

**(ID 020)****Plantation Fence System as a Sustainable Method to Reduce Human- Elephant Conflict in Contemporary Sri Lanka: A Sociological Study****Pavithra, K.K.H.\*, Kaluarachchi, H.D.***Department of Sociology, University of Colombo, Colombo 03, Sri Lanka**\*[hirupavi123@gmail.com](mailto:hirupavi123@gmail.com)/[pavithra@soc.cmb.ac.lk](mailto:pavithra@soc.cmb.ac.lk)***Abstract**

Development is a multi-dimensional concept, and it cannot be limited to the economic growth and can be defined as the progressive growth that occurs in all social, cultural, economic and environmental sectors. In Sri Lanka, we can identify many development projects that have been carried out with the sole aim of economic growth without sustainable goals. As one of the side effects of this development projects, wild animals have lost their habitats. The human-elephant conflict can be identified as one of the crises caused by this. For several decades, management strategies have been implemented to control human-elephant conflict, such as driving away elephants, trapping, erecting electric fences around reserves, and enriching wild elephant habitats. But due to the ever-increasing elephant and human deaths, it can be recognized that these strategies have failed to achieve the desired results. The aim of this study was to propose the plantation fence system as a sustainable program to reduce human-elephant conflict in Sri Lanka. A village in Anuradhapura district was selected as the research field. In-depth interviews conducted with 6 respondents were used in primary data collection. According to the research findings, it can be shown that the elephants' invasion of villages was related to their food problem. All the 6 members of the research sample (100%) said that elephants coming to the village in search of food caused maximum damage to their agricultural fields, leading to substantial crop damage. Farmers suffer economic losses, exacerbating the conflict. According to the data collected through my research sample, there have been 60 crop losses, 1 elephant loss and 1 human loss in the relevant research field in the year 2021. The amount of crop damage is very high and compared to that, the amount of property damage is less. Although there were 60 crop losses, only 5 property losses were reported. Accordingly, in order to prevent wild elephants from invading villages and agricultural areas, it is necessary to provide a solution to the food problem of those animals. Recently, a voluntary organization called "Practical Action" has come forward to discuss a method that provides solutions to prevent elephants from attacking villages and to solve their food problem. Through that proposal, they point out that planting the Palmyra tree at an acceptable distance and erecting it as a fence, the necessary physical barrier against elephants from attacking the village will be solved as well as the food problem. If we consider the Palmyra fence solution, it is a positive situation that it also creates a food supply for elephants that goes beyond a physical barrier. At the same time, Palmyra trees can be suggested as a trend of providing a good source of income to the local residents. This fence, which creates a physical barrier for elephants and also, becomes an economic source of income for the local residents. Considering these factors, this method can be proposed as the most successful solution to reduce the human-elephant conflict.

**Keywords:** Sustainable goals, Human-elephant conflict, Plantation fence, Physical barrier