## A Crisis between Human and Elephant:

# A Study of Conflict Resolution Methods Taken to Mitigate Human-Elephant Conflict with Special Reference to Gampola Village, Sri Lanka

## Oshadhi Herath<sup>1</sup>

#### Introduction

Many species face increasing competition with people for space and resources (Pimm et al., 1995; Balmford et al., 2001). As human population gradually increased in recent decades, human-animal conflict problems are getting serious. These problems occur due to the encroachment of human beings on animal habitats for agriculture or poaching activities. Many forests have been developed into agricultural areas and this has led to many animals lost their habitat. Thus, human-elephant conflict is triggered by habitat loss and fragmentation and the lack of suitable wildlife habitat. It is difficult to confine elephants to a small place because they move in great distances. Elephants leave forests and go into farm to feed for food. Hence, they would damage the crops and plantation and also property of farmers or villagers. Moreover, injury or death of people or elephants might be happen.

While over 200 elephants fall victim annually, pushing them to 'endangered' status, about 70 human lives are lost due to elephant attacks. However, as much as 80% of these deaths are preventable incidents. In each incident there are two parties involved the human being and an elephant. As an elephant cannot be made to understand the problem or to look for a solution, it is the human who should be responsible.

Basically the human invasion into wild life, illegal forest clearing, industrial development along the wild life areas and large scale plant cultivation are the reasons why the wild elephants enter the villages. In fact, they were not villages but were their habitats where they lived for many generations. When the elephant corridors are turned into villages, wild elephants enter them as they are used to enter them for migrating. This results in causing the conflict between humans and elephants.

## Research problem/ Objectives

Are there any effective steps taken by the relevant authorities is the research problem and the major objective of this research is to identify the methods that have taken to mitigate the problem.

<sup>&</sup>lt;sup>1</sup>Visiting Lecturer, Department of Philosophy, University of Kelaniya, Sri Lanka.

## Method

This research has done mainly based on Gampola village (a village belongs to Giribawa provincial secretariat division in kurunegala district) as a case study and both primary and secondary data have been used for this research where as interviews and observation referred to primary data collection methods. To collect primary data 30 families were interviewed and observed. In addition, books, web sites, online magazines were taken as secondary data. Since the collected date were qualitative, data analysis has been done qualitatively.

## **Findings**

According to the findings of the research the government and the relevant authorities have taken some steps to protect both the parties from the issue. Electric fences have been the traditional solution to the problem, but other alternatives have been used such as beehives, palmyrah fences and spiky lime to keep elephants away from human settlements. However, these steps have shown limited success and to this year has an allocation of Rs 4,000 million for the environment sector for three years, to resolve the human-elephant conflict and preserve Sri Lanka's rich biodiversity. Instead of that the Government is seeking additional funds through a World Bank project interest-free loan of US\$ 30 million; a large portion of the project's funding is to initiate innovative programmes that would reduce human-wildlife conflict through co-existence. Unfortunately, this issue of national consequence hasn't been adequately addressed by the authorities concerned due to several factors and according to the findings of the case study Gampola people are not satisfied with the steps taken because, only an electric fence has implemented around the village and still villagers are suffering from the issue.

According to the Director General of Wild Life Conservation, he said that

"We have proposed a national project as to protect the elephants and the people of our country who are being victimized by this human-elephant conflict. Therefore we have already built 3,000 electric fences in the island and will be building electric fences for 2050 kms where the wild elephants enter the villages in search of food and water.

He also claimed that the proposed project includes building of waterfalls, green parks and orphanages for baby elephants and mad elephants within the forest areas.

"The orphaned baby elephants will be protected in the elephant orphanages and will be released to the forests when they are old enough to be left on their own. We also have plans to rehabilitate the elephants which have an aggressive behavior in our elephant orphanages,".

The new Government had, had several rounds of talks with the World Bank to gain some fund to address this issue and with the new Government's manifesto promising a solution to the human elephant conflict, the new Wildlife Minister Gamini Jayawickrema Perera says he will treat it as a priority.

Many blame Wildlife Officers for not providing a viable solution to the problem. However, the Department of Wildlife Conservation (DWC) alone cannot provide a solution, similarly in cases of crop raiding or destruction of houses, appropriate steps should be taken to prevent such occurrences. If crops are cultivated in an area where elephants roam, they will raid the crops unless preventive measures are taken. Many people store paddy in their houses, resulting in the elephants breaking into their houses. The Government generally assists people to construct protective fences or give priority to buying paddy from areas at risk.

But electric fences have been the traditional solution to the problem, but other alternatives have been used such as beehives, palmyrah fences and spiky lime to keep elephants away from human settlements and crops. However, these take up a lot of effort and resources or have limited success. Such inappropriate use of fences results in fences inside forests with elephants on both sides of the fence. Such fences are difficult to maintain, communities cannot and will not play a part in maintaining them and very soon they become non-functional. Instead, human settlements and permanent cultivations should be protected by fences and people who are benefited by such fences need to take the responsibility for maintaining them.

On the other hand the elephant experts say that establishing elephant corridors will have limited success, if implemented without obtaining actual data of elephant movement in an area. The concept that elephants constantly migrate from one forest to another covering large areas is an outdated concept that belongs to the colonial era, whereas modern research has shown that elephants in Sri Lanka do not migrate long distances but have limited home ranges of 50-500 square km in extent, to which they show a high level of attachment. However, within a home range there are places or routes that elephants use to cross from one area to another or to cross a main road etc. and these need to be established as 'Elephant Corridors'. Blocking of such 'corridors' by development or encroachment causes increase in HEC as elephants then have to cross in spite of the development or through alternative routes, which brings them into conflict with people.

Meanwhile Sri Lanka already formulated a National Policy for Elephant Management and Conservation in 2006 with consultation of experts in the field and the participation of all the relevant line agencies, led by the Department of Wildlife Conservation. Many saw this as comprehensive enough to provide sound suggestions with a scientific base to address the human-elephant conflict and elephant conservation. However, this remains only a document, as it was not implemented. So without updating this National Policy or implementing effective solution to the problem this crisis would not become end.

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