

Sustainability of acacia catechu forest management for cutch production in magway region, Myanmar

Wai Phyoe Maung, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=9999920539864&lokasi=lokal>

Abstrak

Acacia catechu (Sha)-bearing forests are the primary sources of cutch, a tannin extract from the heartwood of Sha trees. Sha forests in Myanmar are managed for cutch production, and tree harvesting for cutch is regulated by an official diameter limit (ODL, 30 cm DBH [diameter at breast height]). We explored sustainable Sha forest management for cutch production through stand inventory surveys and informal interviews with locals and forest managers. We compared Sha forests with six different official harvest histories and assessed seedlings and saplings as well as the size and species of harvested stumps and remaining trees. We found that the forest understory was disturbed by surface fire, and all Sha seedlings and saplings < 1.7 m in height showed post-fire marks. We observed a regeneration gap between 1.7 m and 2.7 m, which might indicate the flame height of the surface fire. The “illegal” harvest exceeded the official harvest; only 5% of the harvested stumps were found to be larger than the ODL. Local harvesting of cutch appeared to be limited by the stem diameter required for heartwood formation (15 cm DBH). Stump data revealed that the forests were utilized not only for cutch but also for other purposes, including fuel and timber. Despite fire and local harvesting, local forest utilization patterns appear to be reasonable, although they are illegal. Implementing fire control and community management of forests along with clear definition of property rights could help in sustainably managing Sha forests for cutch production.