



Commentary

Climate Change: A Global Concern That Needs Urgent Action

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Definition of climate change

Climate change is a global environmental problem. It occurs when temperature and weather change from normal patterns on earth over an extended period. During the past hundred years, the earth's temperature has drastically increased because of human activities, including emissions produced when fossil fuels are burned, deforestation, industrialization, and overproduction of pollutants. This causes a buildup of greenhouse gases such as carbon dioxide and methane.

Climate change is a social, economic, and political issue as well as an environmental one. No country is immune; rich nations and poor nations are all affected. Some areas are affected by rising temperatures, more intense storms, floods, droughts, and shifting rainfall patterns. Scientists from around the globe have been issuing warnings that unless we act soon, our children will face dreadful consequences. Climate change is a worldwide concern for many reasons. It already affects ecosystems, human health, food production, and economies around the world.

What Is Climate Change?

Climate change is when the earth's climate changes drastically over a long period of time. The climate can change naturally due to factors such as volcanic explosions or variations in solar energy. Today, the climate is warming because of human actions. Since the start of the Industrial Revolution, factories and transportation have burned coal, oil, and natural gas. These fuels produce nasty gases, which cause the greenhouse effect to strengthen.

The greenhouse effect is a natural process that warms the Earth to temperatures suitable for life. Otherwise, Earth would be frigid. Everything gets tricky when there is an overabundance of greenhouse gases that keep more heat

than needed. This leads to global temperatures rising, the melting of glaciers, and changing weather conditions. The last ten years, scientists say, have been one of the hottest decades in recorded history, demonstrating how serious a problem it has become.

Main Causes of Climate Change

The 1st explanation of weather alternate is the uptake in greenhouse fuel emissions. Everyday factories, vehicles, and power plants burn fossil fuels and release carbon dioxide. As well as keeping the ecological system in balance. Deforestation means there will be higher amounts of carbon dioxide in the atmosphere. The farming activities have also led to changes in the climate patterns. For instance, the farming of animals leads to emissions of gases such as methane into the atmosphere. The urbanization and industrialization processes lead to increased pollution and energy consumption. The plastic usage and inappropriate methods of disposing of wastes are environmentally destructive. Human activities have led to climate changes at a much higher pace than the natural processes of restoring balance in nature. Agricultural processes are also responsible for climate change. Animal farming leads to emissions of gases such as methane, which is dangerous to the atmosphere. The urbanization and industrialization processes lead to increased pollution and energy consumption.

Effects of Climate Change on the Environment

Climate change has caused serious environmental damage across the globe. Natural ecosystems are under pressure due to rising temperatures and changing weather patterns. Forests, oceans, rivers, and wildlife are all experiencing negative impacts. The environment is becoming increasingly unstable, making life difficult for both humans and animals.

Rising Global Temperatures

One of the clearest signs of climate change is the increase in global temperatures. Summers are becoming hotter, and heatwaves are occurring more frequently. Many countries have recorded extremely high temperatures in recent years. These rising temperatures affect agriculture, water supplies, and public health.

Hot weather also increases the risk of wildfires. Forest fires destroy trees, wildlife habitats, and homes. In some regions, heatwaves have caused deaths, especially among elderly people and children. High temperatures can also reduce worker productivity and increase energy demand for cooling systems.

Melting Glaciers and Rising Sea Levels

Glaciers and polar ice caps are melting rapidly due to global warming. This melting contributes to rising sea levels, threatening coastal cities and islands. Millions of people living near coastlines are at risk of flooding and displacement. Countries with low-lying areas face the danger of losing land permanently.

Melting glaciers also affect freshwater supplies. Many rivers depend on glacier water for agriculture and human use. If glaciers continue to disappear, water shortages may become more severe in many parts of the world. This situation can create conflicts over water resources and increase migration.

Extreme Weather Events

Climate change has increased the frequency and intensity of natural disasters. Floods, hurricanes, cyclones, droughts, and storms are becoming more destructive. Heavy rainfall causes floods that damage infrastructure, crops, and homes. Droughts reduce agricultural production and create food shortages.

Extreme weather events affect poor communities the most because they often lack resources to recover. Natural disasters also place pressure on governments and emergency services. Scientists believe that reducing greenhouse gas emissions can help decrease the severity of future disasters.

Impact of Climate Change on Human Life

Climate change really significantly affects our health, lives, and how we live day to day. All over the globe, folks are dealing with stuff from these environmental shifts. It's often the poorer and more vulnerable communities that feel it the hardest since they depend so much on natural resources.

Effects on Health

So, climate change cranks up health risks in a bunch of ways. Think about heat waves; dehydration, heatstroke, and even breathing issues can pop up. Then there's air pollution from fossil fuels, which leads to asthma and lung infections. Warmer temps are making it easier for diseases carried by mosquitoes to spread, like malaria and dengue fever. And don't forget about mental health troubles. Those hit by floods, droughts, or other disasters usually deal with stress, anxiety, and depression. Plus, health systems are really going to struggle with more climate-related sicknesses, especially in poorer countries where medical resources are already stretched thin.

Food and Water Shortages

Farming relies so much on stable weather, right? But climate change is truly messing with rainfall patterns, making it tough for farmers. Droughts cut down on crop yields, while floods wipe out arable land. Farmers are stuck wondering when to plant or harvest. Water shortages are becoming a real worry everywhere. Some places already have issues because of less rain and water overuse. If climate change keeps going unchecked, millions might face hunger and struggle to find clean drinking water in the years to come.

Economic Consequences

Then, you've got the economic hits from climate change too. Natural disasters rack up damages in the billions every year. Governments pour in loads of cash to rebuild and help emergency responses. Businesses take a hit, too, from supply chain messes and property damage. Areas like agriculture, tourism, and fishing? Totally at risk from climate change. With the economy lagging, unemployment and poverty levels could spike. Developing countries usually have it the toughest since they don't have as many resources to deal with environmental issues.

Climate Change and Pakistan

Pakistan is one of those countries that really feels the heat from climate change. Even though it doesn't pump out a ton of global greenhouse gases, it's facing some big environmental hurdles. We're seeing rising temps, floods, droughts, and water shortages happening more often. Floods and Heat Waves in Pakistan: Pakistan's had some crazy, devastating floods lately. Heavy rains during monsoon season have wrecked homes, roads, and farms. A ton of people have been forced out of their homes because of flooding. And heatwaves? They're getting worse, especially in cities like Karachi and Lahore. These

high temps are bad for our health and make people crank up their ACs, which isn't great either. Poorer communities tend to feel the worst of it since they often lack decent homes and cooling systems. Climate change has made the weather feel unpredictable, and that's creating worry for millions of people.

Agricultural Challenges

Farming's a big deal for Pakistan's economy. But climate change is putting crop production at risk with its changing rain patterns and rising temperatures. Farmers are having a harder time growing wheat, rice, and cotton, basically the backbone of their crops. And water issues due to melting glaciers and less rain are piling on more pressure. If we don't get some good climate adaptation plans in place, the security of food and rural jobs could really be at risk down the line.

Solutions to Climate Change

Even though climate change is a massive hurdle, there are plenty of solutions floating around. Governments, businesses, communities, and even individuals all have key roles to play. Cutting down and taking care of our natural resources is crucial if we want a sustainable future.

Renewable Energy Sources

Renewable energy is really one of the best ways to cut pollution out. Solar, wind, and hydropower can give us electricity while keeping greenhouse gases in check. Loads of countries are all in on investing in clean energy tech to break from fossil fuels. And hey, renewable energy brings job opportunities and boosts the economy, too. With technology getting better, clean energy is becoming more affordable and easier to access. Shifting to renewable energy can fight climate change and help the economy grow at the same time.

Tree Plantation and Forest Protection

Trees are super important since they soak up carbon dioxide from the air. Planting more trees and keeping forests safe can totally help with global warming. Governments and environmental groups are pushing for tree-planting campaigns around the world. Forests also help keep biodiversity alive and maintain that ecological balance we all need. Making sure deforestation doesn't happen is key to tackling climate change and keeping natural habitats intact.

Reducing Carbon Emissions

To slow down climate change, industries and transport

have to cut carbon emissions. Embracing energy-efficient tech and public transport and even electric vehicles can drop those pollution levels. Recycling and managing waste the right way also lessen the environmental impact. Everyone can pitch in, too, by saving electricity, cutting back on plastic, or just living more sustainably. You wouldn't believe how much of a difference small actions can make when we all do it together.

Public Awareness and Education

Education is super vital to tackling climate change issues. People need to know what's causing and what the fallout of environmental damage is. Schools, universities, and media can help spread the word about sustainable practices. It's also significant to have public participation. When communities get climate change, they're way more likely to back efforts for protecting the environment and supporting sustainable development policies.

Role of Governments and International Organizations

Governments and international organizations are huge players in the climate change game. Countries are working together through agreements and environmental programs to slash emissions and promote sustainability.

Global Climate Agreements

International deals push countries to team up against climate change. You can't talk about it without mentioning the Paris Agreement, one of the biggest global moves to keep temperature increases in check. Countries are nudged to adopt cleaner energy approaches and sustainable policies. Plus, wealthier nations also lend financial and tech support to developing countries, helping them adapt to climate conditions and handle disasters.

Governments have a chance to minimize environmental damage. They can back renewable energy, green transportation, and conserving the environment. Strong laws against pollution and deforestation are also vital to keeping natural resources safe. Urban planning and climate-resilient structures are key for helping communities flex with the changing environment. Long-term thinking is a must if we want to create a safer future.

Conclusion

Climate change is such a global crisis that hits every single part of life on this planet. With rising temperatures, natural disasters, and environmental ruin, we're looking at real threats to human health, economies, and our ecosystems.

Sure, human activities are the main culprit behind this mess, but people also have it in them to come up with solutions. We really need governments, organizations, and individuals to join forces, tackle pollution, protect our forests, and champion renewable energy. If we all raise awareness and act responsibly, it can lead to significant changes. If we kick into action now, future generations can have a healthier, safer, and more sustainable world waiting for them.