



Regeneration Status of Some Tree Species in Garhjungle Sacred Forest, West Bengal, India

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Abstract: Sacred groves have significant effects on environment conservation due to the special precautions taken by local communities applying their religious faith and belief. The present investigation aimed to study the regeneration status of tree species and survival of naturally emerged seedlings in a sacred forest situated in the Rarh region of West Bengal, India. Regeneration status of species was determined based on population size of seedlings, saplings and adult trees. Shannon-Wiener diversity index (H) ranged from 1.88 to 2.38 and it is highest for saplings. When seedling density is highest followed by saplings and trees of a particular species, the regeneration status is said to be in good category. Among the 14 tree species recorded in the study area, one showed lack of regeneration indicating declining population, while 9 species were newly colonized. Poor regeneration status of the dominant species *Shorea robusta* indicates a serious threat as it is a naturally occurring climax species of lateritic zone of West Bengal. The present study has provided a baseline data for the long term monitoring of tree communities in the area that will help to assess the effect of present ecological consequences of ongoing and future climatic changes.

Keywords: Sacred forest, Regeneration, Lateritic zone, Diversity index, Sapling, Seedling
