



A.G. TEACHERS COLLEGE, AHMEDABAD

The AGian Eco-Post

Year 2019-20

Issue 1/4

Australia Bushfire: After Amazon, it's Kangaroo Island that's burning

Inside this issue:

Climate Change	2
Greta Thunberg	2-3
Goals of SDG	4
Sustainable City	5
E-waste	6
Eco-Pledge	7
Fun Time	8
2020 Resolution	9

Special points of interest:

- Person of the Year 2019.
- Ways of making every day an Earth day.
- Know about the 17 SDG.
- How to make more smart and Eco city?
- How to recycle the E-waste?

After the world witnessed the devastation of the Amazon rainforest wildfire, it's the Kangaroo Island which is burning. This is the worst wildfire that Australia has experienced in decades.

Bushfires are slow moving fires that have a high heat output which usually pass in 2-5 minutes and often triggered by natural sources such as lightning strikes but it can also result because of electric arcing or even arson. Sometimes a combination of conditions such as severe drought and heat waves turn the flora into tender and strong winds adds to the severity. The wind not only add O₂ to fuel the intensity of the fire but it also influences the direction in which it travels.

An estimated of 60,000 km² of land has burned and half a billion of plants and animal are believed to have perished in the fire including 30% of all Australian koalas - becoming a threatened species. This fire



has done 4 times more damage than Amazon fire.

The smoke produced is more than 5,500,000 km². Power and intensity of these bushfires are causing their own weather phenomena called - "PYROCUMULONIMBUS THUNDERSTORMS" or as NASA describes it as "A fire-breathing dragon of clouds". It is a very complex process in which the smoke from extremely powerful fire is propelled in the atmosphere from an intense updraft where it becomes a part of the clouds. The faster this happens, it is most likely that it will spark lightning which produces a

thunderstorm. However, the rain from the storm evaporates from the heat before it can reach the ground. So, rain from PY-

ROCUMULONIMBUS won't put out fires but will spark lightning causing even more fire.

Experts believe that climate change is amplifying the conditions necessary for firestorms to form.

Researchers have predicted that by 2060 they could begin to happen in spring as well as summer.

Source: <http://youtu.be/K14jmMNGHN4>

- Nabila A. Khan



SAVE AUSTRALIA



2009
Greta Thunberg is born in Sweden.

2011
Finds out about climate change. Cannot understand why so little is done about it.

2014
Becomes depressed and stops talking. "THAT BASICALLY MEANS I ONLY SPEAK WHEN I THINK IT'S NECESSARY. NOW IS ONE OF THOSE MOMENTS..."

2018
Sweden suffers from record heat waves. Wildfires rage in the Arctic Circle. "I FEEL LIKE I AM DYING INSIDE IF I DON'T PROTEST."

2018
Greta decides to not attend school. Holds a protest in front of the Swedish parliament. Demands that Sweden reduces carbon emissions. "SKOLSTREJK FOR KLIMATET"

2018
She declares: "I AM DOING THIS BECAUSE YOU ADULTS ARE SHITTING ON MY FUTURE."

2018
By the end of 2018, more than 10,000 students in 270 cities worldwide join in.

2019
Three members of the Norwegian parliament nominate Greta for the Nobel Peace Prize.

2019
School strikes begin taking place in over 2,000 cities worldwide.

Climate change in INDIA

India is the 13th most vulnerable country to climate change. Since more than 60 per cent of its agriculture is rain fed and it hosts 33 per cent of the world's poor, climate change will have significant impacts on the food and nutritional security. Here is a series of maps that capture climate change impacts on the country.

IMPACT AND VULNERABILITIES IN INDIA :

⇒ **The coast and islands** : The 7,517 km Indian coast can be divided into the west coast, the eastern coastal plain and the biodiversity-rich Indian islands. The region is already witnessing climate change impacts like frequent, severe cyclones and sea ingression due to sea level rise.

A one-metre rise in sea level will displace 7.1 million people in India

- Gujarat: Junagadh and Porbandar districts to witness increased intensity and frequency of cyclones Rainfall to increase by 6-8% in the western coast by the 2030s.
- Maharashtra: Sea level rise of one meter will inundate 0.18 per cent of the state Thane has the highest vulnerability to climate change.
- Kerala: Coconut yields are projected to increase by 30%. No. of rainy days to decrease; intensity of rainfall to rise by 1-4 mm/day.
- Karnataka: In Dakshina Kannada and Udupi, 28% coast has reported erosion. 10-15% decline in rice yield by 2050.
- Tamil Nadu: Sea water intrusion will impact drinking water sources; 13 districts already affected - Six coastal districts to witness intense cyclones.
- Andhra Pradesh : Reduction of fish catch in coastal areas. Temperature fluctuation will negatively impact winter crop. Coconut production to increase by 10%.

⇒ **The desert region**: The Thar desert, covering 10 per cent of the total geographic area of India, is the seventh largest desert in the world. Thar is also the world's most thickly populated desert. The region has witnessed unheard of floods in the recent past.

Rajasthan is the 2nd state after Jammu and Kashmir where the greatest number of cold waves have occurred.

- Gujarat : There will be heat stress and water shortages in the state. Luni and the West-flowing rivers of Kutch and Saurashtra to experience acute water shortage. The severity of drought for the Mahi and Sabarmati rivers will increase between 5% and 20% by 2050.
- Rajasthan : Western Rajasthan will witness severe and very severe droughts. The share of water for agriculture is set to reduce from 83% to 70% by 2050.

⇒ **The Indian Himalayan region:** The Himalayas, which represent about 16.2 per cent of the total area of the country, are not only a key watershed of India but also play a crucial role in the monsoon system. Climate change impacts on the mountain range can affect the entire sub-continent.

The mean temperature of the Himalayas has gone up by 0.6°C in the past 30 years; the frequency of warmer days is also increasing

CLIMATE CHANGE PROJECTIONS AND IMPACTS :

Flash flood due to glacial lake outbursts may lead to landslides and affect large-scale food security. Himalayan glaciers melting faster than others elsewhere in the world. Productivity of apple has decreased by 2-3% over the past few years; this will go down further. Project increase in intensity of rainy days is 2-12% in the Himalayan region.

Source: cdn.downtoearth.org.in

- Athira P.Kumar

10 ways to make everyday Earth Day

- Go outside more
- Get reusable bags
- Recycle
- Buy organic food and products
- Stop eating meat
- Start composting
- Start gardening
- Use glass bottle over plastic
- Make your own cleaning products
- Plant a tree



Source: theecologycenter.org

-Athira P. Kumar

Earth Day

Earth Day is a special day,
Bringing great awareness,
Learn what you can do to help,
Show that you are not careless.

Recycling is an easy thing,
Placing items in a special bin,
Some things you don't throw away,
Paper, glass and tin.

Conserve resources and find new ways,
To get you where you're going,
Take a walk or ride a bike,
Keep air pollution from growing.

Don't forget about Arbor Day,
Plant a tree that will thrive,
Grow a vegetable garden,
Help our Earth remain alive!

-Musharrat Ikkiswala



1.4 million pupils participate.

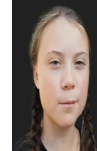
WE ARE THE VOICELESS FUTURE OF HUMANITY. WE WILL NO LONGER ACCEPT THIS INJUSTICE.

2019

Students from more than 1,800 cities in 110 countries protested against the escalating climate crisis.



I AM 16 YEARS OLD, I COME FROM SWEDEN AND I WANT YOU TO PANIC.



Became Person of the year 2019

Source: blog.kickresume.com

-Nabila A.Khan

Knowing Sustainable Development Goals



Hey Ruhan!!! Did you hear about sustainable development?

No...!! I don't know, what It is Sameer?



Sustainable development is defined as a development that meets the needs of the present without compromising the ability of future generation to meet their own needs.

Oh...!! I see.. But how is it possible? How can we achieve it?



There are 17 goals in sustainable development to achieve it, called sustainable development goals.

Goal? What kind of goals?



- To end poverty.
- To end hunger, achieve food security, improved nutrition and promote sustainable development.
- Ensure healthy lives & promote well-being for all at all stages.
- Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- Achieve gender equality & empower all women and girls.
- Ensure availability & sustainable management of water and sanitation for all.
- Ensure access to affordable, reliable, sustainable and modern energy for all.
- Promote sustained, inclusive and sustainable economic growth, fuel and productive employment and decent work for all.
- Built resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- Reduce inequalities within and among countries.
- Make cities and human settlements inclusive, safe, resilient and sustainable.
- Ensure sustainable consumption and production pattern.
- Take urgent actions to combat climate change and its impact.
- Conserve and sustainably use the oceans, seas, and marine resources.
- Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably managed forests, combat desertification and halt and reverse land degradation and halt biodiversity loss.
- Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and built effective, accountable and inclusive institutions at all levels.

Making smarter, more sustainable city

◇ Concept:

Sustainable city is a city designed with consideration for social, economic, environmental impact without compromising the ability of future generations to experience the same. This city will be inhabited by people who will be dedicated towards minimization of require input of energy, water, food, waste, output of heat, air pollution- CO_2 , methane and water pollution.

◇ Key Features:

1. Wherever possible, renewable resources will be used instead of conventional resources.
2. New homes will be energy efficient and affordable.
3. Number of trees will be more than total population of city.
4. All electricity of the city will be produced by renewable energy sources.
5. All education and health management societies will be digitalized.
6. Public transport will be seen as a viable alternative to cars.



7. Public transport will be safe and reliable.
8. Walking and Cycling will be safe.
9. Traffic lights, Municipal and all government offices will be connected by smart sensors.
10. Water and Drainage system will be recycled.
11. Waste will be seen as resources and will be recycled wherever possible.
12. City will be covered by CCTV and Wifi.
13. Optimal building density to make public transport viable but avoiding the creation of Urban heat islands.
14. City will have more and more Eco-industrial park and Green building.

◇ Current Facts:

1. Denmark running on 100% renewable energy for the year 2050.
2. Copenhagen is a city where over 50% of the population get around on bicycle.

Source: <http://www.bbc.co.uk/bitesize/guides/zqvxdmn/revision/1>

-Rajput Parth



TOXIC WASTE

Just a few of the toxic chemicals found in e-waste, with the body parts that they affect.

Lead blood, nervous system & kidneys

Cadmium body & kidneys

Mercury brain

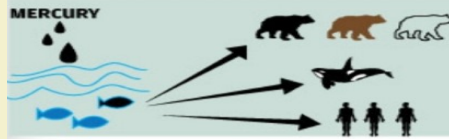
Chromium allergies

PVC lungs



Electronic waste: an overview

Lead tends to accumulate in the environment and has high acute and chronic effects on plants, animals and microorganisms.



When inorganic mercury spreads out in the water, it is transformed to methylated mercury, which percolates through the food chain, particularly via fish.

Chromium VI can cause damage to DNA and is extremely toxic in the environment.



Electronic waste or E-waste

It describes discarded electrical or electronic devices. Used electronics which are destined for refurbishment, reuse, resale, salvage recycling through material recovery, or disposal are also considered e-waste. Informal processing of e-waste in developing countries can lead to adverse human health effects and environmental pollution.

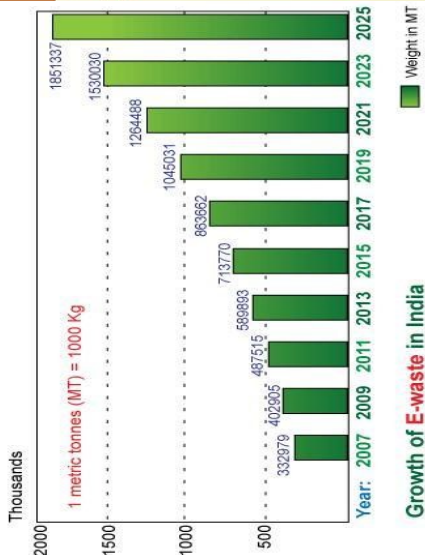
WAYS TO REDUCE E-WASTE AND ITS HAZARD :

The Following are the ways to curb these environmental hazards, reduce electronic waste, and save our planet.

- Sell/Donate old Electronics.
- Recycle and Dispose of E-Waste Properly.
- Maintain your Electronics.
- Repurpose old electronics.
- Store Data Online.
- Buy Energy Star Rated Electronics.
- Rent Electronic Equipment instead of Buying.

Source : <https://get-green-now.com/reduce-ewaste-hazards/>

-Yasmin Bano



HOW E-WASTE IS PROCESSED?



प्रतिज्ञा

पर्यावरण को बचाना हमारा ध्येय हो,
सबके पास इसके लिए समय हो,
पर्यावरण अगर नहीं रहेगा सुरक्षित,
हो जायेगा सब कुछ दूषित,
भले ही आप पेड़ लगाये एक,
पूरी तरह करे उसकी देखभाल,
सौर ऊर्जा का करे सब उपयोग,
कम करे ताप विद्युत का उपभोग,
रासायनिक खाद का कम करे छिड़काव,
भूमि को दूषित होने से बचाव,
कचरों का समुचित रीती से करो निपटारा,
फैक्ट्रियो मे जब सौर यन्त्र लगे जाएगी,
वायु प्रदूषण मे अपने आप कमी आएगी,
तब जाकर पर्यावरण प्रदूषण मे कमी आएगी,
आधी बीमारियों अपने आप चली जाएगी

-उन्नति व्यास

कविता

अपने हित के खातिर देते है मौत को बुलावा
गुस्से मे यू तदकती उगले धरती लावा
रोक सको तो रोक लो क्योकि है धरती विनाश पर
अब नहीं पानी बरसाते बादल है अवकाश पर
पेड़ कटते है लेकिन दोष नहीं कुल्हाडी का
हर जगह गड्डे है नाम निशान नहीं पहाडी का
जो पालती हमको हम फिर उसको क्यों खत्म कर रहे है
फाड़ के सीना इसका अस्थियो में क्या खोज रहे है
आज खेत सूनसान पड़ा और दिखते नहीं पेड़ है
कोई बता दो कहां खो गया इमली का पेड़ है
पेड़ कटे जंगल बट्टे और बंदर छत की शान है
जंगल का राजा सड़क पर और जंगल मे इन्सान है

- उन्नति व्यास



FUN TIME

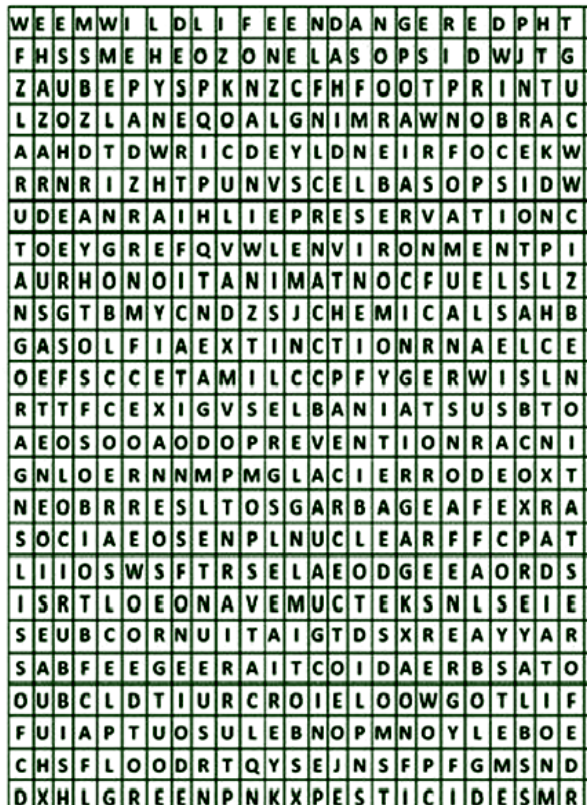
ENVIRONMENTAL JUMBLE

SR NO.	DEFINITION	JUMBLED WORDS	ANSWERS
1	Air surrounding the earth.	OSHETMAPRE	
2	Natural fertilizer.	OCTOMPS	
3	A way to reduce waste.	CELGRYICN	
4	Consume carbon dioxide and produce oxygen.	ESRTE	
5	Global warming is changing this.	MECILAT	
6	Energy from the sun.	ALOSR GYNREE	
7	Burning fossil fuels is a main cause.	AOLBGL MGIRWNA	
8	Provides a non-polluting form of transport.	CIBELYC	
9	Describes foods produced without chemicals.	ANIGROC	
10	Illness caused by pollution.	MAHATS	
11	Energy that nature can provide continuously.	WEBENLRAE REGYNE	
12	Group of living organisms and their environment.	TYEOCSMSE	
13	Most common greenhouse gas.	BANORC OXDDIEI	
14	Gas that traps heat from the sun.	NOSGEEHRUE SGA	
15	Impact of a human being on earth.	NAOCBR RONFPITNO	
16	Part of the earth's atmosphere	OENZO YREAL	
17	Toxic gas found on farms and landfills.	NHEMTAE	
18	The cleanest fossil fuel	LRAAUTN SAG	
19	Place where trash sent or collected.	LDFAILNL	
20	International treaty	TOKYO OCLOTROP	

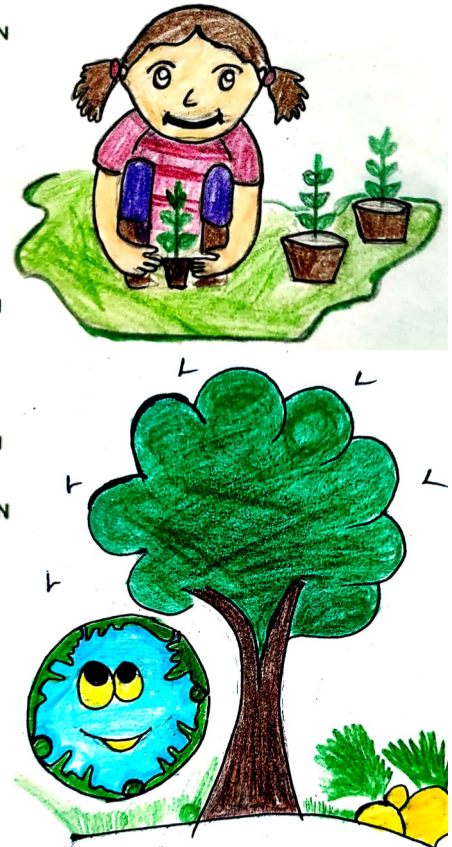
-Musharraf Ikkiwala

WORD SEARCH

WASTE
PREVENTION
CONSERVATION
GARBAGE
HAZARDOUS
FOOD
YARD
DEBRIS
BIODEGRADABLE
ENVIRONMENT
RESTORATION
PRESERVATION
PROTECTION
NATURAL
RESOURCES
SUSTAINABLE
RENEWABLE
GREENHOUSE
EFFECT
POLLUTION
CLIMATE
GLACIER
MELTING



DESERTIFICATION
OCEAN
RAINFOREST
OZONE
LAYER
GLOBAL
WARMING
ECOSYSTEM
AFFORESTATION
WILDLIFE
DISPOSABLE
ECOLOGIST
DEFORESTATION
ECOFRIENDLY
CONTAMINATION
ENDANGERED
SPECIES
DISPOSAL
GREEN
POWER
FOSSIL
FUELS
ENERGY



YASMIN BANO

New Year Resolution 2020



હું બિનજરૂરી ગાડીનો હોન વગાડીશ નહીં.

- Twinkle Patel



હું વીજળીનો જરૂરીયાત મુજબ વપરાશ કરીશ.

- Priya Yadav



હું બને ત્યાં સુધી પ્લાસ્ટિકની બેગ નો ઉપયોગ નહીં કરું, અને જરૂરી હોય ત્યાં ફરીથી ઉપયોગ થાય તેવી બેગ વાપરીશ.

- Avni Gadhe



હું મારી આસપાસ સ્વચ્છતા રાખીશ, કચરો કરીશ નહીં.

-Hetal Patel



હું ભૂખ હોય તેટલું જ જમવાનું થાળીમાં લઈશ અને અન્નનો બગાડ કરીશ નહીં.

-Kumudshree Pancholi



હું હંમેશા વૃક્ષારોપણ કરીશ અને આસપાસ ના વૃક્ષો નુ જતન કરીશ.

- Rahul Chavda



હું હંમેશા પર્યાવરણ માટે મારા શ્રેષ્ઠ પ્રયાસો કરીશ અને હંમેશા પ્રાણીઓને મદદ કરીશ.

- Rahul Sharma



હું પાણીનો બિન જરૂરી ઉપયોગ નહીં કરું.

- Urvashi Rathod



હું નજીકના સ્થળે જવા માટે જાહેર બસનો ઉપયોગ કરીશ.

- Rukhsar Shaikh



ઊર્જાનો ઓછામાં ઓછો ઉપયોગ કરીશ અને પર્યાવરણને નુકસાન ન થાય તેનું ધ્યાન રાખીશ.

- Leena Panchal



હું ફેશન ને નકારી પોતાની જરૂરીયાત મુજબ વસ્તુ ની ખરીદી કરીશ.

- Tausif Raza Pathan



હું અશ્મિભૂત ઇંધણના ઉપયોગ ઘટાડવા અને શુદ્ધ ઇંધણ પર સંપૂર્ણપણે ધ્યાન કેન્દ્રિત કરવા ઇલેક્ટ્રીક વાહનનો ઉપયોગ કરીશ.

- Parth Rajput



बिजली का बेवजह इस्तेमाल न करके ऊर्जा बचाने की कोशिश करूंगी ।

- Unnati Vyas



I will preserve water in my everyday life.

- Yasmin Bano



I will dispose dry waste and wet waste separately.

- Athira Kumar



I will use public transport or will walk down for near distances.

- Mehnaz Bano



કચરો હંમેશા કચરાપેટીમાં નાખીશ.

- Kaynat Sindhi



I will use kitchen waste for composting.

- Musharrat Ikkiswala



I will make atleast one energy-efficient change in my home.

-Nabila Khan

-Musharrat Ikkiswala

