

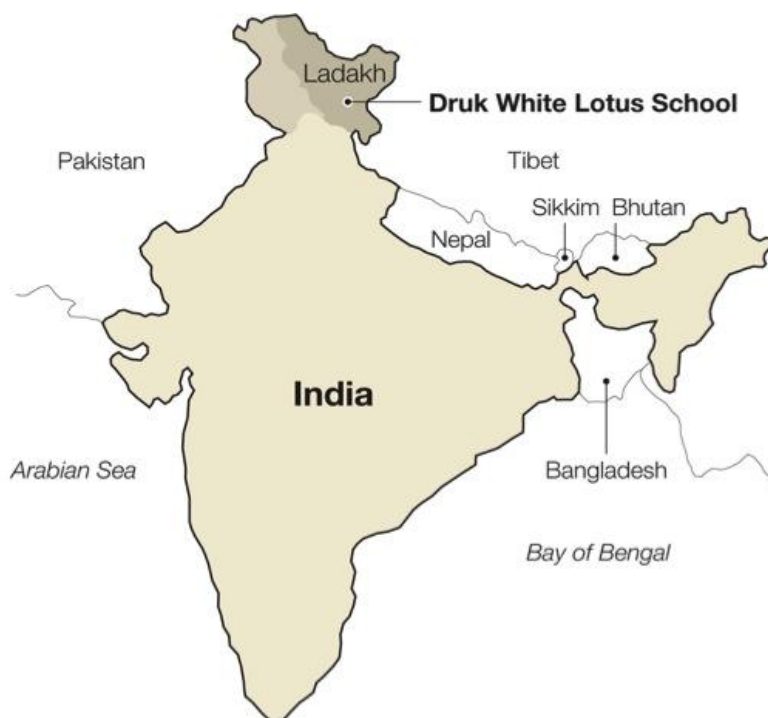
Mudslide Disaster: Update Report

In 2010, devastating rains and floods hit Pakistan, affecting an estimated 20 million people. Around 2,000 people were killed.

Ladakh lies a few hundred miles upstream of Pakistan, along the Indus Valley. Usually there is no monsoon in Ladakh but, in 2010, disruption of the weather system led to unprecedented cloudbursts in Ladakh.

On the night of 5th-6th August 2010, cloudbursts dumped huge volumes of water that mixed with the desert sand to create **mud**.

Gravity started to move the mud down the mountain sides. As the volume and speed increased, rocks and even large boulders started to float. The mud flow swept away trees that became missiles in the flow. In places the mud was flowing at 10-20 km/hour at a depth of 1-2 metres.



One of these mudslide hit the Druk White Lotus School campus in Shey and covered the eastern half of the campus in 1-2 metres of mud, boulders and debris. Fortunately no lives were lost on the campus, but elsewhere in Ladakh, 248 people were killed and 76 bodies are missing. There was substantial material damage and loss of agricultural land.

Before & after the August 2010 mudslide



The mud carried masses of boulders and debris down into the Administration Courtyard.



IT room BEFORE the mudslide



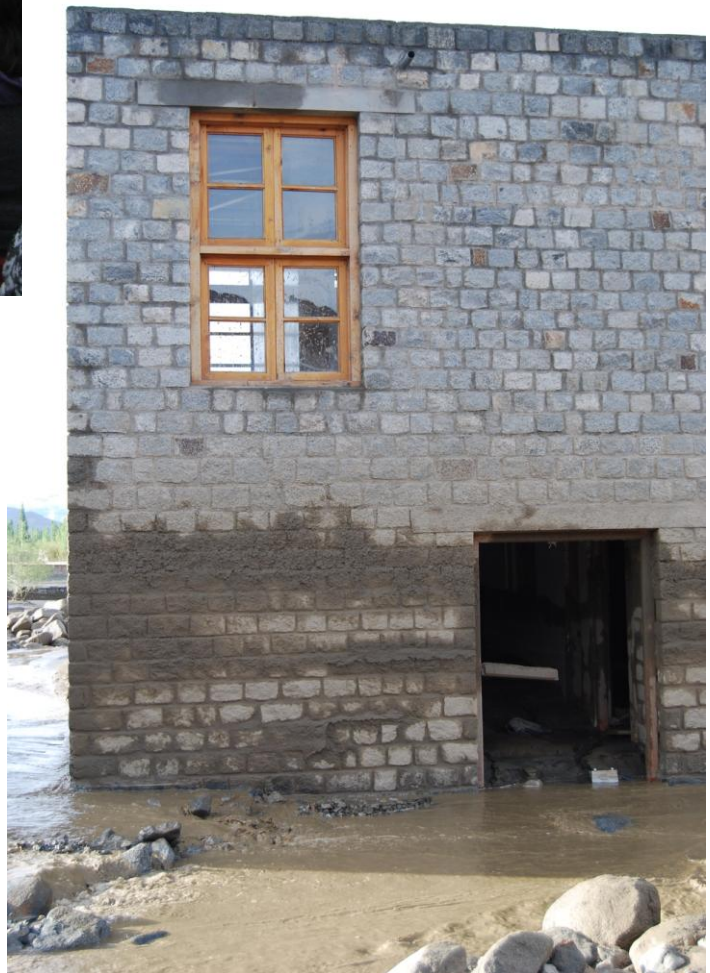
... and AFTER







Location of a famous scene in the 3 Idiots movie.



The Residences. A river of mud and boulders flowed between the residential buildings. Staff had to rescue girls from this residence by roping themselves together and carrying the girls on their backs to safety.



Short-term clean-up

There was virtually no structural damage to school buildings, thanks to high quality design and construction, but school furniture, books and equipment were swept away, and wooden floors and internal mud-brick walls were badly damaged. The attack has set back the school by well over a year and probably by two years or longer.



During the first few weeks following the inundation, the school received help from many volunteers.

The Hindustan Construction Company (HCC) sent a team of around 50 workers for three weeks to dig mud out of the

buildings, which was a tremendous help.

During this time the school received a visit from the Bollywood star Aamir Khan, who filmed part of the hit movie "3 Idiots" at the school two years previously. This visit helped to cheer spirits amongst the devastation.



Oxfam kindly provided emergency latrines. Médecins Sans Frontières offered counselling to the staff and pupils.

The Construction Manager, Angdus, spent the months before the harsh winter set in repairing and replacing the broken doors and windows that the mud and rocks had crashed into. Where the mud had been deposited, up to 1-1.5 m deep inside rooms, the lower sections of interior walls, made of mudbricks, had to be removed and re-built as the moisture from the mud caused them to deteriorate.



While classrooms were unusable, some lessons were held in tents, and gradually classrooms were made ready for temporary use without furniture.



Apart from the two science laboratories, classrooms and offices have wooden floors and there was concern that the floors might be ruined and need replacing - timber costs are high. Once the mud had been dug out, the floors were cleaned and left to dry thoroughly over the winter for inspection in the spring.

Before the school closed in December 2010 for the long winter break, lost equipment, resources and some furniture were replaced and the residential dormitories re-equipped using donated funds.

School resumed in March 2011 after the two and a half month winter break. Thankfully, the wooden floors had survived and have recently been sanded and re-varnished.





Secondary classroom with new furniture.

All classrooms are now in use again.

Some of the classroom courtyards now have a covering of gravel over the deposited mud, so that the school looks less like a “moonscape”.



Long-term defences against future mudslides

Of paramount importance is to build a defensive structure to protect the school from future mud or rock slide events. A mudslide specialist from Arup visited the site shortly after the attack, and a team of geotechnical and structural engineers has designed defensive measures. An Arup structural engineer, Suria Ismail, recently spent 4 months on site working with the Construction Manager to build the defences.

Sir Anthony Bamford of JCB Excavators kindly donated a JCB digger to the school in September 2010 at the request of Drukpa Trust in the UK. The JCB has already been extremely useful in clearing rocks and debris from the school campus and is now being used to create a ditch, wall and earth mound protection.



How to help now

Supporters kindly donated sufficient funds to help cover the short-term repair and replacement costs, and fund the construction of the defensive structure. This included replacing all the computers.



In the aftermath of the mudslide disaster, 68 displaced children who had lost their homes or a parent, were taken in by the school as residential pupils. This unplanned entry inevitably caused class sizes to grow and overcrowding in the residential accommodation. Currently, 280 students live on campus in residences built for 170 and we have just raised the funds to build Residence 4.

Our top capital priorities are now therefore to mobilise:

- US\$51,000 to construct and equip an IT-enabled classroom, x2 needed
- US\$67,000 to construct dining hall stage 2.

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