

NDF WORKSHOP WG 3 – Succulents and Cycads CASE STUDY 5 SUMMARY Cycas circinalis Country – India Original language – English

## CYCAS CIRCINALIS L. IN INDIA

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*Cycas circinalis* L. is a multiuse cycad endemic to the Western Ghats, India. An Appendix II species, *C.circinalis* is listed in the IUCN Red List database of threatened species as data deficient (Hill, 2003). Keystone Foundation (www.keystone-foundation) in collaboration with People and Plants International (www.peopleandplants.org) and University of Hawaii (www.botany.hawaii.edu/faculty/ticktin) have been involved in a monitoring of *Cycas circinalis* to assess its conservation status. Keystone Foundation works with indigenous communities in the Nilgiri Biosphere Reserve, India to monitor ecology, use and trade of *C.circinalis*.

The assessments undertaken so far have been done in the states of Tamil Nadu and Kerala covering more than 50% of the sites where the species is present within each state. Criteria and parameters that were studied so far have been nature of harvest, impact on population of different part harvest, quantity of harvests, time of recovery after harvest, local management for regeneration, size of populations and distribution across habitats.

Populations subject to seed and leaf harvest show lower rates of regeneration as compared to those populations that are not harvested for their leaves. The structure of the populations subject to seed, leaf, stem and male cone harvest consisted almost entirely of individuals in the smallest size classes. There were no individuals larger than 100 cm in height. The lack of adult individuals points to high levels of stem harvest and depletion of the adult population.

*Cycas circinalis* is included in the negative list of exports notified by the GOI Notification 2 (RE-98) dt. 13-04-1998, 1997-2002 (Ravikumar and Ved 2000). The plant is also listed as an RET species. Total number of adult individuals is estimated to be below 4000. The species is restricted to isolated patches in the Western Ghats, India. The main threat to the species is from habitat loss and indiscriminate harvesting.

Lack of clarity on the species, geographical source of cycas products and their authenticity make the assessment difficult. The conservation status of the species is at a crucial stage and can be improved through collective action. Much work is needed to build a database on the different species, its population, harvest practises and demand in trade. A concerted effort that involves the State and National Biodiversity Boards and the Medicinal Plant Board can lead to improved practises that promote the conservation of the species. The species has been in use for food and medicinal purposes traditionally. An understanding of this will contribute to a sustainable use management plan that can be implemented successfully and reduce the pressure on this limited distribution species.