

FORUM: UN ENVIRONMENT PROGRAMME

QUESTION OF: TACKLING THE EFFECTS OF CLIMATE





INTRODUCTION

Pacific Island Nations which are; Fiji, Papua New Guinea, Samoa, Solomon Islands, Vanuatu, Tonga, Kiribati, Tuvalu, Marshall Islands, Micronesia, Palau, Nauru face unique challenges due to their geographic location. They are vulnerable to climate change and they depend on natural resources. Rising sea levels, extreme weather events and environmental degradation are significant concerns for many Pacific Island Nations.



Climate change is changes in the average weather patterns that have been observed over an extended period. It causes shifts in temperature, precipitation, wind patterns and atmospheric conditions of earth. One of the main components of climate change is the increase in greenhouse gasses that come out in the atmosphere primarily due to human activities. Greenhouse gasses are carbon dioxide, methane, nitrous oxide and water vapor that rises up and gets trapped in the atmosphere. These greenhouse gasses increase with human activities including burning of fossil fuels (coal, oil, and natural gas), deforestation, industrial processes, and agriculture, releasing

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large amounts of these gasses, enhancing the natural greenhouse effect. This greenhouse effect causes heat to get trapped in the atmosphere. This results in a rise in Earth's average surface temperature which is known as global warming. The absorption of excess carbon dioxide leads to ocean acidification. This highly effects marine life.

Eventually, people need to adapt to this situation. Making adjustments to social, economic and environmental practices to minimize the impact of changing climate conditions. The adaptation also includes International Agreements. One of them is the Paris Agreement.

The Paris Agreement is an international treaty on climate change. It was adopted by 196 parties on 12 December 2015. It entered into force on 4 November 2016. This landmarks goal is to increase the global average temperature to well below 2°C

above pre-industrial levels" and pursue efforts "to limit the temperature increase to 1.5°C above pre-industrial levels."

DEFINITION OF KEY TERMS

Natural Resources

Natural resources are resources that are drawn from nature and used with a few changes. Oil, coal, natural gas, metals, stone, air, sunlight, soil, water and sand are examples for it.

Environmental Degradation

It is the deterioration of the environment through depletion of resources such as air, water and soil; the destruction of ecosystems and the extinction of wildlife.

Precipitation

Any liquid or frozen water that forms in the atmosphere and falls back to the earth.

Deforestation

It is the decrease in forest areas across the world that are lost for other uses such as agricultural croplands, urbanization, or mining activities.



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Ocean Acidification

A reduction in the pH of the ocean over an extended period of time, caused primarily by uptake of carbon dioxide from the atmosphere.

Greenhouse Effect

This effect occurs when greenhouse gasses in a planet's atmosphere trap some of the heat radiated from the planet surface and it causes the temperature to rise

Greenhouse Gasses

These gasses consist of carbon dioxide, methane, ozone, nitrous, oxide, chlorofluorocarbons, and water vapor.

Climate Change

It is the long-term heating of Earth's surface observed since the pre-industrial period due to human activities.

Adaptation

The action or process of adapting and changing to suit better in the environment.

Renewable Energy

It is energy derived from natural sources that are replenished at a higher rate then they are consumed.

Carbon Footprint

The total amount of greenhouse gasses (including carbon dioxide and methane) that are generated by our actions

Climate Resilience

Generally, it is the ability to recover from, or to mitigate vulnerability to, climate-related shocks such as floods and droughts





CURRENT SITUATION

Every decade since the 1980s has seen an increase in global temperatures above the previous one. Because of the buildup of greenhouse gasses in the atmosphere, the average surface temperature of the Earth has grown.

Extreme Weather Events:

There is ongoing concern over the number and severity of extreme weather events, which include heat waves, storms, wildfires, floods, and droughts. These occurrences frequently have major effects on the environment and socioeconomics.

Sea level rise and ice melting:

Sea levels are increasing as a result of the faster melting of the polar ice caps and glaciers. Ecosystems and coastal populations are at risk because of this.

Ocean Acidification:

The world's oceans absorb too much carbon dioxide, which causes the waters to become acidic. This affects marine life, especially creatures that have calcium carbonate shells and bones.

Biodiversity Loss:

A combination of other human activities and climate change is causing biodiversity to disappear. Ecosystems change as a result of many species' difficulties adapting to shifting climatic conditions.

International accords:

The Paris Agreement continues to be a fundamental structure for worldwide climate action. To stay in line with the objectives of the agreement, countries are expected to revise their Nationally Determined Contributions (NDCs) on a regular basis.

Transition to Renewable Energy:

Continuous efforts have been made to switch to renewable energy sources, with more money being invested in clean technologies like solar and wind power. The rate of this change, nevertheless, differs around the world.



Climate Action Plans:

With the intention of lowering greenhouse gas emissions, boosting resilience, and achieving sustainable development objectives, numerous nations have created and executed climate action plans. These programs vary in their efficacy.

MAJOR PARTIES INVOLVED

Governments:

National governments have a major influence on international agreements, rules, and policies pertaining to climate change. They design mitigation and adaptation plans, assign funds to climate-related projects, and set goals for reducing emissions.

United Nations (UN) and UNFCCC:

Through the United Nations Framework Convention on Climate Change (UNFCCC), the UN is in charge of overseeing international efforts to combat climate change. Representatives from various nations convene annually at the Conference of the Parties (COP) to engage in negotiations and reach decisions regarding climate action.

The IPCC, or Intergovernmental Panel on Climate Change:

The IPCC evaluates scientific data on climate change and produces in-depth reports that help guide policy choices. It is an influential scientific group that directs the global comprehension of climate change.

Parties to the Paris Agreement:

Signatory nations to the agreement are important players in global efforts to tackle climate change. They participate in international climate initiatives and pledge to cut emissions (Nationally Determined Contributions, or NDCs).

International Financial Institutions:

The World Bank and other regional development institutions, among others, offer financial assistance and resources to developing nations so they can carry out climate adaptation and mitigation initiatives.

NGOs, or non-governmental organizations:

Organizations that are dedicated to the environment and climate change, like Greenpeace, the World Wildlife Fund (WWF), and Climate Action Network, are essential in advocating for



change, increasing public awareness, and holding corporations and governments responsible for their activities.

Businesses and Corporations:

Through their supply chains and activities, both small and major corporations in the private sector have an impact on climate change.

Researchers and Scientific Institutions:

By carrying out studies, keeping an eye on developments, and coming up with solutions, researchers and scientific institutions add to our understanding of climate change. The public and policymakers are informed by their work.

Local and Regional Governments:

States, cities, and other subnational organizations frequently carry out climate policy initiatives without the assistance of the federal government. Numerous cities have made commitments to improve climate resilience, increase energy efficiency, and reduce emissions.

Civil Society and Youth Activists:

Civil society organizations and youth-led campaigns like Fridays for Future are important in increasing public awareness, rallying support, and pressuring decision-makers to adopt more aggressive climate action.

Indigenous Peoples:

The effects of climate change frequently fall disproportionately on Indigenous communities. They offer priceless traditional wisdom and methods for adapting to and managing resources sustainably.

Media:

Media organizations contribute to shaping public opinion and disseminating information on climate change. Their role in increasing awareness and holding decision-makers accountable is highly important.

USEFUL LINKS

https://www.ipcc.ch/

https://climate.nasa.gov/

https://www.noaa.gov/

https://www.carbonbrief.org/



BIBLOGRAPHY

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