

Evaluating ecotourism potential based on biological diversity in three established trails in Kanneliya Forest Reserve

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Kanneliya Man and Biosphere Reserve which covers 5305 ha is situated in the Galle District and belongs to the tropical lowlands rain forest type. It is one of the forests opened for tourism in relatively recent times by the Forest Department. The present study focuses on evaluating its potential for nature based tourism primarily based on the biological diversity in 3 existing nature trails. A small part of the study enumerates the willingness of surrounding communities to participate actively in nature based tourism activities.

Work was conducted throughout the season of migratory birds. 10 inward and outward journeys were made in each nature trail per day. Three successive days were spent on the 3 nature trails at one sampling time. This exercise was repeated several times. During these visits all faunal species encountered were recorded. The probability of viewing any one species per trip was assessed. All the tree species and the herbs having special features situated within 10m from either side of the trail were recorded. A village having the highest interaction with the forest reserve was selected and 10 families interviewed based on random selection using participatory rural appraisal.

Among the fauna, highest number of bird species (54), butterfly species (31) and Reptile species (9) were recorded in Nature Trail 1 which leads to 'Anagimala Ella' and 'Narangas Ella' in the Forest Reserve. Five species of amphibians were recorded in Nature Trail 2 which extends to 'Kabbale Kanda'. Largest record of fish species was in Nature Trail 3 which leads to 'Mola Kanda'. With regard to floral biodiversity, in Nature Trail 1, 82 species were recorded having 63.4% endemics and 4 threatened species. 78 tree species of which 64% endemic and 6 threatened species are recorded in Nature Trail 2. In Nature Trail 3, 67 tree/shrub species of which 64% endemic and 4 threatened species of the neighboring communities interviewed, 67.5% expressed their willingness to participate actively in nature based tourism ventures. This ranged from selling their local produce, functioning as tour guides both inside the reserve and the surroundings, allowing for home stays etc.

In conclusion it can be stated that the three already established nature trails have high potential for ecotourism although they differ in the items they offer to the visitor most. Nature trail 1 which leads to Anagimala Ella and Narangas Ella is reputed to have high number of birds and butterflies and reptiles. Nature trail 2 is having more amphibians while Nature Trail 3 is having more fish. Biodiversity was highest in Nature Trail 1 followed by Nature Trail 2 and then Nature Trail 3. Endemism and level of threat was highest in Nature Trail 3 while it was lowest in Nature Trail 1. Nature Trail 2 was intermediate. Despite the fact that there is enthusiasm for the surrounding communities to participate in ecotourism activities this aspect is not well developed, thus should be encouraged to participate actively in these ventures by encouraging participation, training in appropriate areas and enabling the benefit sharing.