

Addendum2 to ANNEX I

Identification of landslide phenomena and landslides prone areas into the CKNP and in its buffer zone

Before the visit to the Hunza landslide we gave a talk at the KIU on the principles of functioning of GPS and some of its most popular applications. The conference was very crowded with students and faculties.



Also the vice Chancellor followed the whole presentation.



The second excursion was to the Bagrote Valley. Crossing the Hunza River near Gilgit one can enter the Bagrote valley after a few km turning towards the Rakaposhi mountain.





Landslides everywhere.....and people working at them. Like my three geologists getting samples.



Bagrot is the main village with a surprisingly nice school. And a large Mosque still under construction.



Going towards the Rakaposhi we find some flowers.



And a little tourist resort with a view of the Rakaposhi glacier



There is always a funny rock attracting the interest of the geologists.



Also the work of the smith looks very interesting.

We are invited for lunch at the guide's home. Giorgio has the usual problem of putting somewhere his (rusty) legs. Two hours of tennis a-week are not enough.



In the village we find another surprise. **We learn why the glaciers are retreating.** The ice of the glacier is cut in big pieces and carried to Bagrot on donkeys back. To-morrow they will be carried to Gilgit to be sold on the market to be used in the refrigerators.



On the way back Chiara finds another treasure.



And a bunch of goats looking for shadow



On the way to Hunza the next day. A little rest at the Rakaposhi glacier view resort to buy necklaces and gemstones.



Past Hunza we proceed to the Atabad landslide and lake. Getting closer to the landslide, the river is very meager. Just the water that passes through the spillway. On the right side one can already see the tractors for the transportation of the goods from the boats to the trucks.



The clay of the Atabad landslide dissolved into dust that covers everything.





The dust is about 10 centimeters thick and covers people, animals and every surface. Whenever a truck goes by it is followed by a cloud of dust that makes the air impossible to breath.



The workers who transport the goods from the trucks to the boats must work in that dust all day long. There is also a little thing very thirsty in that world of dust. We become immediately friends with a little water and it is difficult to leave him there. When we go away and he follows our jeep after a while I avoid looking in the back mirror.



The geologists find treasures everywhere. The hair of a barber shop are named tourmaline crystals. A mix of small multicolor pebbles becomes "fluvial conglomerate" and some little red spots on another rock are named "granates".



But after Nagar we soon reach the Hobar glacier. Wonderful view. Like in the Khumbu valley we look at the glacier down words. We can see it very long and in the final part of it we can spot the Hispar Glacier that we might visit next year.



We decide to give a look at the low part of Hispar crossing the Hobar and climbing on the other side.



The crossing is not easy and I (!!?!!) must help the guide crossing the crevasses.



Climbing on ice covered with debris and rocks is not my favorite sport and we are happy when we reach the other side. Chiara fails the bid of lifting the "stone sample" she wants to bring home and I pretend I can't lift it either (just in order not to humiliate her).





At our return at KIU Chiara gives a talk on our last studies on the landslides.



The next day we drive to Astor in order to survey the bench marks monumented in 2009.



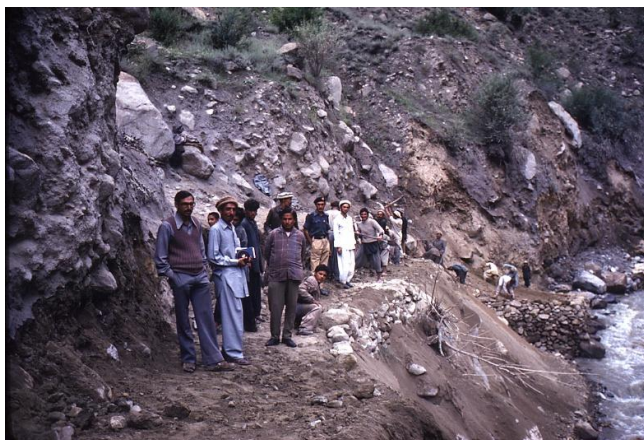
My old landslide of Mushkin is always there (since 1978).
We install the GPS station in Harchu and we proceed to Rama where we have built our benchmark in 2009, graciously painted by Faqiha.



Probably the workers are still the same.



While the GPS receiver is recording for 6 hours we climb to the Sango Sar (now called Rama lake) where we performed a DSS (Deep Seismic Sounding) experiment in 1976 and 1978 in order to determine the thickness of the Earth crust under the Karakorum.



If you want to go home you better help!