

Despite its urgency, climate crisis remains the most neglected cause

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- accountability of petrochemical companies ↑
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 - e) Measures of adaptation; carbon tax and penalties

8. The Pakistani case; failure to address climate concerns:

a) Poor management, lack of capacity building and a dearth of academia

→ Deficiencies of National Climate Change Policy 2012 and Pakistan Climate Change Act 2017

b) 18th Amendment - the root cause of all problems

9. Recommendations in Pakistani context:

a) Employing the "Council of Common Interests" to resolve internal disputes

b) Enact a clear roadmap to harness the "Loss and Damage Fund"

c) Ensuring implementation of "Pakistan National Climate Resilience and Adaptation Plan 2023-30"

10. Conclusion

"We can't keep kicking the can down the road. We are out of road - and almost out of time." This statement by UN chief Antonio Guterres starkly captures the urgency of the global climate crisis and the pervasive neglect evident in addressing it. The world faces an unprecedented environmental challenge, marked by rising temperatures, erratic weather patterns, and impending threats to biodiversity and vulnerable communities worldwide. Pakistan, too, confronts its share of climate-related adversities, experiencing drastic weather shifts and socio-economic impacts.

However, the response to this crisis, both globally and within Pakistan, falls short. It is imperative to critically analyze the policy measures at both international and national levels, and assess their failures to chart a course that effectively tackles the climate crisis.

The history of climate change intertwines

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with a narrative of persistent neglect. While natural climate fluctuations have long existed, the acceleration of human induced global warming has been fueled by industrialization and unchecked emissions. Since the onset of Industrial Revolution in the 18th century, an estimated 2400 gigaton of carbon dioxide has been released into the atmosphere. It was not until the late 19th century that global organisations sounded the alarm. Resultantly, the UN established United Nations Framework Convention on Climate Change (UNFCCC) ^{in 1992} as a pivotal international treaty to address global warming and the Conference of Parties (COP) as the primary decision making body. There have been a total of 28 COP meetings till date but only the last one has ever mentioned "fossil fuels" ^{as an issue.}

The consequence of this historical negligence

is starkly evident in the steady rise of global temperatures. The current warming is happening at a rate not seen in the past 10,000 years. The planet's average temperature has risen about one degree celsius since the late 19th century. This apparently meagre change has resulted in a loss of 7560 billion tonnes of ice from the frozen poles; a 69 percent loss of species' populations; approximately 8 inches rise in sea levels, and the ^{consequent} loss of 28,000 square kilometers of coastal area; change in precipitation patterns and the resultant increase in floods and droughts by 25 percent and 16 percent respectively. Moreover, 2023 has been declared the hottest year in Earth's history.

The manifestations of changes in climate equilibrium are evident through recent catastrophic events: the worst flood in over 100 years

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rocked Somalia and Kenya; deadly flooding in Libya affected over 15,000 people and killed nearly 5000 citizens; heat wave in Europe killed more than 70,000 people in 2022, and multiple hurricanes have caused losses worth billions of dollars.

In the same vein, Pakistan has faced severe repercussions due to climate change. Its temperature has risen by 0.3 degrees Celsius - higher than the global average - despite emitting only 0.4 percent of carbon dioxide. To add fuel to fire, it has fallen prey to the "La Niña" event - above average monsoon rainfall. Resultantly, it received 780 percent above normal rainfall in 2022 which resulted in flash floods. According to National Disaster Management Authority (NDMA), 33 million people were displaced and at least 1200 were killed. The country lost \$14.8 billion

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in damages and \$15.2 billion in economic losses.

Moreover, the effects of climate change have extended into the realms of agriculture and industry. An estimated 9.4 million acres of crops were affected in 2022 coupled with losses to cotton, dates, wheat and rice crops. More than a million livestock were lost.

Damages in the agricultural sector caused a spillover onto the industrial sector. Cotton losses hampered industrial textile production. Similarly, food and slaughtering^{industries} were negatively impacted.

Resultantly, the country experienced an 12.71 percent reduction in exports during FY 2022-23.

The climate crisis is dragging the planet to the brink of collapse. Nevertheless, the efforts to address

it persist as half-hearted and neglectful.

The efficacy of UNFCCC and COP

agreements has been hindered by the forum's rampant politicization.

The Kyoto protocol of 1997 was hailed as a landmark event aiming

to reduce greenhouse gases. However,

it failed due to major powers like the United States, China and Canada

not agreeing to its ^{stipulations}. Subsequently, the

Paris Agreement of COP-21 in 2015 emerged as a significant step forward.

Signed by 196 countries, it pledged to limit global temperature rise

below two degrees celsius of pre-industrial levels. The countries also gave their own

carbon cut-off plans: the US, by 45%;

China, by 40%, and similar reductions

by India, South Africa and Brazil. Similarly,

a loss and Damage fund was established

with a target of "\$100 billion" ^{to be paid by developed world} for victims of ^{climate change}.

The performance of developed countries

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was readily assessed in COP-27 which took place in Sharm-el-Sheikh. All the countries had miserably missed their five-year targets. The US missed it by 60 percent and Canada by 45 percent. Moreover, only \$700 million have been pledged by developed countries against the set target of \$100 billion. The meeting of the Loss and Damage Transitional committee failed in 2023; the developed nations stipulated that their funds should only be allocated to small island states and exclude developing countries like Pakistan. Hence, the event ended in discord between the Global North and South.

The COP-28 has been lauded by many a step in the right direction. It emphasizes the need to "transition away" from "fossil fuels". The "Global stocktake" review has been established to periodically assess the targets under the Paris Agreement.

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It calls for tripling renewable energy and doubling the global average rate of efficiency by 2030. The conference also established the New collective Quantified goal for "Climate Finance".

The wealthy nations owe the developing world \$500 billion till 2025. The goal will start from a floor of \$100 billion.

Moreover, the agreements of COP-28 also address ^{adoption of} sustainable agriculture, electric vehicles, nuclear energy and mechanisms to attain "net zero emissions" by 2050.

The stipulations and roadmap provided by the latest COP may seem ambitious. However, there is a need to iron out the many obstacles in its way to truly realize its objective of ceasing carbon outpouring. The agreement, like its predecessor, the Paris agreement, exhibits negligence in making this

commitment a binding communique.

Exchange of words in negotiating rooms will not change the reality on ground.

The non binding nature of agreements is the reason countries like the US have spent over \$ 8 trillion in wars since 9/11 but pledged a mere \$ 17.5 million to the "loss and damage fund" at COP-28.

The efforts to address climate change, according to NASA, should revolve around the two-pronged approach of "mitigation" and "adaptation". The former involves taking stringent measures for reduction of greenhouse gases; the latter, adapting to the climate already in the pipeline.

Effective mitigation mandates a complete departure from fossil fuels, transition to renewable energy, and implementation of innovative technologies. The role of

fossil fuel industry needs to be taken into account for any climate related policy to materialize. According to Greenpeace, major oil and gas companies like BP, Exxon and Shell have spent millions of pounds to delay government policies that would help tackle the climate crisis. In addition, more than 2450 "representatives" from the "fossil fuel sector" attended COP 28 to further their vested interests over the interest of the planet. Petrochemical corporations need to be taken by the collar by their respective governments. However, the ^{progress} of world governments has been archingly slow in this regard.

The role of climate change activists is commendable in pressurizing sluggish governments and leaders. Millions of people from around the globe are actively promoting the climate cause

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and [↑] highlighting the plight of vulnerable communities.

Campaigners like Greta Thunberg, Vanessa Nakate and Dominique Palmer have inspired many by their movements and representation of the climate issue at international forums. Therefore, activists should be further empowered and funded by citizens and organizations.

Furthermore, the adoption of renewable energy and cutting-edge technology is sine qua non to curtail fossil fuel expansion and ensure mitigation.

Investments in renewables are projected to create 42 million jobs and 61 percent of energy supply by 2050. Moreover, technology like Carbon Capture and Storage (CCS) can potentially bring down carbon output by 19%. Artificial intelligence can be used in domains of energy efficiency, sustainable agriculture, early warning systems and grid management.

The above measures can prevent 150 billions tons of emissions by 2050.

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Adaptation ^{strategies} focus on preparing for and responding to the impacts of climate change. Financial contributions to support climate vulnerable nations are essential in this regard. As mentioned earlier, the current funding is inadequate for adaptation and resilience. For instance, only \$30 billion ^{have} been contributed by the developed world between 2000-2019 compared to climate induced damages of \$3.64 trillion. Moreover, these countries have neither atoned for previously missed targets nor made binding commitments for new climate finance goals. It is imperative to place "carbon tax" on these nations to deal with their inflexibility and negligence. Countries like the US and China, who are the world's largest polluters should ^{not only} pay tax in line with carbon discharge, but also a penalty for crossing a given ^{unanimous} "emission threshold".

In context of Pakistan, all the efforts to address climate change ^{to date} have been marred with poor management, lack of capacity building and a dearth of academia and researchers. Prime Minister's Committee on climate change, National Climate Change Policy 2012 and Pakistan Climate Change Act 2017 exhibit lackluster political will, lack of seriousness and poor policy coordination.

Nevertheless, there is little effort to address the root of the problem - the 18th Amendment. It devolved the subject of environment to provinces allowing them to legislate and implement laws as needed. Resultantly, the Ministry of Climate change has no collaboration with provincial ministries, and the broader targets set ^{at} policy level are never translated into attainable ^{province-wise} targets. For example, goals of battling desertification, conserving biodiversity

only exist in text of climate change Act 2017 and could never materialise. Moreover, inter-ministerial wrangling between ^{the} Ministry of Foreign Affairs and the Ministry of Climate Change has jeopardized the process of enacting a framework to present Pakistan's climate-induced catastrophe on international forums. Therefore, as a first step, the country ^{should} actively employ the council of common interest to settle internal matters and devise an unanimous climate policy with trackable targets.

When internal matters are resolved, only then can Pakistan move to solve external matters. It is absolutely baffling that Pakistan could only secure \$ 131 million against \$ 4 billion losses from the Loss and Damage Fund. On the other hand, India and Bangladesh secured \$ 529 million

and \$374 million respectively. In order to harness the climate finance, Pakistan needs a strong, dedicated team that aptly represents Pakistan's climate vulnerability based on research. Moreover, calculations for required resources and technology, and a roadmap is needed that elaborates ^{in line with SDG-13: Climate Action} the steps of our climate plan and explains its financial breakdown. Lack of the aforesaid measures is the sole reason Pakistan failed miserably to secure the required funding.

Contemporarily, Pakistan has rolled out a new "Pakistan National Climate Resilience and Adaptation Plan 2023-2030". Notable measures of this policy are Electric Vehicle Policy 2019, Bus Rapid Transit Karachi, Ten Billion Tree Tsunami and Living Indus Programme. However, these policy measures require hefty funds and prudent management. ^{Again,} Pakistan needs to solve its internal issues and cater to the external matters to secure finances

and actualise this ambitious plan.

To conclude, the global climate crisis stands as an urgent, pressing issue demanding immediate attention and concerted effort. Persistent negligence has landed the world in a quandary, with catastrophic climate induced events ^{unfolding at an} accelerated pace. Pakistan, too, has exhibited blatant oversight in dealing with this crisis despite being one of the most vulnerable regions. ^{Therefore} Depoliticization of international forums, transparency and accountability of top polluters and other measures revolving around mitigation and adaptation are imperative in dealing with the climate issue.

↑ In the same vein,
 ↑ Pakistan must prioritize solving its internal matters to actively harness international ^{forums and} stipulations ^{to} its advantage, and actualize its climate projects.