

## **Establishing a Critical Zone Observatory (CZO) in the Ganga Basin**

### **Abstract:**

The project proposal aims to set up a critical Zone Observatory (CZO) in a watershed of the Pandu basin in the Gangetic plains where an array of field instruments will be set up to monitor hydro-meteorological parameters, determine soil characteristics and chemistry, and geochemical fluxes. Data generated from this project will be helpful to quantify various climatic, hydrological and geochemical parameters related to the critical zone and will contribute towards understanding of physiochemical (and biological) processes responsible for sustenance of the critical zone. The CZO will also provide an opportunity to establish the necessary understanding of how the Pandu basin has formed, evolved and shaped today's environmental processes on the Indo-Gangetic plains, and how it may respond to future changes.