



## Elephant Survival Region in Surgujia District C.G.

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### ABSTRACT

The study has different area of Elephant are found in Surgujia for study of behavior. The elephant is earth's largest land animal (mammals).Elephants were classified into two species the African (*Loxodonta Africana*) and Asian elephants (*Elephas maximus*).Asian Elephant (*Elephas maximus*) species is found in India and we will study in SurgujiaSambhag Chhattisgarh.

### Introduction

The Asian or Asiatic elephant (*Elephas maximus*) is the only living species of the genus *Elephas* and is distributed in southeast Asia from India in the west to Borneo in the east three subspecies are recognized *E. m. maximus* from Sri Lanka the *E. m. Sumatranus* from the island of Sumatra. Asian elephant are the largest living land animals in Asia.

The genus *Elephas* originated in sub-Saharan Africa during the Pliocene and spread throughout Africa before immigrating into southern Asia. The earliest indications of captive use of Asian elephants are engravings on seals of the Indus Valley civilization dated to the third millennium BC.

Since 1986 *E. maximus* has been listed as endangered by the International Union for conservation of nature (IUCN) as the population has declined by at least 50% over the last three generations estimated to be 60-75 years. Asian elephants are primarily threatened by degradation fragmentation and loss of habitat and poaching in 2003 the wild population was estimated at between 41,410 and 52,345 individual's female captive elephants have lived beyond 60 years when kept in semi-natural surroundings such as forest camps. In Zoos, elephants die at a much younger age and are declining due to a low birth and high death rate.

Carl Linnaeus first described the genus (*Elephas* and an elephant from Ceylon under the binomial *Elephas maximus* in 1758. In 1798, Georges Cuvier first described the Indian elephant under the Sumatran elephant under the binomial *Elephas coerced Jacob Tammi Sumatranus*.

Frederick Nutterchason classified all three as subspecies of the Asian elephant in 1940.

Three subspecies are currently recognized: The Sri Lankan elephant the Indian elephant and the Sumatran elephant. In 1950, Paules Edward Pieris Drainage way described the Borneo elephant under the trinomial *Elephas maximus borneensis* taking as his type an illustration in the national geographical magazine, but not a living elephant in accordance with the rules of the International code of zoological nomenclature *E.m. borneensis* lives in northern Borneo and is smaller than all the other subspecies, but with larger ears, a longer tail and straight tusks results of genetic analysis indicate that its ancestors separated from the mainland population about 30,00000 years ago.

In few of the places the indirect count method was followed for checking their number in study area (Dawson and Dekker, 1992, Rama Krishnan et al.,1991 and Santi Pillai and Suprahman, H. 1986). This involves path counts and frequency of elephant signs for conducting the study on elephants' presence, all the observation were made from a vehicle and through adopting the road -strip count method (Hirst,1969,santi Pillai et al.,2003 to monitor the fluctuations in elephant numbers Ritesh Joshi.

Historically according to Forsyth (1889),Northern Chhattisgarh used to be the home of elephants, However, they become locally extinct in the early part of the twentieth century (Krishnan,1972) more recently elephants entered Chhattisgarh in 1988 from Jharkhand and caused extensive damage to life and property. It was thought that these elephants had strayed away from their original migration routes and therefore hard come to Chhattisgarh by mistake in 1993. The then Madhya Pradesh government captured 10 elephants in order to prevent any of other invasions of elephants into Chhattisgarh just two years after this operation ie. From 1995 onwards elephants have regularly.

### Material Method

#### Study area

The study was carried out 2020-21 the present district headquarters in AmbikapurSurgujaSambhag and there related elephant zone is Sitapur, Badal khol,Ramkola, Bhelkhha, Duigai, Sutari, Bagicha, TamoraPingla, Mainpat, Pratappur, Surajpur, Udyapur, Lakhapur, Batoli, Lundra, Dhowerpur, Raghunathpur and there elephant alert village are Jajawal, Keshar, Bodarpara, Dumarpani Bend this district borders on the state of Uttar Pradesh and

Jharkhand and overlaps the South eastern part of the vindhyaChhattisgarh and region of peninsular India.

The present study was conducted to city Ambikapur of district Surguja of Chhattisgarh. Which is part of the elephant zone of eastern, south eastern and north east Surguja.

Working of the aggressive behavior of Asian elephant (Indian elephant) the Geographical location of the town Ambikapur lies between 23° 37' 25" to 24° 6' 17" north latitude and 81° 34' 40" to 84° 4' 40" east Chhattisgarh in India. The climate of study area is subtropical and temperature ranges between 40°C (115°F) degrees during summer while in winter dips to 5°C (41°F) degrees.

Annual Rainfall is 5.4 mm mainly in monsoons, Forest cover inside and outside recorded forest area. The state has reported extent of recorded forest area (RFA) 59,772 sq km which is 44.21% of its geographical area. The reserved, protected and unclassified forest are 43.14% and 40.21% and 16.65% of the recorded forest area in the state respectively, however as the digitized boundary of RFA from the state covers 52,579.935 sq km. The analysis of forest cover inside and outside this area is given below.

In the 1980s huge swathes of forested land in Odisha and Jharkhand were cleared to make way for the coal industry. As a result, its resident elephants began migrating to the forests of western Chhattisgarh. Here, too the districts of Raigarh, Korba, Jashpur and Surguja saw their lands being requisitioned for coal mining, pushing the pachyderms out from the safety of their dense forests out onto the periphery towards villages faced with a loss of habitat and food, the elephant was attacked by the villagers crops and man-animal conflicts in these surrounding villages have been steadily rising since. According to official records, the human elephant conflict in the state has caused 8,657 incidents of property damage and 99,152 incidents of crop damage in the state between 2005 & 2014 in addition to 198 registered deaths. In 2005 in a bid to reduce these conflicts the state government passed a resolution seeking permission from the central government to create two wild life reserves. The first was the proposed, Lemru Reserve in Korba, which was cleared by the ministry of environment and forests in 2007 but subsequently shelved in 2008 to facilitate more coal mining as its creation would block the extraction and utilization of approximately 10 million tons of coal per year (Subrata Biswas 2016).

Asian elephants inhabit grasslands tropical evergreen forests, semi- evergreen forests, moist deciduous forests dry deciduous forests and dry deciduous forests and dry thorn forests, in addition to cultivated and secondary forests and scrublands. Over this range of habitat types elephants occur from sea level to over 3000m (9800ft). In the Eastern Himalaya in Northeast India, they regularly move up above 3000m(9800ft) in summer at a few sites. In China, Asian elephants survive only in the prefectures of Xishuangbanna, Simo, and Lincang of Southern Yunnan. In Bangladesh, some isolated populations survive in the South east Chittagong Hills.

### **Wild Elephant -**

Wild elephants in Chhattisgarh can soon look forward to paddy in their diet, says the state forest department which has come up with a 'novel' initiative of feeding paddy to elephants in the state this believes the forest departments will reduce human-elephant conflict as the paddy would be placed outside the villages for the wild elephants to feast upon.

Making the paddy available to the elephants will prevent them from entering human habitation and ransacking crops and homes in villages 'Mohammad Akbar' forest minister of Chhattisgarh told Gaon connection. Since the elephants usually visit some areas, it will be easy to feed them and keep them happy he added.

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### **Data collection**

All blocks' areas observations were during August 2020 to August 2021. In few of the forest coverage it was difficult to observe directly the elephants in Surguja forest because of dense sub-tropical vegetation and presence of undulating foot hills with scrub taller than the animal. Thus, the study mixed both direct as well as indirect methods.

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### **Human-Elephant Conflict**

One of the major instigators of human wild life conflict is competition for space. Destruction of forests through logging, encroachment slash and burn – shifting cultivation and monoculture tree, plantations are major threats to the survival of elephants. Human-elephant conflicts occur when elephants raid crops of shifting cultivators in fields, which are scattered over a large area interspersed with forests. Depredation in human settlements is another major area of human-elephant conflict occurring in small forest pockets, encroachments into elephant habitat and on elephant migration routes studies in Sri Lanka indicate that traditional slash and burn agriculture creates optimal habitat for elephants by creating a mosaic of successional stage vegetation. Populations in habiting small habitat fragments are much more liable to come into conflict with humans.

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### **Conservation**

Asian elephants are quintessential flagship species, deployed to catalyze a range of conservation goals in clouding,

1. Habitat conservation at landscape scales.
2. Generating public awareness of conservation Issues.
3. Mobilization as a popular cultural icon both in India and the west.

Project elephant was launched in 1992 by the government of India ministry of environment and forests to provide financial and technical support of wildlife management efforts by states for free ranging populations of wild Asian elephants. The project aims to ensure long-term survival of viable conservation reliant populations of elephants in their natural habitats by protecting the elephants. Their habitats and migration corridors other

goals of project elephants are supporting research of the ecology and management of elephants creating conservation awareness among local people providing improved veterinary care for captive elephants.

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### Suggestion

1. Most of the settlements along mountain forest and elephant, weighting more damage big reason behind it is made from rice wine made from pot and mahua. Their aroma elephant penetrates into homes. So, it should be strictly prohibited.
2. To understand the movement of elephants Radio Kaling best plan. Elephants neck Radio Karting information is applied, the movement can get it easy in future can prevent the loss of life and properly.
3. Do not Obstruct the path of the elephants to come, doing so becomes stubborn and aggressive attack on the people.
4. Elephant in the affected areas chili, ginger, turmeric etc. So that the crops would produce greater amounts of such places could be used to ward off elephants.
5. Elephants from entering the settlement plan should be adopted to prevent the solar facing.

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