

Abstract

Human Elephant Conflicts (HEC) is a major ecological problem in most of Asian and African countries. Overlapping of human and elephant needs causes this HEC. Number of methods using FOR minimise HEC. Electric fences, bio-briars, elephant drives, translocation, capture and elephant corridors are some of the methods that are using to minimise the HEC. In Sri Lanka this HEC occurring most of the dry zone, where the elephant population comparably higher than the wet zone. In the year 1989-1992 HEC was increased in Udawalawe (UW) area. Sevanagala Sugar Cooperation (SSCo) croplands are very close to UW Protected Area (PA). Because of the elephant have been entered to the cropland, SSSCo was established the Electric Fence (EF) in the year 1992. As a result of this Elephant entrance was decreased according to PA authorities and SSSCo data files. But still there was no scientific study about the efficiency of this EF. This study aimed to monitoring the efficiency of the electric fence. Identify the breaching patterns of the elephants and financial loss to the SSSCo. The study area is located the south side of the UW NP and there are 298 families living in this area and they are permanent sugar cane growers. During the rainy season they are growing crash crops. The electric fence is locating in between Colombo Monaragala B-427 road and the PA. Total length of the fence is 15Km and the power supplying to the fence with the help of two batteries. Power range is 12V and 1.5A. During the study period (6th of September to 10th of December) there were three elephants was identified that breached the fence according to their foot print perimeters. Single elephant damage to the fence along and two elephant's damage to the fence at once. According to result most of the times elephants breach places, where the average distances between the two houses over 500m and the bare lands in the inside of PA, the sugar cane very close to the EF and no current supplied areas. The single elephant used it head and front legs and the two elephants used their back legs. Elephants have mostly damage to the sugar cane and also damage to the crash crops. Total lost for SSSCo was Rs.801600.00.