FADING VISTAS

Beauty of Northern Pakistan





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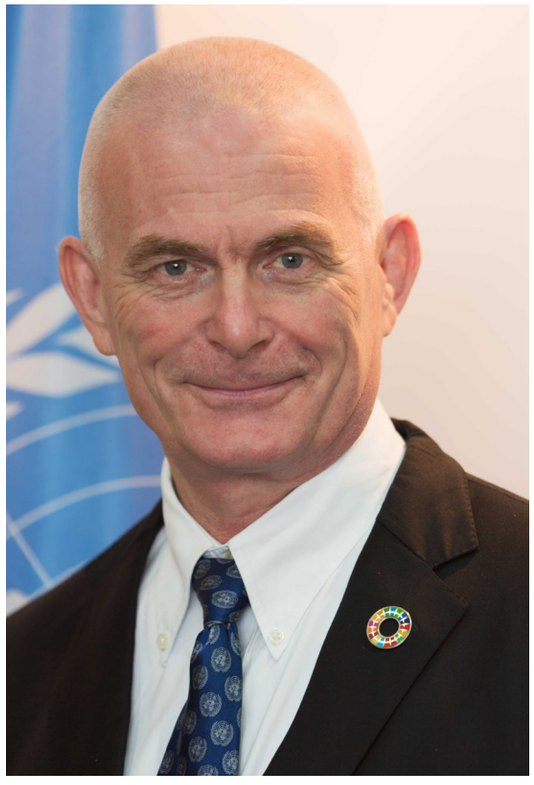
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Broghil, Chitral, Khyber Pakhtunkhwa

F O R E



KNUT OSTBY

Resident Representative

United Nations Development Programme, Pakistan

In Pakistan - a country with diverse topography ranging from the highest glacier-covered mountains to the deepest seas; the effects of global climate change is clear and present, negatively impacting not just the country's livelihoods and human health but also endangering its rich ecosystems. As temperatures continue to rise; floods and droughts would be more frequent, and with these natural disasters, we will witness the disappearance of one of the Earth's most poignant of beauties – its age-old Glaciers.

The devastation this country has witnessed has been overwhelming, as communities that contribute the least to climate change are the ones who are suffering the most. The unprecedented floods in 2022 - from monsoon rains and additionally, glacial lake outbursts have gravely impacted over 33 million people, with 84 districts of the country reported as 'calamity hit'.

Considering the enormity of these challenges and as part of SDG 13 on Climate Action, we at UNDP-Pakistan are supporting the people of Pakistan in tackling environmental challenges through natural resource management, environmental protection, and climate change mitigation as our top priority.

Our "Scaling-up of Glacial Lake Outburst Flood Risk Reduction in Northern Pakistan (GLOF-II)" project, with ardent support of our partners at the Ministry of Climate Change, the provincial governments, and the Green Climate Fund, is enhancing the resilience of people to the impacts of climate change induced disasters in the glaciated areas of the country.

I have been fortunate to travel through these unique areas and experience and breathe in the freshness which these snow-covered mountains so selflessly offer. Having witnessed them firsthand, awakens naturally a most pressing concern within me that we might be losing out on Earth's most sustainable and scenic life sources.

This book is a compilation of the picturesque views this region offers. It is an attempt to pay tribute to the majestic mountains, and the gorgeous terrains across Gilgit Baltistan and 08 districts of Khyber Pakhtunkhwa. The book also illustrates some of the devastating effects of glacial lake outburst floods, and our work to support affected communities.

I hope that our readers will join me in enjoying the captivating beauty of these fading vistas and also in the commitment of nature conservation.

W O R D

SHERRY REHMAN

Senator, Minister for Climate Change

Ministry of Climate Change, Government of Pakistan



Pakistan's climate vulnerability is well established. The sooner we create pathways of resilience for our communities and safeguard our natural resource endowments, the more lives, and livelihoods we will preserve, and establish a secure future for generations to come. Such a vision needs reiteration, as the resources needed for climate adaptation and mitigation are still coming together. For a country like Pakistan, the threat emanates from emissions made elsewhere, with catastrophic consequences for us. Equipped with bare coping mechanisms, our communities will confront the worst of climate stress, and our role as implementers must be to assist adaptation as quickly as possible.

Temperatures in Pakistan's mountainous north are soaring each year, putting glaciers in the Hindu-Kush, Karakoram, and Himalayan peaks at severe risk of accelerated melt. In addition, there are significant carbon soot deposits from transboundary pollution that have caused glacial mass to recede, and adversely impacted both glaciated environments and watershed areas that feed river systems downstream. The Indus and its tributaries are constantly in flux as a result of this.

Communities across Pakistan are vulnerable to the Indus' catastrophic flooding, nowhere more so than districts of Khyber Pakhtunkhwa and Gilgit Baltistan where GLOFs have become an increasingly frequent occurrence. Pakistan has suffered losses of USD 3.8 billion over the years 1999-2018 in flood related damages, with the loss of life and casualties estimated to be 9,989.

To protect vulnerable communities from climatic onslaught and assist local adaptation, the GLOF-II project has aligned governmental climate action priorities with invaluable provincial implementation capacity. Together, we intend mobilizing resources and capabilities to safeguard lives, livelihoods, and natural resources from the stresses of climate degradation. The leadership provided by UNDP Pakistan to this is commendable.

This compilation showcases the spellbinding beauty of Pakistan's northern region and serves as a timely reminder on what we stand to lose if climate degradation consumes our best natural resources. Failure is not an option.

INTRODUCTION



MISBAH ZAFAR

National Project Manager, GLOF-II Project

Pakistan's National Climate Change Policy mentions that climate change is likely to have adverse effects on our ecosystem, particularly on the already vulnerable sectors of Pakistan. The most likely impacts will be decreased productivity, alterations in composition of species, decreased forest cover, unfavourable conditions for biodiversity and massive increase in flood risks especially Glacial Lake Outburst Floods (GLOFs).

It is unfortunate that we have come to the stage where the country, standing at the 8th number on the climate risk vulnerability index, is experiencing the grave impacts of climate change. Shift in weather patterns, increased temperature, heavy rains, glacial melting and floods are just a few impacts that can be counted. Just during this year's monsoon season, we witnessed a catastrophic increase in flash floods and GLOF events in the northern regions of our country.

I feel that despite our continued efforts, there is still a huge capacity gap between our institutions and communities, and this is where GLOF-II project is assisting, in terms of building capacity of our intuitions to bridge the gap for effective and timely disaster response and recovery. Through installation of automated weather stations, river gauge systems, early warning systems and flood protection infrastructure, our people will be much more equipped to cater to any emergency situation in case of a disaster such as GLOFs. I believe that the project's two-tier approach of implementing soft and hard components will help us achieve our targets in a holistic manner.

We also need to understand that to attain these targets, it is very important for all of us to work together, understand each other better, to coordinate most effectively and work hand in hand to achieve our set goals.

Fading Vistas is an ode to the resilience of vulnerable communities and celebrating the beauty of our northern areas, the magnificent mountains, spectacular glaciers, lush valleys, the clear blue waters and the simple life, which makes it even more significant to be preserved and sustained.

MAJESTIC HORIZONS

GLACIERS

Shisper Glacier, Hunza,
Gilgit Baltistan

Shisper Glacier, Hunza,
Gilgit Baltistan

"In the Andes and the Alps, I have seen melting glaciers. At both of the Earth's Poles, I have seen open sea where ice once dominated the horizon." - Ban Ki-moon

Baltoro Glacier, Shigar, Gilgit Baltistan



Glaciers form the largest reservoir of fresh water on the planet, storing 75% of the world's fresh water. Pakistan is home to 7,253 glaciers (ICIMOD) in total, with the most glacial ice than anywhere on Earth outside the polar regions, often known as the 'third pole'. These glaciers supply water to over 200 million people who live amidst them.

Tirichmir, Chitral, Khyber Pakhtunkhwa





Boun Kalam, Swat,Khyber Pakhtunkhwa



Sor Laspur, Chitral, Khyber Pakhtunkhwa

80 % of the water flowing into the Indus River in summers comes from snow and ice melt from the glaciated region (PMD).



Boun Kalam, Swat, Khyber Pakhtunkhwa



Baltoro Glacier, Shigar,
Gilgit Baltistan

Most of the glaciated region of Pakistan lies in the Central Karakoram National Park (CKNP) situated in High Mountain Asia (HMA). It spreads over an area of approximately 10,500 km^2 (ICMOD, 2014) constituting over 3680 km^2 of ice bodies including big and small glaciers as well as perennial ice surfaces.



Passu Glacier, Hunza, Gilgit Baltistan





Baltoro Glacier, Shigar, Gilgit Baltistan

At 63 km in length, the Baltoro Glacier is one of the longest non-polar glaciers in the world. It is located in the Gilgit Baltistan region of Pakistan, home to some of the world's highest mountains.

Baltoro Glacier, Shigar, Gilgit Baltistan







Ghulkin Glacier, Gojal, Hunza, Gilgit Baltistan

Minapin Glacier, Diran Range, Nagar, Gilgit Baltistan

Four major icefalls converge forming the 13km long S-shaped Raikot Glacier, beneath Nanga Parbat’s north face in Gilgit Baltistan

A closer look at the Raikot Glacier at the foot of Pakistan's second highest peak, Nanga Parbat in Gilgit Baltistan

“The way up to the top of the mountain is always longer than you think. Don’t fool yourself, the moment will arrive when what seemed so near is still very far.” – Paulo Coelho



Sopat Valley, Kohistan, Khyber Pakhtunkhwa





Passu Cones, Upper Hunza, Gilgit Baltistan

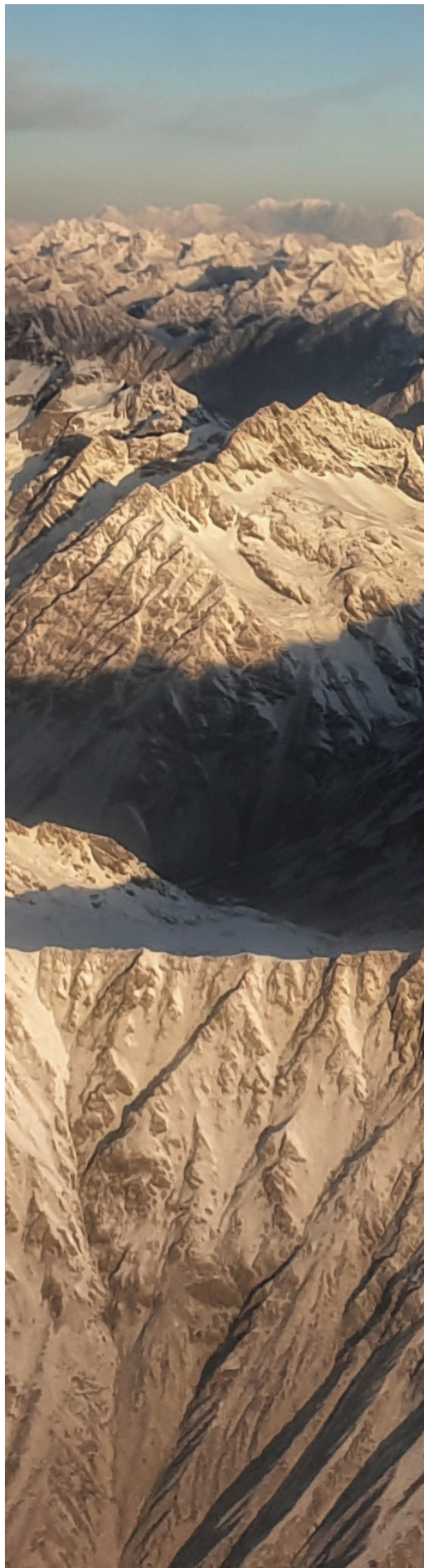


Duikar View Point, Golden Peak, Hunza, Gilgit Baltistan

Pakistan is home to 5 of the 14 mountains in the world that are above 8000 metres tall; in addition to 108 peaks above 7,000 metres and 4,555 peaks above 6,000 metres.



Gahkuch, Ghizer, Gilgit Baltistan





Lower Himalayan mountain range overlooking Kaghan, Mansehra, Khyber Pakhtunkhwa

Rakaposhi, Nagar, Gilgit Baltistan





Diran mountain, Karakoram Range, Nagar and Bagrot Valleys,
Gilgit Baltistan



A towering peak of the Himalayas, Astore,
Gilgit Baltistan

Snow covered peak,Hunza, Gilgit Baltistan





Towering peaks, Naltar Valley, Gilgit,
Gilgit Baltistan

"As it lay there with the shadows of the mountains brilliantly photographed upon its still surface I thought it must surely be the fairest picture the whole earth affords."-Mark Twain



Passu Cones, Goja,l Hunza,
Gilgit Baltistan



Ladyfinger Peak (6,000 metre), a distinctive rock spire, in the Karakoram range, Hunza, Gilgit Baltistan



Deosai Plains, second highest plateau in the world, Gilgit Baltistan

Rakaposhi Peak, Nagar, Gilgit Baltistan



Karakoram Mountain Range, Astore,
Gilgit Baltistan



Boun Kalam, Swat, Khyber Pakhtunkhwa

Sopat Valley, Kohistan, Khyber Pakhtunkhwa



Sor Laspur, Chitral, Khyber Pakhtunkhwa

Borith Gojal, Hunza, Gilgit Baltistan



Madaklasht, Lower Chitral, Khyber Pakhtunkhwa



The Mighty Karakoram Range, Gilgit Baltistan



Sor Laspur, Chitral, Khyber Pakhtunkhwa



Sor Laspur, Chitral, Khyber Pakhtunkhwa

Broghil, Chitral, Khyber Pakhtunkhwa



Boun Kalam, Swat,Khyber Pakhtunkhwa



Godar Dhand, Swat, Khyber Pakhtunkhwa





Sor Laspur, Chitral, Khyber Pakhtunkhwa

Sunset at Gasherbrum IV (G IV), 17th highest mountain on Earth, Gilgit Baltistan



Nanga Parbat, Diamer, Gilgit Baltistan



Pakora Pass, Naltar valley, Gilgit, Gilgit Baltistan

Nanga Parbat (8,126 meter)Himalayan Mountain Range, Diamer, Gilgit Baltistan



Mountains near Khaplu, Ghanche,
Gilgit Baltistan



Passu Cones, Gojal Valley, Upper Hunza,
Gilgit Baltistan

Falak Sar, Swat, Khyber Pakhtunkhwa



LAKE

Sheosar Lake, Deosai National Park, Gilgit Baltistan

LAKES



Glacial lake, Ghizer, Gilgit Baltistan



Glacial lake, Ghizer, Gilgit Baltistan

The northern areas of Pakistan are one of the most exotic locations on planet earth. The Himalayan, Hindukush and Karakoram Ranges lay in their full grandeur and present magnificent views that one cannot imagine. The remoteness of this region not only makes it unique but has helped in sustaining its environment. However, with the current impacts of climate change, the vulnerability of the area is increasing due to the threats of disasters such as GLOFs.

Speen Khwar, Utror Valley, Swat, Khyber Pakhtunkhwa





Godar Dhand, Swat, Khyber Pakhtunkhwa



Kurumbar Lake,Chitral, Khyber Pakhtunkhwa



Sor Laspur, Chitral, Khyber Pakhtunkhwa

Stay close to the serenity of a lake to meet your own peace of mind - Munia Khan

Shandur Lake, Chitral, Khyber Pakhtunkhwa



Lulusar Lake, Naran, Khyber Pakhtunkhwa

Attabad Lake, Hunza, Gilgit Baltistan

Attabad Lake

Located in the Gojal region of the Hunza Valley, the Attabad Lake gleams with its eerily blue waters in Gilgit Baltistan.

Attabad Lake in winter

Attabad Lake , Hunza, Gilgit Baltistan



Lake in Barah Valley, Ghanche, Gilgit Baltistan



Khaplu Nullah Lake, Ghanche, Gilgit Baltistan

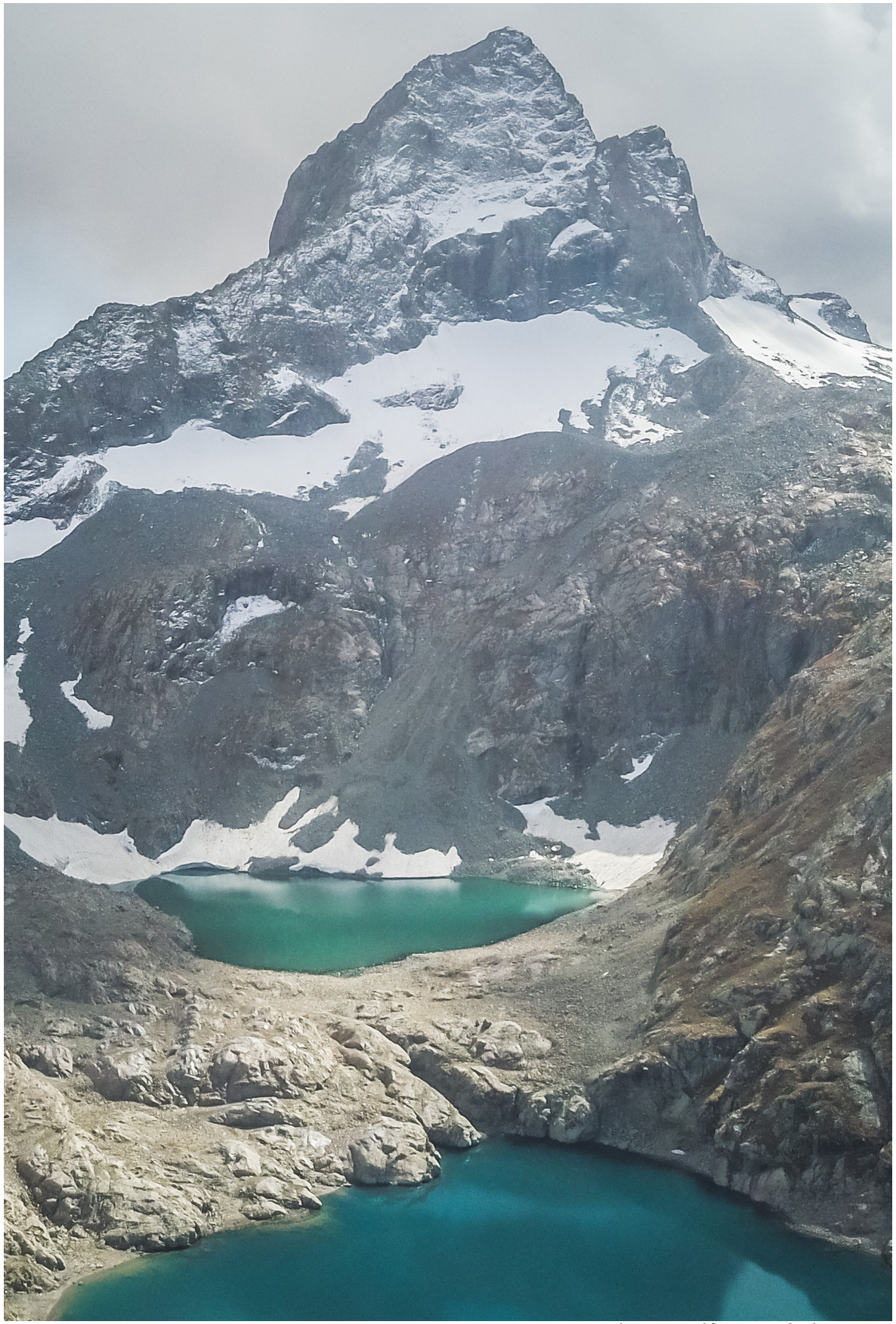


Yogo Nullah Lake, Ghanche, Gilgit Baltistan

Ghatti Lake, Kohistan, Khyber Pakhtunkhwa



Pari Lake, Swat, Khyber Pakhtunkhwa



Sheosar Lake in Deosai National Park, between Astore and Skardu, Gilgit Baltistan

Shandur Lake, Chitral, Khyber Pakhtunkhwa

Sheosar Lake, Deosai National Park, Gilgit Baltistan



Kundol Lake, Swat, Khyber Pakhtunkhwa



Borq Lake, Barah valley, Ghanche, Gilgit Baltistan



Kandol Lake, Swat, Khyber Pakhtunkhwa

Borat Lake, Hunza, Gilgit Baltistan





Karamber Lake, Upper Chitral, Khyber Pakhtunkhwa



Trout Lake, Sopat, Kohistan,Khyber Pakhtunkhwa

Maheen Lake, Soppat, Kohistan, Khyber Pakhtunkhwa





Satar Lake, Kohistan, Khyber Pakhtunkhwa

Shandur Lake, Upper Chitral, Khyber Pakhtunkhwa







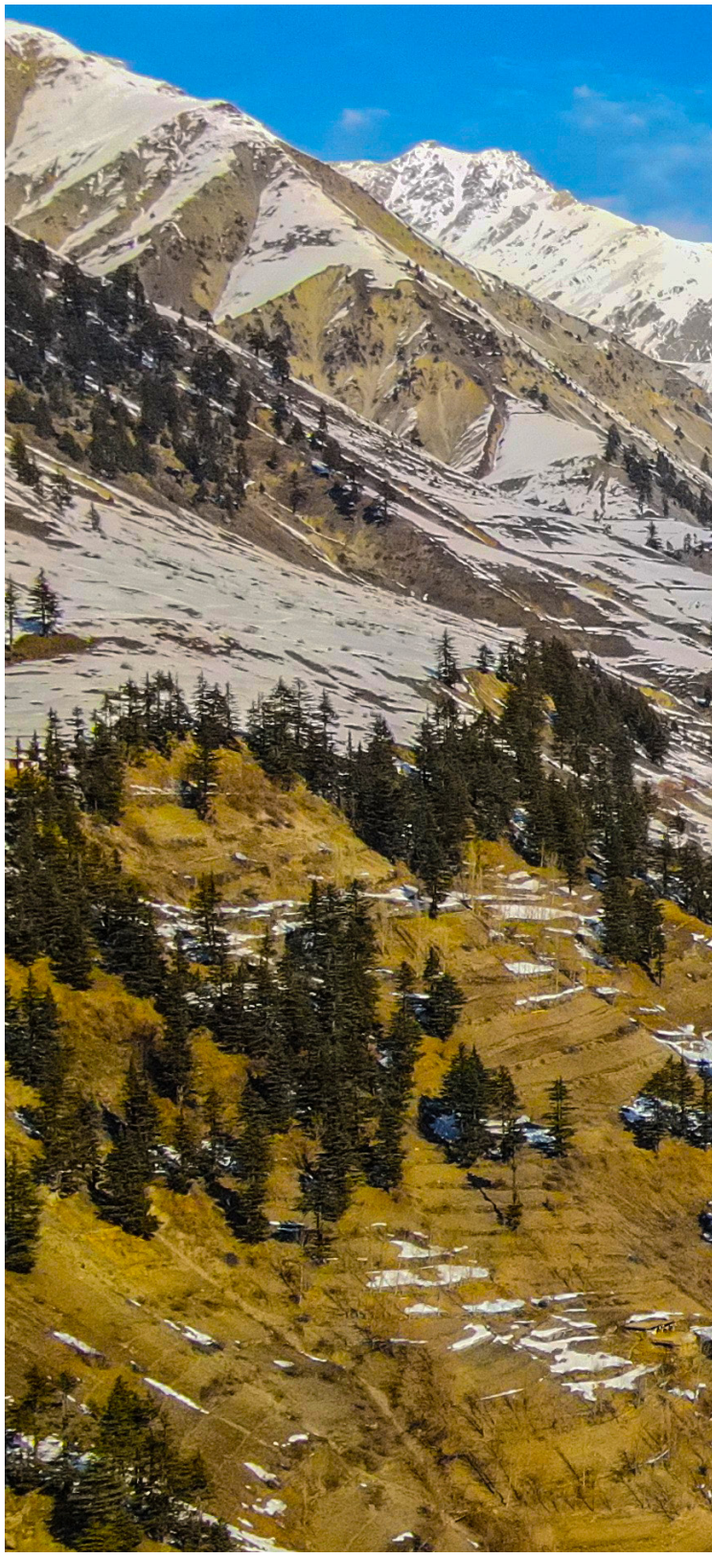
Lashkar Gah Goz, Broghal, Upper Chitral,
Khyber Pakhtunkhwa

Katora Lake, Jahaz Banda, Upper Dir, Khyber Pakhtunkhwa



VALLEYS





Terraced fields of Duiker, Hunza Valley, Gilgit Baltistan



Madaklasht Valley, Lower Chitral, Khyber Pakhtunkhwa

“Mountaintops inspire leaders but valleys mature them.”
~ Winston Churchill



Katora Lake, Jahaz Banda, Upper Dir, Khyber Pakhtunkhwa

Thorgo, Skardu, Gilgit Baltistan



Darkut, Ghizer, Gilgit Balitistan



Chitral, Khyber Pakhtunkhwa





Battal, Mansehra, Khyber Pakhtunkhwa



Burzil Top, Astore, Gilgit Baltistan



Chamoghar, Gilgit, Gilgit Baltistan



Dadimal, Nagar, Gilgit Baltistan



Daas Khiram, Astore, Gilgit Baltistan





Gilgit, Gilgit Baltistan

Sheep grazing on the Deosai plains, Gilgit Baltistan



Goonar Farm, Diamir, Gilgit Baltistan





Gulkin, Gojal, Upper Hunza, Gilgit Baltistan



Minimarg, Astore, Gilgit Baltistan

Skardu, Gilgit Baltistan





Naltar, Gilgit Baltistan

Rakaposhi, the world's 27th highest mountain, lies in the Karakoram Range in the middle of Nagar, Bagrote and Danyor valleys in Gilgit Baltistan





Kumrat, Upper Dir, Khyber Pakhtunkhwa

Passu Cones, Gulmit, Gojal, Upper Hunza, Gilgit Baltistan





Pari Village, Kharmang, Gilgit Baltistan



Zahar Dara, Kandia, Kohistan, Khyber Pakhtunkhwa



Deosai National Park, Gilgit Baltistan

Deosai National Park, Gilgit Baltistan

Kumrat, Upper Dir, Khyber Pakhtunkhwa





Kaghan, Mansehra, Khyber Pakhtunkhwa

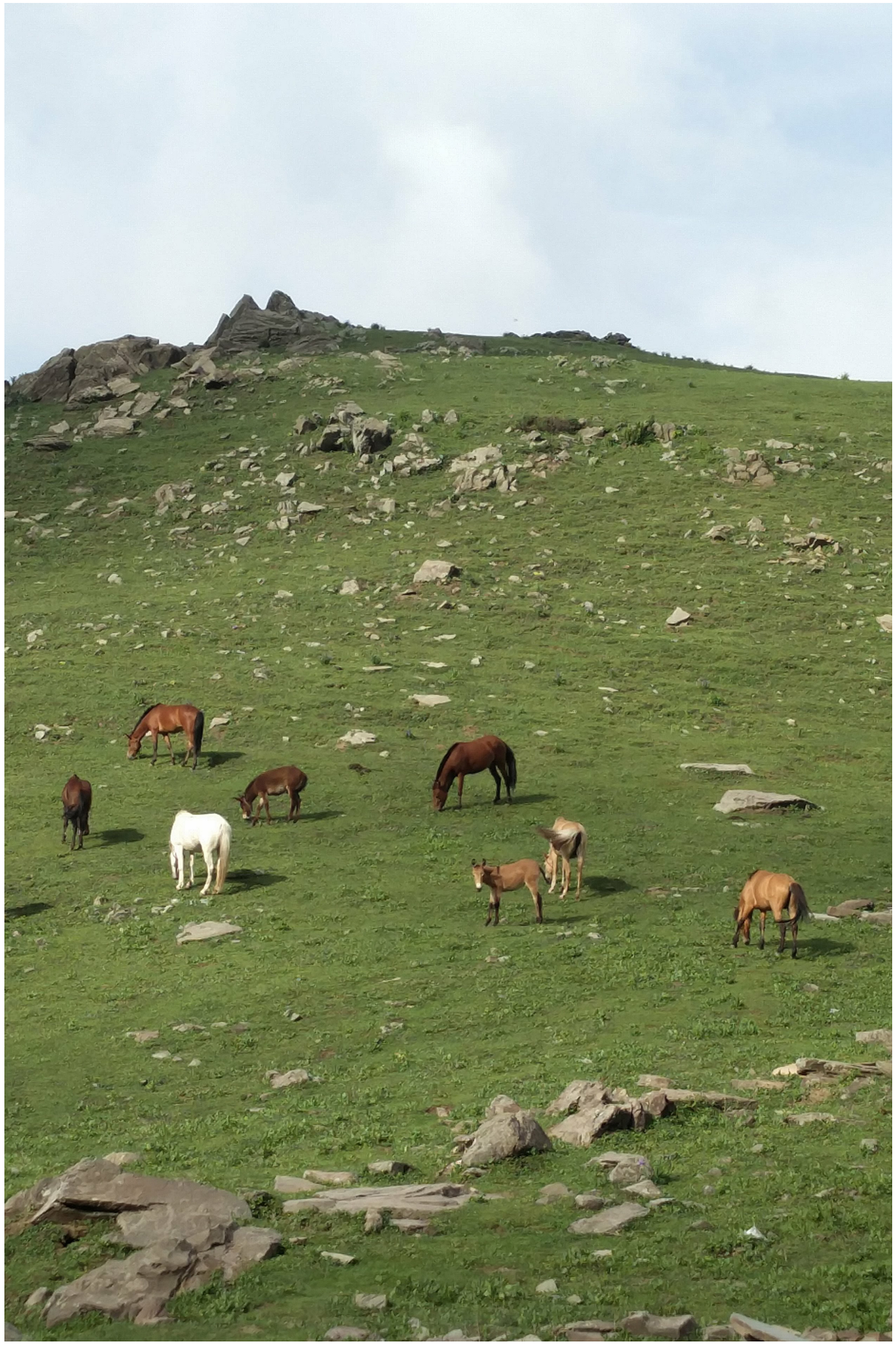




Kumrat, Upper Dir,Khyber Pakhtunkhwa



Lake on the way to Musa ka Musalla(Moses Peak), Gilgit Baltistan



Shogran, Mansehra, Khyber Pakhtunkhwa



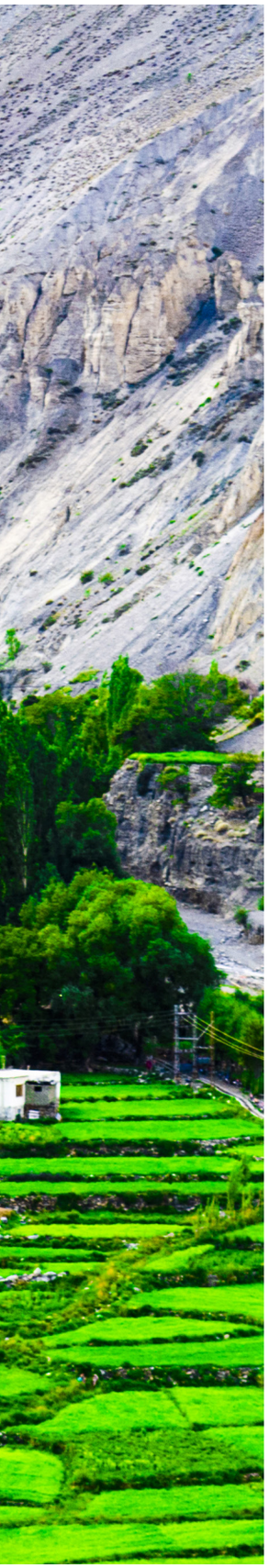
Upper Shani near Naltar, Gilgit Baltistan



Sharan, Mansehra, Khyber Pakhtunkhwa



Chandu Valley, Skardu, Gilgit Baltistan



Sarfaranga/Katpana Desert (Cold Desert):
Situated at the elevation of 2,226 meters (7,303 ft) above sea level, lies one of the highest deserts in the World, the Cold Desert, also known as the Katpana Desert or Biama Nakpo, in Skardu, Gilgit–Baltistan. The desert sits with all its glory in Khaplu and Shigar valleys of Skardu. The mighty dunes amongst the snow-covered peaks present the most mesmerizing views and thus makes a popular tourist's destination for travel addicts.



Sarfaranga/Katpana Desert (Cold Desert), Skardu, Gilgit Baltistan



Chandu, Skardu, Gilgit Baltistan

Kandia, Kohistan, Khyber Pakhtunkhwa



Booni, Upper Chitral, Khyber Pakhtunkhwa

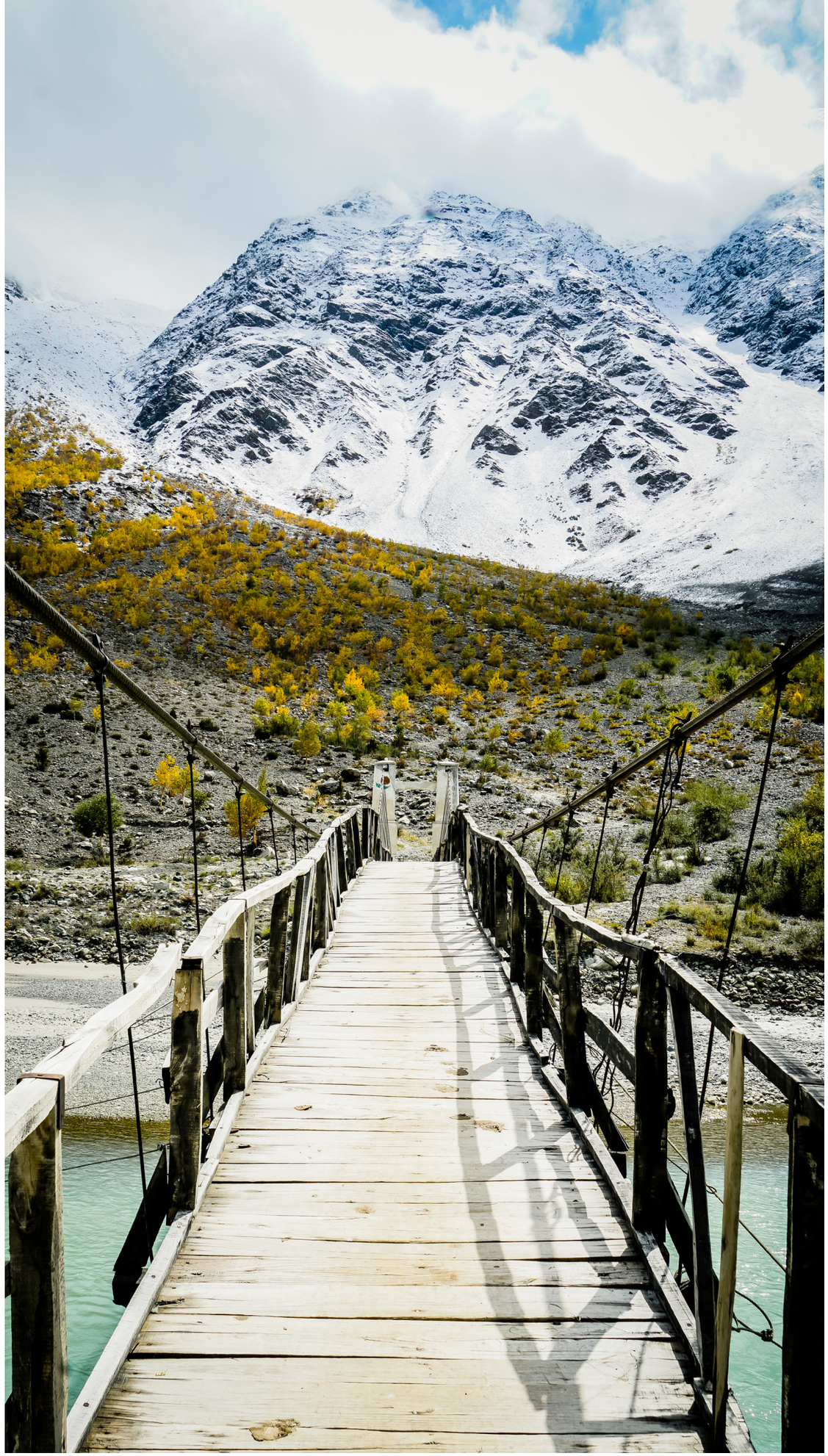


Phander, Ghizer, Gilgit Baltistan



Phander, Ghizer, Gilgit Baltistan





Broghil, Upper Chitral, Khyber Pakhtunkhwa



Shigar, Gilgit Baltistan





Booni, Upper Chitral, Khyber Pakhtunkhwa

Ayun,Lower Chitral, Khyber Pakhtunkhwa



Garam Chashma, Lower Chitral, Khyber Pakhtunkhwa

Kumrat, Upper Dir, Khyber Pakhtunkhwa



Lashkar Gah Goz, Broghil, Upper Chitral, Khyber Pakhtunkhwa

Lashkar Gah Goz, Broghil, Upper Chitral, Khyber Pakhtunkhwa





Qaqlasht, Lower Chitral, Khyber Pakhtunkhwa



Supat, Kohistan, Khyber Pakhtunkhwa



Shandur Pass, Upper Chitral, Khyber Pakhtunkhwa

Tambo Dheree, Naran, Masehra, Khyber Pakhtunkhwa

Malam Jabba, Swat, Khyber Pakhtunkhwa

CLIMATE CHANGE AND ITS IMPACT- A TALE UNTOLD

Climate Change is defined as the change of climate that is attributed directly or indirectly to human activity, that alters the composition of the global atmosphere, and that is in addition to natural climate variability over comparable time periods (UNFCCC).

Pakistan lies in a geographic region where temperature increase is projected to be higher than the global average. One of the major threats identified in Pakistan's National Climate Change Policy (NCCP) is the projected recession of the Hindu Kush, Karakoram, and Himalayan glaciers due to global warming and carbon soot deposits from trans-boundary pollution sources. In addition to threatening water inflows into the Indus River System (IRS), glacial recessions are a prominent threat to the water sector due to the country's arid climate and its reliance on water from glaciers and snowmelt. Glacial melt in the Himalayas is expected

to increase the flooding of the Indus River and its tributaries over the next two to three decades, which will be followed by decreased river flows as the glaciers recede. Two areas in Pakistan's north - home to the country's Hindu Kush, Karakoram, and Himalayan glaciers - are particularly threatened: the administrative territory of Gilgit-Baltistan (GB) and the province of Khyber Pakhtunkhwa (KP).

Pakistan was ranked number eighth in the 2021 Global Climate Risk Index. The grave impacts of Climate Change are evident as shift in weather patterns resulting in devastating disasters. Owing to this sudden rise in temperature in April 2022, rapid glacial melt, and catastrophic monsoon spells continuing through August 2022 caused severe flash floods from cloud bursts and glacial lake outbursts.



Gabral/Utror, Swat, Khyber Pakhtunkhwa

As per data released by Pakistan's National Disaster Management Authority (NDMA), over 33 million people have been severely affected by torrential rains, floods, and their consequent impacts. 84 districts of Pakistan have been listed as 'calamity hit,' including 17 in KP, and 10 in GB, the provinces with GLOF-II Project footprint.

The heatwave resulted in the first GLOF event in April 2022 at Shisper Glacier, Hassanabad valley in Hunza district of GB followed by numerous GLOFs, wreaking havoc in other parts of GB and KP. The situation is likely to worsen, exacerbated by the inability of existing infrastructure to cope with the extraordinary amount of water. The floods and monsoon rain has also resulted in significant impacts on the lives and property in these areas.



50 year old Bridge destroyed at Shisper, Hunza, Gilgit Baltistan

The heatwave resulted in the first GLOF event in April 2022 at Shisper Glacier, Hassanabad valley in Hunza district of Gilgit Baltistan followed by numerous GLOFs, wreaking havoc in other parts of Gilgit Baltistan and Khyber Pakhtunkhwa.

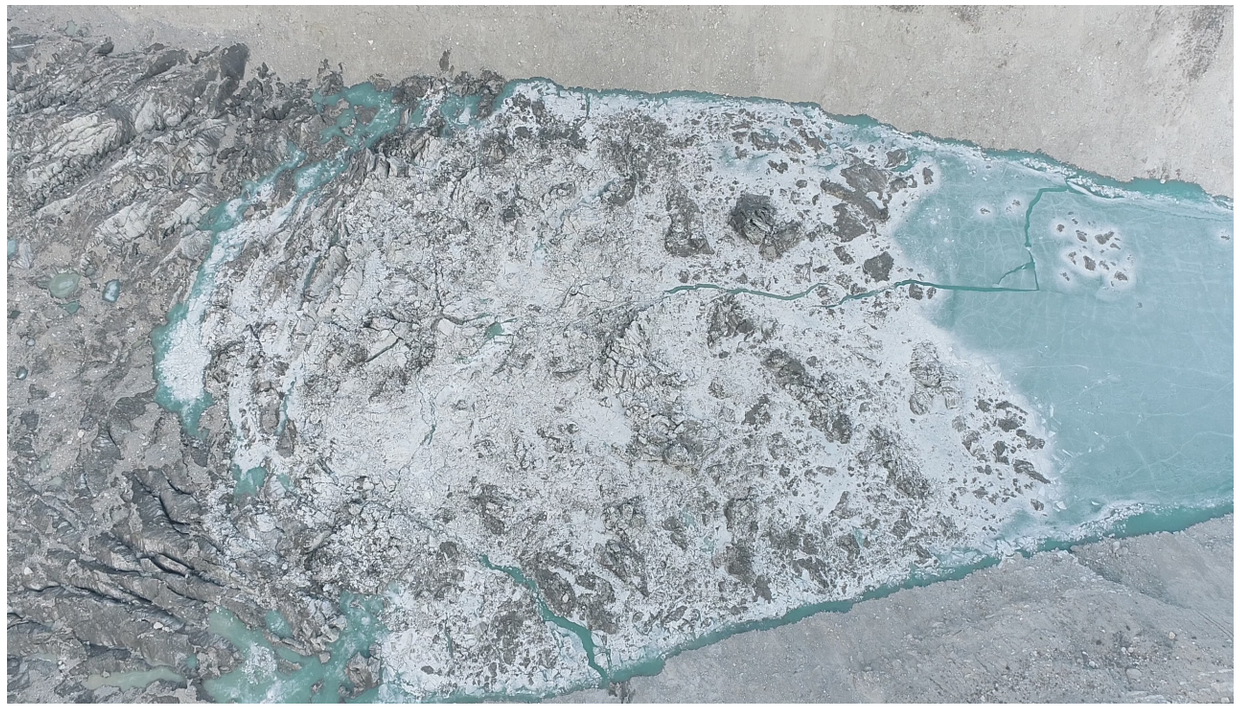
The situation is likely to worsen, exacerbated by the inability of existing infrastructure to cope with the extraordinary amount of water. The floods and monsoon rain has also resulted in significant impacts on the lives and property in these areas.

Gabral/Utror, Swat, Khyber Pakhtunkhwa



Shisper Glacier, Hunza, Gilgit Baltistan

Shisper Glacier Top Veiw, Hunza, Gilgit Baltistan





Shisper Glacier Top Veiw, Hunza, Gilgit Baltistan

Pari Village, Kharmang, Gilgit Baltistan

Ice Stupa is an offshoot of glacier grafting technique to harnesses underground water to create artificial glaciers in the form of conical shaped ice heaps. These stupas act as water reservoirs to fulfill the drinking and cultivation requirements of the locals. This simple technique of passing glacial water through underground pipes, making the water flows upwards through the attached sprinklers, causes water to lose its heat, and freeze when exposed to sub-zero air temperatures in vertical, cone shaped structures. Achieving heights of 50 feet or more, the melt from these stupas results in increased water supply in early spring and summers, March to June, when the water is scarce but required for agriculture. The formation of Ice Stupas is a process that involves extensive hard labour; what drives the locals to go the extra mile is sheer commitment and the love for their mountains. It is the commitment to their land that forces them to thrive and live sustainably in these most challenging environments.

Pari Village, Kharmang, Gilgit Baltistan





River Chitral in full flood, Lower Chitral, Khyber Pakhtunkhwa

GLOF-II Pakistan

SCALING UP OF GLACIAL LAKE OUTBURST FLOOD RISK REDUCTION IN NORTHERN PAKISTAN PROJECT

Due to rising temperatures, Pakistan's glaciers are melting at an accelerated pace resulting in the formation of over 3,044 glacial lakes in Gilgit-Baltistan and Khyber Pakhtunkhwa regions, of which over 33 are posing grave threats to the vulnerable communities living around them and downstream. The resultant phenomenon of Glacier Lake Outburst Floods (GLOFs) is a sudden catastrophic event that brings with it, millions of cubic meters of water and debris, consequently wreaking havoc to livelihoods, property, and infrastructure. Out of the 7.1 million people in Gilgit Baltistan and Khyber Pakhtunkhwa that are vulnerable to such GLOF events; 26.7 percent and 22 percent of the population respectively are below the poverty line.

Pakistan is home to the largest ice cap after the polar regions and climate change is dramatically accelerating its melting. A comprehensive study published in the Journal of Science Advances in 2019, analysed forty years of satellite observations indicating that glaciers have been losing the equivalent of more than a vertical foot and half of ice each year since 2000, double the amount of melting that took place from 1975 to 2000. Another study by researchers from the Global Change Impact Studies Center (GCISC) concluded that the increasing rate of warming is significantly higher in northern areas of Pakistan than the global average in this 21st century. The warming is

having profound impacts on glaciers and people living near glaciers and downstream.

The role of GLOFs in the overall intensity of floods in Pakistan is even more pronounced because of the rapidity at which Pakistani glaciers are melting compared to any other part of the world (Pakistan Economic Survey 2014-15). In the year 2022, Pakistan has witnessed the worst floods including numerous GLOF's, resulting in unprecedented devastation to human lives, houses, transport networks, irrigation channels and cultivated land. Over 33 million people have been severely affected by the consequent impacts of these floods (National Disaster Management Authority).

'Scaling-up of Glacial Lake Outburst Floods Risk Reduction in Northern Pakistan (GLOF-II) Project' is helping communities to prepare and mitigate disasters through effective response by setting up early warning systems, enhanced infrastructure and community-based disaster risk management. Led by Ministry of Climate Change (MoCC), in collaboration with United Nations Development Program (UNDP) and support from the Green Climate Fund (GCF), GLOF-II aims to empower communities to identify and manage risks associated with GLOFs and related impacts of climate change.



GLOF-II Project has a mandate to build the national and sub-national institutional capacities for better policy formulation by devising National and Provincial level Climate Change Adaptation plans and making GLOFs an integral part of them; in addition to building resilience of vulnerable communities by providing them with better adaptation measures. The Project is also establishing mitigating structures, repairing, and rehabilitating irrigation channels and providing slope stabilization through plantation and bio-engineering structures on 700 Ha (280 Ha in Khyber Pakhtunkhwa and 420 Ha in Gilgit Baltistan), linked to the sustainable land and pasture management plan to ensure that the vegetative cover and the stabilization it provides will be maintained in the long term. Choosing local indigenous species for re-vegetation will help conserve and restore natural ecosystems in the project area, and sustainable harvest of those species with economic value will contribute to income generation. Community Based Disaster Risk Management Committees (CBDRMCs) and Hazard Watch Groups (HWG) have already been set-up in 24 valleys of Khyber Pakhtun khwa and Gilgit Baltistan.



The Project is building Community Based Disaster Risk Management Centres as well as safe havens. The awareness and outreach in addition to policy interventions and support to communities is another vital aspect of GLOF-II project. Mock drills and Community Mobilization Sessions are being conducted in all 24 target valleys to equip stakeholders and communities with Disaster Risk Reduction/Disaster Risk Management in collaboration with Gilgit Baltistan rural Support Program and Khyber Pakhtunkhwa Civil Defense Department.

Burche, Bagrot, Gilgit Baltistan



Installation of Early Warning System is one of the core interventions under GLOF-II project. This system will help the relevant Government Departments and the communities to identify the hotspots of glacial lake formation and onset of GLOFs. The EWS comprise of an automatic weather station, rain gauge, water depth gauge, water discharge gauge, warning post, and communication set up which is centrally integrated for enhanced forecasting, simulation, and disaster mitigation.

Ecotourism- A Step Towards a Sustainable Future

Ecotourism is a form of tourism that involves responsible travel to fragile, pristine, and relatively undisturbed natural areas. It helps preserve and foster respect for some of the most beautiful environments on earth, encouraging travelers to help protect the environment in its natural habitat and contribute to local communities on a much deeper level.

Ecotourism allows communities to build their economies without harming the environment which means that local wildlife can thrive and visitors can enjoy untouched destinations.

Pakistan is endowed with natural wonders that offer a diverse range of ecotourism opportunities. It has mountain ranges with exceptional terrain, wetlands, harbors the highest peaks in the world, the largest glaciers outside the polar region, and the rarest wildlife species on earth. The coastal stretch is also known for its tranquil beaches, and nesting ground for marine turtles, islands, coral beds, and rocky shores.

Pakistan boasts great potential for adventure and nature. Every year it attracts dozens of mountaineering and trekking expeditions to the Hindukush-Karakoram-Himalayas region of Pakistan, along with enthusiasts of white-water rafting, mountain and desert jeep safaris, trout fishing, bird watching, big game hunting, yak safaris, and paragliding.

Ecofriendly tourism is on the rise globally, yet it needs a lot of awareness in Pakistan and requires a commitment to conservation.

Green Camping Pods,
Gabeen Jaba, Swat,
Khyber Pakhtunkhwa

Broghil, Upper Chitral, Khyber Pakhtunkhwa

Tirah, Khyber, Khyber Pakhtunkhwa

Gabeen Jaba, Swat, Khyber Pakhtunkhwa





Thalay, Ghanche, Gilgit Baltistan

Gabeen Jaba, Swat, Khyber Pakhtunkhwa



Suspension Bridge in Ghulkin Hussaini, Gilgit Baltistan



Deosai National Park, Gilgit Baltistan





Hooper, Hunza, Gilgit Baltistan





Xoq Village, Skardu, Gilgit Baltistan



View Point Hopper Glacier, Nagar,
Gilgit Baltistan



Gabeen Jaba, Swat, Khyber Pakhtunkhwa



Jahaz Banda, Upper Dir,
Khyber Pakhtunkhwa





Kuramber Track, Upper Chitral,
Khyber Pakhtunkhwa



Broghal Pass, Upper Chitral, Khyber Pakhtunkhwa

Shandur Pass, Khyber Pakhtunkhwa

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