

## “DISASTER RISK REDUCTION IN MOUNTAINS”

### CEE Himalaya celebrating International Mountain Day 2009

CEE Himalaya celebrated IMD 2009 with educators by conducting a series of events on climate change adaptation and disaster risk reduction. About 150 participants including District Resource Group, Zonal Resource Persons (ZRPs), Cluster Resource Persons (CRPs), teachers and officials of the Department of Education, Ganderbal district of Kashmir, India participated in weeklong series of events.

Participants worked together to identify climate change impacts in local context particularly the water availability, variation in micro-climate, impact on agriculture/horticulture and other livelihoods, vulnerability to natural disasters and so on. Discussions also addressed to the ways on handling post disaster situation in Kashmir valley through a participatory process. School safety concerns were highlighted. Concept of School Disaster Management Plans (SDMP) was introduced focusing on its various components. Participants got hands on opportunity to prepare SDMPs for their schools through group exercises. Vulnerability to disasters can be minimized only through the community based disaster risk management (CBDRM). Village Contingency Planning is a significant exercise for CBDRM. CEE is involved in village contingency planning exercise on pilot basis in 50 villages from five districts of Kashmir valley. Teachers' involvement in preparing the VCP of their village is important. Teachers made presentations on their opinions about village contingency plans which were discussed in a group work activity.



Sharing observation on climate change in the area representatives of education department mentioned that they had witnessed the melting and disappearing of 'Thajbaj' glacier near Sonmarg (a known tourist destination in Kashmir) within

20 days in April this year. The phenomenon was very unusual and the glacier never melted so early. The Chief Education Officer shared that most of the glaciers of the area have shrunk by about one third.

ZEO Hariganwan who hails from Gurez Valley shared that there used to be about 100 water springs in the Valley flowing year round. About two third of them have dried up between 1965-90; the remaining ones also have much less flow of water and are no longer perennial. Besides quantity, the quality of water has also gone down. The area has suffered heavy deforestation which subsequently has lead to much reduced wildlife, heavy soil erosion, siltation of water bodies, loss of crop yield, reduced availability of fodder and other non timber forest produce. Gurez Valley had many swamps, wetlands, lakes and ponds filled with water round the year. Now most of these have dried up.

Gurez Valley has a strategic location. It is surrounded by international border (actual Line of Control) with Pakistan from all the sides except a narrow Razdan pass that connects it with Kashmir Valley, India. Razdan pass remains snow covered for about 7 months (November – May) and only occasional air transport operated by the government is available to reach the valley.

*Now the streams have dried up therefore paddy cultivation in the area is no longer possible. Because of lack of water even other crops cannot be grown. This has increased food insecurity in the area.*



Mohd. Zamal, Head Master, Middle School Hayan village, Mohd. Maqbool Wani, resident of Cheerwan village and a teacher in Middle School, Razen village sharing their observation mentioned that 'Gangbal' glacier used to get 30-40 feet snow fall every year and used to be under the thick cover of snow year round but since 2000 there is much less snow fall. This glacier is the origin and source of water for rivers Indus and Lidder. Both the

rivers have much less (just about one fifth) flow of water because of less snow at source. Streams 'Satruna', 'Kow Charwan' and 'Thune' having their origin from glacier

'Gangbal' used to have water flowing year round. Areas downstream used to be irrigated and paddy was cultivated in the area giving good crop yield.

Communities like Gujjars, Bakarwals and Pahadis in the area which depend upon forests for their livelihood now are under tremendous pressure for their survival. Musk deer, sloth bear, tigers, leopards, many birds that were a common sight are no longer sighted in the area. Human population has also increased and therefore the pressure on forests has increased many folds.

Participants were of the opinion that flow of water in rivers Jehlum, Lidder, Indus and others in the area got reduced to less than one fifth what it used to be till 1965. Several medicinal plants, wild animals, birds got rare and are now extinct from the area. Water

springs have dried up and are no longer perennial.

Pollution level has gone up several times more and now water of none of the rivers can be used for drinking, washing and bathing. Because of deforestation, mining of



gypsum, lime stone and other minerals, the Suspended Particulate Matter (SPM) has increased many folds in the area causing health hazards. Tuberculosis is now rampant in the area. There has been degradation in physical fitness and health of the people. Production of electricity and irrigation of agricultural lands depends on the amount of snow fall and size of glaciers. Because of less snow now electricity production has reduced. Similarly for the lack of irrigation the places where crops could be grown earlier are no longer cultivated now.

Films "An Inconvenient Truth", "First Victims of Climate Change" and others were screened and discussed during these programmes. Urdu version of "Riskland- Let Us Learn to Prevent Disasters" UNISDR's (UN International Strategy for Disaster Reduction) educational kit which has been trans-adapted for Kashmir situation by CEE was disbursed, discussed and explained to the participants. Exercises in the book related to DRR were practiced with the participants. Another educational package of CEE, the "Pick Right" developed for climate change education and promoting



environment friendly life styles to bring down individual carbon emission and reducing carbon footprint was distributed, discussed and practiced. Contrary to ecological footprint, CEE has developed “Handprint” ([www.handsforchange.org](http://www.handsforchange.org)) which symbolizes human contribution to protect environment. A message to reduce footprint and increase handprint was spread during these events.

CEE Himalaya ([www.ceehimalaya.org](http://www.ceehimalaya.org)) works in Indian Himalayan Region addressing to sustainability through education for sustainable development. Kashmir province of the State of Jammu & Kashmir, India is a repository of water, biodiversity, minerals, medicinal plants and a host of other goods and the vital ecological services. The province falls under zone 4 & 5 for earthquakes and is also prone to floods, landslides, avalanches and GLOFs. It was hit by a devastating earthquake of 7.6 on Richter scale on 8 October 2005 and suffered serious loss of life and property.

In response to the calamity CEE Himalaya has taken up a disaster risk reduction (DRR) campaign in 2,000 schools and 50 villages of Baramulla, Kupwara, Bandipora, Ganderbal and Srinagar districts. In the schools awareness is created through school programmes, teachers and students are involved in vulnerability and risk mapping through rapid visual risk assessment and preparing disaster management plan for their school. A disaster response team is also formed in selected schools trained in life saving skills and safe evacuation.