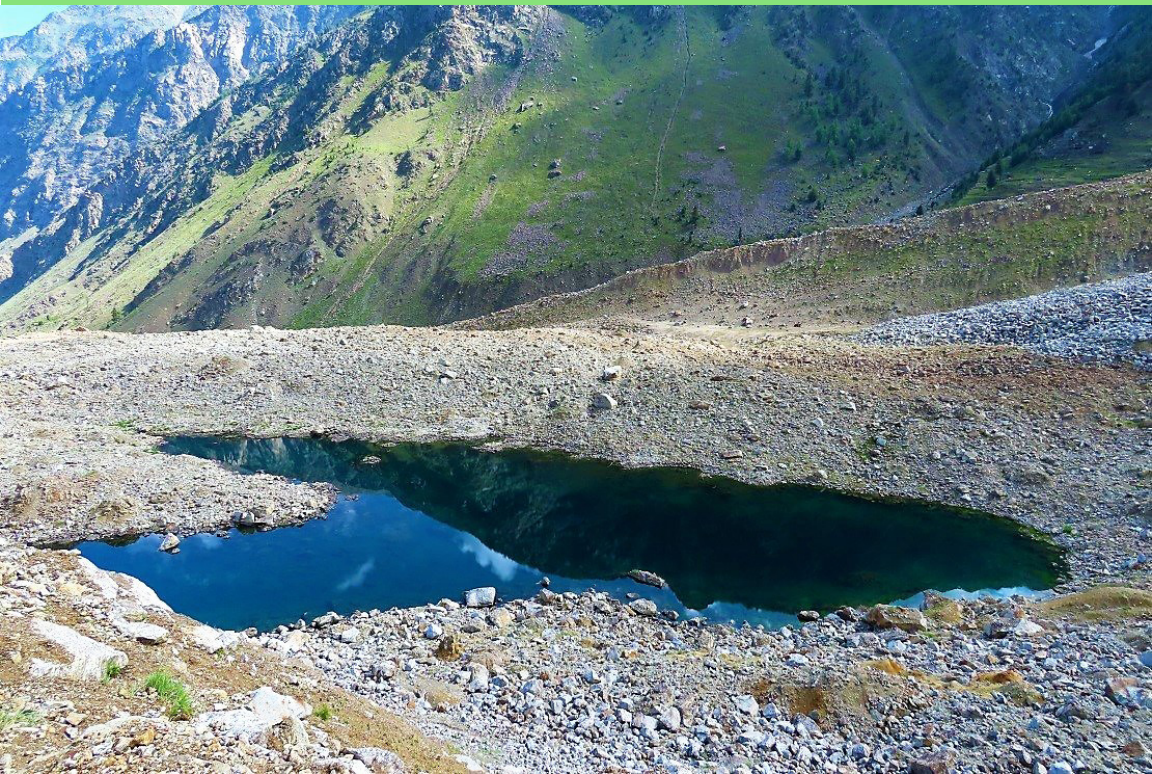


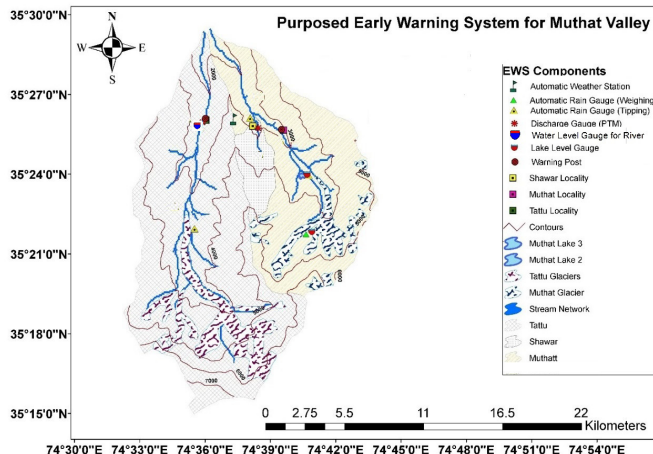


VALLEYS OF

GLOF-II

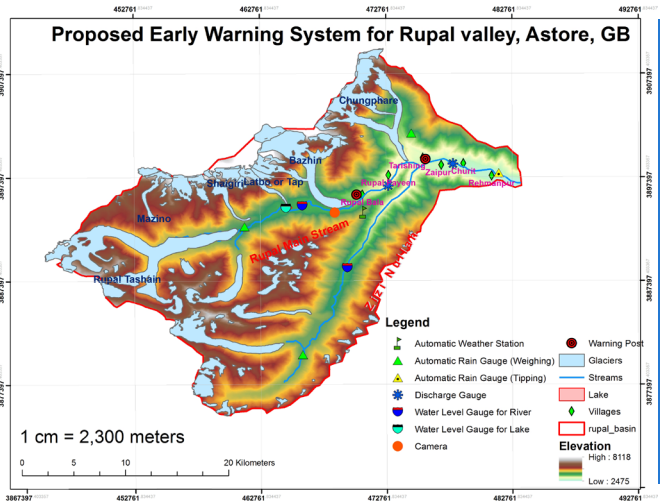


Muthat valley is one of the popular village of district Diamer situated in the North at a distance of 72km from Chilas. Majority of the people belong to Yushkun tribe with the minority belonging to Sheen. Most of the people depend upon their share in forest and mines. Maize and potato are locally grown; apricots and walnuts are the famous fruits in the area. Bulder glacier, Dader glacier and Phia glacier surround the valley..

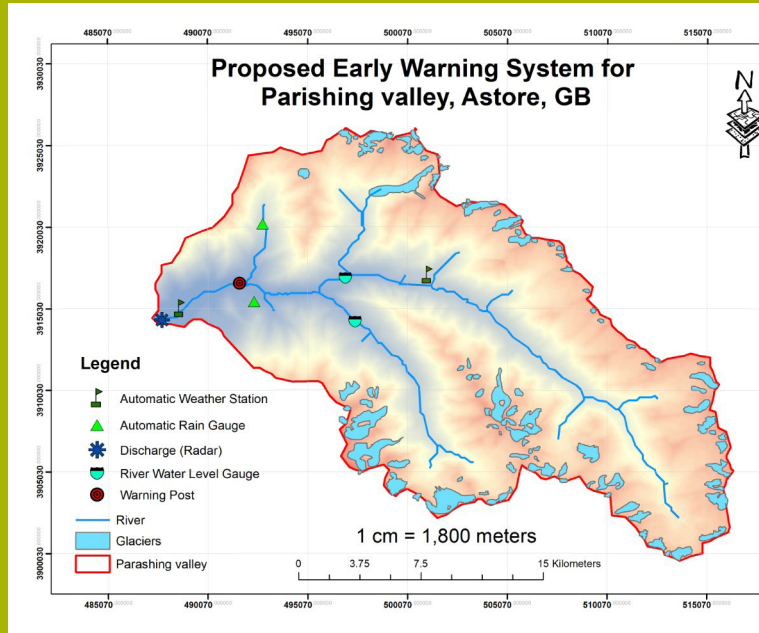


Rupal Valley is situated in GB at a distance of 65 km from district headquarter, Astore. The valley is close to district Diamer through Diameri Pass. Famous for its beauty and the killer Mountain-“Nanga Parbat”, climbers from all over the world visit this valley. Shina language is the common language. The area lies under single cropping zone and the main source of income is livestock and agriculture. The temperature drops down very low during the winter season being very pleasant in the summers. Rupal Glacier, Bazin, Latobo, Girjal and Shai Ghiri Glacier surround the area.



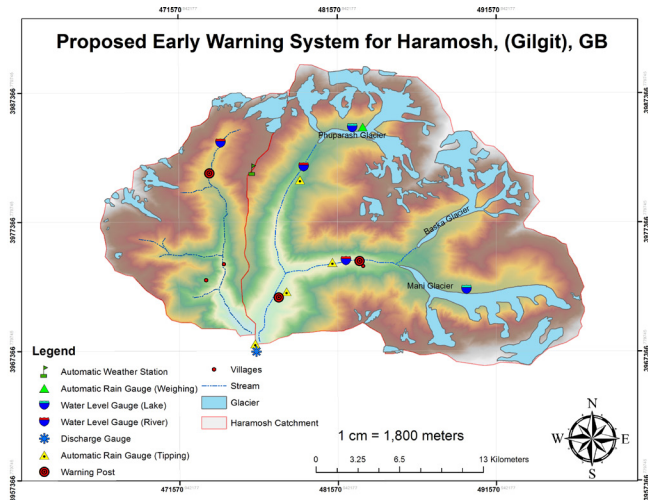


Parashing
Parishing valley is one of the renowned tourist resort called Allah Wali Lake located in louse union council District Astore covered with Glaciers and Forests and high altitude mountains. This valley is situated between Skardu and bubin valley Astore.

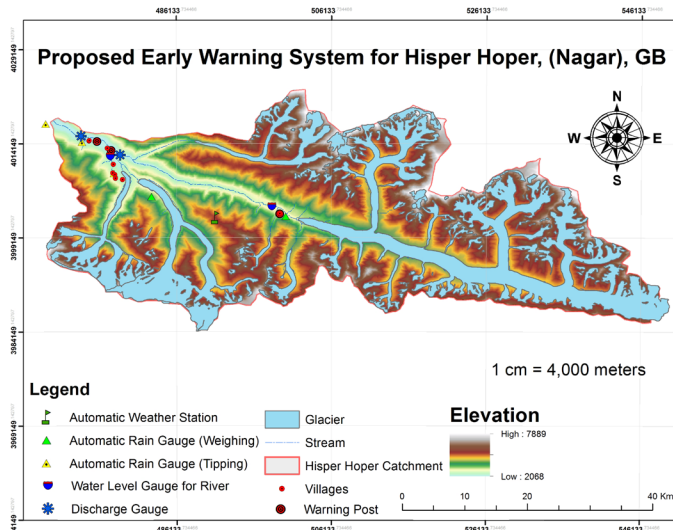








Haramosh is located 65 km east of district capital Gilgit. It lies in the south-central region of the Rakaposhi-Haramosh Mountains, a sub range of the Karakoram Range. The valley rises steeply above the north bank of the Indus River, approximately 22 km upstream from the confluence of Gilgit and Indus Rivers. The population is settled in pockets of 08 small villages. Most of the population is engaged to formal agriculture and live stocks. There are 37 glaciers covering an area of almost 75 km² with elevation ranging from 2750 m-7400 m in both catchments of Haramosh region i.e. Khaltoro and Kutwal-Barchi-Jutial. The three main glaciers are Mani, Baska and Phuparash.



H i s p a r

Hispar Glacier is a 49 km (30 mi) long glacier in the Karakoram Mountains of Gilgit-Baltistan, Pakistan which meets the 67 km (42 mi) long Biafo Glacier at the Hispar La (Pass) at an altitude of 5,128 m (16,824 ft) to create the world's longest glacial system outside of the polar regions.

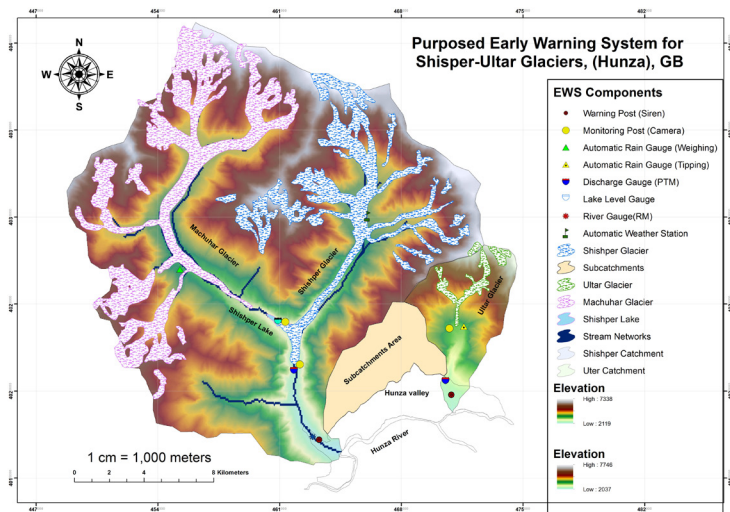




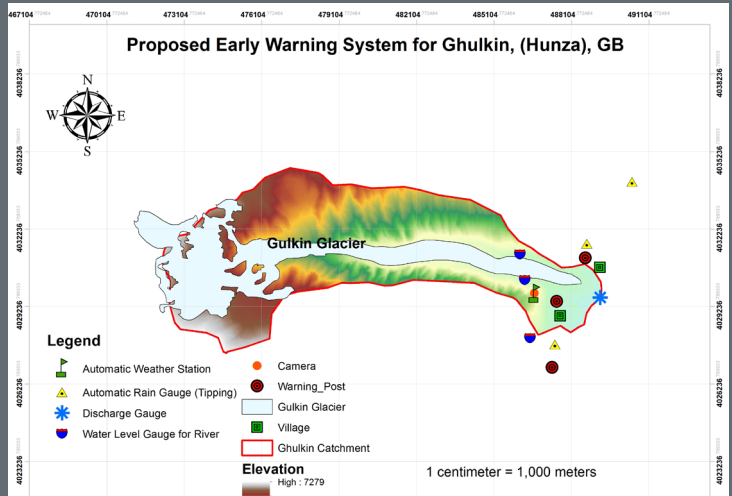


Shispar

Shispare lies east of the Batura Wall, which is the highest part of the Batura Muztagh in Pakistan. The Hunza River curves around the southwest, west, and northwest sides of the Batura Muztagh, and Shispare towers above the western bank of the river. In turn, the Hunza Valley lies in the Hunza District of Gilgit-Baltistan, Pakistan.

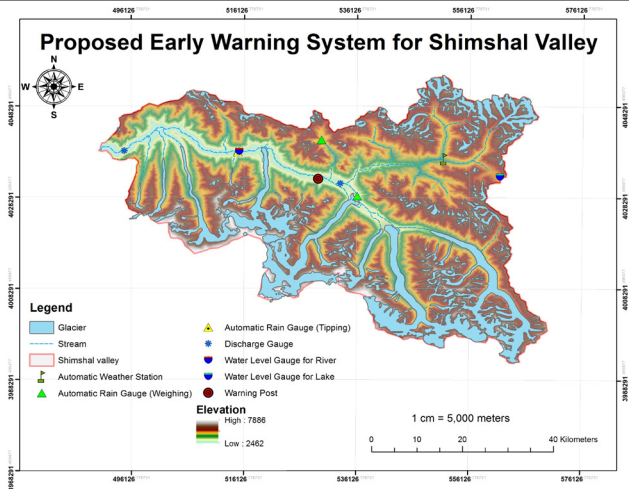






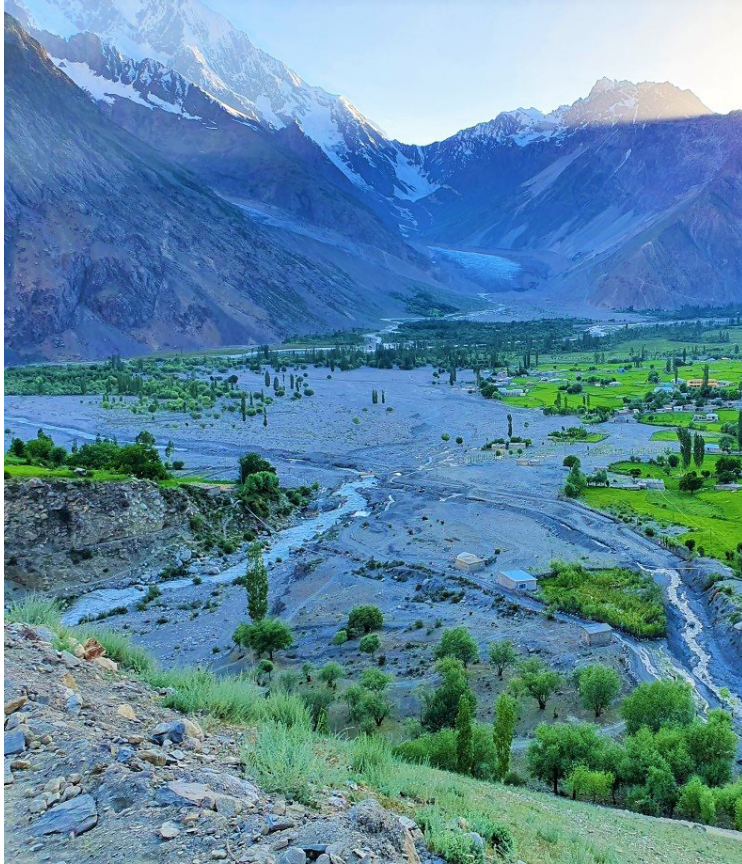
Ghulkin/Hussaini Valley is situated in district Hunza of GB. The valley consists of two villages namely; Ghulkin & Hussaini. The old main village is on the western-bank and at the lateral moraine of Hussaini glacier and below Borith Lake. The valley is located on main Karakoram Highway (KKH), 40 km North of Hunza. Wakhi language is mainly spoken in the valley. The history of the valley can be traced by old folklores as being approximately 600 years old. Both the villages are prone to GLOF related disaster due to the Ghulkin-Hussaini and Zarabad glacier.

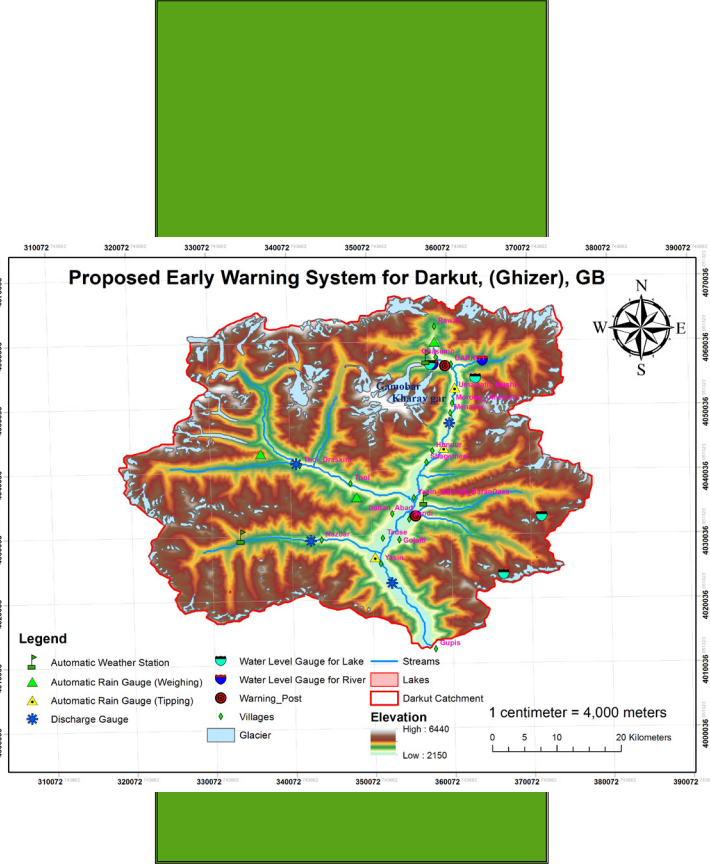
Shimshal is a village located in Gojal Tehsil of Hunza District, in the GB being the largest valley in the region. It lies at an altitude of 3,100 m above sea level and is the highest settlement in the district. It is in the valley of the Shimshal River, a tributary of the Hunza River. Shimshal is a border village that connects the Gilgit-Baltistan area of Pakistan with China. Wakhi language is widely spoken in the valley. Namely OG glaciers, Mumhel Glacier, Malangudi Glacier, Yazgel Glacier, Khurdopin Glacier, Yukshin Gardan Glacier, Odever sar adjoin the area.





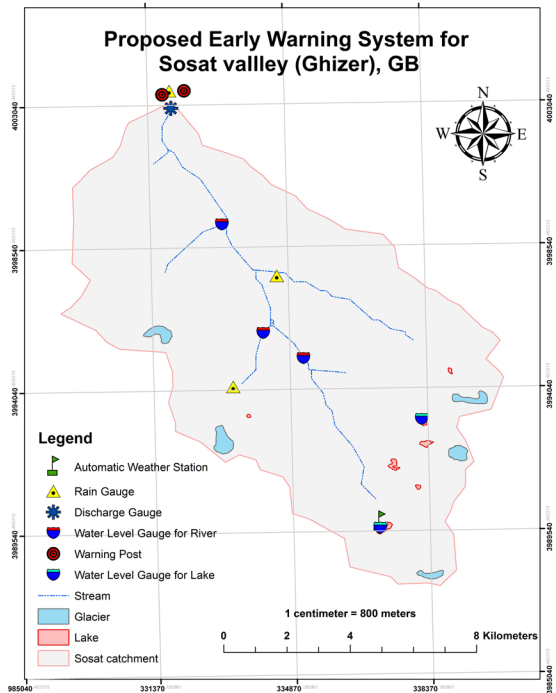
Darkut is situated in district Ghizer of GB at a distance of 65 km from district headquarter, Gahkuch. The valley is close to the Broghal Valley of district Chitral of KP province. It is one of the tourist hub owing to its natural beauty. Burushaski speaking and Khowar languages are spoken commonly. The main source of income is livestock, agriculture and employment in armed forces. Ghorochi Glacier, Mandaybar Glacier, Ghamubar Glacier, Kharay Ghal Glacier and Garum Chashma Glacier surround the valley.





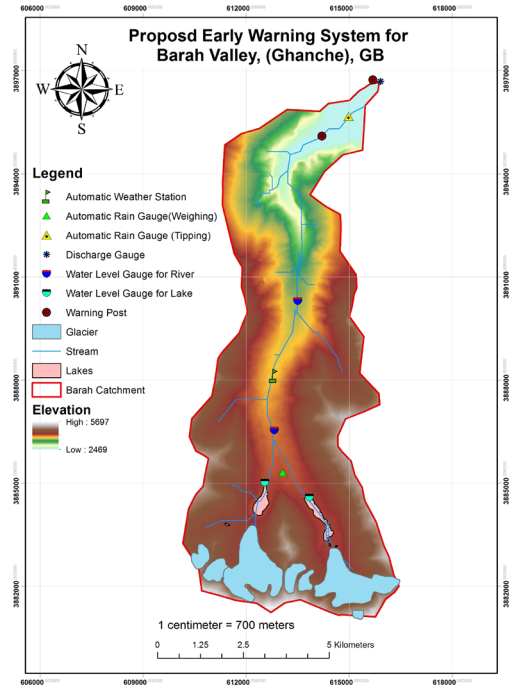


Sosat Valley is situated in district Ghizer, some 100km away from Gahkuch City of GB. The valley consists of 10 small villages. Mostly people have ownership of pastureland, which offers grazing for livestock. The valley offer beautiful natural nullahs as a water resource. The valley offer beautiful natural nullahs as a water resource. The only glacier present there is the Sosat Glacier.



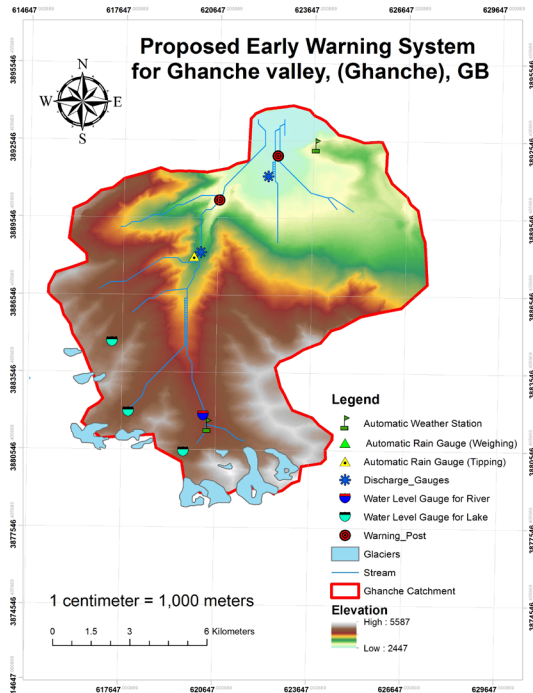
Barah Valley is situated on the bank of Shoyk river and 5 km away from head-quarter of district Ghanche. The word Barah was originated by “Cattle Shed” as this piece of land was initially found by the Aryan who migrated from Tibbet and settled with their cattle herds, consequently naming the valley as Barah. Locals consider it as “heaven on earth” owing to lush green fields in summer, blooming flowers in spring, falling autumn leaves and hot water springs in winter. Numerous springs provide crystal clear water for drinking. Trout fish farming generates economic revenue for locals. The valley is main tourist attraction and adjoins to Trangpi Glacier ,Khenpi Glacier ,Apo Bhatta and Chugrail Glacier.

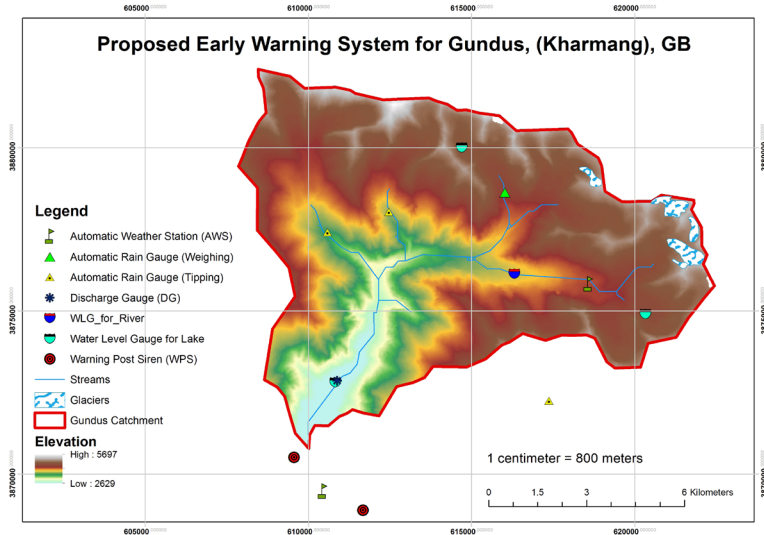






Khaplu is the administrative capital of the Ghanche district of GB. Lying 103 km East of the town of Skardu, it was the second-largest kingdom in old Baltistan of Yabgo dynasty. It guarded the trade route to Ladakh along the Shyok River. Balti language is mainly spoken in the valley. The area lies under single cropping zone and the main source of income is livestock and agriculture. The temperature drops down very low during the winter season whereas the summer season is very pleasant. The Khaplu is surrounded by Chu, Trangpi, Khenpi, Phong, and Strala Glaciers.



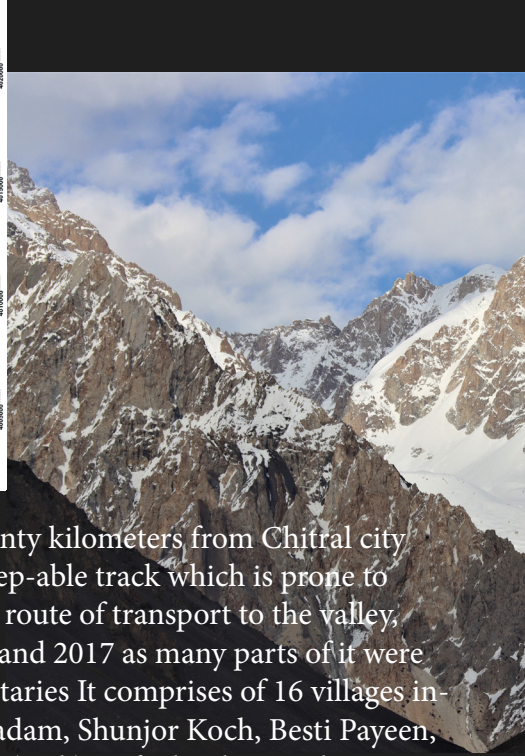
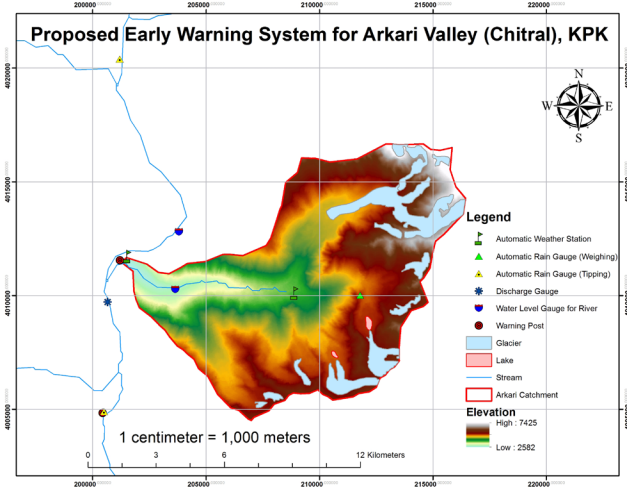


Ghundus is one of the major villages in Kharmang district of Baltistan division. It is bounded on the south by Kargil and Leh of Ladakh, on the north east by Ghanche district, on the north by Skardu and on west by Astore. The valley is located at a distance of about 100 km southeast of Skardu and area is approximately 7909 square km. Major occupation is agriculture and livestock rearing of cattle, sheep, yak and



cows. Barley, wheat, potatoes and vegetables are the main crops. Apricot, apple, walnut and cherry are the popular fruits of the valley. The region is famous for apricot production and dry apricot is the main source of income. The glaciers around the valley are Staay Mangale Glacier and Zing Gar Glacier.

Proposed Early Warning System for Arkari Valley (Chitral), KPK



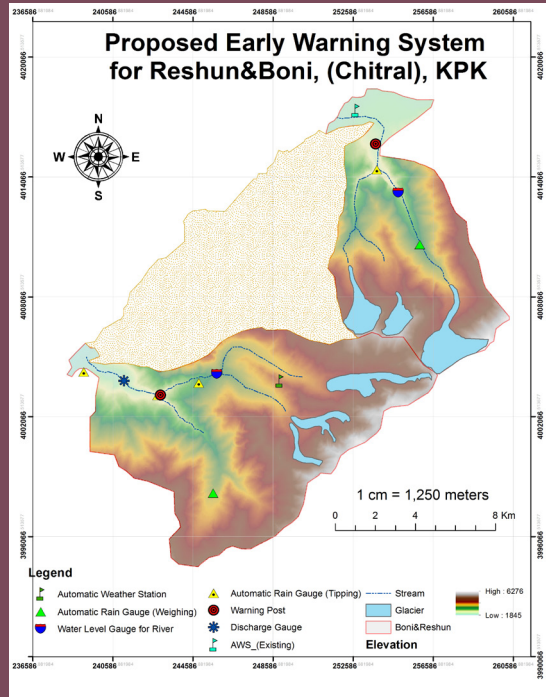
Arkari: Chitral

Arkari Valley is located at a distance of seventy kilometers from Chitral city and can be accessed through an unpaved jeep-able track which is prone to flooding and land sliding. There is only one route of transport to the valley, which remained closed for months in 2015 and 2017 as many parts of it were washed away by the main river and its tributaries. It comprises of 16 villages including Mirzi Gram, Rahim Abad, Shoal, Sadam, Shunjour Koch, Besti Payeen, Besti Bala, Afzal Abad, Pur Pooni, Ali Abad (Siak), Sufaid Arkari, Rabat



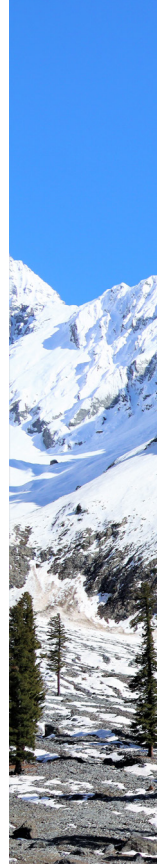
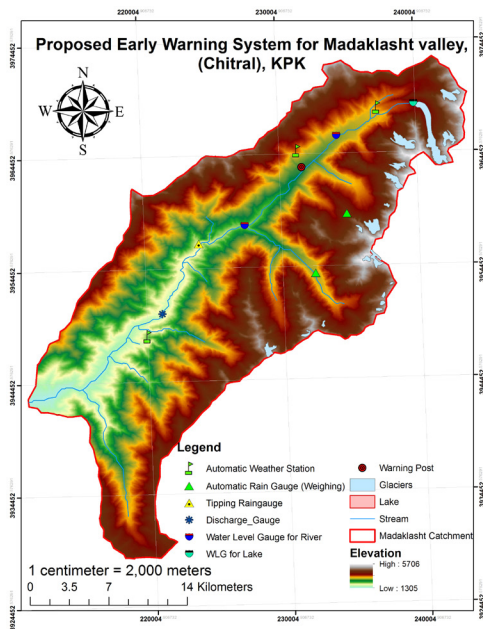
Mukhi, Sultan Abad, Rabat, Oweer and Oweer Lasht. Around 6500 persons divided into 9 major clans are living in the valley and are mostly dependent on agriculture and livestock. The land is owned by the local community and there is no protected forest area, however, the local communities have imposed a ban on timber smuggling and tree cutting in the area. The economy of the area largely depends upon agriculture, livestock, and businesses in Chitral city as well as other parts of Pakistan. The locals keep livestock through which they derive a major proportion of their food for personal consumption. The valley is surrounded by high mountains including the famous Terichmir peak. The timeline of natural disaster in the area shows that the Deer Gol River has received floods as a result of outburst of a glacier at the foothill of the Terichmir peak and a glacier lake at the top of Meshtar Gol joining Deer Gol while flowing towards main Arkari. The village across this sub-valley of Deer Gol have already lost their agriculture lands and communal infrastructure and are still vulnerable.

R e s h u n : Reshun is a village located on the left bank of Kunar River, in Upper Chitral District of Khyber Pakhtunkhwa, Pakistan. Reshun is mentioned in Nizari Ismaili Pir Sabzali's travel diary, in which he details his journey to Central Asia under the assignment of Aga Khan III Sir Sultan Mohammad Shah. Pir Sabzali describes the majlis that he experienced in the region of Reshun, held in devotion to the contemporary Ismaili Imam, as well as to the famous Persian luminary, Nasir-i Khusraw.

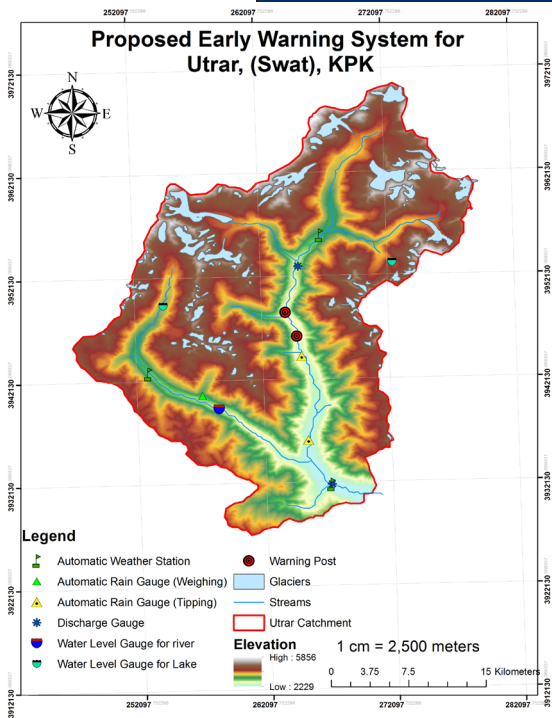




Madaklasht, Chitral: Madaklasht valley is situated about 81 km at the South East SE of Chitral city. Madaklasht valley is connected with rest of the Shishako valley and main Drosh-Chitral Road through a jeep-able track of around 52 KM. The valley of Madaklasht is home to approximately 5000 individuals, reside in about 7 number of revenue villages, who are part of the progressive Dari-Khowar speaking rural community. The valley has also been identified as a highly vulnerable site to potential GLOF events as per the assessment of Pakistan Metrological Department (PMD), and therefore has been included as a target site for the GLOF II project.







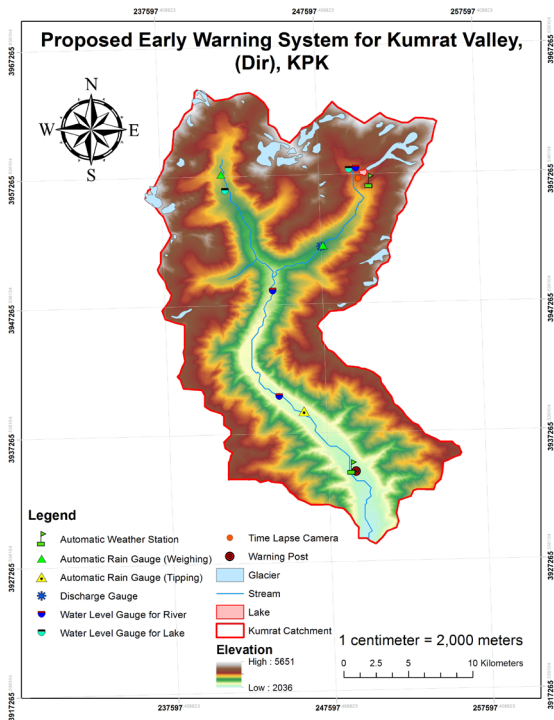


U t r o r :
Utror 16 km from Kalam Valley
and 120 km from Saidu Sharif.
Utror valley is situated between
 $35^{\circ} 20'$ to $35^{\circ} 48'$ N latitudes
and $72^{\circ} 12'$ and $72^{\circ} 32'$ E longi-
tudes. The population of Utror is
6888 and the area of the valley
is about 47400 hectares. Utror
valley is surrounded by Gabral and
Bhan valleys on the east, upper Dir
district on the west, Kalam valley
on the south and Gabral valley on
the north. It is 15 km from Kalam,
the centre of Swat Kohistan. The
altitude of the valley at Utror
proper is 2300 meters and reach-
es to 2900 meters at Kandol Lake.

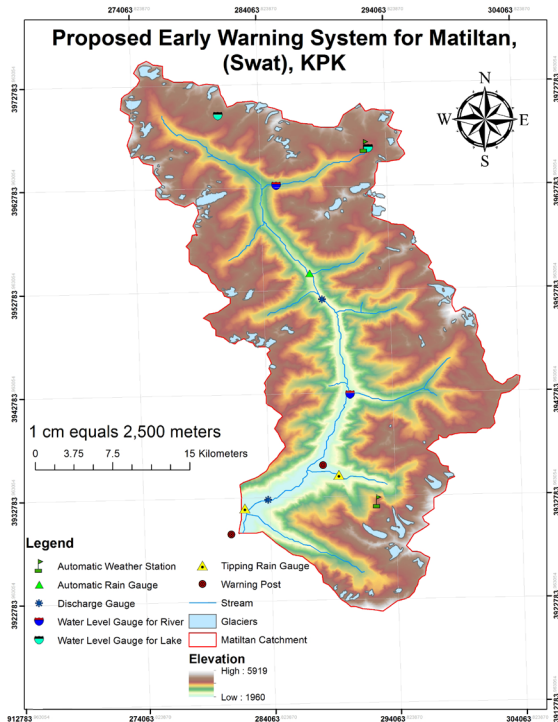




K u m r a t :
 Kumrat is a valley in the Upper Dir District of Khyber Pakhtunkhwa the Province of Pakistan.[1] [2]
 Kumrat Valley is located about 2 hours away (normally it's 45 minutes but due to road conditions it's 2 Hours) from the town of Thal.[citation needed] It is one of the beautiful valleys of Khyber Pakhtunkhwa. Every summer season thousands of tourists from different areas of the country visit Kumrat valley for its greenery and cool weather

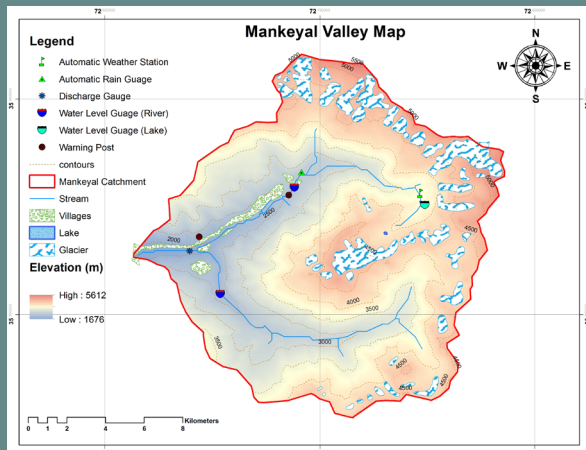






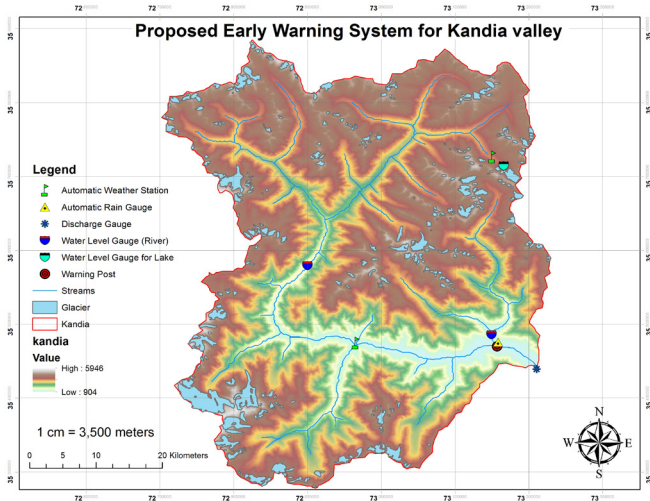
Matiltan :
Matiltan is a valley in Pakistan about 11 km away from Kalam. It has large glaciers, thick forests and lofty mountain peaks. The tallest peak of Falak Sar mountain can be seen from it. It is accessible through a non metalled road from Kalam by a four-wheel drive vehicle and the charming lake of Mahodand comes after this village of Kalam.

Mankeyal: Mankiyal Valley, District Swat:
Mankiyal valley is situated north of Swat with a distance of approximately 100 kilometers from the district's center point. The valley is one of the newly identified valleys by to the GLOF-II project intervention, making it third in the district after Utror and Matiltan. . The valley is famous for its high peaks and mesmerizing views. Mount Mankiyal is the highest peak in the valley with an altitude of 18,750 feet above sea level, which was summited for the first time in 1975 by a Japanese mountaineer. Mankiyal valley is a two-pronged valley with a total population of 7200 people scattered over 9 hamlets. The valley is abundant in natural resources which are largely left untapped.









Kandia Subdivision consists of five Union Councils, i.e Karang, Thoti, Kareen, Jashoi and Gabriel in Kohistan Upper Khyberpakhtunkhawa in Pakistan having a population of approximately 84,055 according to Census 2017. The Detail of Union Councils is that Karang has four Villages, i.e Village council Dansh, village council Karang Khas, village council Bertti and village council Bagroo. Union council Garial has six villages, i.e Nakao, mirshahi, mulakhel Gabriel, Shadomkhel Gabriel, Village bagh seri and village council Barigo.

@theGCF

<https://www.facebook.com/GCFOfficial>

<https://www.facebook.com/undppakistan>

@UNDP_Pakistan

twitter: @ClimateChangePK

fb: @ClimateChangePK

fb:@undppakistan

twitter ; @UNDP_Pakistan

fb: @GLOF2Pakistan

twitter : @Glof2Pakistan





GLOF II

PAKISTAN



GREEN
CLIMATE
FUND



Ministry of Climate Change



