

The Tale of the Beas: The Lifeline of the Himalayas

The Himalayas are considered the most densely populated and most rapidly urbanizing mountain ecosystem in the world. In recent years, forces of urbanization have led to patterns where even relatively non-buildable and, until now, inaccessible areas are also getting encroached upon. These include non-buildable slopes and flood plains. Several factors are shaping these patterns—meeting the demands of the growing population, migration from nearby villages and towns, floating population of hill towns that serve as headquarters for commercial and administrative activities, and growth of tourism, among many others. This has led to a tremendous increase in the size, area, number, and complexity of the urban fabric, which has led to enormous expansion of urban infrastructure in towns. This expansion is continually impacting the blues (rivers and water bodies) and greens (mountains, flora). Humans have been emotionally, physically, and socially connected with this blue-green ecosystem since time immemorial. The cradle of our existence, these ecosystems have evolved and traversed trajectories that have shaped their Urban Form in ways that are doing more harm than good.

To better understand the aforementioned, the course of this discussion is intentionally swayed to the case of the Beas River. This river flows through parts of Punjab and Himachal Pradesh. The Beas has indeed seen it all! It is believed to have created problems during Alexander's conquest of India; it is believed to be the site of umpteen religious congregations and celebrations and the connector for many who traversed across the same to earn their bread and butter. Post Conversations with inhabitants of Himachal, one can safely say that this river can best be defined as the lifeline and the spine of hill towns such as Mandi in Himachal Pradesh. Fast forward to the latter half of the twentieth century, and it has been widely used for irrigation purposes.

In the twenty-first century, rather unfortunate events have begun to surface. The inflow of tourists always brings along the question of whether we are fully equipped to deal with the same? Do we have systems in place to deal with these tourist flows? The 2014 drowning of 24 engineering students in the Beas at Thalout, district Mandi, was one such regrettable and eye-opening event. We have often wronged our Beas, and we cannot deny the same. Sometimes, we tend to take our water bodies for granted. Neglect of the land-water interface has also been scary and disastrous; the same happened in 2018 when numerous fishes and aquatic organisms were found dead in the Beas. The same was attributed to the release of molasses from a sugar mill in the Gurdaspur district of Punjab. The talks of Beas are incomplete without the mention of the 2023 North India Floods, an event that is deeply embedded in the memory of the people of Himachal Pradesh, Uttarakhand, for generations and generations to come; the mighty Beas roared the loudest, flowed faster than ever. With unstoppable and heavy rains for three days, landslides coupled with flash floods, the Beas swelled and washed off settlements built close to it. With an eroded fabric, district Mandi is returning to normal, one step at a time! In introspection, we cannot deny that many human settlements have perspired in areas where the river setback is being regulated, not-so-strict implementation of the River Regulation Zone

Guidelines. T It has been over 5 months since this disaster unfolded, but the broken roads, half-cut houses as though someone was doing a live building section study, fallen trees, and broken bridges testify to the disaster. Very little has changed, and lives here are still far from normal. Whatever we have lost- friends, family, abodes are never coming back, but there are only lessons that we need to take care of. Beas continues to be the spine of our towns and villages. Talk to the locals, and you will discover that naiveness and honesty are writ large on the faces of Mandyals (inhabitants of the Mandi district of Himachal Pradesh); few are still unaware that construction near the river is not legal.

The disturbed urban ecosystem needs attention. It can very well be rescued with utmost sensitivity by bringing in the minds of the local intelligentsia who have learned from those who practised indigenous Architectural systems that were engineered to combat the earthquakes of Seismic Zone V along with environmental engineers, civil engineers, Architects, Urban Designers and Planners from various parts of the globe! This eclectic mix of local and global can sensitively shape our habitat!

As a Mandyal who dearly loves Mandi, I cannot help but stress how the RRZ needs to journey to the masses not as a Sacro sant regulation but by word of mouth in a one-on-one conversation! These conversations can help mould the urban form of our hill towns such that they are resilient to urban floods. This can be done through workshops and mobile vans that go into our neighbourhoods and take help from local Architecture, Civil Engineering and Environmental Engineering professionals who can interact with the locals in their native language and spread the word. After all, *Prevention is always better than cure*, and we cannot afford to witness another such disaster with such unpreparedness. The very urban form of our towns needs to be reimagined! We have always beautifully co-existed with our rivers, and we need to continue doing the same.