

The threat of global warming and the ways to counter it.

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"Climate change is the most severe problem that we are facing today, more serious even than the threat of terrorism" (David King)

Climate change is certainly the biggest problem the world is facing right now. Threat of global warming doesn't only concern with developing countries but also developed countries are vulnerable to global warming. One can say that developing countries are more vulnerable to global warming than developed countries, well this statement is right to some extent as recently developing countries like Pakistan was the victim of global warming but in last decade the floods of Pakistan was the 10th most expensive climate disaster to have buffeted a nation, according to risk Modelling firm RMS. The California wildfire was the costliest of past decade with losses of \$328bn. The global warming occurs when carbon dioxide (CO_2) and other air pollutants collect in the atmosphere and absorb sunlight and solar radiation that have bounced off the earth's surface. It is the reason of increase in temperature globally with that it causes many calamities, however the unity of world leader to tackle it by taking different measures with help of different platforms like conference of parties (COP) can be very helpful to overcome this issue.

As every problem has some threats, weather pattern is changing due to the effect of global warming. Floods is one of the threat that causes massive destruction. Floods are caused by heavy rain falls, the non stop rain falls inundate many lakes, rivers which start to

overflow and as water finds its own way, it becomes the season of different deluges that result in heavy flooding. Heavy rainfalls are the result of global warming, as global warming causes the temperature to rise that temperature or heat evaporates more and more water from ^{rivers} lakes and seas and the cycle starts, as those water vapours turn into liquid water droplets. These water droplets form on tiny particles, like dust, that are floating in the air. Recent floods of Pakistan last year caused destruction on massive scale and disturbed whole country as Pakistan bore cost of physical losses around \$11bn last year and overall economic losses close to about 3 percent of its GDP.

In addition to this, rise of temperature is another threat our planet is facing. Greenhouse gases are the reason that Earth is getting warmer, greenhouse gases such as carbon dioxide and methane, trap the sun's heat in Earth's atmosphere. It's normal for there to be some greenhouse gases in our atmosphere, ~~trap the sun's heat~~ they help keep Earth warm enough to live on. But too many greenhouse gases can cause too much warming. The burning of fossil fuels like coal and oil increase the amount of CO_2 in our air. This happens because the burning process combines carbon with oxygen in the air to make CO_2 . It is important that we monitor CO_2 levels, because too much CO_2 can cause too much warming on Earth. Several NASA missions have instruments that study CO_2 in the atmosphere. Americans make up just 4% of the world's population, ^{still} they produce 25 percent of the CO_2 pollution from fossil fuel burning, by far the largest share of

any country.

Besides rise of temperature, air pollution is also adding insult to injury. Because of climate warming, the Earth experiences more extreme weathers, such as heat waves and drought, which can negatively impact air quality. Heat waves cause an increase in ground level ozone pollution because the chemical reactions that create ozone in the atmosphere occur more often in hot temperatures. On a related note, the carbon dioxide in the atmosphere that causes the climate to warm also causes plants to grow. Increasing concentration of carbon dioxide leads to an increase in the plants that cause allergies, which increases the amount of airborne allergen pollutants. The warming climate also extends the growing season in some areas, which increases the number of days with high pollen concentrations. Airborne allergens degrade both outdoor and indoor air quality and cause respiratory problems such as asthma and allergies. World is heavily affected due to air pollution as according to Peter Maravel around 7m people die of air pollution in the world.

Furthermore, global warming is already affecting water access for people around the world. Climate scientists predict since more water will fall than vegetation and soil can absorb. The remaining water, or runoff, drains into nearby waterways, picking up contaminants like fertilizer on the way. Excess runoff eventually travels to larger bodies of water like lakes and the ocean, polluting the water supply and limiting water access for

humans and ecosystems. When fertilizers from farming wash into lakes and the ocean, they promote the rapid growth of algae. These resulting algal blooms clog coasts and waterways with clouds of green, blue-green, red, or brown algae. The blooms block sunlight from reaching underwater life and diminish oxygen levels within the water. Toxins from the blooms can kill off fish and other aquatic animals, make people sick, and even kill humans.

Global warming causes a major threat to any country's structure of economy. The recent floods of Pakistan shook the entire economy of the country, many people have gone below the poverty line. There are many reasons to this as floods caused damages to country's infrastructure, businesses got disrupted, electricity of different districts got affected and with that industry got a massive blow. Agriculture was affected the most as Pakistan's GDP relies heavily on Agriculture so GDP was hit badly, many crops were washed off. The world bank presented a report at COP 27, according to the report; by 2050, annual GDP of Pak could reduce by 18 to 20 percent due to climate change and environmental threats. Globally there are many examples on how global warming has affected an economy of any country like California wildfire which costed it country of \$328 bn money, this is considered to be the costliest blow any country bore in past decade.

Similarly, Global warming has affected human's life very badly. Globally the humans are affected due to floods, air pollution, water pollution and economy. The floods of Pakistan has affected human badly as Pakistan is ranked 161st out of 191 countries on Global Human development index in terms of long and healthy life. Females and children were hit badly as according to the United Nations population Fund (UNEPF), had painted a bleak picture of women affected by the unprecedented floods as it said that there were at least 650,000 pregnant women in flood affected areas while according to the provincial health department's data that showed that a total of 193,048 cases of watery diarrhoea and dysentery were reported in August alone. This shows how human life can be affected due to global warming.

Furthermore, Global warming is affecting tourism also. Tourism is one of the significant factors in the success of a country's economy. It is also essential for humans as tourism promotes recreation, happiness and relaxation. Due to global warming, snow areas and glaciers melt faster than they should, so people are unable to enjoy it. It is one of the reasons why global warming is bad for tourism. Similarly, the time of rainfall, snowfall, and other such natural processes change more often due to which people can't find time to go to such places. There are many oceans, rivers, lakes in the world that are worth seeing but due to global warming and more amount of carbon in the air, the

Oceans absorb a lot of carbon and become acidic. This way, such places become dangerous for tourists. Moreover, fish and sea animals are also affected by acidic oceans, and this is another reason why people don't come to such places. Many people like fishing, but no one would want to get dead fish or fish that is acidic. Fish business owners at such sites also face loss.

Last but not least, vital infrastructures for energy supply, water supply, and transportation system are severely affected by global warming. Extreme weather and sea level rise create new risks to the infrastructures. In fact, extreme weather leads to negative impacts on transportation infrastructure, including on its physical condition and the higher cost for operation and maintenance. Transportation system is essential to ensure the efficient distribution of food, energy and trade as well as to facilitate workers. The physical damage to these infrastructure systems and disruption of the services due to climate change will cause significant economic and human losses. Extreme weather lead to flooding will also weaken the structural support of bridges, increase sedimentation rate in water infrastructure and increase the risk of landslide or avalanche. Flooding can also destruct the water supply network and wastewater system. Public facilities, such as hospitals, schools, shopping malls and offices, can also be damaged by flooding.

The United Nations framework convention on climate change (UNFCCC) secretariat is the United Nations entity tasked with supporting the global response to the threat of climate change.

Together with the convention, the Kyoto Protocol and the Paris Agreement establish the institutional agreements for the climate change. Paris accord which was adopted by 196 world leaders in 2015 in order to maintain global temp increments below 2 degrees Celsius, during Trump's period, he left out of the Paris Agreement but ~~Paris~~ incumbent President Joe Biden rejoined the Paris Agreement and set a course for the United States to tackle the climate crisis at home and abroad, reaching net zero emissions economy-wide by no later than 2050.

Furthermore, COP 27 was a great development in the way to counter global warming as UN unveiled a satellite based system to detect methane emissions as part of efforts to cut down on the major contributor to global warming.

The Methane Alert and Response System (MARS), as Methane is responsible for roughly 30% of global rise in temperature to date. UN climate envoy John Kerry said cutting Methane was the "fastest opportunity" to help world reach goal of limiting warming to 1.5°C.

We have some roles too in order to reduce global warming.

The first way to prevent climate change is to move away from fossil fuels and adopt renewable energies like solar, wind, ^{another is to} produce clean energy and use more efficient devices.

Furthermore, to reduce CO_2 emissions from buildings caused by heating, air conditioning, hot water or lighting, the use of better natural resources should be encouraged as well as adopting responsible consumption habits is crucial, be it regarding food, clothing, cosmetics or cleaning products, but not least, recycling is an absolute necessity for dealing with waste.

Global warming is an issue which needs to be addressed emphatically as day by day this issue is being highlighted more on different platforms like newspapers or social media the more this issue is being given importance. Global warming can cause serious issues if it isn't addressed for that all global leaders need to unite and mitigate ~~the~~ perhaps the biggest problem world is facing, with that global warming can be tackled ^{but} with proper and also strict measures and the inception should be from developed countries. If the world is united global warming can be completely eradicated and in that aspect world leaders started taking rigorous measures.