

HGG001-09

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## Analysis on the relation of landform and land cover in Himalaya between Nepal and Pakistan using Global Map data

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Previous field survey in Nepal already revealed that vegetation distribution is different between north (N) and south (S) facing slopes. In this study we extended the study area from Nepal to Himalaya between Nepal and Pakistan; then, we investigated the relation of slope aspect (8 orientations) and land cover considering elevation zones. In the analysis, we used SRTM30 (Shuttle Radar Topography Mission 30; 900-meter-resolution digital elevation model) and land cover data in Global Mapping project by ISCGM (International Steering Committee for Global Mapping). As a result, for example, it was found that S and southeast (SE) orientation bias is shown on cropland in 1,200-3,000 m elevation zone, N and northwest (NW) bias on needleleaf deciduous and evergreen forest in 3,000-5,000 m zone, and E-SE-S bias on snow/ice in more than 5,000 m zone. It is thought that these orientation biases depend on the interaction between human activities and natural condition.

Keywords: Global Map, digital elevation model, land cover, vegetation, slope aspect, International Steering Committee for Global Mapping