August 2018. She is well-read and very vocal with her opinions concerning various social causes. She wants to be a lawyer representing India at the International Court of Justice. We also had Captain Keithair Misquitta, one of the first women pilots to circumnavigate the globe in an ultra-light motor glider. She wants the number of Indian women pilots to be equal to that of men, she also advised aspiring female pilots about the hard work that needs to go into getting those three stripes. We





wish our *'hope of the future'* all the very best in their endeavours to make a change.

In the next segment, we had our present she-roes:
Dr. Snehal Pinto – Director, Ryan International Group

of Institutions, Dr. Uma Rele – Principal, Nalanda Nriya Kala Mahavidyalaya, Ms. Anna Bredemeyer – India's 'original' supermodel, Dr. Jasmine Gujarathi – Ayurveda doctor and advocate for women's health issues and Ms. Shibani Sachdeva – Director



of Empower India, Art of Living teacher and a sailing champion. These powerful women shared their experiences about making their stance in this challenging world. There was not a dry eye in the room as Dr. Pinto spoke about her passion as an educator. Ms. Bredemeyer had the audience in splits of laughter as she took them through her journey as a supermodel while Ms. Sachdeva gave the audience a 3-minute taste of a meditation technique. One could feel the difference instantaneously.



Our last segment showcased *'the glory of the past'*; our she-roes who with their vast experience have laid a foundation for our present and future superwomen. We had Dr. (Maj.) Anuradha – India's first lady army officer to drive and fire from Arjun tank and the Managing Trustee of Aasthagram Trust, an NGO for inclusive education among tribal children in Madhya Pradesh who was present along with a few children from the school, Dr. Kanak Rele – a Padmashri recipient, Founder-Director of Nalanda Dance Research Centre and Founder-Principal of Nalanda Nritya Kala Mahavidyalaya in Mumbai, Ms. Zelma Lazarus, the Founder-Director and Chief Executive Officer of Impact India which started the Lifeline Express project, a special rake of 5 railway coaches specially adapted to serve as a mobile hospital, and thus reach anywhere on the railway map of India and Dr. Ketna Mehta – a paraplegic because of a paragliding accident and Founder-Trustee of Nina Foundation, an NGO involved in rehabilitating friends with spinal cord injuries. These stalwarts shared their experiences and their struggles to get to where they are today.





The Conclave took place at St. Andrew's Conference Hall. It was a great experience for all those who attended as they got to hear these wonderful women speak and also interact with them at the end of each session. The participants were treated to a sumptuous meal and exciting takeaways from Phoenix MarketCity, Kurla as well as a participation certificate.



Sunday, 8th March was International Women's Day and the final day of SHE-links. **SHE-nanigans** was an evening of masti and entertainment focused on the celebration of womanhood. The venue – St. Andrew High School quadrangle was lit up with bright lights and colourful stalls wherein the women showcased their talents by selling their creations – food, jewellery, clothing, etc. The evening opened up with a few women representatives releasing the balloons and Sr. Suchitra Furtado AC, Principal, Apostolic Carmel High School declaring it open. There was much entertainment lined up for the evening thanks to our



entertainment partner – Infrared who got the crowd rolling with its talented performers. Ms. Daniella Gomes got the crowd tapping to a fitness mode with a power packed Zumba session. We were also entertained by some professional dancers who mesmerised us with their performances. Attractive prizes were won by the crowd. For those who witnessed the dhol and dance, the music and the masti, it was an evening well-spent.

Kudos to Fr. Magi Murzello and his team for putting up this wonderful 3-day event, Glenn Dodd for capturing the beautiful moments of the events, DJ Delon D'Souza and all the women who worked behind the scenes to make the event a grand success.

Even though a woman is a paradox, she is a gradual paradox. Just like the waxing and waning of the moon – a constant process of change – she plays multiple roles in life; keeps shedding one skin for another.

In the season of fall, she stands leafless. In the spring, the birds lay their nest in her arms of shade and care. From tender love care to standing upright with all her might, she endures it all. She grows like the tree of life; upwards as well as downwards, watching the seasons change and becoming wiser. Going through the norms in life, burning and bruised, she rises like a phoenix from the ashes.

Then who is this woman really? Is she the one who nurtures a child for 9 months in her belly, or the one who drives down the road with a carton of books for children not her own, or the one who has given her life in the service of God, or the one who waits patiently for her husband to return home? Is she the one who works 24x7 in front of a screen making presentations, or is she the one who awaits Prince Charming, or who no longer believes in Cinderella's fairy tale and rides her own horse? Only she knows who she really is.



She is Satyavati, she is Shabari, she is Sita as well as Draupadi, she is Mariam and Menaka, she is Holika as well as Hidamba, she is the mother of Moses and wife of Buddha, she is Athena and Ayesha – the prophet's daughter. She is ever-changing, accommodating and breaking barriers while flowing like an eternal river.

This painting is an attempt to look for that woman – the only person who knows who she really is.

**An artistic attempt by Dr. Omkar Bhatkar
SHE-links 2020**

SHE-lympics, an evening of tele-games, invited teams from all over Mumbai with 13 participants (4 from Primary, 8 from Secondary section and 1 mascot) to let the girl students showcase their nimble athletic skills. We had decided **Moana** (Disney character), a vibrant, tenacious and optimistic young lady, would be our mascot and, though initially hesitant, I relented to dress as the team mascot. On our arrival, we were amazed at the extraordinary turnout. Stepping into a familiar surrounding brought back memories of almost 2 decades ago where a young me used to scuttle around as a student in the adjacent St. Andrew's College building.



Though it was a warm sultry day, it did little to dampen the spirits of the excited participants. All one could see around was a sea of gleeful painted faces, colourful flags and fancy costumes. After being issued groups, group co-ordinator and instructions, we headed out to display our talent as a group in form of a team impromptu dance and march. This was one of the best moments for me as I juggled around my oar prop hoping not to knock off the team captain and other participants in a desperate attempt to win the prize for the Best Team March. Though the attempt was in vain, I had loads of fun swaying to the music. After all the teams finished their customary team march, we walked to the newly-built hockey turf for the games to begin.

It began with a game testing the Group A participants' nimbleness and endurance by making them balance on bricks to a game testing the strength of Group B participants where they had to fan paper cut-outs of fish to the finish line. As the evening progressed, the games became more fun and challenging. Unfortunately, though we stood 3rd in our Group, we did not make it to the semis. The games were well-thought, unique and well-executed. The evening was a whole lot of fun and a great time to bond with students and teachers from other schools. Though rivals at the games, we cheered and applauded for each other to boost our participants' confidence. The SHE-lympics did achieve what it set out to do – 'link'. It linked us all – students, teachers, young and old no matter which part of Mumbai we hailed from or what educational board we followed or if we were winners or runners-up. It was one rewarding evening with amazing gifts from Colorbar for all participants.

This was an unique experience for me in many ways; one, both my daughters were participants and I their team mascot; two, meeting Fr. Magi Murzello who served as a young priest in Our Lady of Immaculate Conception parish, Borivali (West) when I was a teen and Bishop Barthol who was Parish Priest at the same parish a few years ago; then, of course, the nostalgic memories of my college days at St. Andrew's; and lastly, but the best, was the exciting magical evening we had at SHE-lympics 2020. Till next time... Cheers!

Ms. Nisha Lobo,
Mascot – Team Marians,
Mary Immaculate Girls' High School, Borivali (West)

From Zoom to Zoomba – International Women's Day 2021

Suzie D'Silva

To register,
Kindly contact +91 97692
anytime between 9 am - 5 pm

Registration free
and mandatory

LAST DATE TO REGISTER:
FRIDAY, 5TH MARCH, 2021

Reporting Time
3: 30 PM
Evening includes
Positivi-tea Party

All Covid protocols
and photo calls will
be followed

THE BANDRA SHE-LINK PROJECT

ANDIE
Department of
Women's Empowerment

THIS INTERNATIONAL WOMEN'S DAY
ANDIE SALUTES THE TENACITY OF TEACHERS

'FROM
ZOOM TO ZOOMBA'

An evening just for you to share all your humorous anecdotes
and jugaad as you danced your way from the blackboard to
the screen!

SUN 7TH MARCH, 2021 • 4 TO 6 PM
VENUE : ST. ANDREW'S CONFERENCE HALL, BANDRA

Open to all school teachers & college lecturers teaching online

It all began at an ANDIE (Andean Network of Dynamic and Inspired Educators) team meeting in January 2021 when we were reminiscing about the previous International Women's Day... a grand celebration spanning three days in March 2020, shortly before the pandemic hit and the country went into lockdown. The conversation naturally turned to front-line workers and their efforts during the pandemic. Some, like the medical fraternity, had been felicitated at award ceremonies and lauded by the press for their proactive role in containing the spread of the virus. Others, like the teaching community, had been forgotten and their role trivialized. If it were not for their commitment to their vocation, a major chunk of the population would have had to forego an entire year of learning. They switched so seamlessly between

the blackboard and the screen that it seemed like they were born with these skills. Only they would know the tremendous efforts they had to put in to maintain some semblance of normalcy in the lives of their students. The team thus thought it would be apt to celebrate the teachers' achievements this Women's Day. This was the origin of 'From Zoom to Zoomba'.

On Sunday, 7th March 2021, teachers from across Mumbai schools arrived at St. Andrew's Conference Hall, Bandra for an evening of edutainment. Ensuring Covid protocols were met, each teacher was welcomed at the registration desk with a participant's kit comprising a pink dupatta (which they had to wear in the most innovative way possible), a special Women's Day edition of EduFOCUS, a black 'smiley' face mask



and stationery. They made their way to their pre-assigned teams and enjoyed a hot cup of tea while they skimmed through EduFOCUS and filled in Dr. C.F. Wilson's stress profile for teachers. Following the theme of 'online' teaching, the teachers were assigned to one of three teams: Team Mobile, Team Tablet and Team Laptop. Each team had a moderator and a runner to ensure the event went smoothly.

The evening began with an icebreaker between the teams. It was a sight to see the teachers communicating 'Chinese Whispers' through actions only! In terms of an analogy, 'instructions to cook biryani were given, but we were served khichdi'. It was then explained to the teachers that effective communication between principal,

teachers, students and parents was the key to success especially during online teaching.

Fr. Magi Murzello, Rector of St. Andrew's Educational Foundation and Founder of ANDIE, welcomed the participants and explained the concept of the event before they settled down to sharing personal experiences and exchanging ideas. It was touching to hear the teachers share the challenges faced personally as well as in their inter-personal relationships and their workspace. But their inherent strength came shining through as they found ways to navigate the issues through trial and error and various '*jugaad*'.

Each team had 8 minutes to discuss one type of challenge (personal, inter-personal, academic) before moving on to the next type. Between each

Personal Challenges

Challenges	Learnings
<ul style="list-style-type: none"> ▪ Operational problems ▪ Low technical awareness ▪ Time management ▪ Minimal personal interaction with students and colleagues ▪ Health issues ▪ Salary cuts ▪ Maintaining a conducive environment in the home ▪ Lack of privacy ▪ Restricting movement of family members in the home ▪ Sharing devices with family members 	<ul style="list-style-type: none"> ▪ YouTube videos solved technical and operational issues ▪ Children and spouses willingly shared knowledge improved communication within family ▪ Curating teaching methodologies ▪ Better lesson planning and streamlined lessons ▪ Increased confidence levels ▪ Time for other activities ▪ Saving money on travel, attire, etc. ▪ Yoga sessions



challenge, the teachers were taught short yoga asanas that would improve their physical and mental well-being. These asanas could also be taught to the students during online class to give them a much-needed break from their studies. The moderators then collated the 'Challenges' and 'Learnings' under each challenge and presented the findings to the entire audience.

It was now time for the Zoomba part of the evening. While ensuring social distancing, the teachers formed a circle and danced their hearts out to foot-tapping music by Delon Zee Sound and action songs led by Ms. Suzie D'Silva, the compere for the evening. They truly let their hair down and had a blast, not wanting the dance session to end.

But another delightful experience was next on the agenda. There was excitement all around

when the teachers discovered that *chaat* was the main item on the menu for the Positivi-tea Party... something that most would not have eaten during the lockdown as restaurants and roadside stalls stayed shut. It was lovely to watch them enjoy the *chaat* and chat as they continued to bond with one another. With that, the event came to close but not before each participant had collected their certificate of appreciation, a specially-designed Mission Sunshine bag and a well-being kit meant just for them.

The smooth flow of events and success of 'From Zoom to Zoomba' would not have been possible without the help of GAP (Grand Academic Portal) and the Women's Cell of St. Andrew Parish. We look forward to many more collaborations between ANDIE, GAP and the Women's Cell. May we go from strength to strength!

Inter-personal Challenges

Challenges	Learnings
<ul style="list-style-type: none"> ▪ Faceless students if video is kept off by the child ▪ Being judged by parents ▪ Connecting and creating a bond with children especially pre-school learners ▪ Reaching out to children who do not have access to a device ▪ Being a teacher 24x7 ▪ Gossiping between teachers and parents ▪ Convincing parents to let their children attend online lessons ▪ Financial constraints to invest in multiple devices, data plans, etc. ▪ Minimal social life ▪ Parent management 	<ul style="list-style-type: none"> ▪ Cooperation from parents is a must for smooth functioning ▪ Respect and appreciation from parents ▪ Understanding the family background of the child ▪ Ensure good attendance ▪ Build leadership skills ▪ Seek parents' help whenever required ▪ Personal phone feedback to parents ▪ Parents learn along with their child ▪ Support from and involvement of one's own family members ▪ Personal involvement ▪ Become tech-savvy and helping peers to overcome their challenges ▪ Reduction of school fees by the Management ▪ Overcoming ego issues

Academic Challenges

Challenges	Learnings
<ul style="list-style-type: none"> ▪ Child's enthusiastic interaction disrupts teaching ▪ Online teaching medium vis-a-vis classroom teaching ▪ Parental interference during teaching ▪ Preparation of assignments and study material ▪ Re-enforcement and retention of concepts ▪ Student evaluation ▪ Keeping videos on during exams ▪ Exams answered by family members on behalf of the child ▪ Correction of worksheets and exam papers ▪ Unable to give personal attention to children especially the weaker ones ▪ Teaching mathematics and conducting science practicals ▪ Getting used to MCQs (Multiple Choice Questions) ▪ Decline in book reading 	<ul style="list-style-type: none"> ▪ Students learn better through animation and PowerPoint presentations ▪ Creation of Google forms for MCQ exams ▪ Management of multiple devices and split screens ▪ Learnt how children use Google handles in different ways to obtain answers ▪ Learnt how to check/ correct test papers ▪ Usage of multiple portals (Zytopod/ Jamboard) to teach mathematics ▪ Management of assignments ▪ Remedial teaching for weaker children



This painting by Omkar Bhatkar in gond style depicts the beauty of nature being degraded by the soot of carbon cloud. This cloud encapsulates the grace of the giver earth in diverse damaging ways, mostly visible but sometimes invisible. The tree is green but its branches are now wrapped in carbon. The colourful animal faces and feathers covered in carbon stare at us with fearful eyes. Slowly, the world is turning into an insidious carbon pit of degradation directed towards destruction. The woman in the centre of the painting is wrapped in a cloud of carbon. Though she is still graceful, the carbon renders her almost invisible, less significant in the order of things. Patriarchal culture renders the role of women insignificant. Similarly, the contribution of women in environmental sustainability is undermined to the extent of inconsequentiality. The artist raises a question – what if the figure in the centre was not covered in carbon, how different would it look then?

It's time we value nature, honour women and recognise their role in environmental sustenance.

- An artistic attempt by Dr. Omkar Bhatkar – SHE-links 2022