

Elephants Migration Strongly Impacted on South Bengal District: A Case Study of Bankura District, West Bengal.



Geography

KEYWORDS : Elephant Migration, Extensive Damage, Migratory Elephant, Movement of Elephant.

Asit Kumar Jana

Govt. Approved Part-Time Teacher Department of Geography
Garhbeta College Garhbeta: Paschim Medinipur, West Bengal

Madhumita Jana Pal

. M.A. (Geography), B.Ed.

ABSTRACT

Man-elephant conflicts have increased in Bankura district. As elephant which enter the region from the Dalma hills of Jharkhand stay on for longer every year. The past few years, they stayed on for much of the district Bankura, resulting in crop losses and human death. Bankura district is one of Elephant migration effected district of south Bengal. The district Gazetter and records of British period, it is known that large number of elephants used to make in to the dense forest areas of Bankura district. Mainly cause of elephant migration for such foods. The migratory elephant founds extensive damage of paddy and other cash crops, Injuries human beings, damages houses etc. Continuous migration of elephant assesses the effects of human life in Bunkura district.

INTRODUCTION:

The primary motivation for forest elephant migration is appetite. An adult elephant requires 330 to 375 pounds vegetation daily, which can take 18 hours of steady foreign in a 24 hour period to satisfy. Even a small herd would quickly drain in area of resources without a timely travelling plan. Fortunately, these giant herbivores have developed a diverse dietary range and conservation measures to help protect the forest. Water and food sources along the route often determine the timing and pattern of forest elephant migration.

STUDY AREA:

The district of Bankura is situated in the western part of West Bengal. The district of Bankura bounded by the state of Jharkhand and the districts are Burdwan and Paschim Medinipur, Purulia. The western part of the study area is undulating being an extension of chhotonagpur pletu region. The maximum temperature of this district from 42^oc to 48^oc during summer seasons and minimum temperature during winter is 8^oc to 13^oc. The monsoon period is from mid-June to end of September. The annual rainfall in the study area during 2010 varied from Bankura district in 924 mm. and soil is red, sandy, lateritic types.

area of Bankura districts.

MATERIALS AND METHODS:

hant migration in Bankura and assess the effect of the elephant migration of human life and change their livelihood pattern. Grampanchayet and block development office, forest department, Bankura districts office, and Jab-divisional office of Bankura district. District statistical handbook, collected from the data of elephant migration. Firstly the primary data have been collected by on spot verification, base map of study area, elephant migration route map etc are to be prepared.

RESULT AND DISCUSSION:

Continues migration (mainly Jharkhand) of elephants assess paddy and other cash crops, damaging houses, injuring human being during their onward route Jhargram to Panchet and the Barjara and Sonamukhi region during few years. During study period (2010-2013) the largest herd was 118 elephant observed in years 2010-11, and smallest herd was 25 elephant observed in the year 2007-08. Elephants are entry roué are different, Acrabari, Jhargram, Goaltore are the major area covered by the migratory elephant are Bankura district. During the study period total 925 hector areas damages of crop and 675 house damage, human death occurred in Bankura district due to migratory elephants.

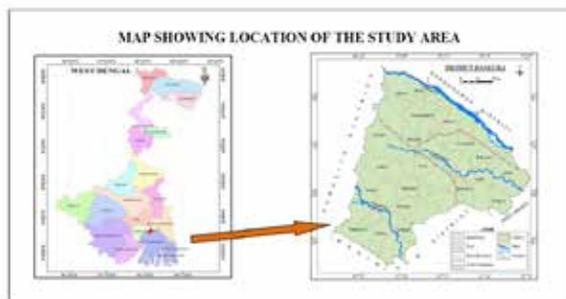


Fig: 1 Location Map of the study area

Table 1: Distribution of Geographical and Recorded forest land in the study area.

Study area	Geographical area (sq. km)	Recorded Forest (sq. km)	% of Record forest
Bankura Distric	6.882	1,482	21.53

Source: Anon 2010 – 2011.

Bankura has the highest percentage of forest area in South Bengal. Elephant migration maximum time Borjora and Sonamukhi

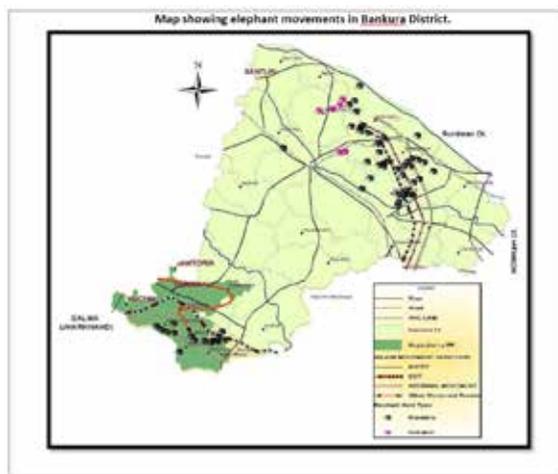
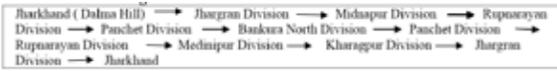


Fig: 2 Elephant Movement of Bankura District

Source: Anon, 2013d.



MIGRATION AND MOVEMENT ROUTE OF ELEPHANTS TO WEST MEDINIPUR – BANKURA AREA:

The usual route of migration:

ROUTE IN DETAILS:

Entry:



Migratory Elephants crossing the Road on Bankura District



Fig:3 Migratory Elephants crossing the Road

RETURN:

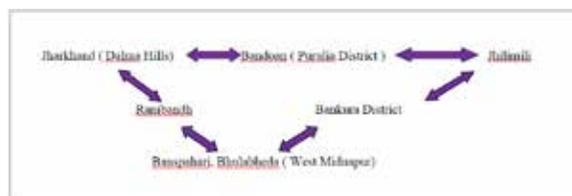
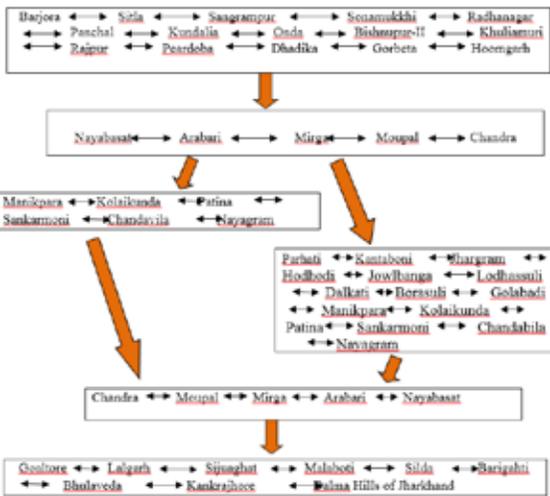


Chart: 2 Chart showing short migration and movement route of herds from Dalma WLS to West Medinipur – Bankura area.

CAUSE:

The main Cause of elephant migration in Bankura district, are-

At present to demand of resource imbalance is primarily created by excess population. So deforestation is common matter, than

in that case the elephants are migrate of the study areas for such foods.

And increase of agricultural land for food supply. The elephant are creating problems of habitation. Crisis of foods is an important cause of elephant migration in Bankura district. Create deforestation is the main problem of crisis of foods. Then the elephant are migrating in village areas. Otherwise minimum rate of rainfall are create the problem of drinking water. Shifting cultivation also important cause of elephant migration. Forest fire, problem of diseases is also important cause of elephant migration. The elephant migration in Bankura district mainly searche of food. The elephants get their most preferred foods that is sugarcane also available in some forest patches they get good fodder.

EFFECTS:

- ❖ The migratory elephant found suitable habitant here causing extensive damage though out the year in Bankura districts.
- ❖ Intercepted with habitation and agricultural fields.
- ❖ Mono-crops and plantation forest are mostly patches, because which are not suitable food for elephants.
- ❖ Agriculturally the Silabati river bank is very fertilitie and most of land under crop cultivation. The migratory elephants are providing foods to this area. Than the extensive damage of paddy and others cash crops.
- ❖ The routes of migratory elephants are gradually encroached by construction resulting in invention of new route for the elephant causing damages.



Fig: 4 Migratory Elephants damage of houses

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CONCLUSION:

Elephant’s migration generally follows the some migratory routes annually. Migration distance very considerably depending on environmental conditions. Elephant’s migration to extend between 20 to 50 km in West Bengal. Elephant migration occurs in the three ways. The migration methods depend on environmental conditions. Elephant’s migration due to destruction in South Bengal areas. The elephant’s migration to the region and excessive damage of the study area.

REFERENCE

1. Anon, 2010. A Paradigm shift in the Elephant depredation in South Bengal. Divisional Report of Bankura (North) Division.
2. Anon, 2013a. Elephant depredation problem in Paschim Medinipur. Divisional Report of Rupnarayan Division.
3. Anon, 2013b. Elephant Problem in Purulia. Divisional Report of Purulia division.
4. Bist, S.S. (2002) an overview of elephant conservation in India. *Indian Forester* 128: 121- 136.
5. Chandra, S., (1996) Man –Elephant conflict south West Bengal.
6. G. W. M. Wittemyer, *Behavioural Ecology and Sociobiology*, 61, 1919 (2007)
7. Hoare, R.E. (1995) Options for the control of elephants in conflict with people. *Pachyderm*, 19: 54-63.
8. Thouless, C.R & Sakwa, J. (1995) Shocking elephants: Fences and crop raiders in Laikipia Districts, Kenya. *Biological Conservation* 72: 99-107.
9. R. Sukumar, the Asian Elephant: Ecology and Management, Cambridge University Press, Second Edition (1993)
10. R. Sukumar, *Elephant days and nights: ten years with the Indian elephant*, Oxford University Press, New Delhi (1994)
11. R. Sukumar, the Living Elephants: Evolutionary Ecology, Behaviour and Conservation, Oxford University Press, Oxford, UK, 1st Edition (2003)
12. Santra, Ajit Kumar, Ashish Kumar Samanta and Subhansu Pan. 2007. Measures adopted to combat Migratory Elephants in South West Bengal forests. *Gajah* 27 (2007) 42 – 47
13. Singh, Anil kumar, Rina Singh and Sushanta Chowdhury, 2002. Human – Elephant Conflicts in Changed Landscapes of South west Bengal. *Indian Forester* Vol. 128, No. 10, Pgs 1119 – 1132.
14. Taylor, R.D. (1993) Elephant management in Nvaminayami District, Zimbabwe: turning a Liability into an asset. *Pachyderm* 17: 19-29.