

# A STUDY ON THE ISSUES OF HUMAN ELEPHANT CONFLICT WITH REFERENCE TO DHARMAPURI AND KRISHNAGIRI DISTRICTS

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## ABSTRACT

Human –elephant conflict are always considered to be a geographical, economical and emotional issues in the elephant corridors and in the villages, which were located near and at elephant corridors. Agricultural lands which are nearby the forest regions were invaded by the elephant herds and they were totally collapsed which results in loss of crops and sometimes even in human lives. Such conflicts were prevailing all over the world where forests and human populated regions meet. This paper speaks about the problems faced by the farmers due to the interruption of elephants in agricultural fields with reference to Dharmapuri and Krishnagiri District. The paper reveals the reasons behind the Human Elephant conflict (HEC) and suggestions have been recommended to overcome the issues due to the human elephant conflict.

**Keywords:** Elephant, Conflict,

## INTRODUCTION

Elephants are considered as a major destructor of agricultural products in the farms nearby forests. It has been a great controversy that whether elephants are voluntarily entering the farms or it is compelled to do so by indirect and direct human activities. When investigating the farmers about the loss created by the elephant, they say that the elephant enters the fields and they create loss of crops than they consume as food. Some elephants never eat any crops but just collapse the total farm and they just move on their way. But it is impossible to ask the opinion or conducting investigation from the sides of the elephants. If we speak with the activists related to environment, they say that the elephants enter the farms as the results of the following reasons.

- Deforestation
- Lands nearness to forests
- Cultivating crops which are considered favourite to elephants
- In search of water

Forest department advises the people who are near to the forest not to cultivate crops in the fields which are nearby forest regions. But majority of farmers own their lands which are so near to the forests. Their point is that they don't have any other option and their only source is their lands which are nearby the forest region. In Tamilnadu the problem due to elephants are common in the regions which are nearness to forests. The districts of Coimbatore, Erode, Salem, Dharmapuri, Krishnagiri, Nilgiris, Theni, Tiruvannamalai and Tirunelveli are considered to be facing such problems. On the other hand, the department of forest and the wildlife activist groups blames that the villagers are slowly destroying the forests and that is the reason for the invasion of elephants group in their agricultural fields.

Normally elephants prefer to change its habitat from one region to another. During their transportation for one region to other it becomes unavoidable to cross the areas where people live. Even those regions might be forests before few years. So, these could be considered as human errors caused in changing the life styles of elephants. But when considering about the loss faced by the farmers, it could not be reimbursed at many occasions. The losses faced by the farmers could not be totally cleared by the government bodies. Moreover, there is no proper awareness and guidance, which has to be given to the farmers.

Likewise, the conversation will extend in favour and against both the sides. Till now there is no proper solution for this case. Let us consider a particular region which is affected by elephant attacks in agricultural farms. Krishnagiri District, which shares its border with Karnataka and Andhra are always been an evident of such cases and Dharmapuri district which is adjacent to Krishnagiri district which also shares its boundary with Karnataka and Krishnagiri District. Using drums, loud speakers, firing of crackers and making a huge noise are some of the traditional methods followed by the farmers for the past few decades. But these methods are not at a solution to divert elephants into the forest. Instead it makes the elephant herds more violent and they move away from their usual track and will be diverted towards the nearby villages and agricultural fields.

## **REVIEW OF LITERATURE**

Ajay A. Desai and Heidi S. Riddle (2015)<sup>1</sup> stated that there are four factors which were involved in Human Elephant conflict. They are elephant population, elephant behaviour, habitat and human contributions. They have also mentioned that habitat loss and habitat degradation were considered to be a major threat for elephants in Asian Countries. Such Losses and degradation are the results of human activities and encroachment or extension in forest region. Arivazhagan and Ramakrishnan (2010)<sup>2</sup> have categorised the conservation issues into two types. The first type is directly affecting activities like hunting and capturing the elephants. The second type is human activities which affects the elephant habitat like deforestation and other related activities.

## **OBJECTIVES OF THE STUDY**

1. To study about the reasons for Human elephant conflict in the study area
2. To analyse the issues faced by the agriculturists due to the Human elephant conflict
3. To provide suggestions to reduce the ill effects of Human elephant conflict

## **CASUALTIES DUE TO HUMAN-ELEPHANT CONFLICT (HEC)**

Hosur –Krishnagiri is one the major elephant migrating corridor in Tamilnadu. This is also considered as the second important migrating corridor as the first place has been taken over by Munnar-Nilgiris elephant migrating corridor. This elephant corridor covers a minimum distance of one-kilometre breath almost in all the areas. Elephants more than 200 in numbers will be residing in the Cauvery north wild life sanctuary of approx. 50000 hectares which comes under the reserved forest range of Hosur forest division. The elephant herds which comes from the neighbouring Karnataka forest crosses the forests which covers Jawalagiri and Denkanikottai of Krishnagiri District. These elephants further move towards Venkateshwara wild life sanctuary in Chittoor district of Andhra Pradesh.

It is clearly advised by the department of the forestry not to enter the forest during the migration period of elephants. But around 20 people have been died due the elephant attacks in the Krishnagiri region from 2012 to 2015. So, it is evident that despite of the warning from the forest department, the local villagers enters the forest and thereby accidental deaths occur. Recently in late 2018 and at the beginning of 2019, 4 casualties have been registered at the villages in Krishnagiri district which includes a forest guard. On the other hand, 15 elephants have been killed in Chennai-Bengaluru national Highway while they cross the road at nights. It includes a calf elephant which was hit by a speedy car on the highway.

Elephants also die due to poaching and electrocution which occurs by the illegal electric fences in the borders of the forests. Illegal electric fences are now a days becoming a bigger challenge to the forest department as this farmer does this blunder in a very clever manner. Elephants don't have the habit of staying a long time in a particular region. They always have the habit of moving alone in herds. They migrate from one place to another for the following reasons.

1. Requirement of a broader area as their habitat
2. Conflict between dominant & sub-dominant groups
3. Competition among males to attract its mate
4. Search of nutritional food (agricultural crops)

## **ELEPHANT CORRIDORS AT CAUVERY NORTH WILDLIFE SANCTUARY**

Elephant corridors are the track or area which helps to connect the wildlife population which were separated due to the human encroachments in forest region or other human activities like construction of roads and other infrastructure development plans. Such corridors were not only the passage for animals but they were the shelters for many herbivores and carnivores which were larger and smaller in size and also for many plant and reptiles. Krishnagiri and Dharmapuri district shares the North Cauvery wildlife sanctuary which covers the wide forest regions, where the elephant passage and migration seems to be more. The sanctuary comes under Melagiri hills range which connects Bannerghatta national park of Karnataka and extends till Satyamanagalam tiger reserve of Tamilnadu. 504.334 sq. km of reserve forest in the region which is located at the north side of the Cauvery River in the Krishnagiri and Dharmapuri districts were announced as the Cauvery North Wildlife sanctuary by the Government of Tamilnadu on 24 February 2014. The elephant corridor in this region comprises of Thalli, Anchetty, Jawalagiri, Sanamavu and Shoolagiri. The giant mammals cross the Shoolagiri through the National Highway where they face many problems like accidents and attacks by villagers etc. The elephant herds move towards Kaundinya Sanctuary which is located at Chittoor District of Andhra Pradesh. The migration of elephants in the Krishnagiri district was observed by the famous ecologist Dr. Raman Sukumar. The above-mentioned migration track has been observed by him in his works.

## **PROBLEMS FACED BY THE FARMERS DUE TO THE MIGRATION OF ELEPHANTS**

Months between September to March were considered to be the seasons in which the major crops like Ragi, Sugarcane, Banana, Tomato and Groundnuts were cultivated and harvested. The elephants in these regions raid the

fields in both day and night times. In the day time, their damage of crops seems to be minimum, as people will be there in the fields and hence, they could drive away the elephants. But at night time it is not possible for the farmers to drive out the elephant herds. Many attempts resulted in human casualties and high-risk injuries.

The farmers have stated that the compensation paid by the government was not satisfied and they insist on other strong remedial and preventive measures from the government. But many wild life activists argue that the agricultural farms were illegally created near the elephant corridors and hence the elephants enter the fields. Ajay A. Desai and Heidi S. Riddle, (2015) in their book stated that if there is no proper training or guidance about the crop protection methods and tools, the total efforts of the forest departments and non-government organisation will fail.

They have categorised the crop raiding activities of the elephants into three types. They are

1. Opportunistic crop raiders
2. Habitual raiders
3. Obligatory crop raiders

Opportunistic crop raiding happens when there is no proper means of crop protection measures taken by the farmers in their agricultural fields. Here the elephants might have alternate sources for their food but due to the lack of preventive measures from the farmers. Habitual raiders are the opportunistic crop raiders who were not controlled by the farmers and the land holders nearby the forest regions. Opportunistic crop raiders after getting relieved from the fear of human will raid crops and agricultural farms. Obligatory crop raiders are the animals which raid crops due to scarcity of food in their habitat. Deforestation and habitat loss were considered to be the major reasons for obligatory crop raiding. Based on the problems faced by the elephants the quantity of crop damage may vary. If the farmers do not have the knowledge of handling elephants, they would be able to safeguard their crop from such giant mammals.

Ramakrishnan and Durairasu (2002 and 2004), in their studies stated that the elephants never raid the crops like Marigold, Cotton, Green chillies, Onion, Gingili etc. Farmers who were cultivating Sugarcane, Ragi, Tomatoes and coconut farms were facing more losses due to this crop raiding animals. Kumar (2004) evidenced the incidents that the elephants in the region of Valparai raid the ration shops in the nearby villages and also the schools which provide noon meals.

Thirunavukarasu. V (2014) in his work mentioned that the human casualties also occur during the crop raiding of elephants. He has mentioned that 73 cases were registered in between the years from 2005 to 2013, in which human injuries were also added. Such incidents occur during the crop raiding by the animals.

Human casualties are quite common in the agricultural fields which were near the forest regions of Hosur division. Majority of the victims are farmers who were attacked by the elephants nearby their agricultural lands. Casualties are more in Hosur division at Krishnagiri district when compared to Dharmapuri District.

## **REMEDIAL AND SAFETY MEASURES**

The above-mentioned incidents and scenario are the results of lack in awareness about the Human elephant conflict among the villagers who resides and cultivates crops nearby the forest region. Hence there is a necessary to create awareness about the crop raiding mammals and the reasons behind such activities. The following safety and preventive measures which were mentioned by V.Thirunavukarasu (2014) can be made much effective. These preventive measures are implemented in the study area i.e., Dharmapuri and Krishnagiri.

- ❖ Constructing Trenches to prevent elephants entering into agricultural lands and nearby villages
- ❖ Electrical fences which has to be designed with experts to make it more successful and effective and in order to safeguard the elephants from life losses
- ❖ Constructing water pits and tanks for elephants, because it was one of the major reasons for elephants invading the nearby villages in search of water in summer
- ❖ Driving the elephants with the suggestions from forest department

## **CONCLUSION**

Human Elephant conflict is considered to be one of the major issues in the Dharmapuri and Krishnagiri region due to the increase in loss of human and elephant lives. Hence it is essential for immediate and operative actions in order to create a peaceful environment in the regions where forest meets the human habitats. Moreover, blaming the elephants or human beings is not the solution for this issue because both the sides were struggling for their existence. Creating awareness among the human beings and making an interruption free elephants' corridor will be some of the beneficial steps which would take this issue in the positive track. Not only elephants, all the living creatures have their rights to survive in this planet.

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