



# PLANET earth

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Impregnates  
the Womb

## Babies at Risk

The increasing number of babies born with birth defects in highly polluted areas is an indication that there is something in the air that is not right for the developing baby



# The Kalimpong crusader

Photography is his life's elixir and Wing Commander **Praful Rao** (Retd) has employed it to impress the perilous state the hills and mountains of Sikkim are in

Sheetal Vyas

**H**e has dared the mountains, crossed raging rivulets and followed serpentine paths in the woods, at times to feed his passion for photography, but very often to study and capture the treacherous ravines, crevices, cracks and rock structure of the Himalayas in Sikkim. Wing Commander Praful Rao (Retd), who describes himself as a true *pahari*, is the founder of Save The Hills, an NGO involved in spreading awareness about landslides.

Raised in the hilly terrain of the picturesque Kalimpong, Rao has always been fascinated by the hills and feels one with the air that surrounds them. Much as he loves the mountains, Rao realises that there is constant danger lurking, especially that of disastrous

landslides, around the hilly slopes that are so much a part of the area he lives in. Which is why he has taken it upon him to ensure that the government departments turn their focus on this long-neglected geological problem. "The landslides problem is a very serious issue in these areas and I was first exposed to a major landslide when I was still in college. This was in 1968. It had been raining incessantly for almost a week and I still remember that the only noise we could hear was that of water forcing its way downhill through crevices and overflowing rivulets. Then the landslides happened. It was a record of sorts in the entire North East because we had almost 20,000 landslides and entire hills had cracked open. Almost 10-15 per cent of the tea production

was destroyed during this period. The road between Darjeeling and Siliguri, which is a 80-km stretch, was shredded at more than 90 places and was totally cut off for two whole months. There was a terrible loss of human life and property," he recalls.

Adventure is not new to this ex-Air Force officer, who as an air traffic and radar controller and air crash fire expert, was party to several rescue operations to save pilots from fallen aircraft. However, he admits that the images of the 1968 landslides don't fade from his memory. He nearly relived the memories when in 2007 Kalimpong was again ravaged by landslides following a four-day downpour. The damage would have increased twice as much if it had rained for a day more, he informs. "We were inches away from disaster and very close to becoming victims of the rivers of mud and rocks that slid away. Though I had been working on landslide awareness in the area prior to that, and blogging about it, this incident instilled in me the urgency to take up the issue in a larger way," he says.

Following this, he took the only weapon he loved to carry with him, his camera and set about observing the mountains and the factors that render them susceptible to landslides in the region. "It was perhaps because I have a photographer's eye, but I end up observing things that a normal eye may miss. It was



Praful Rao



Landslide at Meli, Sikkim blocking part of NH31A (Sep07).



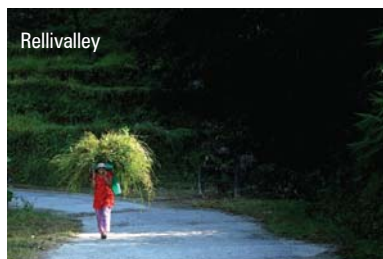
Landslide at Hati Surey (NH31A) - Aug2008.



Lebung, Darjeeling Sep2007.



Wanderer



Rellivalley



Rusticidyll



Ummianlake

Photos: Pratul Rao

shocking to notice that unplanned urban development was one of the basic reasons for the increasing number of landslides. It is mere commonsense. Callous human activity around the mountains, that has resulted in the construction of an eight-storey building on a 40-degree slope, deforestation and man-made drains in the mountains have weakened the hills," says the photography lover.

Rao has blogged about the problem and also written articles in the local newspapers and conducted awareness programmes at ground level to make the village people understand the perils associated with landslides. Natural drains, he believes, have disappeared from this part of the world due to overpopulation and they form an important aspect of landslides prevention. They naturally drain out excess rainwater, balancing the geological health of the region. But they have been blocked and artificial drains have replaced them in an unplanned manner. The major dams add to the risk. While it is true that India's North East is extremely humid and monsoons last for almost five months here, is there something in the

rock or soil structure and the vegetation in the area that makes it prone to landslides? "I am no geologist to confirm that but I have been moving around with many researchers and geologists and they have noticed that the rock structure is different on the slopes and on the peaks. This may be because they come under the rainshadow region. But studies have found that the mica content in the rocks here makes them very brittle and layered, which further aids landslides," points out Rao.

Two types of cultivations are common to the area, rice and tea. Studies are on to assess the risks associated with either plantations and according to Rao, increasing evidence is pointing to the fact that since Kalimpong is a major rice producer, and since the plantations require water to be stagnated, it is possible that the number of landslides in Kalimpong are more than in Darjeeling which has more of tea plantations. "We cannot rule out the possibility that tea plants hold on to the top soil, unlike bamboo, which are very shallow," suggests Rao.

The 57-year-old's working style is simple. He has collaborated with a

few local NGOs like the Darjeeling NGO Network (comprising 11 NGOs in Darjeeling), World Vision and ATREE. He speaks to the local people and urges them to move away from the risky areas. He also has help coming in from friends who are in service. However, local people's attitude is a major hurdle. He says, "They believe that landslides are a part of nature and they have to lie with it. This attitude may have percolated into the departments too because they are yet to understand the risk posed by landslides." Rao has been writing to the government in his blogs and following it up with regular mail to ensure he doesn't leave any means of communication untapped. "All that I request for is action from the government in terms of disaster preparedness and prevention rather than post-disaster help. The NGO has been running on self-funding and at times we have to borrow things as simple as an LCD projector from schools," he reveals. "I have sent innumerable proposals and hardcopies but there hasn't been a single reply. We are in the 21st century and the least you can expect the government department to do is reply to mail," he adds. 🌐