

## Title:

# Despite its Urgency, Climate Change Remains the Most Neglected Cause

## Outline

### 1. Introduction

Thesis statement: Due to climate change crisis across all regions, it has become an urgent matter of 21st century. Whereas, the world has turned a blind eye towards climate vulnerabilities. It demands revision of climate centric policies with an application of Artificial Intelligence to sustain Earth as a habitable planet.

### 2. Urgency of climate change is undermined by poor application of climate friendly action plan

### 3. Climate change urgency reflects in its unprecedented impacts

- a. Earth's temperature has switched from global warming to global boiling
- b. Destruction of marine biodiversity and freshwater ecosystems
- c. Causing intense food shortage and water scarcity



- d. Developing countries are more vulnerable to climate change
- e. Climate change is becoming a catalyst of conflicts
- f. mass migrations across the globe

#### 4. Key factors behind the neglect of climate change

- a. weak governance as a driver of climate crisis
- b. Climate colonialism: an escape mechanism for the global north
- c. False pledge of "net zero" emissions by largest corporations
- d. Climate vulnerability in the world at two wars e.g., Russia vs. Ukraine war
- e. Execution of Nationally Determined Contributions is contingent upon climate finance
- f. Lack of technology and scientific research in developing countries
- g. Inconsistent contribution of environmental journalism to climate cause

#### 5. Innovative ways to address climate change

- a. Revision of Paris Agreement in terms of technology and climate finance



- b. Regulatory oversight to ensure corporate climate accountability
- c. Track record and accountability of military emissions
- d. Use of Artificial Intelligence in tackling climate change

## 6. Conclusion

"Few people realize this, but cutting down the trees is one of the things that keep us Malawians poor," these are the words of a 14-year-old boy William Komkwamba, who built a wind turbine and solar powered water pump during severe droughts of Malawi in 2001-2003. It was one of the worst climate crisis in the living history of Malawi, when death of a person meant "one less mouth to feed." The year 2024, depicts a similar picture across all the continents in form of heatwaves, floods, typhoons, and droughts. In fact, the world is no longer living in the era of global warming that has placed



all the living organisms at higher risk. Climate change has the tendency to enlarge pre-existing socio-economic differences in developing states leading to conflicts and internal displacements. Despite these glaring impacts, climate action hits various road blocks e.g., weak governance structure in different states. Meanwhile, the Global North is still on the route of industrialization adding more greenhouse gases (GHGs), along with two on-going wars adding fuel to the fire. On the contrary, the Global South lacks finances to meet its commitments, as well as technology and scientific support to become climate resilient. Whereas, environmental journalism has failed to initiate a discourse on climate vulnerabilities. It demands a thorough revision of Paris Agreement, 2015 to enhance accountability of states, industries and use of AI in mitigating climate crisis. Due to climate change crisis across all regions, it has become an urgent matter of 21st century. Whereas, the world has



turned a blind eye towards climate vulnerabilities. It demands revision of climate centric policies with an application of AI to sustain Earth as a habitable planet.

Climate change is a by-product of development which happened in 18th and 19th century, particularly in the global North including Europe, USA, Australia, Israel, and some other developed countries. Today, the unprecedented outcomes of this development are visible, particularly in the Global South including Pakistan, Afghanistan, Africa etc. Though, both developed and developing countries have signed climate accords, but both lack in their stringent application. World Bank reported after 2022 floods in Pakistan that 8.0 million people were displaced and economy accrued a loss of \$5.6 billions. Such climate crisis are being reported in other countries as well, whereby the whole <sup>idea of</sup> climate action and strategies has become a plethora of hollow



goals and objectives of climate change adaptation, mitigation, and resilience.

The temperature of Earth has officially transitioned from global warming to global boiling. in July 2023.

This terminology means an increase in average temperature  $1.5^{\circ}\text{C}$  to  $1.6^{\circ}\text{C}$  with a possibility of frequent heatwaves every year. Till 2023, climate change discourse was fixated on rising sea levels, flash flooding etc., but post July 2023, a new pattern of deliberations commenced "unpredictability of climate change across all regions." South Asia is at the brunt of climate <sup>induced</sup> disasters which was quite visible in Saudi Arabia.

A deadliest heatwave claimed the lives of 1300 people due to an ever recorded  $52.8^{\circ}\text{C}$  temperature in the country (Masood Lohar, Global boiling 2024.) It left two messages for the world (i) urgency of climate change (ii) analysis of climate protection measures.

Hence, the transitioning demonstrates that climate change is not anymore



predictable that makes it an emergency of 21<sup>st</sup> century.

The severity of heatwaves leads to a full-scale destruction of marine biodiversity and freshwater ecosystem. Climate change has already caused a substantial damage and irreversible loss of aquatic environments. Oceans cover 70% of the earth surface and play a crucial role in taking up CO<sub>2</sub> "carbon dioxide" from the <sup>atmosphere</sup> environment. It results in the acidification of oceans and freshwater bodies. So far, oceans have absorbed about 30% of the anthropogenic CO<sub>2</sub> posing a higher risk to the survival, growth, and a range of marine taxonomic groups from algae to fish (UN IPCC report, Climate change 2023 synthesis report, 2023) It explicitly hints that climate change has a destructive impact on marine biodiversity and freshwater bodies due to their constant acidification.



Furthermore, climate change is leading to severe food shortage and water scarcity for human consumption. Higher sea-levels lead to inundation of deltas and frequent flooding that destroys natural waterbodies along with soil erosion and degradation. One prime reason for water scarcity is inplate water demand for industrial, agricultural, and residential use. Agriculture sector consumes 70% of the water but it is not climate resilient. Dr. Johan Jager, a climate scientist from Columbia University explains the connection between water scarcity and food shortage, that firstly there is not enough water to cultivate croplands. Secondly, presence of excessive  $\text{CO}_2$  in the air curbs the nutritional vitality of cereal crops e.g., wheat, rice, and maize. The Sub Sahara African countries and South Asian region cultivate these cereal crops, which are facing nutritional and water scarcity challenge. Thus, climate change is



attacking global food production and water bodies that are contingent for every living beings survival.

Such issues are prevalent in developing countries which are more vulnerable to climate change as compared to developed countries.

The Global South that comprises of developing countries does not have the capacity to mitigate and adapt climate change, whereas, frequent climate induced disasters have made it less climate resilient. Climate change has the tendency to exacerbate pre-existing socio-economic discriminations. United Nations Development program (UNDP) reported that even within the same country the impacts of climate change may be felt unevenly due to structural and socio-economic inequalities. Moreover, Global South have already experienced approximately eight times as many natural disasters in the past 10-years, in its comparison to 1980s. (UNDP, Climate change is a matter of Justice.



here's why, <sup>June</sup> 2023). Ultimately, Global South is bearing a disproportionate burden in urgent climate hours, having contributed far less to it.

Another similar issue posed to developing countries is of conflicts and climate change happens to be a catalyst for it. The relationship between climate related risks and pre-existing conflicts is complex and often intersects with social, political and economic domains. It does not itself cause conflict, it is a threat multiplier. As discussed earlier, Global South has pre-existing socio-economic and political instabilities. For instance, Pakistan and India has a water sharing dispute, but once combined with climate crisis the intensity of this issue exacerbates. In 2018, UN Security Council held a debate to address the intersectionality of climate change and conflicts. UN political affairs chief Rosemary DiCarlo commented that "Climate change is a threat multiplier." That is how,



climate change is stimulating pre-existing conflicts, posing greater threats to the survival of Global South.

This threat multiplier is also an instigator of mass migrations across the globe. This century has been dubbed as the century of climate migration amid severe climate crisis across the world. People fleeing the effects of climate change are deemed as a human face of climate change migration. As a rule of thumb, the greater the climate disasters, the more number of people will be displaced. For instance, there were mass migrations in Pakistan post 2005 earthquake, 2010 floods and 2022 floods. Recently, an Australian based think tank, <sup>"The Institute for Economics and Development"</sup> has made a projection that 1.2 billion people could be displaced by 2050 due to climate crisis. Thus, climate change urgency is visible on the face of human migrations happening at an exponential speed.



Despite a long list of climate induced disasters, the overall climate action lacks the attentiveness as visible in the form of weak governance. At local level, it's the local governance setup which implements the international accords e.g. Paris Agreement. As a general practice, policies are devised at the top level, whereas these policies are implemented at local level through the involvement of local administration.

In developing countries, these bodies lack functional capacity to tackle climate change crisis. Floods of 2022 in Pakistan, portrayed a glaring picture of this fact, when five brothers scrambled on to a big rock with wrapped ropes around their bodies. They waited for four hours to be rescued by local administration, which did not even appear on the scene. Four of them were simply washed away by the swelling torrents. In brief, lack of capacity of local administrative bodies has left the affected on the mercy of climate disasters.



Similarly, climate colonialism is a key factor behind climate change neglect that works as an escape mechanism for the global north. It refers to the exploitation of resources and power by the western countries and companies, when deal with climate change policies. Global North <sup>previously</sup> achieved development through industrialization at the expense of Global South. Continuing today, they have designed escape mechanism e.g., carbon trading / off-setting under "UNFCCC" to sustain this progress. Carbon trading is a carbon off-setting project that allows sale and purchase of a smaller carbon footprint, without truly reducing GHG emissions. In United States alone, companies spent an estimated \$1.7 billion in 2023 that was meant to compensate their emissions. Climate activists worldwide have labelled this act as climate colonialism which appears beneficial from the front but doing no good to the atmosphere. They also call (Read, debate, engage, Understanding climate colonialism, 2022)



call it a face saving tactic of the western world. In simple words, climate emergency is a legacy of colonialism, which has provided a backdoor to the Global North with an excuse of compensating for the damage being done.

Not only carbon trading but also pledges of 'Net zero' emissions by companies till 2050 are false. The commitment of 'Net zero' emissions does not align with their lobbies and operations of the companies. On one end, they have pledged under Paris Agreement to opt for climate friendly practices. On the other end, these companies lobby against such agreements to run their businesses smoothly. For instance, Woodside Energy, an Australian oil and gas company, lobbied in favour of new fossil gas supply in Australia. Likewise, a US based gas and electricity supply utility "Southern Company" advocated to preserve the role of fossil gas in transportation and building sectors. This double game



reveals the careless demeanor of world's largest corporations towards climate mitigation. Simply stating, this is a misalignment with Net Zero pledge.

The on-going two wars in the world are further accelerating the climate vulnerability, by making it even harder to meet global climate goals. Any kind of military activity has significant impacts by CO<sub>2</sub> emissions and resources depletion.

The history of mass <sup>em</sup>sembers the blazing of oil wells during 1990 Gulf war amounted to 2-3% of the global emissions. Today, after 45-years, Russia vs. Ukraine war and Israel vs. Palestine war are setting new records of GHGs emissions. So far, only one report has featured the emissions caused by Russia vs. Ukraine war that amount to 150 Mton, similar to those of a country like Belgium (Initiative on GHG accounting on war, Climate damage caused by Russia, Dec 2023). It is a gross negligence that the world



It does not have <sup>and</sup> record of climate damage caused by the on-going wars. All in all, wars and military actions are the major contributors in climate damaging- which are missing from the global climate agenda.

Military expeditions are a threat to developing countries, which lack funding to execute their NDCs. Overall, developing countries are adhering to climate centric policies, but their major challenge is to mobilize finances to meet their commitments. Climate finance allocated under Paris agreement and loss and damage fund 2023 do not include implementation cost of dually committed climate friendly projects. One such cost may go to bridging gender divide in social settings widened due to climate change. Second Needs Determination Report 2024 released by UNFCCC states that upto \$6.3 billions are required till 2030 to meet NDC's' goals of developing nations. It is, thus, evident that execution of



NDCs is contingent to climate finance, otherwise their goals will stay on the paper.

Just like this, developing countries face another notable challenge in terms of lack of technology and scientific research to mitigate climate affects. The use of technology and scientific research make it easier to identify emission sources and stop further damage with greater energy efficiency. Pakistan is one of such countries which is switching to renewable energy sources and establishing new "Economic Zone" to foster climate friendly practices (Dawn News, Renewable Energy, June 2024). But it lack key technologies like "carbon capture and storage technology". The technology is itself not new, in fact, it demands adequate business model to function that does not exist in developing countries. moreover, research capacity is low particularly in agriculture sector to maintain production



production of cereal crops by releasing climate resilient seeds (Mahnoor Gaiser, Climate change and its effects on agriculture of Pakistan, Oct 2023).

So, it would not be incorrect to say that developing countries lack both in technology and scientific research that undermines their overall capacity to fight climate change.

Environmental journalism is an only option to highlight challenges related to technology but its contributions in this domain are inconsistent. This type of journalism aims to give coverage to global climate crisis including deforestation, illegal mining, land seizures and pollution. As of yet, environmental journalism is restricted to climate emergencies. There is a lack of diversity in sources and limited editorial capacities when it comes to climate related topics. Its importance cannot be overlooked, however in South Asia its performance is not upto the mark - remarks of UNESCO on 31<sup>st</sup>



world press freedom day conference  
"Press for the Planet." One reason  
for this ordinary job can be the  
fear of censorship while reporting  
land grabbing designated for reforestation.  
To conclude, environmental journalism  
is doing below the belt job when  
its role is crucial for <sup>the</sup> environment  
protection.

It is high time to devise a  
way forward to tackle climate  
change e.g., by reviewing Paris Agree-  
ment in terms of technology and  
climate finance. Article 10 and Article 9  
of Paris Agreement clearly state the  
transfer of technology and finances  
as an integrated effort to mitigate and  
adapt climate change. But the prior  
discussion illustrates that this practice  
is bare minimum to what is actually  
required on <sup>the</sup> ground. The need is to  
amend both provisions to make it  
obligatory for developed countries to  
to set business models to run climate  
friendly technologies in developing  
countries likewise climate finance



must be reviewed as per implementation costs on NDCs and other disaster mitigation programmes. To summarize, scope of these two provisions need revision to enhance technological and financial aid to mitigate climate effects.

Along with this major intervention ~~at~~ international convention, there is a need to introduce regulatory oversight for corporate climate accountability at domestic level. There is a need to establish full-length regulatory oversight mechanisms to ~~strict~~ anti-environment lobbies and practices in local companies. Both, Global North and Global South, can launch this mechanism to instrumentalize corporate accountability to watch out more closely the companies that have pledged zero emissions by 2050. Secondly, it will help in ~~in~~ compliance of domestic climate centric legislations and regulations. In essence, corporate climate accountability is a pre-requisite for limiting GHG emissions that



will improve overall performance of a state in climate mitigation.

Another important step is to keep a record of military emissions along with establishing an accountability mechanism for it. It is a gross negligence that states are unaware of their military's <sup>carbon</sup> footprint. The end goal should be a common approach to report carbon footprint of militaries. It should not be exempted from <sup>the</sup> reporting obligation, in fact, militaries need to engage their extensive supply chains on emissions tracking at the earliest possibility. In simple words, it should be binding upon states to track and record their militaries emissions in order to determine their role in climate deterioration.

Lastly, the power of AI must be explored for tackling climate change. AI offers numerous benefits in addressing climate change from mapping deforestation to cleaning up the oceans. At domestic level



AI powered satellite images are being used e.g., in Scotland that help in measuring deforestation rates and how much carbon is stored in a forest. Such powerful use of AI would be beneficial for other regions like Africa and Asia. Likewise, AI can be used in cleaning up the oceans. AI that detects objects is helpful to map out oceans' litter in remote locations. This waste can then be gathered and removed, which is more efficient than cleanup methods using trawlers and aeroplanes. To simply put, use of AI in Climate action plan will exponentially enhance the health of the environment including aquatic environments.

Closing the discussion, climate change is a harsh truth of our time, which is not going anywhere for the next 50-years. Given the damage which has already been done to the environment. It started with a race to rule the world through development ~~that~~ and



ended up risking every living being. In fact, climate change has become a catalyst for conflicts and migrations. Though, there have been efforts to compensate climate change damage, but every time there are different obstacles that undermine the efficiency of climate friendly action plans. It includes poor governance models, no mechanism of accountability, lack of technology and finances, and constant wars happening in the world that are suffocating the environment two fold. Fortunately, the mother Earth has a quality of healing itself, if the humans take right steps in right direction like use of AI, accountability of the states and their militaries, and strengthening international climate change conventions e.g., Paris Agreement and UNFCCC. All it takes is a true determination and commitment, just like William Kamkwamba, who lighted a torch of life for Malawians



by building a wind turbine and solar powered water pump using blue gum trees and bicycle parts. He is an inspiration for this climate stricken world to pursue innovation, resilience, and shared responsibility in the face of climate change adaptation, mitigation and resilience. As William Kamkwamba rightly said:

"Whatever,  
you want to do, if you do it  
with all your heart, it will happen."

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