

A STUDY ON POLLUTION PROBLEM IN INDIA

Project Report submitted in partial fulfilment of the requirements for the award
of the Degree of

MASTER OF BUSINESS ADMINISTRATION
of
BENGALURU CENTRAL UNIVERSITY



By

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2019-2021

DECLARATION BY THE STUDENT

I hereby declare that “**A STUDY ON POLLUTION PROBLEM IN INDIA**” is the result of the project work carried out by me under the guidance of **DR. TEJAS B VYAS** in partial fulfillment for the award of Master’s Degree in Business Administration by Bengaluru Central University.

I also declare that this project is the outcome of my own efforts and that it has not been submitted to any other University or Institute for the award of any other degree or Diploma or Certificate.

Place: Bangalore

Name: CHANDAN KUMAR

Date:23/01/2021

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GUIDE CERTIFICATE

This is to certify that the Project Report title “**A STUDY ON POLLUTION PROBLEM IN INDIA**” Submitted by CHANDAN KUMAR, (Reg no: MB198216) to Bengaluru Central University, Bangalore for the award of Degree of MASTER OF BUSINESS ADMINISTRATION is a record of work carried out by he/her under my guidance.

Place: Bangalore

Date: 23/01/2021

Signature:

ACKNOWLEDGEMENT

During such project report is an arduous task itself. I was fortunate to get support from a large number of people whom I shall always remain grateful. I would like to express my deep gratitude to all those who, directly made this project report possible.

I would like to express my gratitude to **DR. APARNA RAO**, principal of GIBS B SCHOOL Bangalore who gave me an opportunity to do a research study on the chosen topic

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Sr. no	Title	Page No
1.	Chapter 1: Introduction <ul style="list-style-type: none">• Introduction about topic• Statement of the problem• Need and relevance of the study	6-13
2.	Chapter 2: Methodology <ul style="list-style-type: none">• Objectives of the study• Research methodology• Data collection• Limitation of the study	14-18
3.	Chapter 3: Swot analysis	19-20
4.	Chapter 4: Outcomes of the study	21-26
5.	Chapter 5: Experience, Learning and Conclusion	27-28

CHAPTER 01

INTRODUCTION

Pollution influences the atmosphere in terms of human health and also the manner in which certain processes, including the climate, operate on the earth. All areas of the world are affected by pollution. It affects our health by food we consume, drinking water and the air we breathe, and is expected to cause about 19 million premature deaths per year as a result of the use of natural resources for global production and consumption and the environmental effects.

The first enemy of mankind has been pollution. The 19th century industrial revolution led to a tragedy for the world. Today, the whole world fears more pollution than nuclear energy – the technical developments in life style and the national economy, which have overwritten control over nature, have brought revolutionary changes. Environmental security has become an important concern for people's well-being and economic growth around the world.

There are many things which are useful in polluting people. Cars sprout their exhaust pipes with toxins. Air pollution due to the burning of coal to produce electricity.

Air pollution

Air pollution is increasing at an unprecedented pace in the cities. New data from the World Health Organization have pointed out that emissions are harming human health and melting rapidly in developing economies like India.

The cities of India have some of the highest particle emission levels, with 14 of the worst 30 cities.

Since 2011, China, which has suffered from air pollution, has improved its air quality, with just five of its top 30 cities.

Noxious smog spreads across the Ganga and Indus basins and in Bangladesh Peshawar is among the worst cities of Pakistan and Dhaka.

In the five years between 2008 and 2013, global air pollution levels increased by 8 per cent. In poorer regions cities most of the more than 300 cities in the middle and low – the income countries have recorded an alarming increase, sometimes five times above their security limits. Dust and sand and soot are also extreme in Indian cities of 10 particles greater than pm. Such particles heat and warm urban zones, which in lower altitudes will lead to climate change. India includes 8 cities from 30 to 10 pm worldwide. High air pollution levels are "health catastrophic," said the co-author Annette of the study financial times. Air pollution causes more than 3 million premature global deaths annually, according to who reported the new particulate matter level data on May 12 in 3,000 cities in 103 countries.

Water pollution

Indian cities 10 particles larger than pm are also extreme in sand and soot. These heat particles vanish and warm urban areas contributing to climate change at lower altitudes. India comprises eight cities worldwide from 30 to 10 pm. High levels of air pollution are "health catastrophic," the co-author of the report, Annette, explained. According to data from new level of particulate matter recorded on May 12 in 3,000 cities in 103 countries, air pollution causes more than 3 million.



The contamination of water may be categorized as ground or surface water. Pollution from the aquatic ecosystem and pollution by nutrients are subsets of water pollution. Point sources or

non-point sources are sources of water contamination. Point sources have one identifiable causes of contamination, such as a plant that drains from storms or a wastewater treatment plant. Containing the broad variety of chemical, pathogens and physical parameters, contamination is the product of the accumulated impact over time.

Pollution of water is measured by sample of water. It is possible to perform physical, chemical and biological tests.

Noise pollution

Noise pollution is commonly characterized as a repeated exposure in human or other living organisms to a high sound level that can lead to an adverse effect. Sound levels under 70 dB are not dangerous for live species, depending on the duration or quality of the exposure, according to the world health organization. Exposures above 85dB can be harmful for more than 8 hours to excessive noise. You are very likely to be subjected to noise pollution around 85dB when you operate in close proximity to a busy road or highway for 8 hours.



In today's world there are so many pollutants.

- Sounds of street traffic from coaches, taxis, football, ambulance and so forth.
- Building sounds such as boiling or other in action heavy machinery.
- Airports, for example with continuously higher air traffic noises. Aircraft take off or land.
- Sound workplace, commonly used in open secure workplaces.
- Loud music at industrial sites or in the vicinity.
- The sounds of industry such as fans, engines, compressors, mills.
- Compressor of train, miles.
- Transport train stations.

Land pollution

Land pollution is the destruction at and below ground level of earth's surface. The explanation is that solid and liquid waste materials are accumulated that contaminate groundwater and soil. Municipal solid wastes, including both hazardous and non-hazardous waste, are also referred to as such waste.

When waste is deposited onto an Areas of land, it may raise or minimize the risk of land contamination by the soil formations below the waste. The more soil permeability, the more

likely the soil permeability, the more likely the soil is to be infected.



Mining consists of the extraction from the earth of minerals and other geological materials which are then used for a wide variety of purposes, including but not limited to the production of fuel for cars, the production of energy and the sale of materials such as gold and silver. However this extraction and the process used deplete the earth and cause damage and contamination in its wake. This is why it is so important to find renewable energy sources which are not derived from the surface of the earth to help minimize emissions.

Statement of the problem

Toxic chemicals:

Since 1930 chemicals have increased by 400 since their development, but they have also polluted the world's landscape. They can travel long distances by air and accumulate through the skin in or intake of chemicals in the body of animals and humans. Others may cause damage, while some chemicals may be harmless. In addition, there are three types of chemicals,

which exist and accumulate in the species of wildlife and humans, endocrine disruptors that can interact with hormones and chemicals that can trigger cancer or harm DNA, that are increasingly concerned in the latest.

Greenhouse gases:

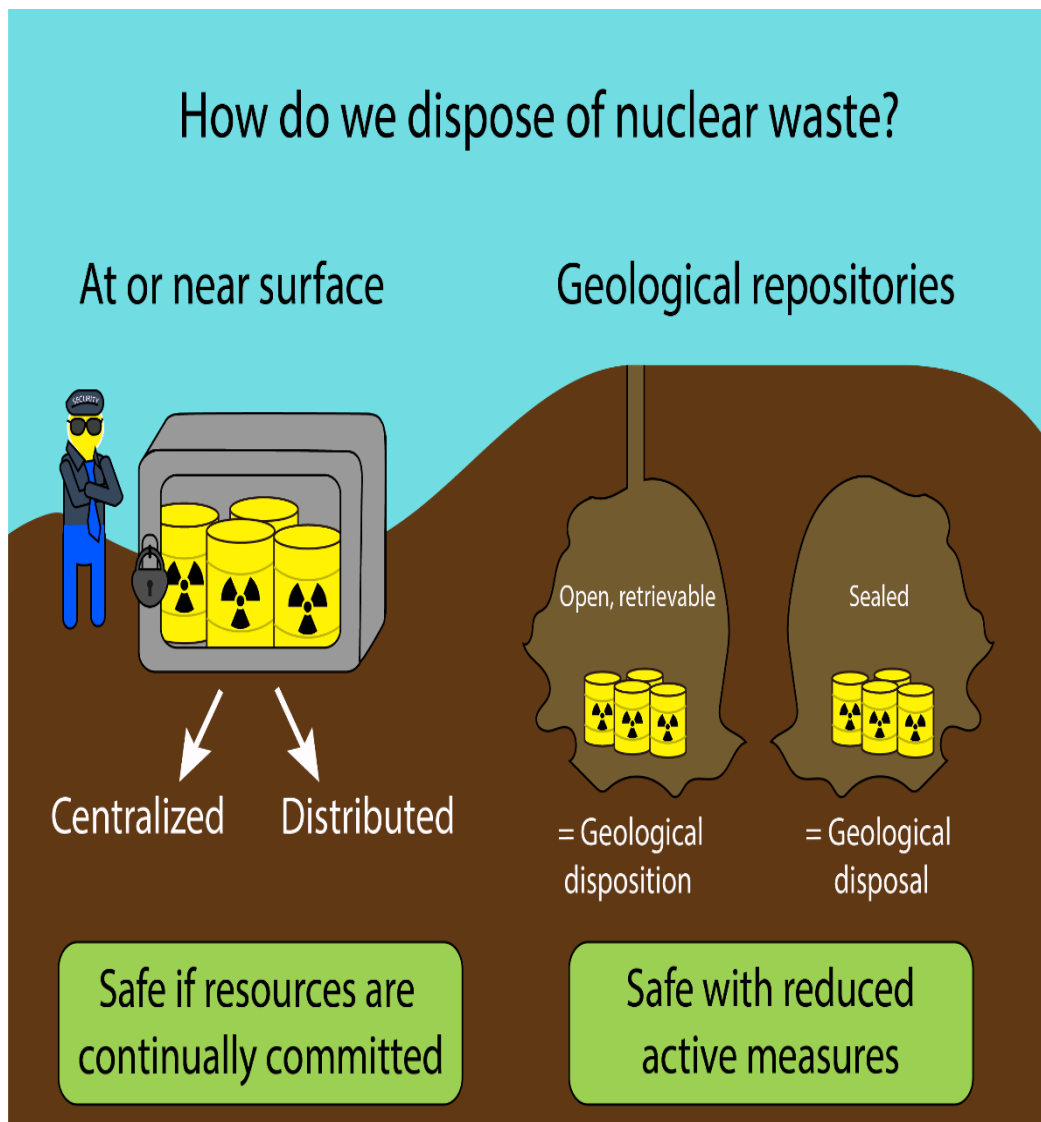
By trapping the earth's heat in the atmosphere, greenhouses are contributing to higher temperatures and to all of the indoor signs of climate change. These include rising sea standards. Severe weather, heat-related deaths. Carbon dioxide accounted for 81 percent of the total country's greenhouse gas emissions, and methane accounted for 11 percent, according to a 2014EPA report. "Carbon dioxide comes from fossil fuels combusted with natural and industrial sources, including the vast quantities produced by oil and gas forage

Groundwater:

The water becomes ground-water as rain falls and flows deeper into the ground, fills the holes, gaps, and porous spaces of an aquifer (most notably an underground storehouse). Almost 40% of Americans rely on soil water, and they inject drinking water into the surface of the earth. It is their only source of freshwater for some people in rural areas. Groundwater pollutes by pollutants – from pesticides and fertilizers to waste from an aquifer to a water source, making it unhealthy for human use.

Nuclear waste:

Nuclear plants can produce a large amount of nuclear fission, and fusion RAMs contain hazardous radioactive material that can adversely affect human health. Under the planet, they are dumped to deter victims.



Need and relevance of the study

We know that pollution is our country's biggest challenge and we have taken strict steps on our own. However, we as individuals are also able to take measures to decrease our own environmental effects, particularly as regards air pollution.

- **Reduce the use of private vehicles:**

Travel on foot, on public transit or by vehicle, to your destination with others in the area if possible. You will reduce your carbon footprint by reducing vehicle emissions.

- **Conserve energy in the home:**

Reduce the use of energy by buying products that are environmentally friendly, turn your thermostat off and isolate the home. If feasible, turn to renewable sources of energy.

- **Recycle:**

Try buying fewer and recycling houseware and everything you throw away, even food scraps will go on a heap of compost.

- **Reduce food miles:**

You will greatly reduce the distance you move your food to your plate by buying more local food farms and by growing your own fresh items.

- **Improve the indoor air quality:**

In addition to the measures above, air quality can be improved yourself by demanding smokers to be able to lit elsewhere by avoiding extreme cleaning agents, by restricting the use of synthetic air refreshers, by periodically opening the window and by incorporating plants in your interior design.

While it is easy to condemn bad air quality for us. we must just look at statistics to realize the detrimental effects of pollution on us and our environment. It should also be noted that it is important that we act now if we do not want to leave an inheritance that future generations will not be able to undo.

CHAPTER 02

METHODOLOGY

The objective of the study

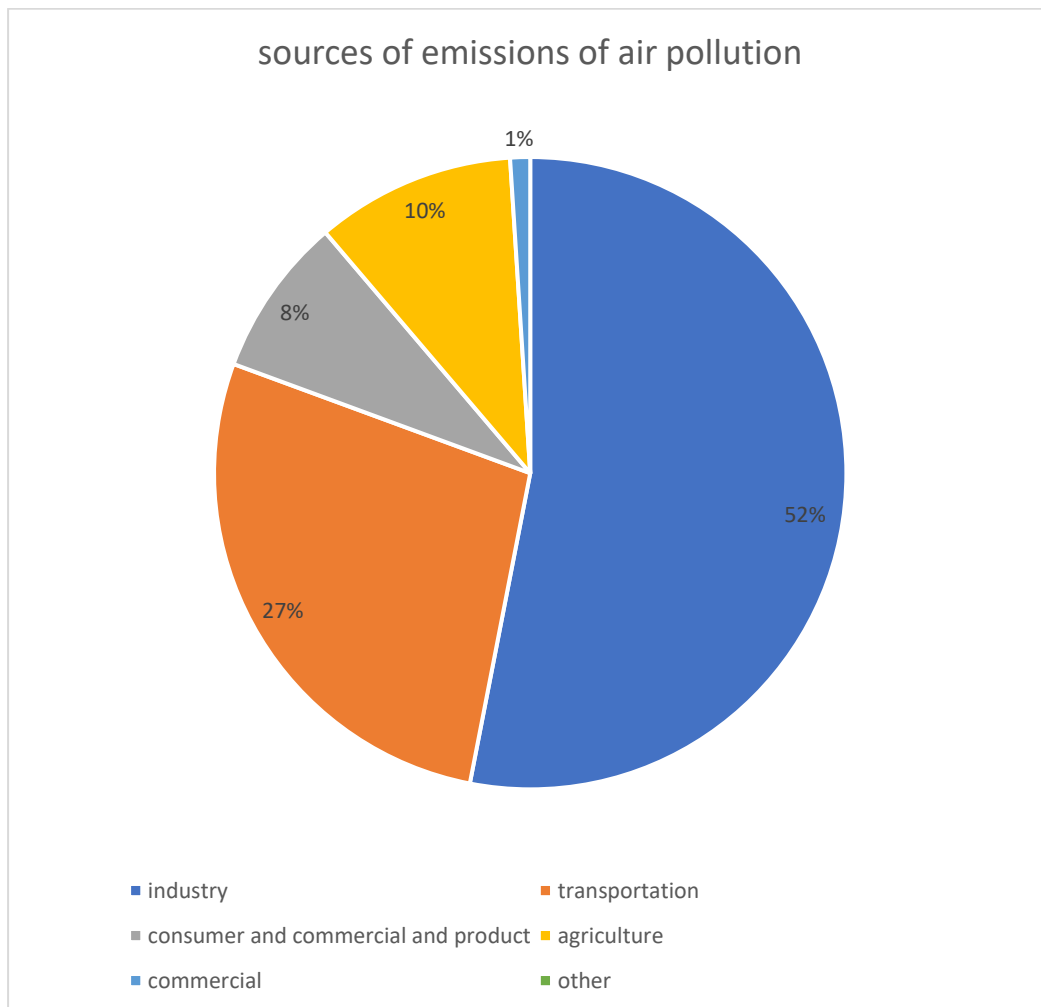
1. To stress so much environmental waste.
2. To underline how we are dealing with emissions.
3. Sensitization of India's emissions. Since it's really hard for the future if we don't grasp India's condition.
4. We cut millions of trees every year for the development of the paper.

Research methodology

Two types of data collection methods are available, for example: primary and secondary. Mates, colleagues, collect primary data because we cannot be somewhere in a pandemic situation. While the website gathers secondary info, our ideas etc.

Data collection

The different data from this study was collected through the internet, Wikipedia, so many maps, different journals and information from the government analysis and by examining people who normally have had to face this problem is gathered in this project.



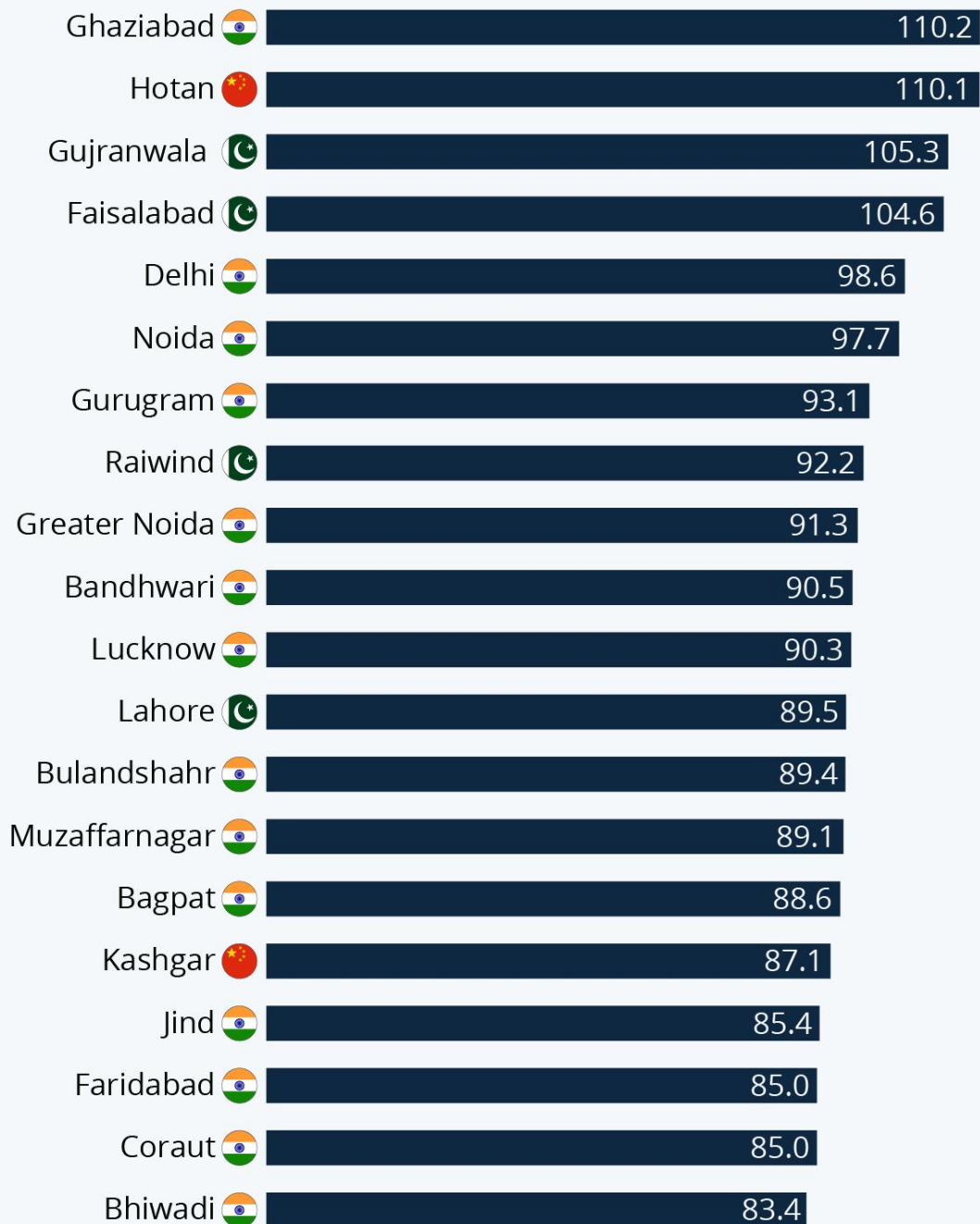
In this diagram you will see what the causes of air pollution are. I wasn't surprised when I saw the pie chart by the amount (51%) contributed by the industry. Pollution from industry is causing disasters on Earth. Not even India is hit by every country. And some people are actively working to raise visibility and awareness and encourage change. Pollution-related behaviors include.

As you can see, the transport proportion (27%) leads to smog and poor efficiency, which has a negative effect on the health of people.

This pie graph indicates a low environmental effect on consumers and industrial and product (8%), commercial and residential (1%) and agricultural (2%). However if the industry chart grows in the future, then the climate and people are still very risky.

India Has The Most Polluted Cities On Earth

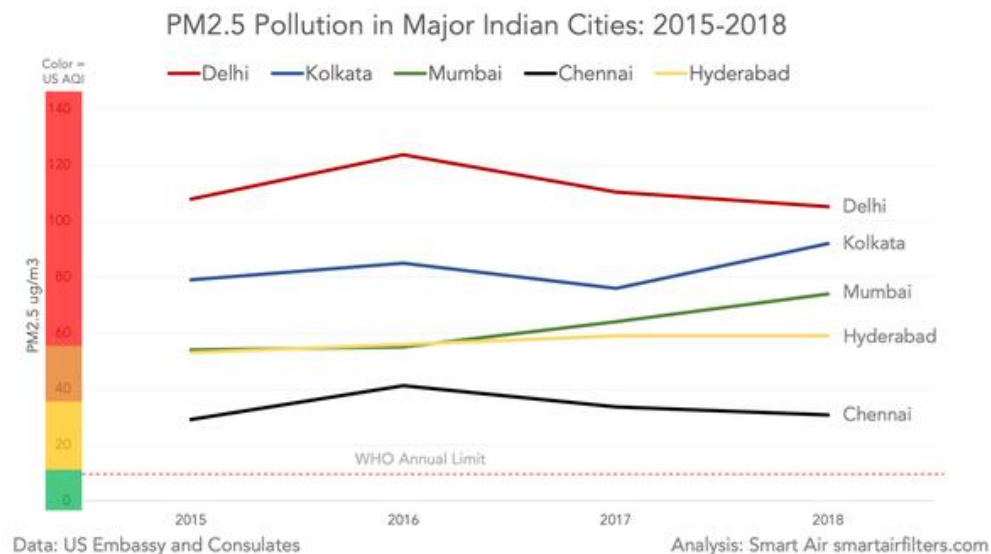
Average level of particulate matter (PM 2.5) pollution in 2019



Sources: IQAir AirVisual 2019 World Air Quality Report



As we can see in figure that Ghaziabad is one of the most populated in India. And we have to Think so much about this. because if will not take some initiative by itself, it's very tough for me to survive.



This figure seeing that the pollution of Delhi is more dangerous than Kolkata, Mumbai, Hyderabad and Chennai.

PM 2.5 level of Delhi is above 120 which is more dangerous, while PM 2.5 level of Calcutta and Mumbai are little bit concern for us. But Hyderabad, Chennai are in a good position.

Limitation of the study

- During this pandemic situation it is not possible to go outside and collect the data.
- In this situation I have to made my project report from home.
- For making this project report I have to connect with friends through the skype, video calling.
- In covid-19 time I was in my home town and there was technical glitch to connect with others.
- It was very tough to complete this project report just because of regular online class

CHAPTER 03

SWOT ANALYSIS

As we know, SWOT is just the strength, weakness, opportunity, threat. The Swot analysis is a method in strategic planning used to recognize strength, vulnerability, opportunities and risks in conjunction with the planning of a project.

Strengths

- New electric bus operating center.
- 2000 buses and five operating centers in the broad fleet.
- Electric bus experience and charging opportunities.
- Change management experience • (diesel-natural gas).
- Modern organizational map streamlined
- Pollutant control annually.
- Capital for new bus procurement and infrastructure investments.
- High number of participating actors.
- Non-commercialization of waste.
- Well-known technological needs.
- Value-added goods production.
- More revenue Source.

Weakness

- Amortization before substitution of polluting vehicles.
- Large part of the electric vehicle personnel Lack experiences.
- Sectoral expertise is minimal.
- Low financial assistance.
- Missing sensitivity.
- Too much red tape.
- Missing in infrastructure and technologies.

Opportunities

- Minimize emissions and repair of property.
- Decreased energy import reliance.
- Infrastructure building.
- Cooperation in science and technology.
- Green jobs are growing.

Threats

- Failure to prepare for the long term.
- Social admissibility.
- Confusion with respect to legislation.
- Bad waste management mindset
- Other energy sources rivalry.

CHAPTER 04

OUTCOMES OF THE STUDY

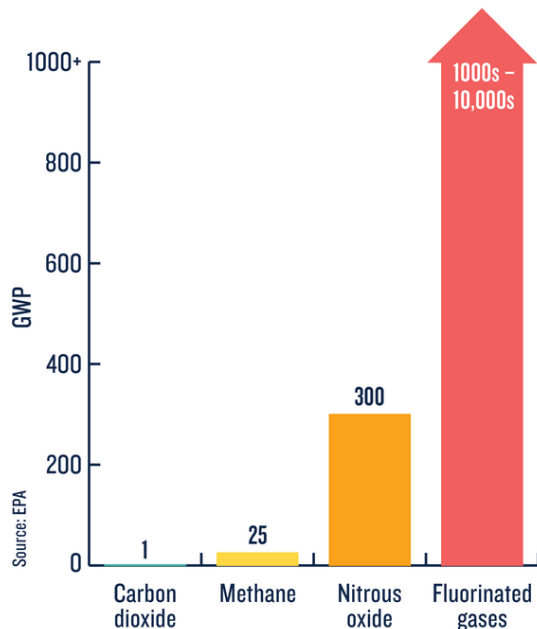
There are so many conclusions and suggestions from this research project study that I list here:

- Pollution means the introduction into the world of hazardous products. Pollutants are known as these toxic products.
- Natural contaminants like volcanic ash may be available. They may also be generated by human activities, such as mill waste or runoff. The quality of air, water and earth is impaired by contaminants.
- Much that is helpful in polluting people. Cars spew their exhaust pipes with toxins. To generate electricity by burning coal. Contaminate the weather.
- Homes and factories contain waste and wastewater that could pollute the land and water. To kill weeds, insects - Sep into waterways and harm fauna, pesticide-Chennai poisons are used.
- The earth supply of air and water relies on all live stuff from bacteria to blue wales. All types of life are endangered when these resources are polluted.
- Global issue is waste. Although urban areas are more polluted than the rural areas, pollution can spread to remote areas where people do not live.
- A large array of plastic particles microscopically shapes the so-called large Pacific garbage patch.

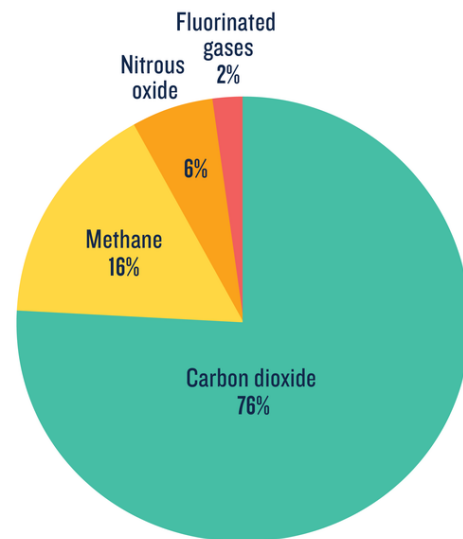
- Flows of air and water pollute. Ocean and migratory fish flows move aquatic contaminants far and wide. Winds may inadvertently capture and disperse radioactive material from a nuclear reactor.
- Fabric smoke drifts into another country in one country.
- Air pollution is often noticeable. a individual can watch our dark smoke from the big truck or factory exhaust pipes.
- Dirty air, even though it is visible, can be harmful.
- It can cause people to burn their eyes and make them breathe hard.
- The risk of lung cancer can also increase.
- Easy kills of air pollution. At least 8 000 people died a day later in an accident at the pesticide plant in Bhopal, India. There were seriously wounded hundreds of thousands more.
- Automobiles and manufacturing facilities contain other common contaminants, such as nitrogen oxide, sulfur and hydrocarbons. These substances respond to smog, a dense fog or air pollution with sunlight.
- Smog makes it hard to breathe, especially for children and older adults. Some towns with heavy smog issue warnings of air pollution.
- If air pollutant combined with moisture, for example, nitrogen oxide and sulfur dioxide, they become acids. Then they return as acid rain to earth.
- Acid rain also brings wind away from sources of emissions. Acid rain can reduce pollutants generated by factories and power plants.
- Marble and other stones are also eroded away by acid rain. Words on the gravestone have been erased and several historic monuments and constructions have been destroyed.
- The taj mahal, which once shone white in Agra, India. It has been for years of acid rain exposure.
- The government attempted to reduce the emissions emitted into the air by stopping acid rain.
- Another cause of air pollution is greenhouse gases. The climate is natural for greenhouse gasses such as carbon dioxide or methane.

- For life on earth, they are important. Sunlight reflected from Earth is absorbed and prevented by trapping heat in the atmosphere into space.

HOW GREENHOUSE GASES WARM OUR PLANET



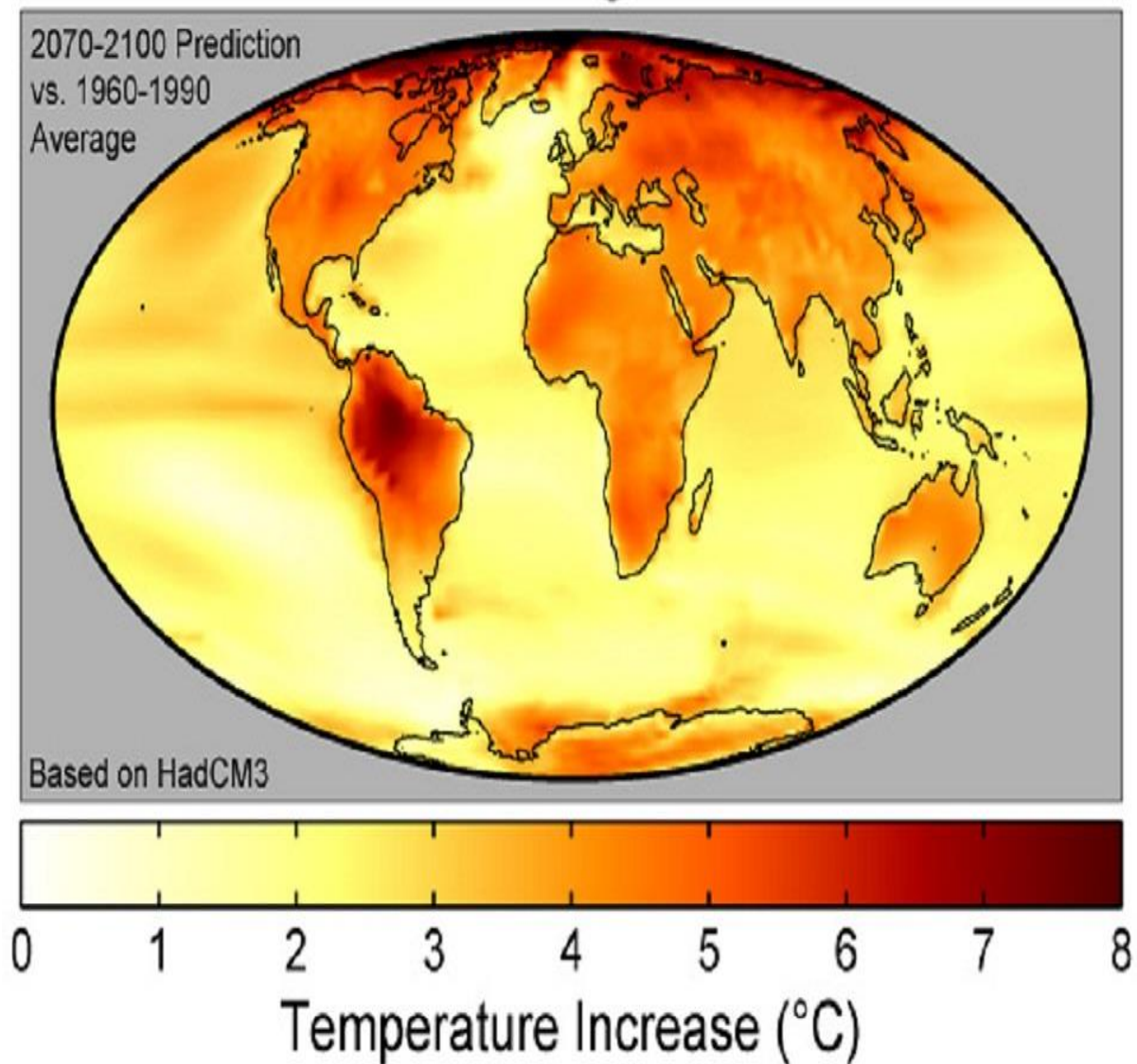
The global warming potential (GWP) of human-generated greenhouse gases is a measure of how much heat each gas traps in the atmosphere, relative to carbon dioxide.



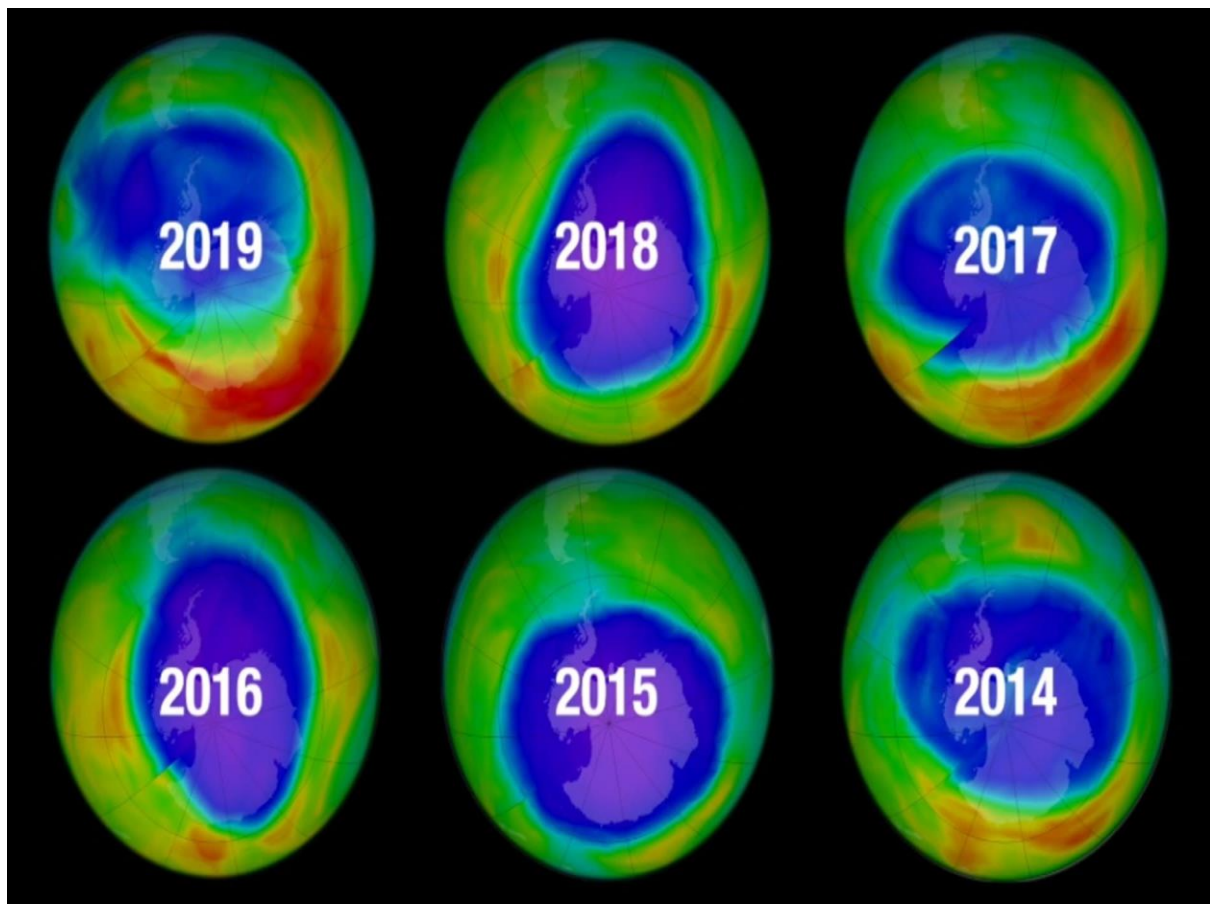
How much each human-caused greenhouse gas contributes to total emissions around the globe.

- The number of greenhouse gasses in the environment has risen in human activities such as fossil fuel consumption or forest degradation.
- The greenhouse effect has risen and global average temperatures rise. This is the warmest decade ever since 2000.
- Global heat causes glaciers and ice sheets to melt. Melting ice contributes to a rate of 2 millimeters of sea level rise per year as rising waters ultimately inundate low-lying coastal areas. This climate change threatens entire countries, including the Islands of the Maldives.

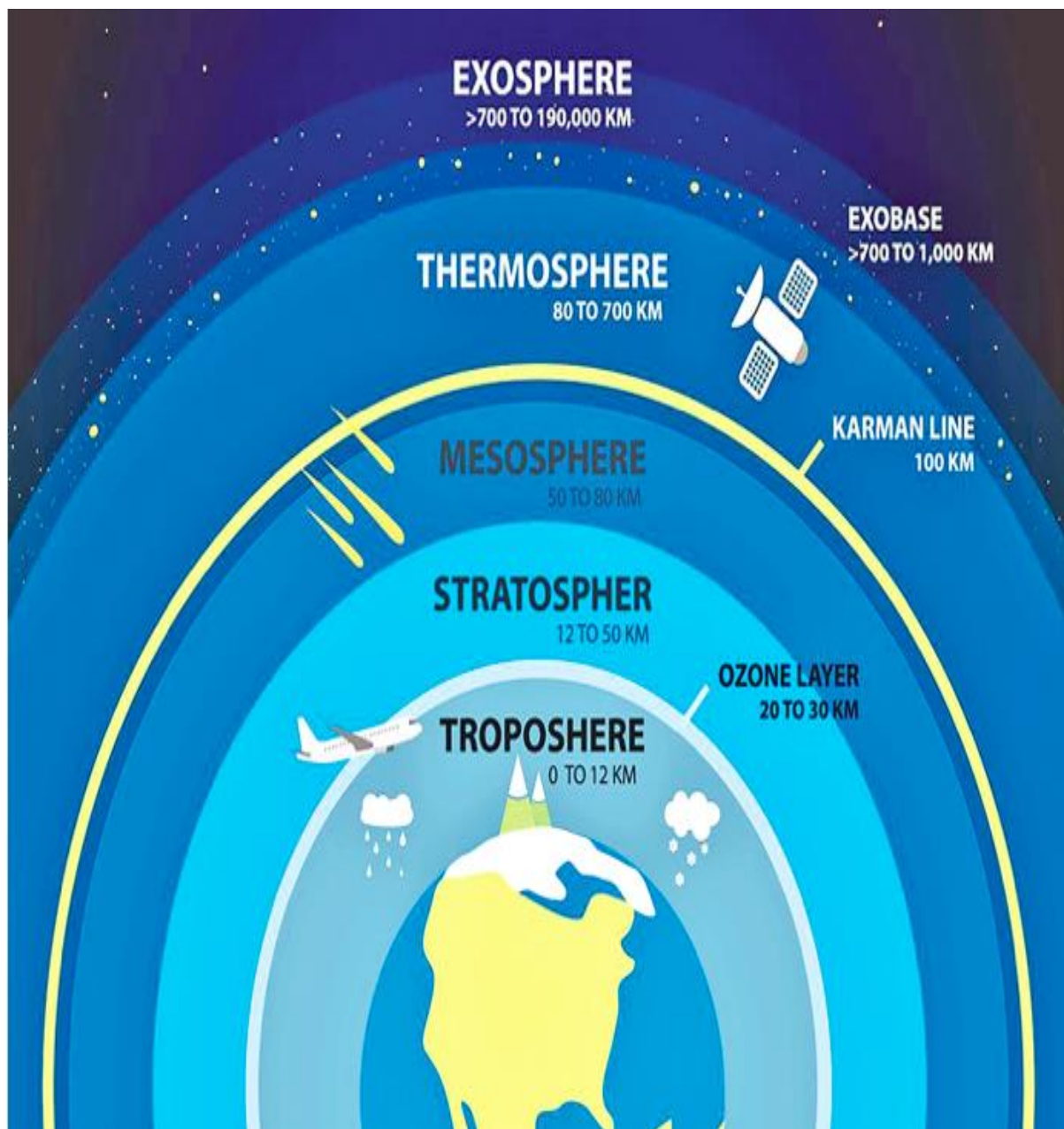
Global Warming Predictions



- CFCs threaten the upper earth atmosphere ozone layer. The ozone layer protects the earth from the harmful rays of the sun, blocking much of it.



- Radiation, skin cancer, eye diseases and other diseases are more likely to grow.
- The 80s saw that the ozone layer was slimming over the Antarctica. Often referred to as the "ozone hole." Nobody stays in the Antarctic forever.



CHAPTER 05

EXPERIENCE, LEARNING AND CONCLUSION

Experience

During this research project report some people have good or bad experience. I have had positive and bad experiences, too. When I gathered info. Experiences are available:

- I learned how important pollution is not only for India but for the world, and how important it is for us as well as for the future.
- We have to keep our climate fresh so that pure and fresh air can be taken into the future.
- House cleaning will also improve our household. Our environment.
- Do not throw anywhere a plastic, waste, it will damage the environment.
- The new environmental situation is not so good, and for all of us this will be a major problem.
- We must take steps such as planting a tree on the side of the lane.
- Due to Covid-19 I didn't obtain the data quickly. Going out and gathering project-related data is difficult.

Learning

- Learning is really important things that are going through our lives up to the end of time. From something new we still learn something.
- We do have to learn from our error. I learned so much about pollution during the collection of data.
- If I feel inspired and take a step towards our society or something possible, this learning will inspire me. I have not seen so many countries and I have tried to learn about them only through India's pollution.

Conclusion

- A great deal is being done to regulate, track and correct pollution damage. The concerns are complex and some of them are just recognizable, but it is important to keep a close eye on pollution so that we can preserve an acceptable climate for future generations.
- We need to help avoid pollution by recycling our accumulated waste with decomposable products instead of plastic or glass, otherwise we too will suffer the effects of not stopping pollution.

BIBLIOGRAPHY

- The India times
- The economics times
- National geographic
- The Wikipedia

Websites

- www.thoughtco.com
- www.cbsms.co.in
- www.auessays.com
- www.chankyaacademy.com
- www.britannica.com
- www.softschool.com

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