Journal of Himalayan Earth Sciences 43 (2010) 32-32

Climate Change and vulnerability of Pakistan

Muhammad Mohsin Iqbal, M. Munir Sheikh, Ghazanfar Ali and Arshad M. Khan
Global Change Impact Studies Centre, NCP Complex, Quaid-i-Azam University Campus, Islamabad

Climate change is a stark reality, no more a fiction. It is brought about by the industrial nations but its brunt has to be borne by the developing and developed countries alike. Pakistan is particularly vulnerable to climate change because it has generally a warm climate, lies in a world region where the temperature increases are expected to be higher than global averages; its land area is mostly arid and semiarid; its rivers are predominantly fed by Hindu-Kush-Karakoram-Himalaya glaciers which are reported to be receding rapidly due to global warming; its economy is largely agrarian and hence highly climate sensitive; and the country faces increasingly larger risk of variability in monsoon rains, extended droughts and large floods. The recent devastating floods in the country are vivid examples of this vulnerability. Under the influence of all these factors the Water Security, Food Security and Energy Security of the country are under serious threat. Compounding these factors are the expected increased risks to the coastal areas (these include Karachi, Pakistan's largest city and hub of its industrial activity) and the Indus deltaic region due to sea level rise and increasing cyclonic activity, to the mountainous regions due to Glaciers Lake Outburst Floods (GLOFs) and landslides (the recent GLOF at Attabad, Hunza is a clear example of this); to the scanty (<5%) forests due to forest fire, deforestation and reduced regeneration ; to human health due to heat strokes, diarrhoea, cholera, vector borne diseases, etc.

Adaptation to climate change has, therefore, emerged an imperative and high on the development agenda of Pakistan to deal with the unavoidable impacts of climate change, manage risks and adjust economic activity to reduce vulnerability and introduce climate proofing.