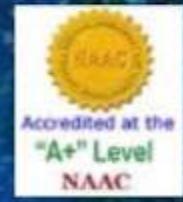


Chikitsak Samuha's

Sitaram And Lady Shantabai Patkar Varde College Of Arts And
Science and V.P Varde College Of Commerce and Economics.
(An Autonomous college affiliated to University of Mumbai)

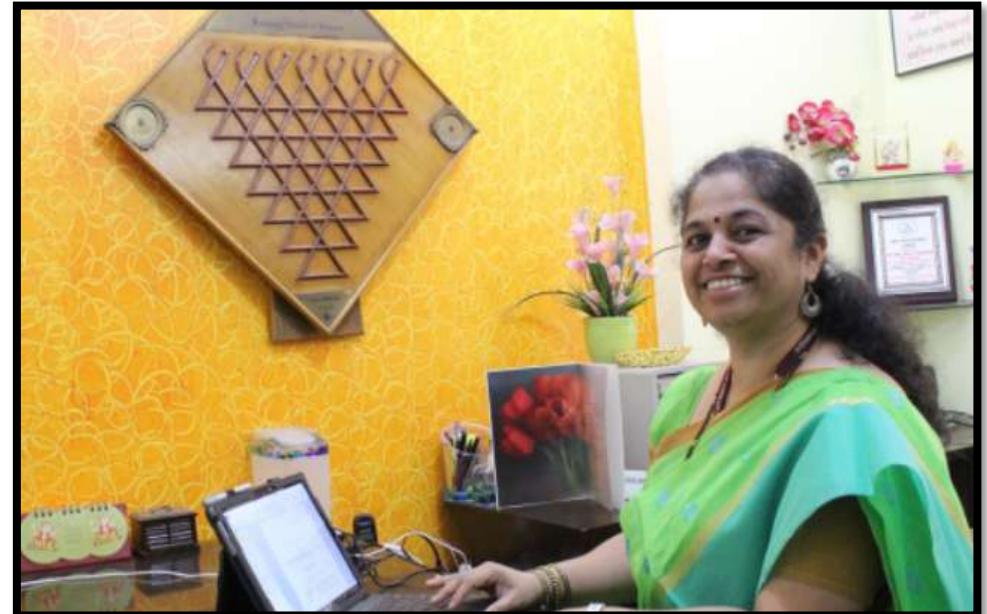


WEEKEND CHRONICLE

Environmental challenges in the
contemporary world

B.M.S DEPARTMENT

SPECIAL ISSUE



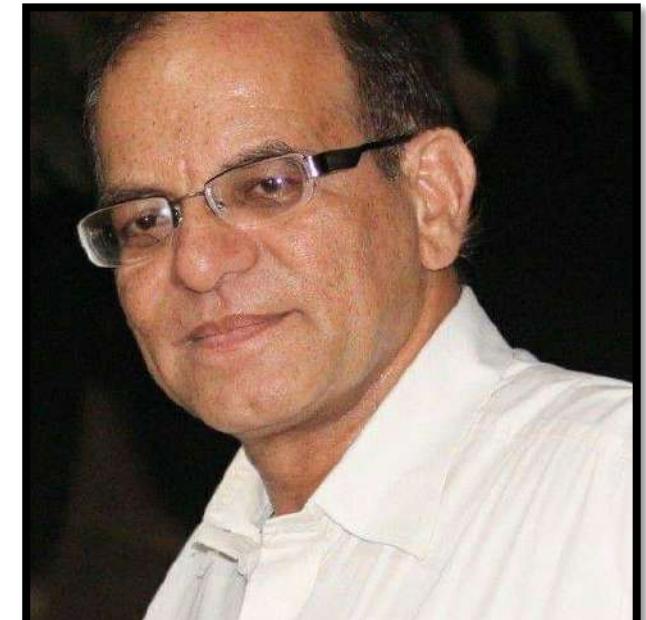
A MESSAGE FROM CHIEF EDUCATION OFFICER'S DESK

Dear Readers,

“Develop a passion for learning. If you do, you will never cease to grow.” We live today in a world that is so very different from the one we grew up in, the one we were educated in. The world today is moving at such an enhanced rate and we as educationalists need to cause and reflect on the entire system of education. On-line learning provides new age technology to widen the educational scope. It prepares students to succeed in an increasing technology driven global economy. Technology makes life much easier, most of all it saves time and energy. It is one of the fastest growing field right now and there is no sign of stopping anytime soon.

It is indeed a great moment for all of us to bring forth this weekly E-Periodical “Weekend Chronicle”. We are sure this E-Periodical will help to acquire knowledge and skills, build character and enhance employability of our young talented students to become globally competent. There is something for everyone here, right from the fields of Business, Academics, Travel and Tourism, Science and technology, Media and lot more. The variety and creativity of the articles in E-Periodical will surely add on to the knowledge of the readers. I am sure that the positive attitude, hard work, continued efforts and innovative ideas exhibited by our students will surely stir the mind of the readers and take them to the fantastic world of joy and pleasure.

Dr. Mala Kharkar
Chief Education Officer
(Patkar-Varde College)



A MESSAGE FROM THE PRINCIPAL'S DESK

Dear Readers,

As we know, "An Investment in knowledge pays the best interest."

Hence in this regard the E-Periodical Weekend Chronicle is playing a vital role in providing a platform to enhance the creative minds of our students of BMS Department.

The E-Periodical i.e online magazine drives us through varied genres containing- News related to Global affairs under departments like Business, Advertisement, IT and Science & Nature to intellectual news articles under Academics, Media and Library Departments. It also covers articles related to Food & Health care, Culture & Cuisine and Travel & Tourism which usually tops our "bucket lists" including article which address societal problems under Department of Social Issues. Lastly covering words and vision of our talented students as budding poets, writers and thinkers under Student's section Department.

Over all this vision of constructing E-Periodical by students will engage today's youth and the crafters of the youth (teachers) in their communities which is the necessity to over come hurdles of present reality. We will strive to make a better world through our acts and thoughts. Rather it is a challenge to be met!!!

**Dr. Shrikant B Sawant
Principal
(Patkar-Varde College)**

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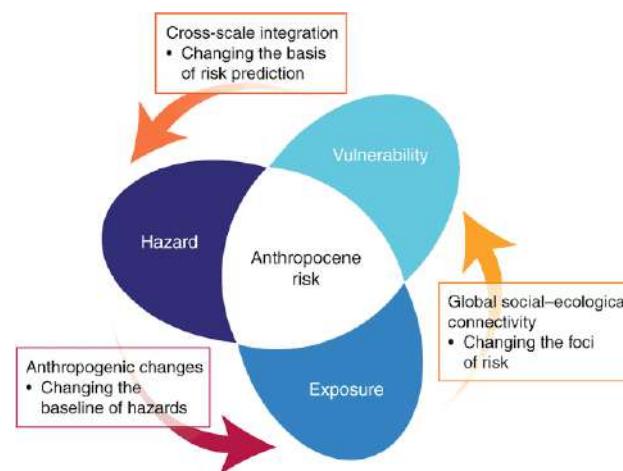
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BUSINESS

THE CHALLENGE OF GLOBAL ENVIRONMENTAL CHANGE IN THE ANTHROPOCENE: AN ANALYSIS OF BRAZIL AND CHINA.

Some of the main events and trends of environmental policies in Brazil and China are explored. Both Brazil and China have many challenges to be faced in relation to the set of problems that make up the environmental issue in a world characterized by high modernity, society of risk and by the global environmental changes. This is not, however, a local issue only for these two countries; since this is a global issue, it should be part of the political agenda of other countries around the world, especially with regard to the dilemma of prioritizing environmental concerns at the expense of economic development on a planet that is facing significant environmental changes.



Brazilian Strategies with Respect to Climate Change.

Regarding environmental concerns in Brazil, it is always difficult for them to become a priority in Brazilian politics. The analysis of the political and administrative dimension of environmentalism in Brazil reveals a complex legal and institutional framework increasingly growing, defined in public administration levels since the 1970s. Indeed, several government environmental agencies have been created along with a considerable number of environmental regulations (Ferreira and Tavolaro 2008; Ferreira et al. 2016). Thus, there were several policies aimed at improving the quality of life of urban and natural areas in the last 30 years or more, whether at the federal, state and local levels.

The creation of the Brazilian Forum on Climate Change (FBMC, in Portuguese) was, in 2000, one of the first moves at the federal level related to climate change. They aimed at presenting, educating and mobilizing society for the discussion of issues related to global warming. In 2007, the federal government established the Interministerial Committee on Climate Change, and the main tasks were planning and implementing of a National Policy on Climate Change, through a National Climate Change plan (Barbi et al. 2015; Ferreira et al. 2016).

During the process of creating and promulgating the Forum and National Policy, other public events, research institutions and civil society organizations have been established at the federal and state levels. Among them are: the presentation of the Climate Network; the creation of the National Institute of Science and Technology for Climate Change; the development of a network of civil society organizations called “Climate Observatory”; the launch of the Research Program on Global Climate Change in the State of São Paulo by FAPESP (Foundation for Research of the State of São Paulo); and the creation of the Brazilian Panel on Climate Change (PBMC) (Ferreira et al. 2016).

PBMC, launched in 2009 by MCTI (Ministry of Science, Technology and Innovation) and the MMA (Ministry of the Environment), tried to strengthen relationships between climate science and policy. It was structured based on the IPCC, in order to provide scientific assessments on the impacts, vulnerability and adaptation actions and mitigation of climate change. The “First National Assessment Report” of PBMC was presented in 2012 during the Rio + 20 (PBMC 2013). The importance of this report lies in the elements it can provide for the implementation of climate policy in the country, both related to mitigation and adaptation.

Data presented by the Anthropic Brazilian Inventory (MCT 2010) show that in the last 15 years, Brazil has increased its GHG emissions at very significant levels. Between 1990 and 2005, CO₂ emissions increased by about 65 % on the sum of all surveyed sectors; only coal mining-related emissions decreased by 29 %. The Change of Use of Land and Forest was responsible for most of the CO₂ emissions in 2005, representing 77 % of total emissions. During the analyzed period (1990–2005), emissions from this sector grew 64.3 % (Ferreira et al. 2016).

Regarding Brazil, the analysis of the political and administrative dimension of the climate issue reveals a legal and complex institutional structure increasingly growing. In fact, some divisions of government were created with a specific policy to address the issue. However, this does not guarantee efficient and necessary responses that address the magnitude of the issue, as stated by scientists. Moreover, the question is whether Brazil will fulfill the objectives defined by the national reduction policy of GHG emissions, in a context of increasing levels of deforestation and energy options of GHG emitters.

Regarding China, the challenges are even greater, as the country remains focused on economic growth, and coal continues to dominate the energy matrix. The country's choices will continue to strongly influence global efforts in relation to climate change.

-Rohit Pawar

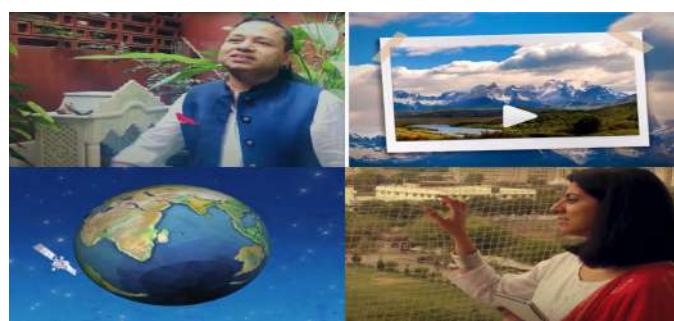
(NEWSCASTER)

Ref: <https://link.springer.com/article/10.1007/s41111-016-0028-9>

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BRANDS GO CREATIVE FOR WORLD ENVIRONMENT DAY 2020.

Due to fear of Covid-19 people are locked up in their homes, but on the other hand, the environment is healing itself. Brands come forward this World Environment Day to celebrate and spread the right message...



Luminous Power Technology

Luminous Power Technologies celebrates World Environment Day through a video imparting a beautiful message around keeping our Mother Nature clean and green. The video takes a positive stance on reversing the damage done to our environment. The idea is to encourage everyone to broaden their perspectives, look at the brighter picture and start making efforts towards the betterment of the earth and environment.

ITC

As Mother Earth heals herself, on this World Environment Day, ITC comes up with a digital video, which aims to help shape a better, secure, sustainable and inclusive future for the generations to come.

Nestlé

Nestlé India in collaboration with Stree Mukti Sanghatana and RE CITY have released a poetry film, 'Let's imagine a healed world' as part of Project HILL DAARI this World Environment Day. The poem recited by Anamika Joshi, a popular spoken word performance artist, urges people to collectively imagine a cleaner environment that helps biodiversity flourish, similar to what we are experiencing these days during the lockdown.

Tata Tiscon

Tata Tiscon spreads the message of building a strong planet through Tata Tiscon Go Green, the brand's sustainability initiative. 'Plant for the Planet', is a digital film conceptualised by Wunderman Thompson South Asia which came out on World Environment day to encourage people to care for and nurture the environment.

Video links:-

Luminous:- <https://youtu.be/WaZLs6WoWq0>

ITC :-

<https://youtu.be/rrSlLqBLPa0>

Nestlé:-

<https://youtu.be/EojFpzsYrh8>

Tata Tiscon:-

https://youtu.be/JOppVCz_vws

-KSHITIJA CHAVAN
(NEWSCASTER)

Ref: <https://brandequity.economictimes.indiatimes.com/news/marketing/brands-go-creative-for-world-environment-day-2020/76228765>

BRANDS REITERATE COMMITMENT TOWARDS NATURE ON WORLD ENVIRONMENT DAY 2020.

Here's how brands across the spectrum amplified their message on preserving the ecology with creative campaigns and sustainable measures by Sanstuti Nath



As the world deals with the pandemic, people have finally come to recognise the gravity of climate change and pollution. The core reason for these problems is man's interference with the natural order of the environment. The situation has also thrown a sharp focus on the link between people's health and that of the ecosystem, emphasizing the importance of conserving nature.

Therefore, this year, on June 5, brands are coming out to find a connection with nature and to take a pledge to protect it. From Helo to Forevermark, brands across the spectrum have come up with campaigns centred on World Environment Day to amplify the message of preserving ecology. Talking about why it has become important for brands to align with nature's cause, Parag Kulkarni, Managing Director, A.O. Smith India said, "Protecting biodiversity has become a business imperative for companies. The alarming rate of deforestation and land degradation in recent years has highlighted the urgent need for action to safeguard the rich biodiversity. The ongoing COVID-19 pandemic has heightened this reality (by underlining the importance of fresh and non-contaminated air) and has also thrown into sharp focus the link between people's health and that of the ecosystem, emphasizing the importance of conserving nature.

-TUSHANT GUPTA

(NEWSCASTER)

Ref: <https://www.google.com/amp/s/www.exchange4media.com/amp/marketing-news/brands-reiterate-commitment-towards-nature-on-world-environment-day-2020-105124.html>

INFORMATION TECHNOLOGY

HOW TECHNOLOGY IS SAVING THE ENVIRONMENT



Technology is changing almost faster than we can keep up, with new smart technologies changing the way we live and work, an endless stream of helpful new apps to add to our phones, and the growth of artificial intelligence improving how we use information. Besides making our lives easier, it's also helping us live greener and live better. It may be surprising to some that smart devices are helping us to not only simplify our lives but also to save the environment. Smart home devices conserve energy by using artificial intelligence to shut off power to devices that aren't in use. Smart appliances like refrigerators can send you an email if the door is ajar, or if your cheese is about to expire. These smart home devices can also optimize your thermostat or power use so you're not consuming energy when you're not at home.

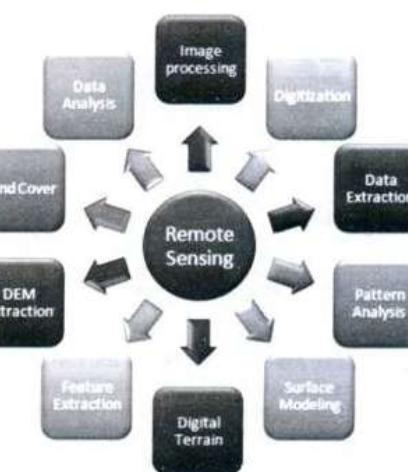
Thermostats and smart bulbs can be programmed to turn on and off at certain times, and some can automatically adjust by detecting activity in the room. It's a great way to know that if someone's burning the midnight oil, they're not wasting it. Just as your appliances can let you know of an energy-wasting problem, they can also email you if they have a part that's about to wear out (imagine if our bodies could do that). It not only saves you money on replacing expensive appliances but allows you to fix problems before your major appliance ends up in a landfill. And how many times have you seen someone's sprinklers running right after a downpour.

Smart sprinkler systems help regulate how much water you're consuming by adjusting according to the weather, optimizing not only your water bill but also the impact on the community water supply. Green buildings that are constructed to best harness and implement natural lighting will drastically reduce expensive lighting costs and reduce the consumption of coal needed to power that lighting. Since electric power accounted for almost 93% of coal consumption in the U.S. in 2017, there's a great deal of potential to reduce that impact. While we haven't become the paperless society of early predictions, screen technology offers an alternative to pen and paper for communication and projects.

-Ajay Lovekar
(NEWSCASTER)

Ref:<https://emagazine.com/how-technology-is-saving-the-environment/#:~:text=Technology%20is%20also%20being%20harnessed,to%20really%20reduce%20that%20figure.>

ROLE OF INFORMATION TECHNOLOGY IN ENVIRONMENT AND HUMAN HEALTH



Functions of Remote Sensing

Information technology has tremendous potential in the field of environment education and health as in any other field like business, economics, politics or culture. Development of internet facilities, Geographic Information System (GIS) and information through satellites has generated a wealth of up-to-date information on various aspects of environment and health.

National Management Information System (NMIS)

NMIS of the Department of Science and Technology has compiled a database on Research and Development Projects along with information about research scientists and personnel involved.

Environmental Information System (ENVIS)

The Ministry of Environment and Forests, Government of India has created an information System called Environmental Information System (ENVIS). With its headquarters in Delhi, it functions in 25 different centres all over the country.

Remote Sensing and Geographical Information System (GIS)

Satellite imageries provide us actual information about various physical and biological resources and also to some extent about their state of degradation in a digital form through remote sensing.

Geographical Information System (GIS): GIS has proved to be a very effective tool in environmental management. GIS is a technique of superimposing various thematic maps using digital data on a large number of interrelated or interdependent aspects.

The World Wide Web

With resources material on every aspect, class-room activities, and digital files of photos, power-point lecture presentations, animations, web-exercises and quiz has proved to be extremely useful both for the students and the teachers of environmental studies.

Database on Environment System

Database is the collection of interrelated data on various subjects. It is usually in computerized form and can be retrieved whenever required. In the computer the information of the database can be very quickly retrieved.

-Ajay Lovekar
(NEWSCASTER)

Ref:<https://www.yourarticlerepository.com/essay/role-of-information-technology-in-environment-and-human-health/30230>

NATURE

FINE PARTICULATE MATTER FROM WILDFIRE SMOKE MORE HARMFUL THAN POLLUTION FROM OTHER SOURCES



This new research work, focused on Southern California, reveals the risks of tiny airborne particles with diameters of up to 2.5 microns, about one-twentieth that of a human hair. These particles -- termed PM2.5 -- are the main component of wildfire smoke and can penetrate the human respiratory tract, enter the bloodstream and impair vital organs. The study appears March 5 in the journal *Nature Communications* by researchers from Scripps Institution of Oceanography and the Herbert Wertheim School of Public Health and Human Longevity Science at UC San Diego. It was funded by the University of California Office of the President, the National Oceanic and Atmospheric Administration (NOAA), the Alzheimer's Disease Resource Center for Advancing Minority Aging Research at UC San Diego and the Office of Environmental Health Hazard Assessment. To isolate wildfire-produced PM2.5 from other sources of particulate pollution, the researchers defined exposure to wildfire PM2.5 as exposure to strong Santa Ana winds with fire upwind. A second measure of exposure involved smoke plume data from NOAA's Hazard Mapping System. A 10 microgram-per-cubic meter increase in PM2.5 attributed to sources other than wildfire smoke was estimated to increase respiratory hospital admissions by 1 percent. The same increase, when attributed to wildfire smoke, caused between a 1.3 to 10 percent increase in respiratory admissions. Corresponding author Rosana Aguilera said the research suggests that assuming all particles of a certain size are equally toxic may be inaccurate and that the effects of wildfires -- even at a distance -- represent a pressing human health concern.

"There is a daily threshold for the amount of PM2.5 in the air that is considered acceptable by the county and the Environmental Protection Agency (EPA)," said Aguilera, a postdoctoral scholar at Scripps Institution of Oceanography. "The problem with this standard is that it doesn't account for different sources of emission of PM2.5." As of now, there is not a consensus as to why wildfire PM2.5 is more harmful to humans than other sources of particulate pollution. If PM2.5 from wildfires is more dangerous to human lungs than that of ambient air pollution, the threshold for what are considered safe levels of PM2.5 should reflect the source of the particles, especially during the expanding wildfire season. This is especially relevant in California and other regions where most PM2.5 is expected to come from wildfires. In Southern California, the Santa Ana winds drive the most severe wildfires and tend to blow wildfire smoke towards populated coastal regions. Climate change delays the start of the region's rainy season, which pushes wildfire season closer to the peak of the Santa Ana winds in early winter. Additionally, as populations grow in wild land urban interface areas, the risks of ignitions and impacts of wildfire and smoke increase for those who live inland and downwind. Coauthor Tom Corrington points to the implications for climate change: "As conditions in Southern California become hotter and drier, we expect to see increased wildfire activity. This study demonstrates that the harm due to wildfire smoke may be greater than previously thought, bolstering the argument for early wildfire detection systems and efforts to mitigate climate change."

Facts: Wildfire smoke contains carbon monoxide, a colorless, odorless and toxic gas. Firefighters working near the fire are at greatest risk for high doses of carbon monoxide. Areas even a few hundred yards downwind of the fire where there are high particulate smoke levels typically don't have high levels of carbon monoxide.

-Rishil Shetty

(NEWSCASTER)

Ref : www.sciencedaily.com/releases/2021/03/210305080124.htm

ACADEMICS

ENVIRONMENTAL EDUCATION: - 5 REASONS WHY IT'S IMPORTANT



Education forms the basis of everything in today's world including environment. *Environmental Education* imparts knowledge about the current situation and future prospects of nature. It teaches people to explore all the problems related to environment, and engage in wise ways of preserving it.

Here are 5 reasons why there is a need that the learning years should be integrated with environmental education.

Awareness

In order to take any step towards protecting our environment surroundings, we need awareness, which can come only from studying subjects related to our ecosystems. What are the issues the world is facing today? How can we ensure their long term survival? What is sustainability and how can it be achieved?

All these questions will be answered only if we learn about the environment and apply that knowledge practically.

Sustainability

Making sure that the needs of future generation are met by the earth's resources, would a Sustainable form of consumption of those resources today. At the current rate of consumption, Natural resources will be depleted far too fast for future generations to survive.

Environmental education helps people understand the repercussions caused by over exploitation, and act accordingly

Health Benefits

One of the best benefits of this type of education is that it takes place outside the confines of a classroom. Students, who would not have otherwise spent this time outdoors, experience serenity and the healing powers of nature. In fact, treatment through natural means is called Eco-therapy. It helps patients recover from depression, cures heart ailments, maintains Blood Pressure, sleep longevity, improves eyesight etc.

Artistic Imagination

Places with natural surroundings are best for artists to create their masterpieces. Poetry, painting, sculptures etc are all products of imagination, inspired by nature.

It can encourage today's generation to switch to safer and better choices. One would know the rescue drills for natural calamities better, how to use your greens better (they can do what no medicine can) etc. Environmental Education is one subject that warns you against everything which may go wrong.

-Sanjeet Bhelekar
(NEWSCASTER)
Ref - <https://claroenergy.in>

TOP 10 BENEFITS OF ENVIRONMENTAL EDUCATION

1.Imagination and enthusiasm are heightened

EE is hands-on, interactive learning that sparks the imagination and unlocks creativity. When EE is integrated into the curriculum, students are more enthusiastic and engaged in learning, which raises student achievement in core academic areas.

2.Learning transcends the classroom

Not only does EE offer opportunities for experiential learning outside of the classroom, it enables students to make connections and apply their learning in the real world. EE helps learners see the interconnectedness of social, ecological, economic, cultural, and political issues.

3.Critical and creative thinking skills are enhanced

EE encourages students to research, investigate how and why things happen, and make their own decisions about complex environmental issues. By developing and enhancing critical and creative thinking skills, EE helps foster a new generation of informed consumers, workers, as well as policy or decision makers.

4.Tolerance and understanding are supported

EE encourages students to investigate varying sides of issues to understand the full picture. It promotes tolerance of different points of view and different cultures.

5.State and national learning standards are met for multiple subjects

By incorporating EE practices into the curriculum, teachers can integrate science, math, language arts, history, and more into one rich lesson or activity, and still satisfy numerous state and national academic standards in all subject areas. Taking a class outside or bringing nature indoors provides an excellent backdrop or context for interdisciplinary learning.

6.Biophobia and nature deficit disorder decline

By exposing students to nature and allowing them to learn and play outside, EE fosters sensitivity, appreciation, and respect for the environment. It combats "nature deficit disorder" ... and it's FUN!

7.Healthy lifestyles are encouraged

EE gets students outside and active, and helps address some of the health issues we are seeing in children today, such as obesity, attention deficit disorders, and depression. Good nutrition is often emphasized through EE and stress is reduced due to increased time spent in nature.

8.Communities are strengthened

EE promotes a sense of place and connection through community involvement. When students decide to learn more or take action to improve their environment, they reach out to community experts, donors, volunteers, and local facilities to help bring the community together to understand and address environmental issues impacting their neighborhood.

-Kapil pande

(NEWSCASTER)

Ref - <https://www.plt.org/educator-tips/top-ten-benefits-environmental-education/>

MEDIA

THE BIGGEST ENVIRONMENTAL PROBLEMS OF 2020

Introduction:

The climate crisis is accelerating at an unprecedented rate, and we are not ready for it. While the crisis has many factors that play a role in its exacerbation, there are some that warrant more attention than others. Here are some of the biggest environmental problems of our lifetime.



1. Poor Governance:: According to economists like Nicholas Stern, the climate crisis is a result of multiple market failures.

Economists and environmentalists have urged policymakers for years to increase the price of activities that emit greenhouse gases (one of our biggest environmental problems), the lack of which constitutes the largest market failure, for example through carbon taxes, which will stimulate innovations in low-carbon technologies.

2. Food Waste:: A third of the food intended for human consumption- around 1.3 billion tons- is wasted or lost. This is enough to feed 3 billion people. Food waste and loss accounts for 4.4 gigatons of greenhouse gas emissions annually; if it was a country, food waste would be the third highest emitter of greenhouse gases, behind China and the US.

Food waste and loss occurs at different stages in developing and developed countries; in developing countries, 40% of food waste occurs at the post-harvest and processing levels, while in developed countries, 40% of food waste occurs at the retail and consumer levels.

3. Plastic Pollution:: A report by science journal, Nature, determined that currently, roughly 11 million tons of plastic make its way into the oceans every year, harming wildlife habitats and the animals that live in them. The research found that if no action is taken, this will grow to 29 million metric tons per year by 2040. If we include micro plastics into this, the cumulative amount of plastic in the ocean could reach 600 million tons by 2040.

4. Air Pollution:: Research from the World Health Organization (WHO) shows that an estimated 4.2 to 7 million people die from air pollution worldwide every year and that nine out of 10 people breathe air that contains high levels of pollutants. In Africa, 258 000 people died as a result of outdoor air pollution in 2017, up from 164 000 in 1990, according to UNICEF. This comes mostly from industrial sources and motor vehicles, as well as emissions from burning biomass and poor air quality due to dust storms.

- Akanksha Bhardwaj
(NEWSCASTER)

Ref: <https://earth.org/the-biggest-environmental-problems-of-our-lifetime/>

SOLUTIONS TO ALL OUR ENVIRONMENTAL PROBLEMS: HOW CIRCULAR ECONOMY CAN SAVE MUMBAI



Famous for Bollywood and dubbed as the '*City of Dreams*', the coastal city of Mumbai is the financial capital of India. The city is plagued with many social and environmental issues due to the rapid and unplanned urbanization in and around Mumbai. Growing urbanization and poverty, scarcity of water, annual monsoon menace and water-logging and air pollution are just a few of the many issues that our city faces.

CHANGE WITH CIRCULAR ECONOMY

The Circular Economy model is based on the idea of maintaining the value of the products and resources as much as possible by keeping it in circulation within the system. This helps generate revenue and maintain a balance between the 3 Ps of the system,

1. People (Society)
2. Planet (Environment)
3. Profit (Economy)

PROJECTS DEVELOPED BY EARTH5R AROUND THIS SOLUTION

- **Waste segregation and composting:** The Earth5R team has trained many housing complexes to segregate their waste and has installed composting bins to turn their organic wastes into manure. This not only minimized the waste ending up in the landfills but the manure was also used for community and urban gardens.
- **Upcycling waste paper into paper bags:** Similarly, the people living in slums were also trained in making paper bags out of newspapers. These activities help put the waste back into the circulation and makes the slum-dwellers independent by generating good income.

➤ REDUCING AIR POLLUTION WITH TRANSPORTATION

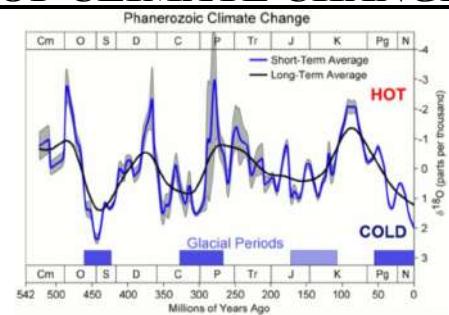
- Mumbai Suburban Railway is the oldest commuter rail in Asia with the highest passenger density in the world, 7.5 million people daily. Mumbai also has one of the largest organized bus transport networks in India. These public transport services in addition to Metro lines and Monorail is a big win for Mumbai as good public transit systems help reduce the emissions and energy consumption.
- But this is not enough to curb the city's air pollution woes.
- **Powai Lake Clean-up**
- Earth5R had arranged a clean-up and waste awareness project for over 13 weeks at the Powai lake in Mumbai under the A.C.T. (Action. Collaboration. Transformation) Powai project. During this, over 1 ton of plastic was collected and recycled by working with rag-pickers to make plastic benches. This initiative led to the following changes:

-Vedang Khopkar
(NEWSCASTER)

Ref: earth5r.org

ARTS & HISTORY

HISTORY OF CLIMATE CHANGE SCIENCE



The history of the scientific discovery of climate change began in the early 19th century when ice ages and other natural changes in paleoclimate were first suspected and the natural greenhouse effect was first identified. In the late 19th century, scientists first argued that human emissions of greenhouse gases could change the climate. Many other theories of climate change were advanced, involving forces from volcanism to solar variation. In the 1960s, the evidence for the warming effect of carbon dioxide gas became increasingly convincing. Some scientists also pointed out that human activities that generated atmospheric aerosols (e.g., “pollution”) could have cooling effects as well.

During the 1970s, scientific opinion increasingly favored the warming viewpoint. By the 1990s, as a result of improving fidelity of computer models and observational work confirming the Milankovitch theory of the ice ages, a consensus position formed: greenhouse gases were deeply involved in most climate changes and human-caused emissions were bringing discernible global warming. Since the 1990s, scientific research on climate change has included multiple disciplines and has expanded. Research has expanded our understanding of causal relations, links with historic data and ability to model climate change numerically. Research during this period has been summarized in the Assessment Reports by the Intergovernmental Panel on Climate Change.

Climate change, broadly interpreted, is a significant and lasting change in the statistical distribution of weather patterns over periods ranging from decades to millions of years. It may be a change in average weather conditions, or in the distribution of weather around the average conditions (such as more or fewer extreme weather events). Climate change is caused by factors that include oceanic processes (such as oceanic circulation), biotic processes (e.g., plants), variations in solar radiation received by Earth, plate tectonics and volcanic eruptions, and human-induced alterations of the natural world. The latter effect is currently causing global warming, and “climate change” is often used to describe human-specific impacts.

-Varsha Bag

(NEWSCASTER)

REF - Wikipedia.in

USING ART TO SHOW THE THREAT OF CLIMATE CHANGE



These seven artists are using climate change concepts in their work. Climate change can be a tough topic to face. Permafrost is thawing, sea levels are rising and glaciers are melting. But in our day-to-day lives, those changes can be hard to see. Most of us don't live near glaciers or beaches. Most of us won't build a house on permafrost. How do we grasp the problem? Maybe we need art.

From epic operas to video games to city-spanning painted projects, here are seven artists, scientists and composers who are using art to spread the word about our changing climate.

Climate change is “one of these topics that makes people want to turn off and disengage,” says Dargan Frierson. “It shouldn’t be that way.” Frierson is a climate scientist at the University of Washington in Seattle. He created a game called Climate Quest to help players engage with climate change. Why a game? “There are so many things that games can do,” he says, that help people connect to big problems like climate change. “You can speed up time, visualize things that are invisible or ... fail a few times before you’re eventually successful.” In the game, disasters strike all over the United States. Players are given a roster of experts such as urban planners and climate scientists. Send the right expert out, solve the problem and save the day. Frierson and three colleagues pulled the simple game together in a single weekend at a hackathon — an event where people work together to build solutions to problems. “A lot of educational games are not very good because they’re a little bit boring,” he says. “It’s most important to make it fun first.”

-Swarabgi Rane

(NEWSCASTER)

REF :- <https://www.sciencenewsforstudents.org/article/using-art-show-climate-change-threat>

LIBRARY

ECOCRITICISM: THE STUDY OF LITERATURE AND THE ENVIRONMENT



Ecocriticism is the study of literature and the environment from an interdisciplinary point of view, where literature scholars analyze texts that illustrate environmental concerns and examine the various ways literature treats the subject of nature. It takes an interdisciplinary point of view by analyzing the works of authors, researchers and poets in the context of environmental issues and nature. Some ecocritics brainstorm possible solutions for the correction of the contemporary environmental situation, though not all ecocritics agree on the purpose, methodology, or scope of ecocriticism.

In the United States, ecocriticism is often associated with the Association for the Study of Literature and Environment (ASLE),^[3] which hosts a biennial conference for scholars who deal with environmental matters in literature and the environmental humanities in general. ASLE publishes a journal—Interdisciplinary Studies in Literature and Environment (ISLE)—in which current international scholarship can be found.

Ecocriticism is an intentionally broad approach that is known by a number of other designations, including "green (cultural) studies", "ecopoetics", and "environmental literary criticism", and is often informed by other fields such as ecology, sustainable design, biopolitics, environmental history, environmentalism, and social ecology, among others.

In comparison with other 'political' forms of criticism, there has been relatively little dispute about the moral and philosophical aims of ecocriticism, although its scope has broadened from nature writing, romantic poetry, and canonical literature to take in film, television, theatre, animal stories, architectures, scientific narratives and an extraordinary range of literary texts. At the same time, ecocriticism has borrowed methodologies and theoretically informed approaches liberally from other fields of literary, social and scientific study.

Cheryll Glotfelty's working definition in *The Ecocriticism Reader* is that "ecocriticism is the study of the relationship between literature and the physical environment", and one of the implicit goals of the approach is to recoup professional dignity for what Glotfelty calls the "undervalued genre of nature writing". Lawrence Buell defines "ecocriticism" ... as [a] study of the relationship between literature and the environment conducted in a spirit of commitment to environmentalist praxis

Ecocritics investigate such things as the underlying ecological values, what, precisely, is meant by the word nature, and whether the examination of "place" should be a distinctive category, much like class, gender or race. Ecocritics examine human perception of wilderness, and how it has changed throughout history and whether or not current environmental issues are accurately represented or even mentioned in popular culture and modern literature. Scholars in ecocriticism engage in questions regarding anthropocentrism, and the "mainstream assumption that the natural world be seen primarily as a resource for human beings" as well as critical approaches to changing ideas in "the material and cultural bases of modern society." Recently, "empirical ecocritics" have begun empirically evaluating the influence of ecofiction on its readers. Other disciplines, such as history, economics, philosophy, ethics, and psychology, are also considered by ecocritics to be possible contributors to ecocriticism.

While William Rueckert may have been the first person to use the term ecocriticism (Barry 240) in his 1978 essay entitled *Literature and Ecology: An Experiment in Ecocriticism*, ecocriticism as a movement owes much to Rachel Carson's 1962 environmental exposé *Silent Spring*. Drawing from this critical moment, Rueckert's intent was to focus on "the application of ecology and ecological concepts to the study of literature".

Ecologically minded individuals and scholars have been publishing progressive works of ecotheory and criticism since the explosion of environmentalism in the late 1960s and 1970s. However, because there was no organized movement to study the ecological/environmental side of literature, these important works were scattered and categorized under a litany of different subject headings: pastoralism, human ecology, regionalism, American Studies etc. British marxist critic Raymond Williams, for example, wrote a seminal critique of pastoral literature in 1973, *The Country and the City*.

-NEHA BHADEKAR

(NEWSCASTER)

Reference: WIKIPEDIA

FOOD & HEALTHCARE

THE SOLUTIONS TO DISPOSE FOOD WASTE THAT AFFECT OUR ENVIRONMENT



Food waste is a significant problem in world leading more and more eco-conscious households to find alternative ways to dispose of their food waste. It is estimated that up to 40% of food will go to waste. However, many people don't think of food as contributing to our garbage problem. After all, food decomposes quickly and disappears, right? How you dispose of food waste doesn't matter, right? Wrong.



Food waste leads to pest infestations and increases bacteria and disease. When you throw your food waste into the garbage, it will end up with all other trash in a massive landfills are already overflowing, causing significant pollution and unsanitary conditions for the surrounding neighbourhoods. The greenhouse gas emissions that come from landfills are also a serious contributor to detrimental climate changes. Throwing food away in the garbage only contributes to these conditions. Find alternative and sustainable ways to dispose of your food. To stop food waste, changes have to be brought in at every stage of the process – from farmers and food processors to supermarkets and individual customers. As a first step, priority should be given to balancing production with demand. This essentially translates to lesser use of natural resources to produce food which is not needed. Secondly, more effort should go into developing better food harvesting, storing, processing and distributing processes. Consumer should also try to buy food in accordance with a meal plan so that they don't end up wasting edible food. Food may be cheaper when you purchase in bulk, but in reality, you are not really saving money when all you are doing is chucking it in the bin at the end of the week. Food waste that ends up in landfills produces a large amount of methane – a more powerful greenhouse gas than even CO₂, absorb infrared radiation and heat up the earth's atmosphere, causing global warming and climate change. So don't waste food and don't just throw it but dispose it properly.

-NIDHI SATAM
(NEWSCASTER)

Ref: <https://moveforhunger.org/the-environmental-impact-of-food-waste>

CHEMICAL ON VEGETABLES AND FRUITS ARE THEY USEFUL OR HAZARDOUS ?



We think that eating well gives our body the essential nutrients that it requires when we consume fresh fruits and vegetables. This might come as a surprise to some of the people but most of the foods contain highly contaminated pesticides residue on them. Most of the fruits and vegetables that you eat are loaded with chemicals and pesticides. Health hazard of calcium carbide chemical are sprayed on it. The contact of calcium carbide can severely irritate and burn the eyes and skin. These are primarily used by the farmers during the cultivation to save the fruits and vegetables from pests and harmful insects. However, the residue pesticides and chemicals stay on the surface of the fruits & vegetables. Rinsing with plain water doesn't remove the harmful effects of pesticides on fruits and vegetables. This is the reason why you need to use KENT Vegetable and Fruit Cleaner.



KENT Fruit & Vegetable Cleaner uses ozone technology to remove chemicals from fruits and vegetables. It can remove the pesticides from fruit and vegetables, kills the bacteria present, disintegrates the hormone residues that are in meat and seafood. It can also bleach and remove the stubborn dirt thereby keeping the food fresh. Several reports suggest that high levels of pesticides in food can lead to the development of diseases such as cancer, kidney and lung ailments. Any exposure to these high chemical residues can lead to childhood cancers, mental health problems such as autism and attention deficit hyperactivity disorder. Experts recommend people to eat organic foods as they are good for health. Organic fruits are becoming increasingly popular and more available in the local grocery stores and supermarkets. Organic foods are grown without any pesticides or other harmful chemicals. So do consume healthy and chemical free food.

-NIDHI SATAM
(NEWSCASTER)

Ref: <https://www.onlymyhealth.com/harmful-effects-of-pesticides-in-fruits-and-vegetables-1533913494>

TRAVEL & TOURISM

LEH-LADAKH – THE BIKER'S PARADISE MAKES THE PLACE PRONE TO ENVIRONMENTAL FACTORS

Undoubtedly, Leh – Ladakh is on every travel enthusiast's list of dream places to visit in India before they turn 30. Ride on the crazy winding roads, get stuck in the middle of nowhere, sleep with the locals, go trekking in Ladakh, and learn to be independent on the desert mountains as you undertake this adventurous journey in one of the best places in India.

Best time to visit: April to mid-May and mid-September to mid-October

How to reach

By air: Kushok Bakula Rimpochee Airport in Leh is the airport connecting the region to other places by air.

By rail: Jammu Tawi Railway Station (700 km from Ladakh) is the nearest railhead. From here, one can hire a cab or board a JKRTC bus to Ladakh.

By road: The most popular means of reach Ladakh remains to be the road. Travelers can go on a bike/jeep ride to the destination. Bike trips from Delhi, Chandigarh, and Manali are the most popular.

Attractions: Zanskar Valley, Pangong Tso Lake, Khardung-La Pass, Spituk Gompa, and Hemis National Park

Rental bikes: You can rent a bike in Ladakh and it costs upto INR 2000 per day

Average temperature: 15 degree celsius (Min.) and 28 degree celsius (Max.)

Nearest Fuel stations: Nagbal, Ganderbal, Kargil and Khalsi are four fuel stations on the route of Srinagar Leh.

Accommodation: Stok Palace Heritage hotel and Shakti Himalaya are some of the accommodations you can stay at in Ladakh

Attractions: Nubra Valley, Khardung La, Shanti Stupa, Magnetic Hill, Pangong lake and leh palace are a must visit.



-ANUSHKA BANSODE
(NEWSCASTER)

Ref: www.lehladakhtourism.com

POLLUTED CITY DELHI

Introduction

Delhi is officially the National Capital Territory (NCT) of Delhi, is a city and a union territory of India containing New Delhi, the capital of India. It is bordered by the state of Haryana on three sides and by Uttar Pradesh to the east. The NCT covers an area of 1,484 square kilometres. Delhi is one of the oldest cities in the world, and has been continuously inhabited since the 6th century BCE. Through most of its history, Delhi has served as a capital of various kingdoms and empires, most notably the Pandavas, the Delhi Sultanate and the Mughal Empire.

Best time to visit :-

The best time to visit Delhi is from October to March when the weather is at its best. During this period flowers are at their blooming best, the weather is pleasant and enjoyable to experience Incredible Delhi.

How to reach there :-

Delhi is well connected by bus to cities like Jaipur, Agra, Alwar, Chandigarh, Amritsar, Shimla, Manali, Dharamsala, Dehradun and even Kathmandu. Domestic Airport connects Delhi to the major cities in India. The railway network connects Delhi to the all major and, nearly, all the minor destinations in India.

Places to Explore :-

- India gate
- Akshardham temple
- Bahai (Lotus) Temple
- Jantar Mantar
- Chandni Chowk
- Gurudwara Bangla Sahib

Conclusion :-

Delhi is the place where you can find both rich ancient heritage that perfectly blends with the present modern times. ... In addition to the ancient architectural structures, there are also the well appointed places such as gardens, museums, the metro system, modern temples such as the Bahai Lotus Temple, etc



-RACHNA YADAV
(NEWSCASTER)

Ref: www.delhitalks.com

SPORTS

ENVIRONMENTAL CHANGES IN THE CONTEMPORARY WORLD SPORTS

As the planet heats up, competing in - or even watching - many outdoor sports is becoming increasingly challenging as climate change brings harsher heatwaves, more intense rain, greater fire risks and other threats. As heatwaves hospitalise players in sports from tennis to cricket, competitions are cancelled due to extreme weather, and winter sports try to cope with less snow and ice, sporting bodies have begun eyeing ways to adapt to the changing climate.

THE HEAT IS ON

The World Meteorological Organization said in June that 2019 was on track to be among the world's hottest years on record - another record year in a string of them over the last five years. That is worrying officials planning events from the 2020 Summer Olympics in Japan to the 2022 soccer.



World Cup in Qatar, a scorching heatwave in Japan last summer prompted Tokyo's Olympics organisers to plan an earlier start time for the event's marathon race and to cover the course with a reflective layer to try to cut pavement temperatures by up to 8 degrees Celsius (14F). Organisers were also looking at ways to keep spectators cool with tents, fans and sprays of cooling mist. Qatar, in turn, is aiming to hold the next soccer World Cup - normally a summer event - during the winter, in November and December, to avoid the worst of the region's steamy heat. It will also install cooling technology in stadiums. "The sporting body needs to provide those provisions so (fans) don't get ill or hospitalised," said Kate Sambook, a climate researcher at Britain's University of Leeds.

But the Olympics and soccer aren't the only sports struggling with heat. Last January, during a match in Australia when temperatures hit 42C (107F), England's cricket captain Joe Root was sent to hospital with exhaustion and dehydration.

At the U.S. Open last August in New York, meanwhile, a tennis fan collapsed in the stands and several players requested medical attention during their matches as temperatures soared above 32C (90F) amid crushing humidity.

As a result, the United States Tennis Association imposed special rules to allow players a 10-minute break between the second and third sets under such conditions. The World Health Organization has said heat stress linked to climate change is likely to cause 38,000 extra deaths a year worldwide between 2030 and 2050, as it worsens existing health problems and provokes heat stroke and exhaustion.

-PRACHI CHAUDHARI

(NEWS CASTER)

REF:

(<https://www.weforum.org/agenda/2019/08/climate-change-turns-up-heat-on-sports/>)

SOCIAL ISSUE

ENVIRONMENTAL DISASTERS ACROSS THE WORLD THAT SHOOK US UP LAST YEAR

People need to focus on the importance of biodiversity since nearly one million species are facing extinction. Because of climate change and human interruptions in the natural environment of several species, the number of environmental disasters has been on the rise. From destruction caused by oil spills to bushfires and floods, mentioned below are some of the worst environmental disasters of 2020 from across the world.

1.Uttarakhand forest fires

The state of Uttarakhand was hit with an environmental tragedy, where 51 hectares of land were burnt due to forest fires in multiple districts in the state. The fires have resulted in the death of two people. The main cause of these forest fires has been the heatwaves that have engulfed all northern regions of India, presumably because of global warming and climate change.

According to several media reports, huge forest covers have been lost in the Kumaon region of Uttarakhand due to the forest fires. With the lack of humidity in the air and existing weather conditions, it became very difficult for the authorities to control the fires.

2. Oil spill in Russia's Arctic region

A state of emergency was declared by the Russian President Vladimir Putin after 20,000 tonnes of diesel was leaked into a river in Russia. A fuel tank collapsed, leaking large amounts of diesel into the river, near Norilsk, which is located above the Arctic Circle.

If this is not handled properly by the authorities, the oil on the surface of the river can block the respiration for marine life. The lighter oil can also mix with the water and get absorbed in the marine mammals' systems, which might lead to problems inbreeding, or even death.

3.Australian bushfires

Australia was engulfed by raging forest fires towards the end of 2019 and the start of 2020, a period which is now known as Black Summer for the country. Hundreds of fires burnt during this season, mostly in the southeast parts of the country. The fires had started in September 2019 and were finally extinguished in February 2020 due to heavy rains.

Nearly 18 million hectares of land were burnt during this bushfire season, destroying nearly 3000 homes and killing a total of 34 people. According to several reports, one billion animals were killed and many endangered species in the country were driven to extinction due to these fires, which were caused by extremely high temperatures and low humidity.

4. Cyclone Amphan in West Bengal and Odisha

Cyclone Amphan was a tropical cyclone that hit West Bengal, Odisha and Bangladesh in May 2020 and caused widespread destruction. The storm was considered the strongest to hit the West Bengal in over a decade, with 86 deaths in the state. The cyclone reportedly had a direct effect on nearly 70 percent of the state's population and the damages caused by the storm will cost nearly one trillion rupees fix.

Widespread floods were caused in West Bengal and Odisha, which killed nearly 4,000 livestock, primarily poultry. The main cause of the cyclone was the high sea temperatures of the Bay of Bengal, which cause rapid intensification of a mild storm to a super cyclone.

5. Spring Tornadoes in the US

As the tornado season has crept up on the citizens of the US, it has already proved to be the worst and busiest tornado season yet. As of now, the US has recorded a total of nearly 456 tornadoes, out of which 498 hit the country in April. All the tornado activity in US caused a total of 40 deaths.



-Sanchita Sutar

(NEWSCASTER)

Ref- Indiatoday.com

STUDENT'S SECTION

QUIZ

- Q.1. Which of the following is a greenhouse gas?
- CO₂
 - CH₄
 - Water vapor
 - All the above
- Q.2. What is the greenhouse effect?
- The name of climate change legislation that was passed by Congress
 - When you paint your house green to become an environmentalist
 - When the gases in our atmosphere trap heat and block it from escaping our planet
 - When you build a green house
- Q.3. Consequences associated with climate change?
- The ice sheets are declining, glaciers are in retreat globally, and our oceans are more acidic than ever
 - Surface temperatures are setting new heat records about each year
 - More extreme weather like droughts, heat waves and hurricanes
 - Global sea level is rising at an alarmingly fast rate —17 centimeters(6.7 inches)in the last century alone and going higher
- Q.4. What can you do to help fight climate changes?
- Divest from fossil fuel companies
 - Engage yourself in the science behind climate change
 - Vote for political candidates who will advocate for climate - related legislation and policy improvement
 - All of the above
- Q.5. What was agreed to in the "Paris Agreement" that comes out of COP-21, held in Paris in 2015?
- To protect biodiversity and end the deforestation of the world's rainforest
 - To keep global temperature rise well below 2 degree Celsius pre-industrial levels and to pursue a path to limit warming to 1.5 degree Celsius
 - To limit sea level rise to 3 feet above current levels
 - To pursue a goal of 100% clean, renewable energy
- Q.6. Which of these countries emits the most carbon dioxide?
- China
 - USA
 - UK
 - Russia
- Q.7. What percentage of the global greenhouse gas emissions does the transportation sector emit?
- 1%
 - 14%
 - 33%
 - 70%
- Q.8. Which has been the hottest year on record?
- 2016
 - 2020
 - All of the above
 - None of the above

- RASVITA RANE
(NEWSCASTER)

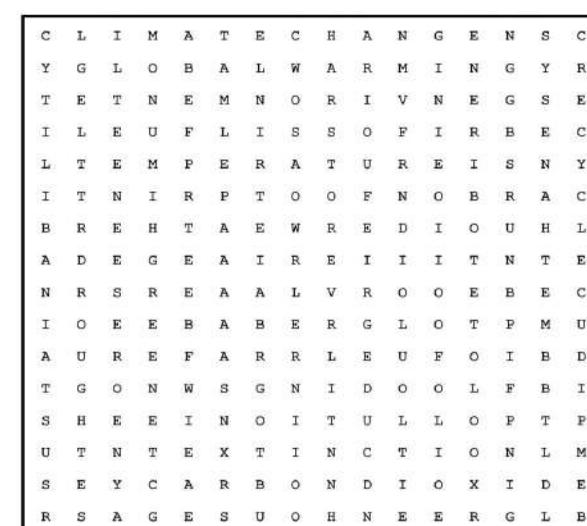
Ref - <https://www.earthday.org/the-climate-change-quiz/>

WORDSEARCH PUZZLE

Word search CLIMATE CHANGE

You can go up, down, forwards, backwards or diagonally in this wordsearch.
Why not time yourself to see how long it takes you to find all the words?

CLIMATECHANGE	CARBONFOOTPRINT	FOSSILFUEL	EXTINCTION
TEMPERATURE	POLLUTION	SUSTAINABILITY	RENEWABLEENERGY
FLOODING	GLOBALWARMING	WEATHER	METHANE
CARBONDIOXIDE	GREEN	BIOFUEL	BIODIVERSITY
DROUGHT	GREENHOUSEGAS	ENVIRONMENT	RECYCLE

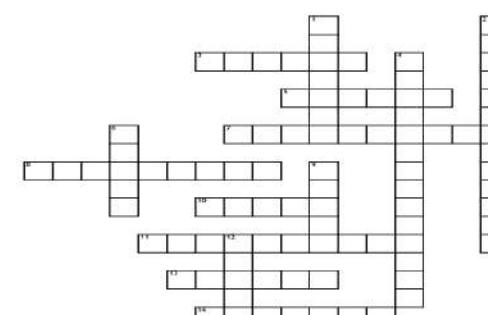


-RASVITA RANE
(NEWSCASTER)

REF :- www.practicalaction.org

CROSSWORD PUZZLE

CLIMATE CHANGE



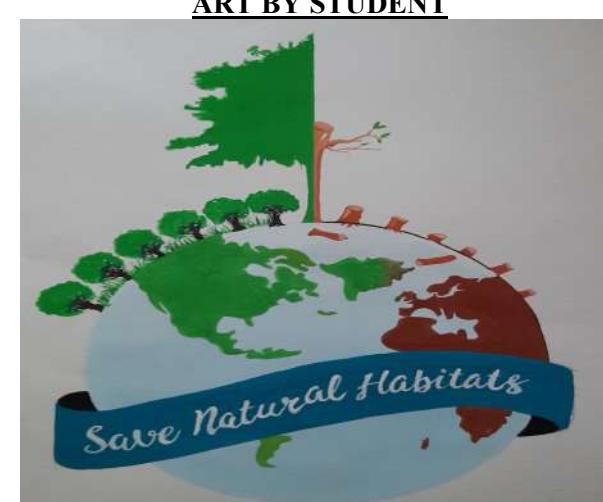
Across
3. _____ fuels
5. _____ dioxide is what we exhale
7. _____ gases can cause global warming
8. A change in the quality of the environment that can adversely affect the health of humans or other living organisms.
10. Water
11. The mixture of gases surrounding the earth
13. _____ warming
14. You can _____ a plastic bottle

Down
1. The average weather for a region over a long time period
2. _____ is another name for global warming
4. Process that occurs in living green plants where carbon dioxide is converted to oxygen
6. _____ energy: direct radiant energy from the sun
9. Planet _____ is heating up because of global warming
12. The _____ layer has holes in it due to global warming

-RASVITA RANE
(NEWSCASTER)

REF :www.wordmint.com

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- Yashika Patel

(TYBMS)

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