

# KNOWLEDGE FORUM

## REGIONAL IMPACTS OF CLIMATE CHANGE: CASE STUDY MALAKAND DIVISION

### EVENT FACTS

The Knowledge Forum on '*Regional Impacts of Climate Change: Case Study Malakand Division*' took place on 12<sup>th</sup> Dec 2023 in Wadoodia Hall, Government Post Graduate Jehanzeb College, Swat. The event was organized by the Environmental Protection Society (EPS) in collaboration with IRC, and Government Post Graduate Jehanzeb College, Swat. More than 200 students (boys & girls), Teachers, EPS representatives, Media representatives, and other activists attended the event. Dr. Naveed Alam – Assistant Professor, University of Swat, and Dr. Murad Ali – University of Malakand were the main speakers of the event. The Chairperson of the Event was Prof. Muhammad Saleem – Principal GPG Jehanzeb College Swat.

### WELCOME NOTE

Mr. Akbar Zeb, Executive Director of the Environmental Protection Society (EPS), expressed gratitude to the Government Post Graduate Jehanzeb College management for their support in organizing the knowledge forum. He extended a warm welcome and appreciation to the media representatives and key speakers from the Universities of Malakand and Swat. He conveyed optimism that the presentations by the relevant experts, along with the subsequent question-and-answer segment, would prove to be valuable for all participants in terms of learning. While discussing the role of EPS in the conservation of the Environment since 1991, he emphasized that the impacts of climate change are devastating from the northern to the southern regions. Whether it be the floods of 2010 or the devastating floods of 2022 in Swat district, we find ourselves grappling with both natural and man-made disasters. In addition, we consistently face the repercussions of precipitation variations, declining groundwater levels, reduced snowfall, and shifts in agricultural patterns due to decreased rainfall. Although COP 28 provided us with international funding for loss and damages, our focus now needs to shift towards local-level adaptation and preparedness. The adverse effects extend to our forests as well. Today's speakers will delve into these issues, and we anticipate a highly informative knowledge forum.

### PRESENTATION BY DR. NAVEED ALAM – ASSISTANT PROFESSOR, UNIVERSITY OF SWAT

Dr Naveed Alam; Assistant Professor, University of Swat delivered a compressive presentation on Climate Change. He added that Human activities, especially emissions of heat-trapping greenhouse gases from fossil fuel combustion, deforestation, and land-use change, are the primary drivers of the climate changes observed in the industrial era.

He discussed many causes affecting Earth's climate to change. Impacts of climate change were also discussed such as; unexpected fluctuations in weather conditions and Floods, drinking water, Diseases and Health problems, Species Migration and change in the habitat, Change of Seasons and timing of biological activities, Land degradation and desertification, Ecosystem and Forest Degradation, Poverty, Mass Migration, Invasive Species, Melting of Glaciers etc.

Approaches to Climate Change Mitigation were discussed such as; Afforestation and reforestation Programs, Approaches to agriculture and land use practices, Water management practices, Natural Energy sources and use, Conservation of Biological Diversity, and Local communities education and awareness.

Governments can make laws and policies that can lead to ecosystem restoration and sustainable conservation of resources. NGOs can struggle to aware the local communities and guide the government organisations. We can all make choices in our own lives that minimize the loss due to climate change

At the end, he concluded his presentation with the remark;

---

*ACT NOW BEFORE EVERYTHING GOES UP IN SMOKE*

---

### **PRESENTATION BY DR. MURAD ALI – UNIVERSITY OF MALAKAND**

Dr. Murad Ali; Assistant Professor, University of Malakand presented a detailed presentation on Regional Impacts of Climate Change; A Case Study of Malakand Division. He started with Climate change – causes and implications. He said that in 2016 alone, faced over 300 natural disasters across the globe. He then put light on; Pakistan and climate change; according to Global Climate Risk Index 2021- Pakistan is among the 10 most affected countries in terms of financial and human cost and emits less than one percent of the global carbon emissions. He further added that according to NDMA



(2019), since 1947, Pakistan has witnessed 114 floods, 99 earthquakes, 19 extreme temperatures, 18 storms, 15 epidemics, 14 avalanches, 13 landslides, 12 cyclones, and 7 droughts causing huge human and financial cost.

He then presented a case study of the Malakand Division on climate change. Climate-induced hazards – floods that occurred in the area with its devastations were discussed. He added that due to financial constraints - the government is currently spending just 0.00028 percent of GDP on environmental protection and the mitigation costs are very high. Lack of consistency including poor institutional coordination and weak policy formulation and implementation processes are the challenges for Pakistan to mitigate against climate change.

### QUESTIONS & ANSWERS SESSION:

After the completion of the presentations, the participants were allowed to raise questions for discussion. Different Questions were asked by the students, teachers, and Journalists and were addressed accordingly by the Speakers. Some important Questions asked and discussed were;

Q. The questions raised the issue of varying carbon emissions between China (30%) and Pakistan (0.93%) and how Malakand Division can contribute to addressing this concern, especially with the prevalence of rickshaws in Swat.

A. In response to the question, it was noted that various developed nations employ diverse strategies, like switching between driving and bicycling on different days to reduce carbon emissions, use of natural energies, etc. The absence of urban planning and limited public transport options, particularly with approximately 35,000 rickshaws, poses a challenge in the Malakand Division.

Q. How can afforestation contribute to the reversal of climate change?

A. As our water levels decline, afforestation emerges as a solution to restore them. It serves multiple purposes by replenishing water, acting as a carbon sink through CO<sub>2</sub> absorption, and preventing soil erosion. Notably, the COP 21 Paris Agreement stipulates that developed nations, as part of carbon trading, will allocate funds to underdeveloped nations. Pakistan is obligated to utilize this budget for enhancing carbon sinks through plantation initiatives and training people in natural resource management.

Q. Why is Lahore, despite Pakistan contributing less to global climate change, considered the most polluted city in the world?

A. Lahore's pollution is primarily attributed to local factors, including industrial emissions, vehicular pollution, and inefficient waste management. While Pakistan's overall contribution to global climate change may be comparatively low, localized issues intensify pollution levels in specific cities like Lahore. The government needs to impose penalties on citizens to improve the situation.



Q. Why isn't there a trend of indoor plantations in Mingora city? Isn't there any government policy in place?

A. The idea of urban afforestation, as seen in European countries, suggests that the initiative can be driven by individual motivation rather than strict policies. It needs personal commitment to tree planting within urban areas. Unlike relying solely on governmental regulations, this approach encourages citizens to take voluntary action to enhance green spaces.

Q. What role can institutions play in achieving the 2050 global consensus to limit the rise in global temperature to 2 degrees?

A. Conduct sessions in schools and colleges, include climate change topics in courses and promote research on climate resilience. It is essential to create demand in society and for society to understand the importance of addressing climate change. Religious institutions can also play a crucial role, and it's vital to ensure that they are well-informed.

### VOTE OF THANKS & SHIELDS DISTRIBUTION:

Mr. Saleem Khan; Principal, Government Post Graduate Jehanzeb College showed immense pleasure and extended his heartfelt thanks to all who have contributed to the success of this Knowledge Forum on climate change. He Thanked EPS for organizing the event and entrusting him the honor of being the chief guest. He thanked the speakers who have showcased their talents and shared their insights.

In the end, reached a moment of great significance to extend appreciation to the distinguished speakers who have shared their knowledge and insights while addressing different queries of the audience. To express gratitude to the Speakers of the event, Shields were presented as a token of appreciation by Mr. Akbar Zeb, ED EPS, and the Chief Guest.

