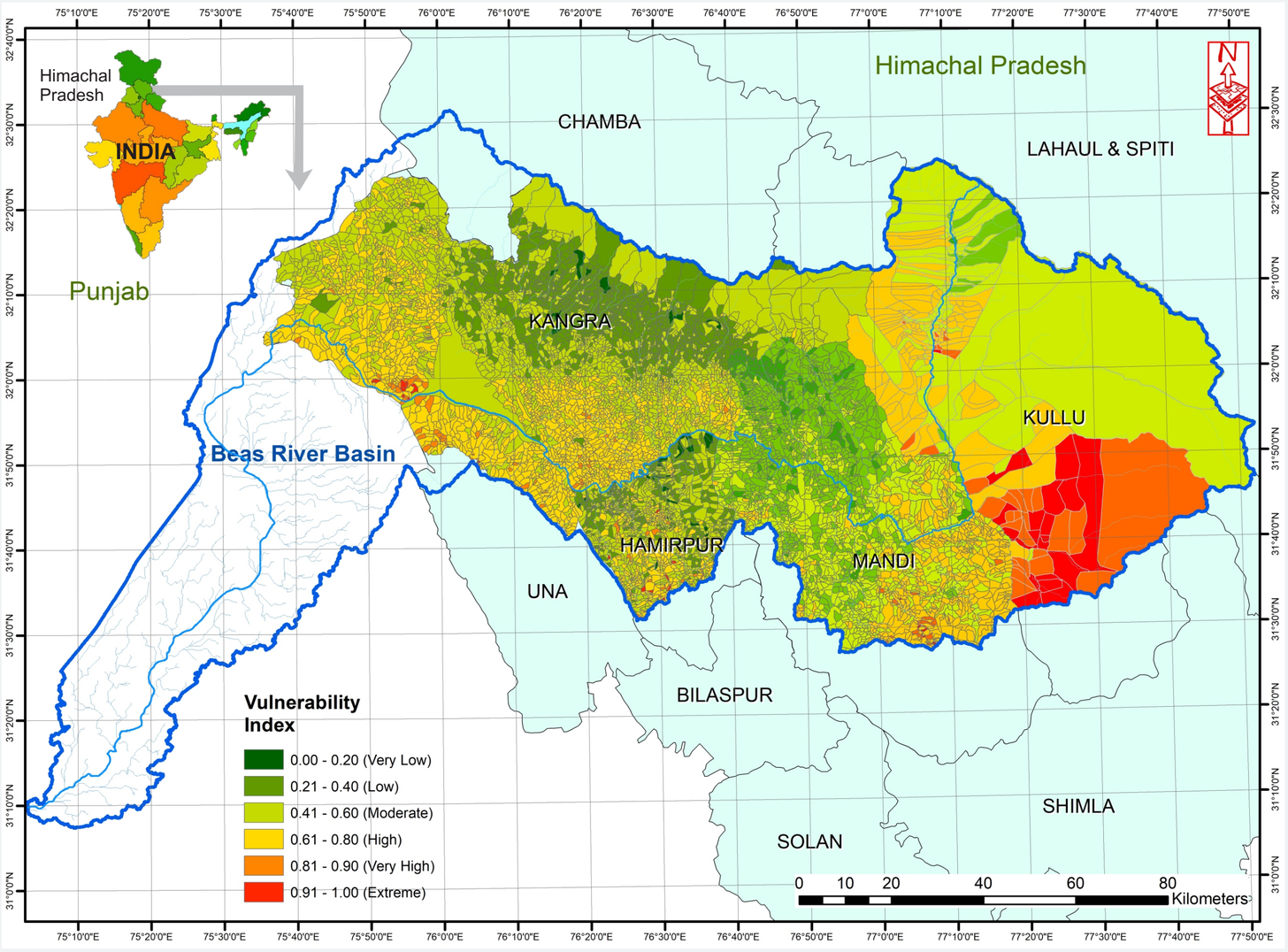
Towards: Green Climate Resilient Mountain Communities
Climate Proofing of Village Plans
(Beas River Basin, Himachal Pradesh, India)

Village level Climate Change Vulnerability Assessment



Key Climate & Hydrological Findings

Catchment Area	**20,303 km^2**
Geographical Area	**12,560 km^2**
Districts	**Kullu, Mandi, Hamirpur & Kangra**
Panchayats	**1,650**
Villages	**9,258**

Precipitation (rainfall)

- Since 1979, precipitation patterns have changed across the Beas river basin although there is no consistent pattern. Projected changes in rainfall vary across the basin, with increase in some area while decrease in others.
- The changing and unpredictable precipitation patterns may have serious consequences for the region, including flash floods in the north and increased droughts in the southern plains.

Temperature

- Since 1979, winters are getting warmer, summers are getting either extremely hot or slight variation in expected weather conditions and extreme hot days are getting hotter threatening moisture levels and subsequent on crop productivity.
- Temperatures are likely to rise by 1.5 - 4°C across the Indian Himalayan region by 2050. Similarly in Beas river basin the rise in temperature is projected by 2°C-3°C by 2050.

Priority Actions

- ✓ Assessment of impacts of climate change on perennial& non-perennial water resources availability.
- ✓ Climate Change aspects factored into water management for decision making.
- ✓ Assessment of basin wise water availability and demand & supply chains- rationalized.
- ✓ Promoting Water User Groups - participatory irrigation management.
- ✓ Capacity building of all Panchayat members and their functionaries on water management and conservation.
- ✓ Undertake Pilot projects for improvement in water use efficiency, recharge, moisture management.
- ✓ Establishment of Seed Multiplication Farms & distribution of foundation seeds to registered farmers.
- ✓ Organic farming by providing training, laying out demonstrations, organizing fairs/on farm trainings of women farmers.
- ✓ Set-up vermi-composting units at every house & financial & technical support to the farmers.
- ✓ Water conservation and minor irrigation programme prioritized.
- ✓ Rain water harvesting and construction of tanks, ponds, check-dams and storage structures for water recharge and moisture management.
- ✓ Optimum use of water by gravity flow and efficient irrigation system through sprinklers, drip irrigation.
- ✓ Developing Farmer Produce Organizations chains - with pre-processing facilities.
- ✓ Promote sustainable agriculture practices - adopting organic farming, intercropping, reducing land degradation and soil conservation.
- ✓ Improve land management strategies to protect the environment, boost productivity, strengthen livelihood.
- ✓ Promotion of renewable energy, solar energy.
- ✓ Discourage concrete use, traditional architecture promotion.
- ✓ Focus on waste management, recycling, MRF, Reduce & Reuse.

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Supported by giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
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