

CRITICAL MOMENTS



Critical climate-stress moments' are defined as those moments when households, communities, and the livelihood systems they depend on are especially vulnerable to climate and weather-related risks and hazards



HI-AWARE has identified 12 study sites spread across



four river basins of the HKH – the Indus, the Upper Ganges, the Gandaki, and the Upper and Lower Teesta. The sites selected were among one of the identified climate change hotspot areas, in the form of glacier and snowpack-dependent rivers.

A critical moment assessment builds upon the insights into: livelihood systems perceived climatic stresses gendered, socioeconomic and biophysical drivers of vulnerability



The majority of the climate stress moments is experienced in the agricultural sector where climatic events, especially erratic rainfall and more severe drought, has led to adverse impacts at different stages of the crop cycle. Communities are responding to, and trying to cope with the critical moment by

- adopting new agricultural techniques and practices

-introducing new varieties of crops more suited for the changing climate and improved/modified cropping patterns.

-delaying or bringing forward the timing of the planting of crops to cope with the changing rainfall patterns





The real concerns in the future stem from relatively high temperatures in winter, hindering vernalization. South Punjab province will be hit first, and by 2050, reduced yields will become the norm,



While the primary focus of policy makers is on post-earthquake rebuilding , communities tend to focus more on current needs and on coping with immediate climate variability. This

INDUS: RETHINKING FOOD SECURITY



UPPER GANGA: n SAFEGUARDING WATER C SECURITY

with North Punjab also affected by the end of the century.

People living in the mid elevations of the Upper Ganga basin face difficulties in accessing water in the peak summer season. Turning points are when the rising demand for water far exceeds supply in the region, and current policies and measures do not offer adequate protection of water sources. Protecting traditional water sources, and springshed management received the highest priority during stakeholder consultations. GANDAKI: TOWARDS CLIMATE-RESILIENT DEVELOPMENT



TEESTA BASIN: RECURRING FLOODING, GLOFS, AND EROSION

includes increased dry spells, wind storms, and more severe heat waves.

Recurring extreme floods and associated erosion and accretion generate huge amounts of sediment which affects the formation of chars. The lives and livelihood practices of the people living in the Teesta floodplains are seriously affected by these extreme events. Structural solutions and capital dredging can enhance the bank stability, water carrying capacity, and navigability of rivers

Consortium members







