



## **CLIMATE JOURNEY**



**HINDUKUSH**

**TO**

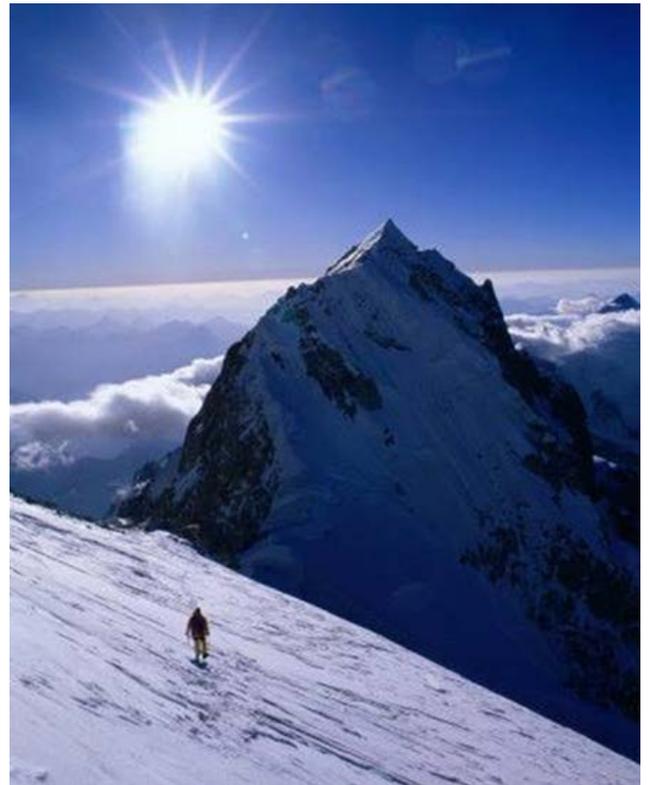
**PARIS**

**(1970-2015)**

**Life memory of climate change.**

It's the time that brings back the fantastic and sweet memories of my childhood from 1970 onward, living my indigenous people in Chitral, the Hindu Kush region of Pakistan in an environment that was peaceful, predictable and habitation friendly. I remember my grandfather was immensely concerned about the weather and give travel advisories on a yearly, monthly and weekly basis, predicting the weather conditions. He was issuing daily Alert of when to leave the house for school and what time to return. Being a religious scholar and elder of the region, he was fully enriched with the wisdom, knowledge, observation and learning from the past history and understanding of timings to cross avalanche, rock fall risk zone area, intensity/magnitude of heavy snowfall, rain and what time wind will start, how to protect from frosting and fizzling and how to respect to nature and environment was what kept us spellbound.

People from nearby villages used to visit him (and after him my father) to seek their voluntary consultancy to construct homes in a safer place that are safe from evils. I remember accompanying my grandfather and father more often for the site assessment visit to decide either to construct a house at a certain site or not on the basis of assessment. They also used to explain different parameters of construction that are safer and blessed for the families. There was control irrigation and pasture management system and no one was allowed to misuse the sacred



natural resources. Today recalling all of these leaves me spellbound that people with wisdom and knowledge of natural resource management, disaster risk reduction, and environment protection more concerned about the future challenges, and were the predictors of the forces of nature.

He preached the people that utilization of the resources is the right and privilege of all people and all species and man should take every precaution to ensure the interests and rights of all others since they are equal partners on earth. With the passage of time, the values of the society changed, the role of my family and the elders in the society diminished, rights replaced with responsibilities,

individualism replaced collectivism, people start misusing the natural resources and the environmental changes became highly visible, and my apprehension further accelerated, when I professional switch over my career from business entrepreneurship/development to Disaster Risk Management in 1997.

The environment changes and people perception to use natural resource further devastated the imitated natural resources of the mountain environment. I am witness to these changes, and the changes are now the reality of life with continued weather and climate- related disasters during last 10 years-2005 to 2015. In addition to regular local disaster events, I have seen unprecedented, unusual changes, like unprecedented heavy snowfall, increased temperatures, changing pattern of crops, the newborn human and animal diseases, reduced life expectancy, insect infections destroying crops and fruits, receding of snow line, melting glaciers, land degradation, shifting and drying of springs, new phenomenon of extreme rains, avalanches, land sliding, land erosion, rock fall, debris fall, variation in weather, shorter winter, sometimes unpredictably very harsh and sometimes normal. Longer summer again very hot and normal. With the passage of time the weather, knowledge and perception of the people changed. The changes are now highly visible in the overall ecosystem, ecology and perception of the people.

The changes in weather pattern, ecosystem, and ecological behavior is challenging lives and livelihood of the mountain people. Adaptation to the changes is very slow and the changes are much rapid, unlike the previous time. The gap is accelerating the miseries of the living organisms in Chitral. Also, significant is the Sunburn issue: the sunburn problems shifted down over from 5,000 meters to 3000 meters. Snow season became shorter from five months to one month and snow season also changed from November-to-the-mid-of-January to-end-of-February. Permanent Snowline and regular snow magnitude



changed. Glacier melting trends became rapid, permafrost areas are now under use of either for human habitation or cultivation. Wildlife shifted to the upper part in high-up in the mountains. Rock and land became more destabilized. Juniper and oak, the evergreen trees having very strong underground roots said to be the natural protection to unstable rock from falling and also a natural protection against flash flooding, is very popular for both cooking and heating, used to be freely available to the people. Now, it is hardly available on the mountain rocks due to deforestation. Population growth and increased demand of housing, roads, channels, cultivation in landslide and stream zones; as well as misuse of natural resources including cutting of trees for construction, fuel, and energy has highly disturbed the natural eco and ecological system, consequently and constantly increasing vulnerabilities of the people and increasing the threats of future disasters. Likewise, Paints (a natural wild shrub/grass) at the snow cap and permafrost/glacier area are a natural protection to stabilize the soil and lose rocks, and reduce the consequences of the dynamic natural process.

The shrub, said to be sinking store of black carbon in the natural process of ice and snow, is now unfortunately being used for cooking and heating by the local communities. Such usage is not only accelerating land degradation, erosion, rock fall but is ultimately affecting land movement and GHG emission. Crops and fruit ripping time lines have changed to a shorter time. Single cropping land are now producing double cropping and no cropping lands produce single crops (positive impact), but the difference in test and energy is quite evident. Insect hibernation period has changed, productivity and health fitness of animal have changed, too. The traditional pasture management system is abolished, environment unfriendly livelihood practices adapted through uncontrolled grazing over the pasture.

The indigenous knowledge is lost and replaced with the imported knowledge of false safety and security measures by western funded organizations. The biological, chemical, and physical weather of the region is rapidly changing the ecosystem and ecology. The pace of development is nature-unfriendly and very slow comparative to the rapid changes in the overall ecosystem. The abiotic components have also affected living organisms and the functioning of the ecosystem. The biotic factors have also changed the behavior, culture, and values of the people as well as the living organisms.



Thousands of people like me believed on the prediction and forecasting about the weather narrated by our ancestors regarding how to go ahead with emerging threats during specific months or years, and how to use and disseminate alerts to the communities at least one week in advance. People would show up at our doorstep with small and big tokens of appreciation and gratitude for my grandfather and father for saving their lives from miseries and catastrophes.

All I have heard them saying in response was “See, we tell you ignorance and illiteracy are the acts of men God doesn't like. So acquire knowledge, act wisely upon it. Simply with this, God will be happy, so there will be no disasters.” The changing pattern of climate is challenging the indigenous knowledge because it is not updated with the changing parameter of the weather.



The imported knowledge based training and capacity building programs by western donors are not friendly to the existing geophysical, ecological and ecosystem. Today after practicing DRR and Climate Change over 20 years, I wish to acknowledge the wisdom and the knowledge of our ancestors about DRR and Climate and the indigenous disaster management mechanism.

When, I recall my 45 year's memory of CLIMATE JOURNEY, I am observing big changes, and the changes are the challenges for adaption, mitigation and implementation for the multidisciplinary and multi-sectoral experts and the scientists. The climate journey of 45 years (1970-2015) has taken us to the universal understanding of Climate Change reality, impacts, and devastation and accumulated huge knowledge to protect, prevent and mitigate the negative impact of the climate change in the atmosphere and on the planet



**This long climate journey from Hindukush mountain of Chitral Pakistan to the beautiful Paris** calls for urgent action at the global level to protect the habitation and the

ecology on the planet by reducing socioeconomic inequality and an injustice to the underprivileged and aggravates inequality. Inequalities, both within and among nations, block agreements and pathways that could lead to sustainability. **Paris Action 2015** required may break the vicious cycle of climate change and socioeconomic inequalities in the region.

As we engage in mitigation, adaptation, and the transition to a low-carbon economy, we must ensure that inequalities are substantially reduced An urgent adaptation, mitigation and implementation strategy (mountain region friendly) researched-based knowledge will save the live and livelihood of the mountain people from a major Catastrophic

Syed Harir Shah

Centre for Disaster Risk and Climate Change (CDRC)

A Project of JAD Foundation Pakistan.