

Visitors' choice for conserving 'Asian Wild Giants'



Prof. Wasantha Rathnayake Vice Chancellor of Ocean University of Sri Lanka

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The Asian elephant (*Elephas maximus maximus*) in Sri Lanka is the most prominent symbol of conservation as a ‘true flagship species’. Attempts to ensure its continued survival in the wild is supported by a majority of Sri Lankans who consider it to be a valued resource. But the Human-elephant conflict (HEC) is one of the biggest environmental and socio-economic crises of rural Sri Lanka.

Causes of HEC

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 travelling on bicycles while elephants are present. Hence, they harass the elephants to scare them away whereas such behaviour 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. These three national parks are not only the main habitats of wild elephants as well as prime sites for elephant conservation in Sri Lanka they also provide the recreational opportunity of ‘elephant watching’ for visitors so that they can enjoy observing wild elephants in their natural habitats.

Although more than LKR 800 million is allocated for elephant conservation and compensation in 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 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 Minneriya, Udawalawe and Wasgomuwa National Parks 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 GO SL 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.

Identification of visitors’ views on reasons for HEC and obstacles for HEC mitigation

When we solicited the opinion of visitors on the prioritization of issues relating to conservation of wildlife, they identified elephant killing by farmers as the major problem, followed by habitat encroachments and poaching of other wildlife.

Respondents of around 82% also mentioned HEC as the most important issue relating to wildlife to be addressed at the national level. Respondents were also asked to express their opinion on the current HEC mitigation activities (i.e., erecting electric fences, distributing thunder flares, elephant drives and habitat enrichment programs) adopted by the DWC. Most of the respondents (67%) expressed dissatisfaction with the current HEC mitigation activities conducted by the DWC. The major obstacle identified by the respondents was impeding the adoption of HEC mitigation activities. A majority of respondents mentioned the lack of fund allocation for HEC by the government to implement the HEC mitigation plans developed by the DWC as the major impediment. Respondents numbering 72% also identified unplanned and unsustainable development activities in the country as one of the determiners of HEC. Another problem identified was the lack of inter-agency coordination, which is a major limitation when implementing a particular elephant conservation plan. The respondents also recognised the importance of awareness and education programs with regard to elephant conservation for people and communities in adjacent areas to national parks as another requirement in HEC mitigation. The other requirement for HEC mitigation that they highlighted was the importance of motivation of staff of DWC and support by the Government.

Visitors’ choice

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 800 million, from these three parks alone, more than 8% 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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