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CHILGOZA PINE (PINUS GERARDIANA) FORESTS IN AFGHANISTAN: CURRENT STATUS, TRENDS IN REGENERATION, MANAGEMENT & PROTECTION WITH SPECIAL REFERENCE TO NURISTAN PROVINCE

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ABSTRACT

Chilgoza pine (Pinus gerardiana) is one of the most economical and ecologically important forest tree species in dry temperate forests of Hindu Kush-Himalayan region. Due to over-exploitation and mismanagement, this species is listed under near threatened category of theIUCN red list. This study aims to assess the current status, trends in natural regeneration, management and protection efforts of chilgoza forests in Nuristan province of Afghanistan. A total of 40 sample plots were surveyed to estimate the regeneration status of chilgoza pine with each circular plot having a size of 500 m² with a radius of 12.6 m. The regeneration status of chilgoza pine was found to be good in 12 plots (25.60%), medium in 18 plots (44.12%) and poor in the remaining 10 plots (30.28%). The overall regeneration rates of chilgoza in the forests were found to be medium (420 plants/ha). Comparatively higher regeneration rates were found on the North-eastern aspect than those on the South-western aspect. The majority of respondents had no awareness about the threatened status of the chilgoza species. It was also found that the majority of villages (90%) were involved in managing chilgoza forests by themselves. Thus, this study strongly recommends the preparation of sound management plan and enforcement of laws and acts for management and protection of the chilgoza forests in the country.

KEYWORDS: IUCN, Nuristan Province, Over-Exploitation, Pinusgerardiana, Regeneration

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