

A Project Work Submitted to

## DEPARTMENT OF ENVIRONMENTAL SCIENCE

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Submitted By

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## ABSTRACT

Tree fern (*Cyathea spinulosa*), is widely distributed in sub-tropical region of Nepal. They are tall more than 10m height, scaly, spore bearing, trunk arborescent, erect and massive. They grow along the water channels, damp and moist gullies in hilly region. Among 16 flora reported in CITES Appendix II, Cyathea (Tree fern, family Cyatheaceae) an endangered tree fern falls under CITES Appendix II and the genus Cyathea in endangered category of IUCN Red Data Book. The study was carried out in few villages i.e. Bhadaure Tamagi, Sidane, Chitre, Bhanjyang, Damdame of Panchase Forest Area of Kaski and Parbat districts. Purposive sampling, questionnaire survey and field observation in its natural habitat were done to assess and document uses, threats and conservation practices of tree fern by locals in its natural habitat. The main aim of the study was to determine socio- economic uses, the cause of threats along with habitat and various modes of uses of plant parts. The research was also focused on familiarity and knowledge of Cythea spinulosa among the locals of study area. From this study, we found the uses of tree fern among the locals was only for provisioning services. Anthropogenic activities such as construction of roads, logging for fencing and natural hazards have been playing a major role for the decline in number of tree fern mainly degrading its natural habitat. Awareness programs regarding the importance of tree fern among the locals might be effective for the sustainable use and conservation of tree fern.

Keywords: Cyathea spinulosa, CITES Appendix II, Panchase, Awareness program

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