
Sustainable Development Imperatives for new Towns in Hilly Areas: A Case of India

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1.0 ABSTRACT

Hilly areas are very sensitive to human induced landscape change. For that reason, the development in such areas has to be viewed as an interaction of the anthropogenic activities with natural environment. The development therefore, should take a sustainable approach, considering the protection of natural environment and resources as the important priorities. The detrimental effects of development may lead to degradation of the environment and thereby may impact biodiversity many a times leading to loss in sustaining the tourism and employability in such areas. Hence, it is important to consider physical environmental factors while planning and design development in such areas. The present study highlights the critical issues related to site development in hilly areas with respect to topography and natural drainage in the study area. It also delineates the important areas for the natural drainage and riparian buffer that need to be preserved and conserved for the healthy environment. The study also derives possibility of alternative plot shapes and their orientation with respect to the land modulation it may cause for any building activity. Lastly, the study also stresses on the use of native vegetation for better ecological functionality relevant to the area.

2.0 INTRODUCTION

Hilly areas are houses of biological diversity, habitat to endangered species and an essential part of the ecosystem. The hilly areas can also, when exposed to unplanned and uncontrolled development will directly/indirectly have an effect on the environmental resources of the region. Besides, tourism today, is one of the world's important sectors for economic exchanges and employment in many hill areas. However, with the rising tourism industry it is important to give due consideration to the interrelationship of the environmental resources and anthropogenic interventions to accommodate tourism activity (UNWTO, 2017). The serene and scenic quality of the natural environment and the abundance of natural resources are of great value to any hill town; as all of them sustain the tourism activity of that place. The excessive pressure of tourism development can lead to degradation of environmental quality and resources of the hilly areas, which in turn may have an impact on the tourism activity, economy and employment of that place (Kumar & Pushplata, 2012). Thus, the unchecked development in these sensitive places may cause an irreversible damage to the resources on which the tourism is based. Indian hill towns are the peculiar examples of massive urban development in environmentally or ecologically sensitive, which are growing exponentially over and above of their natural carrying capacities (Kumar & Pushplata, 2012). Thereby, it becomes increasingly important to have a sustainable spatial planning and design approach in hilly areas (Programme Evaluation Organisation, Planning Commission, 2010) (Tyrväinen et al., 2014). An integrated approach in development can lead to better environmental conditions and improved anthropogenic intervention. This may facilitate to apportion resources for further betterment of the living conditions in sync with the natural environment (Latkar). Since the 1970's there has been a growing awareness of the need to deliberate the environmental values to the development of a hilly area. Ian McHarg (1995) (Steiner F., 2000) and others have brought into focus the growing philosophy of ecological processes; which offer the vital basis for planning and design (Steiner F., 2000) (Belsky, A. J.; Brown, R. T. et al., 1995). Though, this vision has been accepted by many, its potential and applicability still remains unexplored at local levels.