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Deforestation dynamics in an endemic-rich mountain system: conservation successes and challenges in West Java 1990-2015

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While much has been published on recent rates of forest loss in the Sundaic lowlands, deforestation rates and patterns on Java's endemic-rich mountains have been rather neglected. We used nearly 1,000 Landsat images to examine spatio-altitudinal and temporal patterns of forest loss in montane West Java over the last 28 years, and the effectiveness of protected areas in halting deforestation over that period. Around 40% of forest has been lost since 1988, the bulk occurring pre-2000 (2.5% per annum), falling to 1% per annum post-2007. Most deforestation has occurred at lower altitudes (< 1,000 m), both as attrition of the edges of forested mountain blocks as well as the near-total clearance of lower-altitude forested areas. Deforestation within protected areas was rife pre-2000 but greatly decreased thereafter, almost ceasing post-2007 in protected areas of high International Union for Conservation of Nature (IUCN) status. While apparent recent protection against land clearance is welcome, it must be stressed that the area of remaining forest is only 5,234 km^2, that most accessible lower-altitude forest has already disappeared, and that the extant montane forest is largely fragmented and isolated. The biological value of these forests is huge and without strong intervention, we anticipate imminent loss of populations of taxa such as the Javan Slow Loris *Nycticebus javanicus* and Javan Green Magpie *Cissa thalassina*.