

The Asian Elephant (Elephas maximus maximus) in Sri Lanka is the most prominent symbol of conservation as a 'true flagship species'. But the Humanelephant conflict (HEC) is one of the biggest environmental and socio-economic crises of rural Sri Lanka. The intensification of HEC in recent times has been due primarily to the cumulative impact of the increase in human population, especially around the forest fringes, and the concomitant loss and fragmentation of habitats of Asian elephants. The establishment of human settlements in wildlife habitats or corridors (i.e., elephant migration routes) is one of the major causes of HEC. The corridors are the connecting paths of protected areas in which preferable habitats, mainly water and food sources, are available. In the HEC reported areas, it is not unusual to see land encroachments including illegally cultivated areas and human settlements. It is also not unusual to see school children as well as men and women either walking or traveling on bicycles while elephants are present. Hence, they harass the elephants to scare them away whereas such behavior only makes elephants more aggressive rather than making them scared of people.

In the year 2020, alone, three hundred and seventy-six elephant deaths were reported in Sri Lanka while 113 people died due to elephant attacks, mostly in their own villages and fields. Further, according to records available, annually elephants cause over USD 10 million in crop and property damage.



The cost of HEC is three fold: direct, indirect, and opportunity costs. Crop damage and human injuries and deaths are the major direct costs associated with the human-elephant conflict. Scholars have calculated that an average farmer in elephant-impacted areas of Sri Lanka loses over USD 300 annually in crop damage. In 2020, Department of Wildlife Conservation (DWC), which is responsible for conserving elephants in Sri Lanka, paid more than LKR 180 million as compensation for human deaths, injuries, and property damage. It also spent more than LKR 3 million for the capture and translocation of marauding elephants. Of the HEC incidents recorded from around the country, more than 60% were recorded from the areas where Minneriya (MNP), Udawalawe (UNP) and Wasgomuwa (WNP) National Parks in Sri Lanka.

Although more than LKR 800 million is allocated for elephant conservation and compensation and for implementing HEC mitigation measures by the DWC. these outlays in expenditures have not succeeded in mitigating HEC. Due to budgetary constraints, the Government of Sri Lanka (GOSL) finds itself unable to spend more funds to implement mitigation measures in order to solve HEC. In the meantime, wildlife and nature lovers who visit national parks for 'elephant watching' express their concern, over the death of elephants due to HEC, arising partly out of an altruistic desire to prevent their extinction and partly out of a desire to observe these majestic animals in the wild during visits to national parks.

Accordingly, we investigated whether visitors to MNP, UNP and WNP are willing to 'pay a tax' for elephant conservation (which is called 'conservation tax') or for mitigating HEC in addition to their entrance fee applying discrete choice experiment method. We argue that the revenue earned through taxing could be used by the Government of Sri Lanka to implement HEC mitigation measures. With this in mind, the main objective of the present study is to estimate the visitors' willingness to pay a conservation tax which could then be used to implement strategies for the purpose of mitigating HEC in Sri Lanka.



The study found LKR 112.11, LKR 95.37 and LKR 85.38 as the maximum conservation tax that visitors were willing to pay for conserving elephants at MNP, WNP, and UNP respectively. The overall average willingness to pay as a conservation tax was LKR 98.76 per visitor per visit while the existing park entrance fee to a national park is LKR 60.00 per person excluding taxes. If the total annual allocation by the Government for mitigating HEC is LKR 450 million, from these three parks alone, 12% of the total expenses can be recovered. The resultant economic values thus constitute useful and reliable information for policy makers to make policy decisions regarding the levying of a conservation tax on visitors to national parks for mitigating HEC. In addition, public perception of elephant conservation, as evident from the survey, would be of value in generating more awareness in society regarding the importance of elephant conservation.





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