

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/359083829>

# Human health in a changing climate—a study of tribal district of Kinnaur Himachal Pradesh, India

Conference Paper · March 2022

CITATIONS

0

READS

16

2 authors:



**Archana Phull**

Independent Researcher

26 PUBLICATIONS 48 CITATIONS

[SEE PROFILE](#)



**Omesh Kumar Bharti**

Indira Gandhi Medical College

169 PUBLICATIONS 340 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



108 emergency response services at GVKEMRI [View project](#)



Snakebites in India [View project](#)

## ABSTRACT

### **Human health in a changing climate- a study of tribal district of Kinnaur Himachal Pradesh, India.**

Phull Archana\*, Omesh Bharti\*\*

\*Newspaper Journalist

[archanaphull@yahoo.com](mailto:archanaphull@yahoo.com)

VPO Rajpur, Palampur, Kangra, Himachal, India-176061

Telephone: +91-9418028111

---

#### **Background**

Kinnaur district of Himachal Pradesh is a tribal district situated in the Himalayas bordering China, having a population of 864,000. The objective of this analysis is to assess the affect of global warming and local factors on environment and assess its impact on local populations.

#### **Methods:**

The data of changing climate and availability of water was collected from meteorological department and personal interviews of stakeholders and analyzed to know the effects of changing climate on availability of water to local population.

**Results:** Analysis of 14 years of climate data in Kinnaur district shows a rise in average minimum temperature by 0.7<sup>0</sup>C from 0.5<sup>0</sup>C in 1991-1995 to 1.2<sup>0</sup>C in 2001-04 and decline in average snowfall from 441.80 cm to 398.40 cm. Average rainfall in dry temperate zone of Kinnaur decreased from 308 mm to 274.1 mm. As per many studies 67% of nearly 12,124 sq. miles of Himalayan glaciers are receding. Heavy construction in the ecologically fragile hills of Kinnaur for hydro electric power generation from Sutlej has resulted in displacement of water sources uphill. The impact is visible as non availability of potable water and water for irrigation resulting

in decreased agricultural and horticultural output. Around 12 major hydro projects are to come up on 150 kilometres stretch of Sutlej river in Kinnaur and its tributaries, this will make 100 kilometres stretch of river flow into tunnels inside the hills of Kinnaur

**Conclusion:** Diminished snowfall and increasing temperature have affected the water availability in tribal district of Kinnaur and this is also affecting the crop pattern and irrigation. A research study is required on the issue of environment and local hydel power generation to assess the impact of local factors on rise in temperatures to save the ecology of this fragile Himalayan district.

**Keywords:** Global warming, Hydel projects, water

**Bio-- 100 WORDS**

I have been a practising journalist for over 18 years and have worked with national English news dailies, Indian Express and Hindustan Times in North India. Working at Shimla in Himachal Pradesh as bureau chief, Hindustan Times for over a decade, I have travelled to remotest corners of hill state to understand vital issues affecting people. I have a deep insight into changing environment concerns on ground.

On environment, I have covered individual and government interventions to save energy and water, environment damage caused by execution of hydro power projects.