

# Treats of Global Warming and ways to counter it

—: 6/5

## Outline

1) Introduction

2) Treats leads to global warming are:

2a) Combustion of fossil fuels

~ As per IPCC  $\rightarrow$  96% of global warming/pollution is due to use of fossil fuels

2b) Increasing population also leads towards warming of Earth's Atmosphere.

As per US census Bureau ~ By 2050 population leads to 9 billion

2c) People are moving from rural areas to urban areas leads to increase population of urban areas.

As per UN, In 2014 - 54% urbanization currently - 60%

upto year 2045-2050 66%

2d) Depletion of ozone layer

is a great threat to global warming.

↳ British Antarctic survey (1985): in

this survey depletion of ozone layer

was confirmed.

2e) Emission of Greenhouse Gases

is biggest threat.

↳ 91% of Global warming is caused

by Emission of GHGs.

2f) Deforestation leads to Global warming

↳ As per Global Forest Watch: More than

10 million hectares over the 4-5 years.

3) Ways to Counter Global warming:

3a) Afforestation is an alternative.

Include in UN SDG'S sustainable Development

Goals (2016-203)

3b) Shift to renewable energy

resources like wind energy, solar

energy, Geothermal Energy, etc.

↳ In Pakistan, Sindh and Balochistan are coastal areas useful for wind energy production.

3c) There should be a system to control solid waste.

↳ As per UNEP, more than 350 tons of plastic waste are produced in the world on annual basis.

3d) Promotion of local transport system.

↳ China has largest E-transport system in the world.

3e) Environment related Education is needed. Promotion in school, colleges, Universities, and Through Media.

3f) Implementation of Environment commitments at national and international level.

↳ Kyoto Protocol: Green house gases level must be Reduced

UN, IMF, World bank, Regional Forums

(SAARC) need for climate related agreement

In today's Era, one of the greatest threat globally is Global warming, which results into Economic, political, social and environmental issues.

Industrial Revolution from late 19s is the root of this threat.

Global warming is the increase in temperature of Earth. Now as per IPCC increase in temperature is  $1.2^{\circ}\text{C}$  but, its potential rises from  $1.4^{\circ}\text{C}$  to  $5.8^{\circ}\text{C}$  in the end of 21st century. Temperature above

$3.5^{\circ}\text{C}$  is critical for habitat on Earth. Use of non-renewable energy sources like Fossil Fuels

In transportation, Agricultural-sector, Energy sector and Industrial sector

leads to Global Emissions. From these sectors Emission of Green House Gases leads toward global warming. Reforestration and

use of Bio-fuels, Solar Energy

Wind Energy & hydro Electric / Hydel Energy can minimize the threat. Advancement in technology, use of new instruments rather than old like switching towards E-transportation, Ban on old model transport / vehicles and modification in Infrastructure can minimize the threat. Although, with <sup>rapid</sup> increasing in Industries & other multiple causes leads towards Global warming but there are ways, we can counter it.

Burning of fossil fuels ultimately leads towards increase in temperature of <sup>Earth's</sup> atmosphere. These fossil fuels emits non renewable energy sources.

Renewable energy sources are those which cannot be reused. These are included release of energy/pollution from different sectors like Energy sector, Agricultural sector

and Industrial sector. As per IPCC Energy contributes 35, Industrial sector 45 percent, Transport sector 2.0 percent and agricultural sector 15 percent of Air pollution.

Air pollution causes release of  $\text{CO}_2$ ,  $\text{CH}_4$ ,  $\text{NO}_2$  and  $\text{CO}$  into atmosphere which ultimately leads towards the global warming.

Green Houses Gases releases is also a threat to warming of earth.

Green House gases are all those gases which trap heat into themselves.

$\text{CO}_2$  (carbon dioxide) contributes 61 percent,  $\text{CH}_4$  about 15 percent, Chlorofluorocarbon about 11 percent and Nitrogen dioxide upto 4 percent of Global warming. Although Green House

Effect is a normal normal process.

But due to increase level of green house gases in the atmosphere as compared to past result

as enhanced green house effect.

This enhanced level contributes to Global warming.

Although, Deforestation in excessive rate is a way towards to treat to global warming. Excessive cutting of

trees for making / roads, buildings developing factories. As per Global

Watch about 10 million hectares in past 4 to 5 years. Plants

or plantation is beneficial in a sense it contain carbon sinks.

So when excessive cutting is happened then carbon sinks reduced which ultimately leads to increase level of  $CO$ ,  $CO_2$ ,  $NO_2$  into the atmosphere which leads in warming of earth.

However, Increase in population leads towards more consumption of resources. Infrastructural

development, industrialization increase, increase in generation of solid waste, increase demand of Energy.

As per UN Bensus bureau; In 1900 there were 3 billion population. In Year 2000 it rises to 6 billion and in 2022 to 8 billion and current status is 8.1 billion and world is going to cross 8 billion in the 8 to 10 years. This rapid increase leads to scarcity of resources and more consumption which contributes towards global warming.

Then, People are moving towards urban areas known as urbanization.

Increase in number of peoples in cities results into construction.

Construction leads to release of  $\text{CO}_2$ ,  $\text{SO}_2$  and  $\text{CO}$  by using transport, machinery. Addition of pollutant in atmosphere

(3)

تاريخ

results in imbalance in atmosphere.

As per UN, In 2014, 54 percent population urbanized, currently 60 percent and upto year 2045-2050 rises to 66 percent.

So construction involved or cause warming of Earth.

The biggest Threat to Global warming is depletion of Ozone layer. Ozone layers protect earth from harmful ultraviolet radiations coming from the sun. UV rays causes skin cancer, eyes related problems, damage aquatic life and increase risk of fire on Earth.

There were two British scientists who identified the depletion of ozone layer for the first time their names are Molina and Sherwood.

However In British Antarctic survey depletion of ozone layer was confirmed. Depletion of

ozone layer is mainly due to ChloroFlurocarbons resulted into more penetration of solar heat as compared to past and aggravated the Risk of global warming in the world.

However, despite of above mentioned facts or threats towards global warming there are some alternatives which prevents from/counter global warming. Aforestation, Reforestation should be promoted.

By reforestation instead of deforestation results into less emission of  $CO_2$  into the atmosphere. It is included in UN's sustainable development goals (SDGs) (2016-2030).

Miyawaki - Japanese technique of plantation which is promotion of sponge cities. By promoting vertical expansion leads to effective

land use. which results into open space or urban plantation and water reservoirs <sup>which</sup> underground <sup>help</sup> helps for flood management.

However, if from non renewable energy resources there is need to shift towards renewable energy like wind energy, solar energy.

Bio fuels, thermal Energy. China is the largest producer of solar energy which is above from their need so they exports.

In Pakistan coastal cities like Sindh and Balochistan can produce wind energy at largest rate. These energies are safe due to the reason <sup>that</sup> they do not emit gases into the atmosphere. So, switching from non-renewable to renewable is a better option to counter global warming.

By transformation in the energy system levels of Green house gases can be controlled, as Green houses gas contributes 91 percent of global warming. Many developing and developed countries are shifting towards solar energy.

Also, there should be reduction in number of vehicles and promotion of local transport system. But

Decent local transport system, needs to reshape people mind about inferiority complex. Istanbul, Singapore Sydney has one of the best transport systems in the world and these countries are peaceful less affected by global warming.

China has largest E-transport system in the world. A major shift from non-renewable (Fossil Fuels - like oil and gases)

towards electricity;

Environmental related information or campaigns, promotion of information among masses related the threat of global warming.

Through local governance system union council - BD members

should aware people at grass

root level. System of solid waste

management is needed. As per

UNEP, more than 350 million tons of plastic waste are produced in the world annually. In Pakistan

15 million tons of plastic waste

is produced. So, Media is a

great tool, by promoting through

advertisements in print media or

electronic media. One thing

is implementation of environment

related commitments. As in

past Kyoto protocol was

signed to reduce green

: 5

green house gases level and another PARAS agreement on environmental agreement but not implemented, Due to behaviour of States, legal weakness and non-binding. There should be control on levels of carbon. Developing countries India and china uses more carbon level as recommended due to their increase <sup>largest</sup> industrial system. Developed countries also not uses recommended carbon levels. which results into mismanagement. So: develop. world should cooperate.

With the development of industrial and agricultural sector which contributes towards the socio-economic growth of the countries or world. But it leads towards another global threat like global

: 6/5

warming. However by their controlled and limited use or alternatives from technology towards modern technology like Electric vehicles, Bio fuels, Bio diesels which consumes solid waste which is also a huge problem like animal waste, animal fats which pollutes the environment. Bio-fuels or Bio-diesels prevents environment from pollutions and also fuels from gas- or petrol which is expensive and release different harmful gases in the environment / atmosphere towards cheap and clean source. However, cooperation between developed and developing world is in great need to counter global warming. Without these, cooperate among them all efforts are in vain. ~~But~~ However, where there is a will, there is a way! ~~the way is~~