



Perception of climate change and its impact among Himalayan farmers

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Food and livelihood security of Himalayan farmers are under immediate threat due to worsening climate change impacts. However, the extent of impacts experienced and perceived by farmers varies, as there is substantial diversity in the demographic, social, and economic conditions. Therefore, it is essential to understand how farmers with different asset base and livelihood orientation perceive climatic risks. This study aims to analyze how farmers types perceive climate change processes and its impacts to gain insight into locally differentiated concerns by farming communities. The present study is based on the Uttarakhand state of Indian Western Himalayas. Climate change perception data from 241 households in Chakrata and Bhikiyasain tehsil, was collected through primary interviews. In addition, annual and seasonal patterns of historical data of temperature (1951- 2013) and precipitation (1901-2013) were analyzed to estimate trends and validate farmers' perception. The findings of the analysis though that the perception of changes in climate variables is consistent across all farmers. In contrast, the perception of impacts of climate change on food sufficiency, income, and social bond was determined by farmers asset-base, such as the farmers with least assets (land, livestock, labour) felt stronger impacts on social bond. Differentiated understanding of climate change perception will aid in designing flexible adaptation interventions based on the differential needs of the farmers, who are the primary actors of adaptation responses.