

ASSISTED NATURAL REGENERATION OF DEGRADED LAND CAN PROMOTE ECOTOURISM IN THE DRY ZONE

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ABSTRACT

Sri Lanka has a forest cover of 32.2% of which 70% are dry forest in the dry zone. Chena cultivation, illegal felling for timber, fragmentation and other causes are steadily degrading these forests followed by colonizing by Alien Species. It is imperative that these lands are restored into habitats beneficial for wildlife.

The concept of Assisted Natural Regeneration (ANR) is successfully demonstrated in the NIFS-Popham Arboretum located 2.5 km from Dambulla on the Dambulla-Kandalama road (07°51'34''N, 80°40'28''E). This site was an abandoned Chena land, bought by F.H. Popham in 1963. Popham assisted the indigenous tree saplings on the land to emerge and establish by removing the 'weedy' shrubs around them. This practice of ANR eventually developed the site into an arboretum. Popham gifted the arboretum to the NIFS in 1984 to which another 27 acres was added.

The arboretum was developed into a visitor and research center in 2005. A programme for night time watching of the Gray Slender Loris was established in 2007. Visitor arrivals, their purpose of visiting the arboretum and their comments are recorded.

A gradual increase of visitor arrivals was observed for a period of ten years. Comments of visitors on their experiences of day and night safaris were positive. The Arboretum is now a habitat for about 10 mammal species including Gray Slender Loris, Pangolin, Giant Squirrel, False Vampire Bat; 66 birds species including Jungle Fowl, Sri Lankan Grey Hornbill, Nightjar; 30 butterfly species including Common Banded Peacock, The Lime Butterfly, Plain Tiger and many reptiles species including Lizards, Snakes and occasionally pythons. There are 282 plant species including Woody trees, Shrubs, Vines, Herbs, Lichens.

The Dambulla Arboretum is a model to restore abandoned dry forests into woodlands for wildlife and plant conservation and as a source of income from ecotourism in the dry zone and other climatic zones in Sri Lanka.

KEYWORDS: NIFS-Sam Popham Arboretum, Assisted Natural Regeneration, Dry Zone, Eco-tourism