

Heterogeneity and Temporal Flux as Keys to Appreciate Dynamic Landscape Evolution: Insights from Mountain Areas

*Abhik Chakraborty¹

1. Wakayama University

This paper analyzes the key roles of landscape heterogeneity and temporal flux in landscape formation and evolution as keys to appreciate dynamic landscapes. The paper takes dynamic mountain environment as an instructive case, and analyzes landscape evolution, natural disturbance regime characteristics, and formation of specialized niches that drive speciation. The disproportionate impact of global environmental change on mountain landscapes is also reflected upon, and key drivers are identified from global and regional level case studies. It is then argued, with reference to recent research as well as the author's own research results, that although landscape appreciation and conservation frameworks have given some attention to heterogeneity but the important function of temporal flux in landscape evolution has remained largely obscured so far. Based on this argument the paper emphasizes the important role of long-term monitoring of dynamic landscapes for developing a holistic toolkit for landscape appreciation following the framework of 'Conserving Nature's Stage' (CNS) approach.

Keywords: Landscape heterogeneity, Temporal flux, Mountain landscape evolution , Conserving Nature's Stage , Holistic landscape appreciation