

NDF WORKSHOP WG 3 – Succulents and Cycads CASE STUDY 4 SUMMARY Encephalartos Country – South Africa Original language – English

## SOUTH AFRICAN ENCEPHALARTOS SPECIES

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The African cycad genus *Encephalartos* is globally one of the most threatened groups of plants and trade in wild plants is one of the main causes of decline. The centre of diversity for African cycads is in South Africa, where 73% of the 37 species are listed as threatened and 12 species are categorised as Critically Endangered. The single greatest cause of decline is wild collecting for both domestic and international markets. The genus is listed in CITES Appendix I and Article 3 of the Convention compels Parties to determine whether trade in specimens of Appendix I taxa is detrimental to the survival of the species and this is an important dimension for trade in *Encephalartos* from South Africa.

Non-detriment findings have been done on an *ad-hoc* basis but several provincial scientific authorities and the South African National Biodiversity Institute have been working towards a framework for non-detriment findings that is supported by recent legislation. The main components of the NDF assessment focus on the risk factors for wild populations, i.e. proof of artificial propagation, the identification of species in trade, the threat status, life history stage, and compliance with management plans. A decision tree is presented that enables authorities to determine the likelihood that trade will have an impact on wild populations.

Two critical factors for NDF assessments were identified: a) problems with identification of species in trade and b) verification of artificial propagation. Until these issues are resolved, there will always be some uncertainty regarding the possible impact of trade on wild populations and, particularly, on the survival of Critically Endangered species. As a result, the main recommendations arising from this case study emphasize that proper application of NDFs for *Encephalartos* species requires the development of tools to assist with identification of specimens in trade and to verify the source of artificially propagated material. At present, genetic markers seem to offer the best solution to both these problems, but they require further development and refinement.