The Human Dimensions of Climate Change in the Khumbu Region of Nepal: Implications of Hydrological Modification

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Evidence is mounting that climate change is having perceptible and often-adverse effects on human communities, especially where settlements coincide with climatically sensitive biophysical conditions and socio-economic/political constraints. Despite a growing body of scholarship illuminating such outcomes, the production of knowledge examining links between climate change and human well-being in mountain regions, especially in least developed countries, is lagging. This study makes a modest contribution to this deficit through a systematic assessment of climate-related hydrological change and human well-being in the mountainous Khumbu region of eastern Nepal. Drawing on conceptual and methodological insights from the 'vulnerability approach', four important region-wide vulnerabilities are identified. The implications of these vulnerabilities are detailed before their socio-economic/political and biophysical determinants are considered critically. Potential vulnerability reducing options are discussed. This thesis demonstrates clear a need to elevate the position of mountain regions on the climate change vulnerability research agenda.



Khumbu Region, Nepal Photo: Graham McDowell