

Mapping Along Pithoragarh-Malpa, Rudraprayag-Kedarnath and Gangnani-Gaumukh Pilgrimage Routes

Year of Starting: 2000

Year of Completion: 2001.

Funding Agency & Funds Received : Dept. of Space, Govt. of India.

Objectives: To prepare thematic maps of lithology, geomorphology, lineament, fault, slope, slope aspect, slope morphology, drainage, dip-slope relation, rock weathering, anthropogenic factor, landslide incidence, soil texture, soil depth, landuse/land cover and base features on 1:25,000 scale.

Study Area : Pilgrimage route of Pithoragarh-Malpa, Rudraprayag-Kedarnath and Gangnani-Gaumukh routes.

Data Used : SOI toposheets on 1:25,000 scale, PAN + LISS-III merged precision geocoded data on 1:25,000 scale.

Salient Results : All the thematic maps of three pilgrimage routes viz Pithoragarh-Malpa, Rudraprayag-Kedarnath and Gangnani-Gaumukh were prepared through the visual interpretation of PAN + LISS-III merged data supplemented by SOI topographical maps. Structural discontinuities like bedding planes, joints and foliation etc. were mapped in the field in order to understand the mechanism of landslide failure. Detailed field information about the type and subtype of landslides, mechanism failure, existing stability measures and vulnerability was also collected.

Recommendation/Special Achievements: All the geo-environmental parameters responsible for triggering the landslides have been assessed and Atlas showing LHZ and landslide hazard management maps using GIS have been prepared by NRSA, Hyderabad and RSAC-UP.

Project Personnel: Dr. Anil Kumar (from FRED)