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Human-elephant conflicts at Gazini border area, Bangladesh and search for a safe journey of life

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Abstract

Elephants, symbol of royalty, symbol aristocracy and symbol mightiness are the largest land living animal in the world. But day by day it is becoming burden for local people to nurse them. Forest & biodiversity conservation is most important for living environment to all living beings. But due to poor management biodiversity is degrading day by day which is alarming for environment. This research examines the real scenario of the Human Elephant Conflict (HEC) in the border areas of Mymensingh forest division specially at Gazini of Nalitabari upazilla of Sherpur District. The stakeholders expressed their views and there are a lot of causes behind HEC that is described in the research. The problem is not for any community or individual rather it is national phenomenon. So the measures, initiatives and the steps will be very systematic and long term as well as durable. This paper also asks a question to the concern authority to make a systematic management to the road of safe journey of life.

INTRODUCTION

In the hilly areas of Bangladesh there were lots of Elephants to roam about. But it is the matter of great regret that elephants are rarely seen in these areas with abundance. Over the decades the number of elephants is decreasing. Habitat fragmentation and habitat loss, scarcity of elephant fodder species, disturbed elephant's corridor, human settlement in the elephant corridor are the major causes of decline of wild elephant population in Bangladesh.

Since food and habitat of elephants are declining day by day due to human activities, there is an increasing tendency to HEC. Elephants then are the causes of destruction of human settlement in and around the forests, human casualties and crop raiding. This is because of higher number of peoples encroaching into the elephant habitats and their populations are reducing day by day. In study area the elephants are immigrant elephants. The elephants of Mymensingh forest division are primarily non-residents elephants moving seasonally from Assam and Meghalaya states of India in search of food.

So the news found in the newspapers of frequent killing of man and crop damage in that areas are not rumor. Before taking any action to mitigate the conflicts, proper scientific knowledge based on the existing conflicts and its pattern is a prerequisite.

This research has been conducted to find out the real scenario of the Human Elephant conflicts of those very areas and to find out the stakeholder's view on HEC. It also aims at finding out the causes of HEC on that particular area and to assess the financial and human life losses caused by the elephants in the forest and surroundings and to find out the mitigation measures.

RESEARCH METHODOLOGY

This study has been conducted in Mymensingh Forest Division at Nalitabari in Sherpur district where HEC is pervasive and most frequent at present. The study area also includes border areas of Nalitabari, Mayakashi village, Panihata village and Trani village. But there also has been taken help from various books, online journals and websites as well as interviews has taken of some employers as a part of quantitative approach. FGD (focus group discussions) along with formal and non-formal interviews have been also conducted. Total number of participants was eighty five. Primary data has been collected by field survey in the study areas and the secondary data has been collected from different sources. Random sampling method has been used here and there after sorting the data has been analyzed with the help of SPSS and excel sheet.

RESULTS AND DISCUSSION

The findings and results of the study can be seen in two perspectives. One goes for about the Gazini Beat area of Mymensingh forest Division and another goes for Human Elephant conflicts. But it has given utmost importance on HEC. One part will show the scenario of Gazini Beat and another will show the causes of HEC, its effects and the way to solve the problems arisen from HEC.

A. Gazni Forest

In Mymensingh forest division there is a famous forest or beat area where everyday a lot of people visit. The name of the forest area is Gazni. Gazni Beat is an important beat of Mymensingh Forest Division which is under Rangutia range area. The distance of the beat is 3.50 km from the range office. Here there is a recreation center that's name is "Gazni Abokash" The whole forest site covers an area of 3896.41 acres. The forest area is complied with eight sub-beat.

B. The Sub-Beats (Mouja) of Gazni Beat

The moujas of the Gazni beat are Noukuchi, Deflai, Gandhigaon, Halcati, Gazni, Bakakura, Bhaluka and Dhanshail. These sub-beats are maintaining the ecology of that area and providing the elephants and humans with the necessities. Though the elephants are not of or from our country, we are to supply foods for them. The migratory elephants come in a group of 60-70 and raid our crops, eat the eatable fruits and bamboo and other herbs.

C. Category wise forestry gardens in Gazni

The gardens can be described with their actual area where Shal forest zone of its total area of 500 hectares; Beat garden of its 53 hectares; Woodlot garden of its total area 849.71 hectares; Agor Garden of its 50 hectares and Jatafor garden of its 1.0 acres are included.

D. Animals found in Gazni Beat

In this beat people can see monkey easily. Apart from it there are wild hen, wild elephant, deer, etc. In this forest there is not elephant but the elephants are migratory elephants. They go to the deep corner of the forest in day and come down at night.

E. Causes Human Elephant Conflicts

In Mymensingh forest division the elephants are non-resident and they come from India. The elephant herds come to Bangladesh mainly to raid crops. The causes of HEC are many. In this very particular area it is found various causes of HEC from the interviewee. They are scarcity of fodder in the border, to full their belly with food etc.

The forest department has created some forests near the Bangladesh- India border lands that now provide shelter to these elephants during daytime(IUCNB,2011). They are taking these measures to address solutions for HEC problem.

F. Effects of Human Elephant Conflicts

a. Human casualty

Human casualty is one of the common results of HEC. In year (2012) this study has found that two men died for HEC in Mayakashi village and another died in Tarani village. From field survey it has found that 2000 to 2012 more than 12/15 persons died for HEC. In Ragintia range the number of injurious people is most.

Table:1 Human casualty, human injury and elephants casualty in Mymensingh Forest Division from 2000 to 2012

Division	Forest range	Year	Human Casualty	Human injury	Elephant casualty
Mymensingh	***Rangtia	2001-2012	10	3	0
	Balijuri	2002-2010	6	9	0
	Modhutula	2005-2010	8	19	4
	Durgapur	2002-2010	5	0	1

Source: Forest range office, 2012.

b. Elephant causality

Reduction of elephants is one of the alarming consequences of HEC. About 7 elephants died due to HEC in other parts of the forest areas not this very in the study area. From the FGD and field study it is found that no elephant casualty happened there.

c. Human injury because of elephant raid

Due to HEC a lot of people are injured. They have neither the strength to protect themselves nor they are strong enough to fight with the elephants. Hence they are to injure. From the interviewee’s comment it is found that in that very area from 2000 to 2012 only three persons are injured for HEC. From an interviewer, Mr Joynal Abedina , “a poor farmer of Mayakashi village of Nalitabari upazilla, Sherpur district died on 8 June 2012 due to HEC. His wife said that day he was going to out the elephants with other persons but elephant killed him. She also said that there had no incident of being injured by elephant. They are now in immense trouble for this incident. Govt. has given them 1 lac taka as compensation. But it is too small for them. They wanted to have a job for their children”.

d. Loss of Human settlement due to elephant attack

Besides loss of human life and injury a large number of houses are destroyed due to elephants attack. A lot of families have been homeless for this incident of HEC, they have been seriously affected by elephant attack.

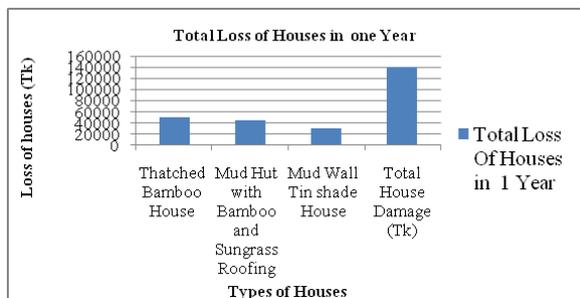


Fig. 1. Total loss of houses in 1 year.

Elephant raid at a very high rate is observed in Rangtia range where 823 homes were destroyed within last one decade followed by Balijuri range where 11 homes have been affected. For raid the affected houses loose about 2lakh taka each year.

e. Loss of cultivated land due to elephant raid

During the study it is found that Raningtia range under sherpur district is the most affected area terms of crop damage due to elephant attack. Hence crop damage is one of the prime consequences of elephant raid. It is seen that if elephants come there will be must losses of crop but other losses may not be happened. About 2072.04 acre crop field have been destroyed by elephants during the last ten years. (IUCNB, 2011). With this issue the financial loss is associated. The participants have revealed that they have to employ guard to protect their crops from elephant raid. They awake overnight to protect their field. They said to the interviewee that the guards lightens fire and create vast sound to out elephants from the crop fields. Modhutula has held the second position in the loss of crop due to elephant raid. About 274.5 acres lands have been damaged by elephant raid with six years.

f. Financial Loss due to HEC

Among the forest division Mymensingh forest division and its adjoining areas suffer and experience the highest financial losses (Tk 6495100). This loss is calculated considering both crop loss and damage of houses. The highest loss is experienced by Rangtia followed by Modhutula, Balijuri, Durgapur etc.

g. Crop and fruits raided by elephants

Elephants raid the ripe and unripe rice paddies most. It raid paddy, sugarcane, potato, corn, sweet potato, seasonal vegetables, cucumber etc. However it raid what it sees in front of it while it is angry.

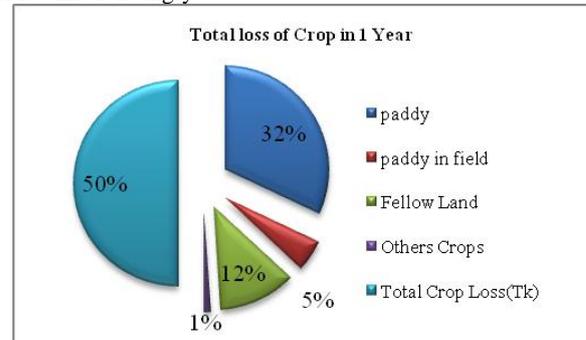


Fig. 2. Total loss of crop in 1 year

We see that almost 50% of the crops are damaged in the Mymensingh forest division especially in Rangtia range. On the other hand various kinds of fruits are favorite to elephants. Elephants like to –jackfruit, banana, coconut, mango if possible to eat, water melon, pine apple guava etc. So they are also attacked by elephants.

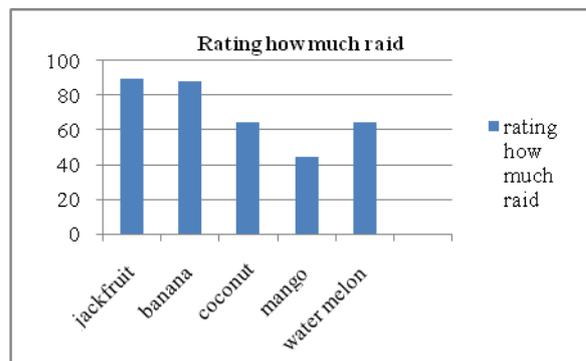


Fig. 3. Fruits which elephant raid most

From figure we can see that jackfruit is raided by elephants most. And the following fruits are also shown in the figure that how much raid by elephants with preference.

REMEDIAL MEASURES

A lot of recommendations and remedial measures have come out from the interviewee while undertaking the field survey. They asked for electricity in that very rural and border areas. We all know prevention is better than cure but in this perspective what they should do is uncertain till now. Therefore some measures can be taken to reduce the effects of HEC. They are given below.

A. Management of habitats

There should be systematic use of land in the border forest areas as the lands are for the roaming of elephants. Habitat improvement can be one of the durable measures to reduce HEC. Natural plants and herbs should let to increase in that area and monoculture crop system should be banned.

B. Seeking alternative barrier for elephants

To prevent elephant physically from coming in the resident area is difficult as well as impossible. Some interviewee said that no one can prevent elephant attack. Trenching method is also fruitless sometimes and electrified barriers are also fruitless

as it is very expensive and elephant can die being electricity burned. So seeking alternative barrier for elephants is a must.

C. *Providing well maintenance of forests*

Maintaining adequate forest and vegetation cover can help. Creating forests blocks at the boundary areas between human settlements, cultivated areas and elephant habitat can be successful method to reduce HEC. Maintaining a rich biodiversity in the border area can also be a part of reducing HEC.

D. *Raise conservation awareness*

Among the people who live around the forestry area should raise consciousness and it can help a lot to mitigate the problems of HEC. At least they should be taught the primary knowledge to live with a strong commonsense knowledge to fight the immediate occurrence with iron hand. All should also know and gain knowledge about the importance of elephants for both ecological and historical importance.

E. *Compensation for victims*

Elephant many a time kill human and damage crops, damage houses and livestock. So to compensate the family where there is a man slaughtered by elephant, government should take immediate measures. To rehabilitate them, should be the prime concern of govt. However the wildlife compensation policy 2010 is recognized as an important, supportive initiative for the elephant victims of the country.

Capacity building through awareness and training, maintenance of habitat quality, develop Elephant Conservation Action Plan (ECAP), introduction of eco-development measures can also be the recommendation or remedial measures to make a safe journey of life for the people who are living in the hilly forest area.

CONCLUSION

Though the number of elephants in Bangladesh is no very significant, in the socio-economic condition of Bangladesh the importance of the existing elephants is vast and pervasive. According to the study the increasing tendency of HEC and the occurrence may be more acute in the near future if no initiative is taken to reduce the problem. Hence the problems of HEC are on the increase. The losses for HEC are in both sides –human and elephants sides. The financial losses from damages from crops, houses, bamboo, fruits, and live-stock can be minimized by taking proper management system of land, habitat as well as by ensuring socio-economic security of the communities. The above management can be for the resident elephants but what will be the solution for this very study area's elephant. For the migratory elephants coordinated efforts can be taken. Both Bangladesh and India should come forward focusing the issue of human life security. Sustainable and durable management system should be introduced there to handle the issue with due care. For other regions steps taken by the government can be successful but in this area the long desire of getting electricity is still a desire. However the people of the border area of Nalitabari upazilla can not start their life with fulltime security or they cannot go to sleep with satisfaction. So long term measures should be taken that will be fruitful so that the people of that area can have the journey of life with full of enjoyment and security. Is it too difficult for a country to ensure security for a minimum portion of people? Can't we make a safe journey of life for them?

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