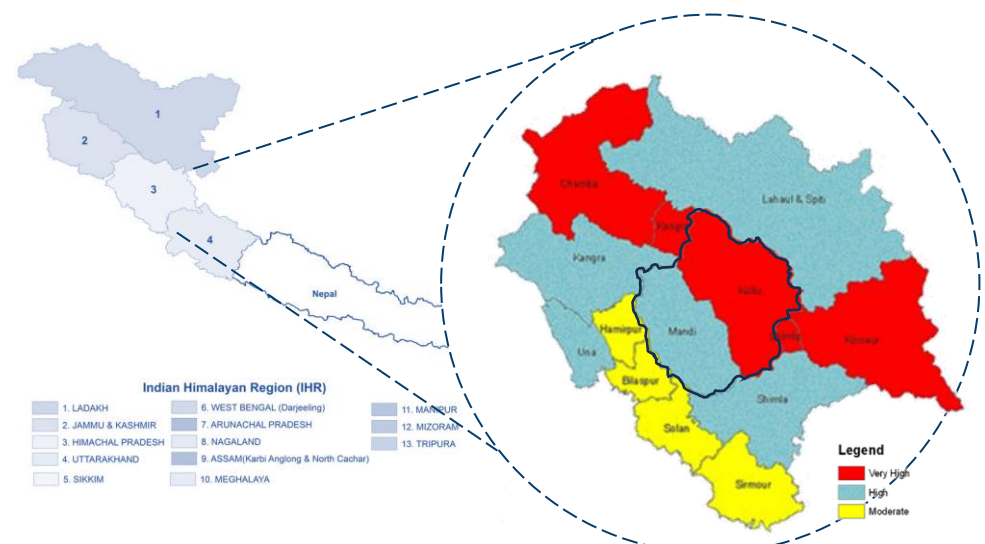


Sponsored Thesis Project Competition on "Re-imagining Urban Rivers"

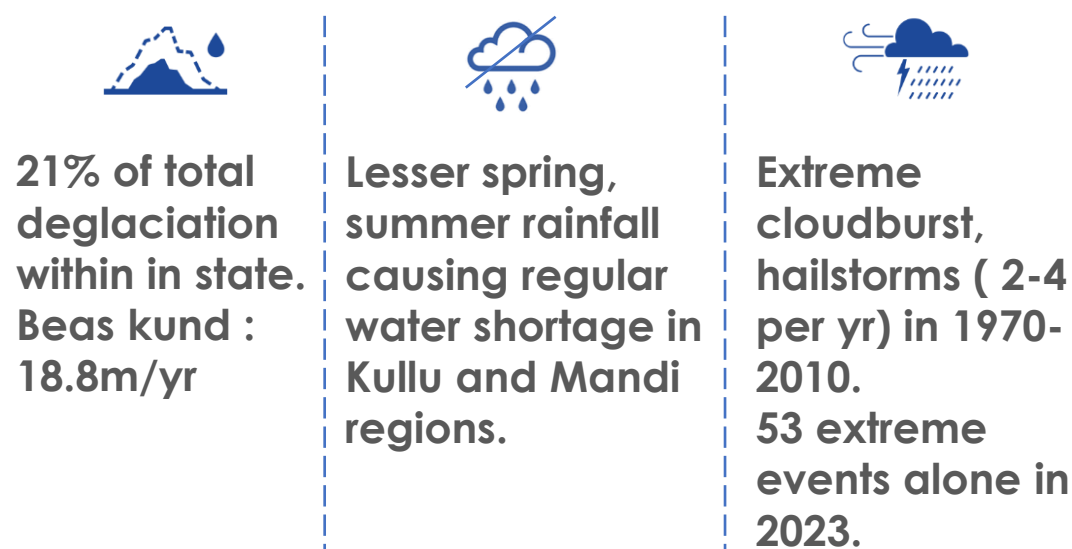
"Securing the future of water resources in Western Indian Himalayan Region amidst the extreme pressure of Climate Change on Beas River using an assessment mechanism of GIS and AI"

Student Name : Pragati Chauhan
Course Discipline : M.Tech in Urban Planning

INTRODUCTION & BACKGROUND



VULNERABILITY OF HIMACHAL PRADESH

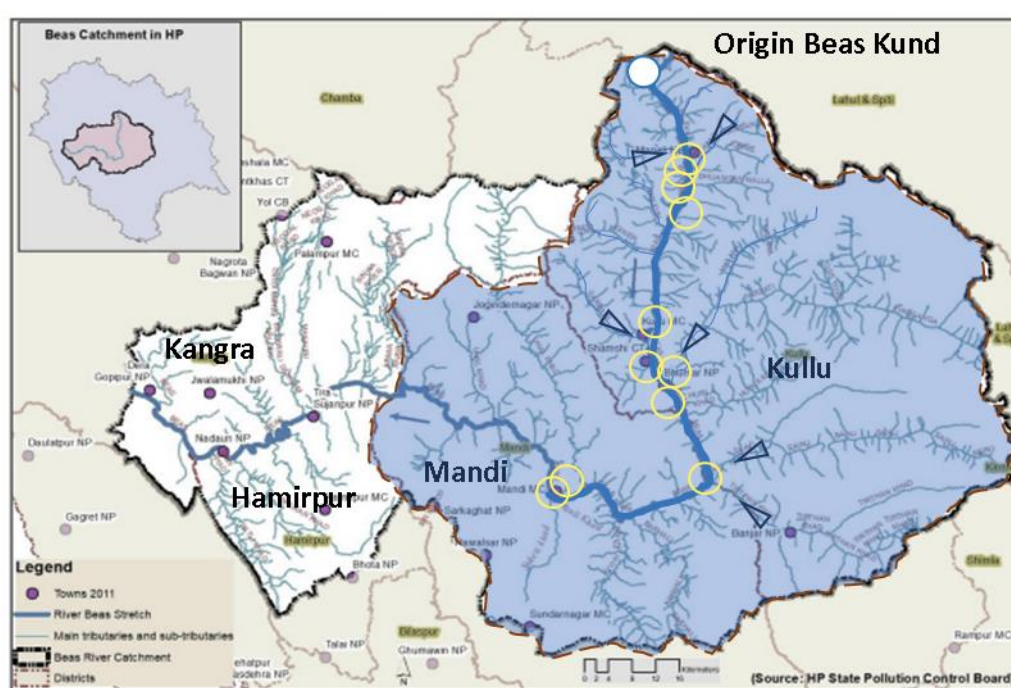


EFFECTS OF CLIMATE CHANGE

AIM

The aim is to study the variables effecting water-based disaster in Western Indian Himalayan region (W-IHR) and proposing region-specific planning solutions like interactive, recreational buffer river zone, artificial water bodies to prevent GLOFs, reduce river load and encourage activities to improve the lives of natives.

Date	Location
14-Aug-90	Kullu District
21-Aug-91	Bhantar, Kullu District
21-Aug-92	Ani, Kullu District
4-Sep-93	Tapri, Nathpa, Dist. Kinnaur
6-Sep-95	Kullu District
5-Sep-95	Panvi Khas
12-Sep-95	Kullu District
11-Aug-97	Chirgaon, Rohru Tehsil
31-Jul-2000	Khah, Spiti
19-Jul-2001	Mandi District
20-Jul-2011	Manali, Kullu District
22-Aug-2012	Manali, Kullu District
11-Aug-2013	Solang Valley
10-Jun-2014	Kullu, Kullu District
14-Aug-2014	Mandi, District
5-Jul-2017	Manali, Kullu District



FLOOD EVENTS IN THE STUDY AREA

OBJECTIVES



To **understand** the potential factors of water related disasters within Kullu-Mandi stretch of Beas River.

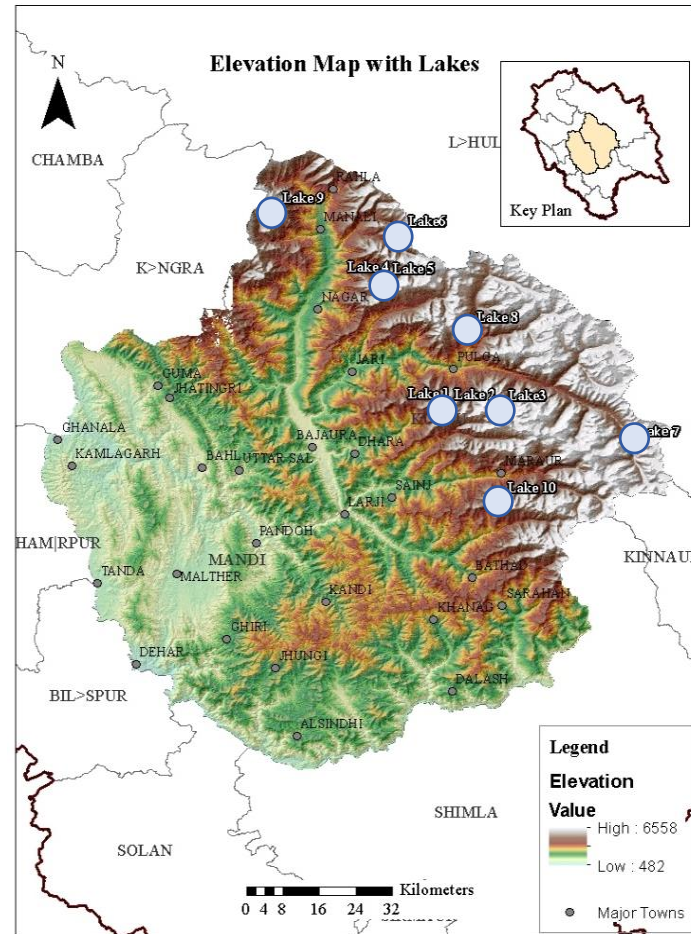
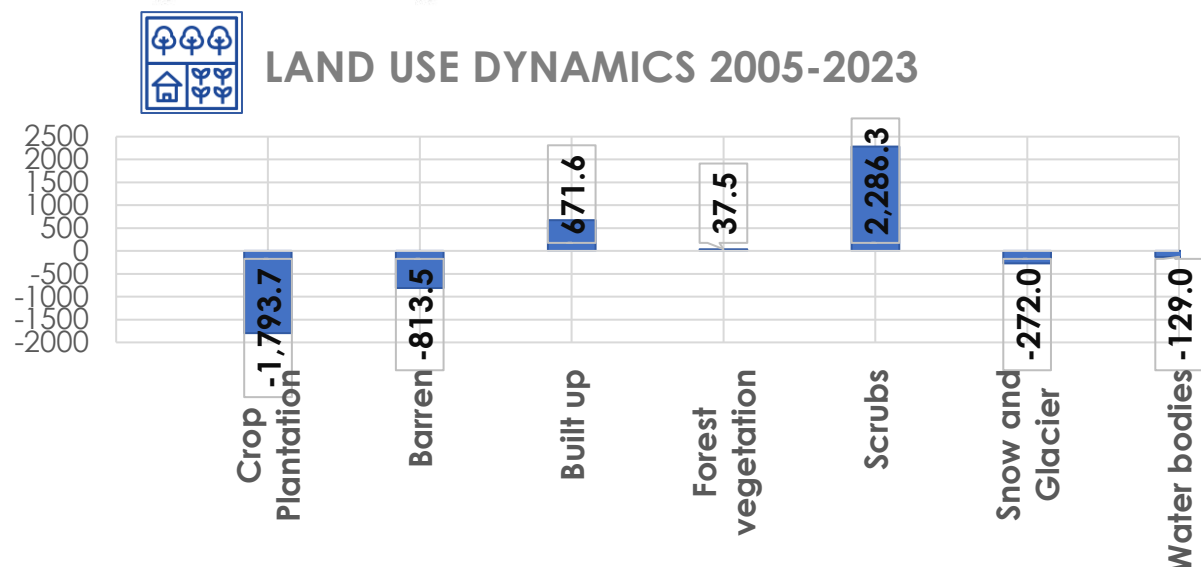
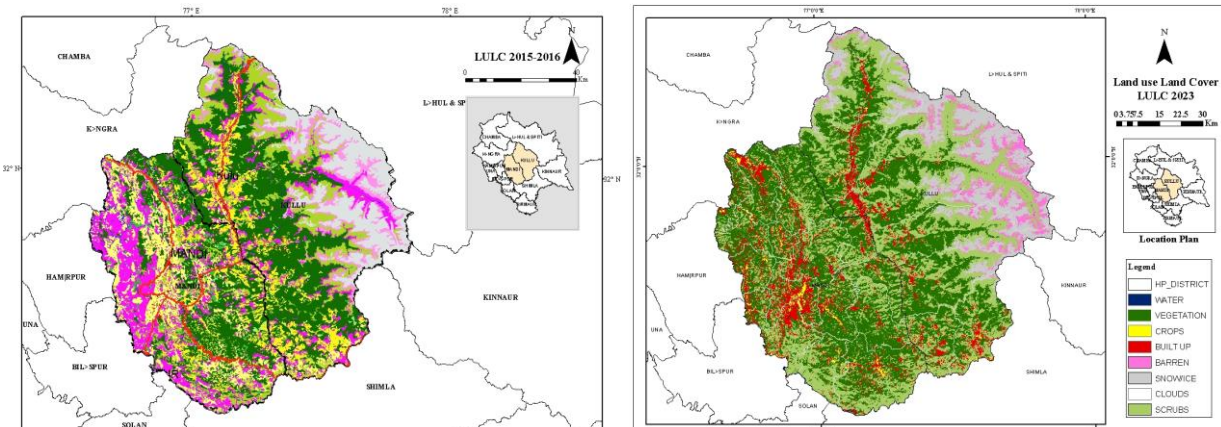


To **analyze** the parameters indicating climate change viz, Snowline trend, precipitation patterns variations, etc. causing burden to the river's capacity using mechanism of VIC model outputs & GIS.

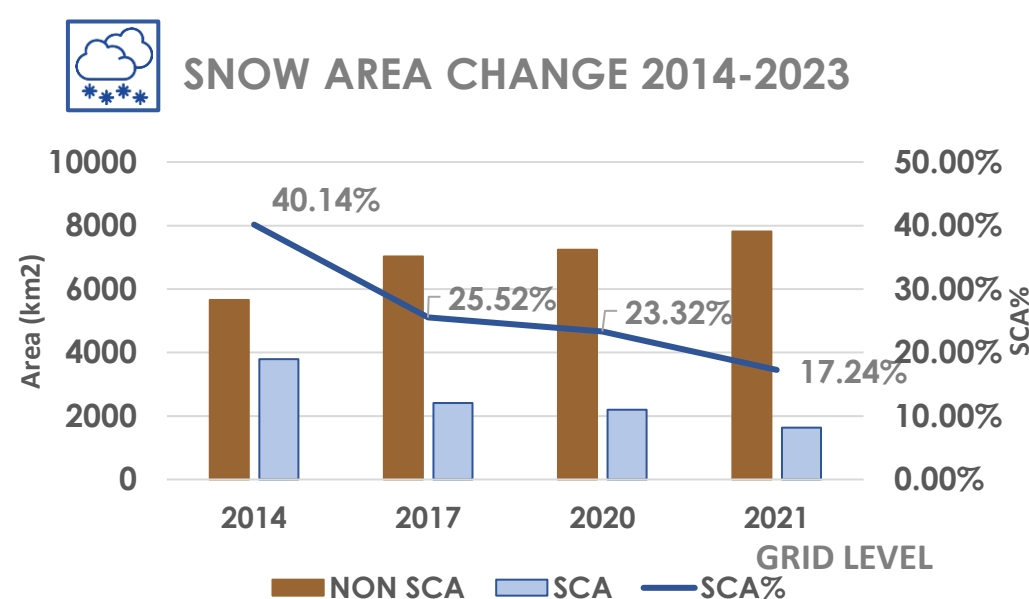
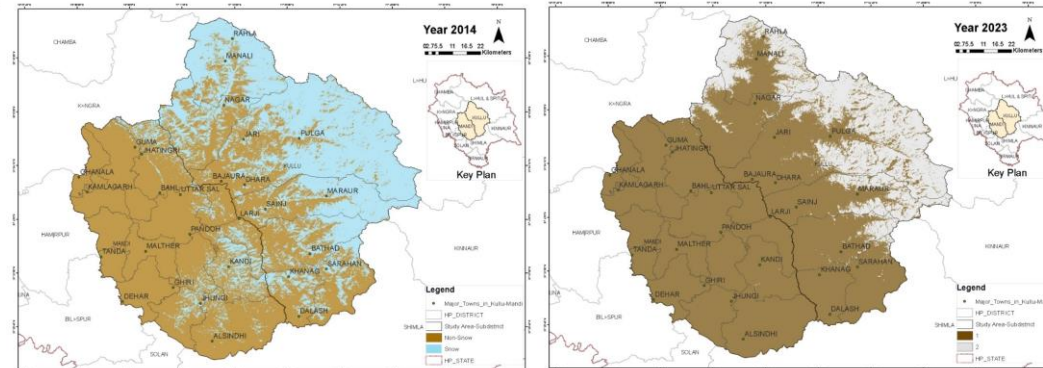


To **propose** hill planning for cities specifically centered around rivers there by utilizing the model to uplift the locals of regions.

ANALYSIS & KEY ISSUES

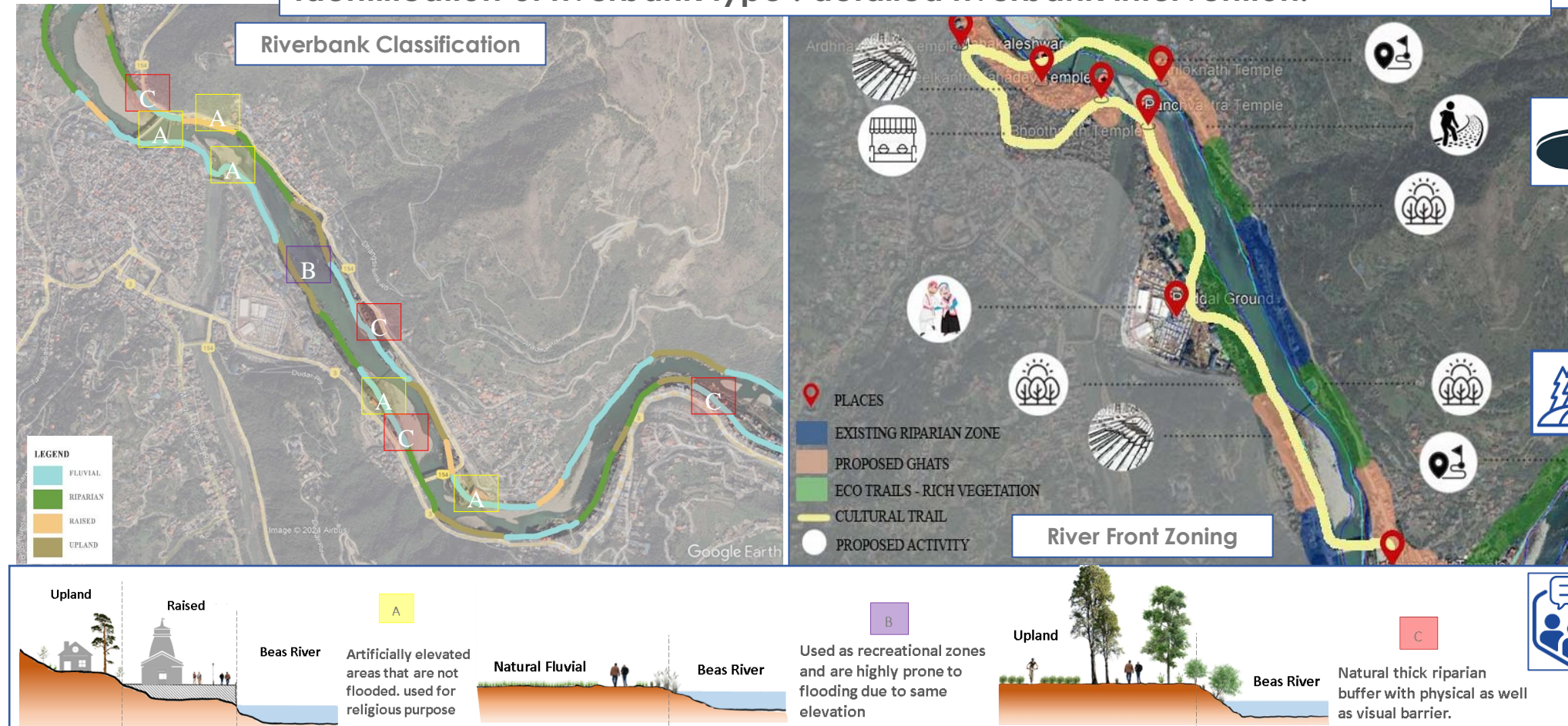


LOCATION OF GLACIAL LAKES



PROPOSALS

Identification of riverbank type : detailed riverbank intervention.



Based on population size, settlements with proximity to glacial lakes & along the drainage path are prioritized.

Tourist-to-Resident Ratio (OTRR) Tourism Capping based on population size.

Involving the locals in supervision & management of the sites.

