

Geographical Study of Ranthambore National Park Problems and Solutions

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Abstract

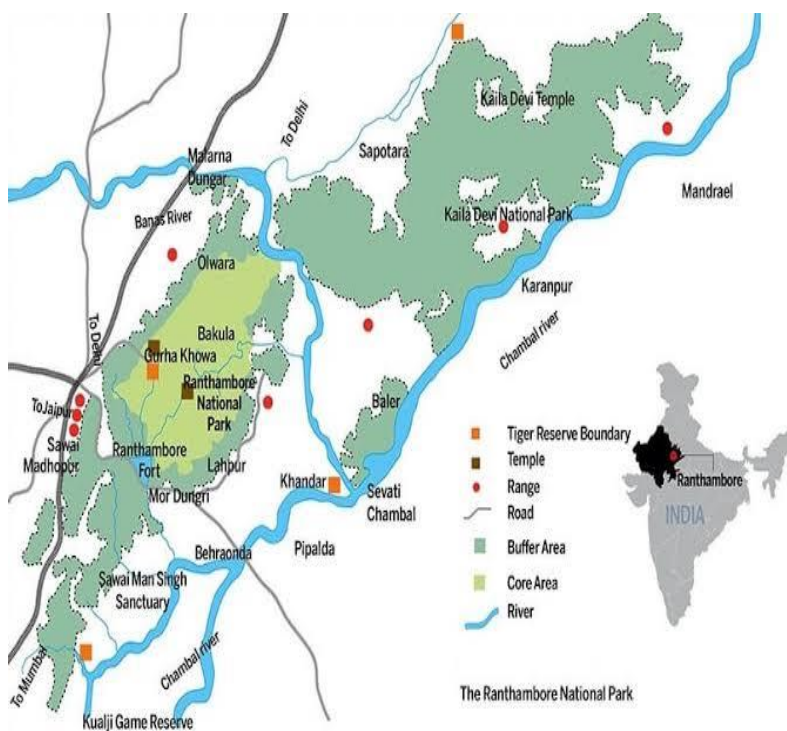
Ranthambore National Park is one of the largest and most famous parks in northern India. The park is located in the Sawai Madhopur district of eastern Rajasthan, about 130 kilometers from Jaipur. Once considered a famous hunting ground of Maharaja of Jaipur, Ranthambore National Park has now become a major wildlife attraction, attracting a variety of wildlife. This research paper is based on the geography and history of Ranthambore. It is important to know the history and geography of the region, because they play an important role not only in the cultural life of the people, but also in the development of the economy.

I. Introduction:-

Ranthambore is part of the major tourist circuit of Rajasthan. It is one of the largest national parks in northern India. It is located 14 kilometers from Sawai Madhopur district but falls administratively under it. It is considered one of the best places to spot the mighty Indian Tiger. Tigers are easy to spot even during the day. It is a major wildlife tourism destination that attracts wildlife enthusiasts and photographers. Surrounded by the Vindhya and Aravalli mountains and the Ranthambore Tiger Reserve, it covers an area of approximately 1410.64 square kilometers, including significant and wilderness areas.

Ranthambore plants are tropical dry deciduous leaves and tropical spines. Due to the mountainous terrain, water is limited to narrow valleys and some lakes. There are many lakes in the park named Padam Talab, Raj Bagh Talab and Malik Talab. Ranthambore is also famous for ruins and forts. It is home to many animal and bird species.

Location Map of Ranthambore National Park



Today, Ranthambore National Park has become a popular tourist destination for jungle adventures in the world. Since it is home to a large number of tigers, thousands of people from all over the world visit Ranthambore National Park and enjoy jungle safari during the tourist season (i.e. October to April). Among the many famous tigers in Ranthambore, "Machli" is the most famous. However, he became weak due to a long illness and died in August 2016, but left behind many legends in his youth. His courage and generosity have inspired many wildlife documentaries, films and television programs. Seeing endangered wildlife close to their natural habitat on a jungle safari is a once-in-a-lifetime wildlife experience.

Objective :-

1. Learn the geography of Ranthambore National Park
2. Clarify the problems of Ranthambore National Park
3. To propose a solution to the problem of Ranthambore National Park.

Hypothesis:-

1. The flora and fauna of the study area of Ranthambore National Park are affected by human activities.

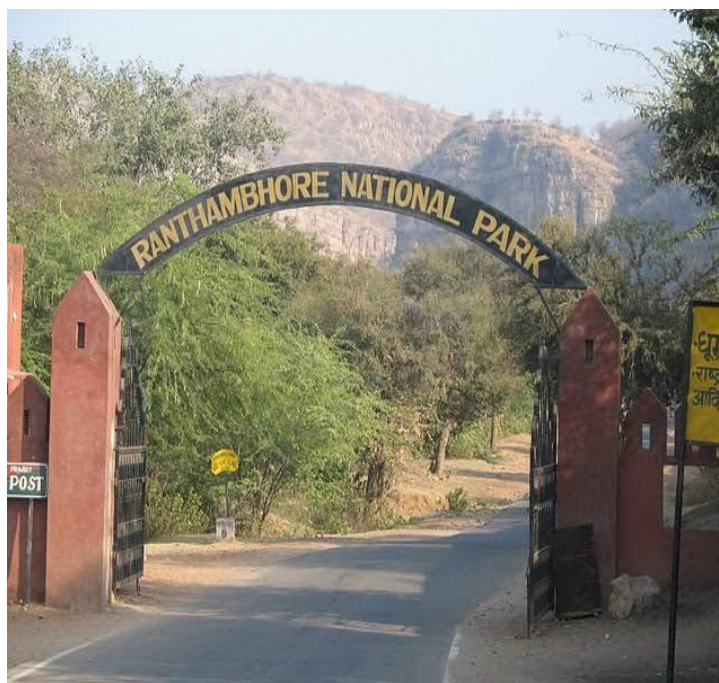
Data Collection:-

This research paper has used secondary data from government and non-government data obtained from Ministry of Tourism and District Collectorate Office.

Geographical Background

Ranthambore is located in the Sawai Madhopur district in southeastern Rajasthan. It is an area between 25°45' and 26°41' northern latitudes and 75°59' and 77°00' eastern longitudes. It is bordered to the south and west by Madhya Pradesh and the west by Tonk district. Stick around. To the west is the Jaipur region. The total area of Sawai Matapur district is 4498 square kilometers.

The entire Sawai Matapur is half flat, half wavy and hilly. The plains in the south and east of the region are covered with slightly sandy, hilly and rugged terrain. It is a rugged region covering part of the Chambal Valley. The northwest and south of the district are located in the Aravalli Hills. Elevation ranges from 450 to 600 meters above MSL. "Bhairon" (527 meters above sea level) is the highest peak of the northwestern Aravalli hills in Bamanwas tehsil. Another famous peak is "Utgir" in the south of the region. The Gangapur part of the subdivision is flat with some broken hills.



Climate

The climate of the region is considered "dry" with a short rainy season. The winter season is from December to March, and the summer season is from March to the third week of June. The rainy season lasts from June to September. The average rainfall amount is 62.28 cm. The maximum daily temperature is 40 degrees Celsius and the minimum temperature is about 3 degrees Celsius (January). While the relative humidity

is 60% during the monsoon season, the rest of the year is dry. The average temperature change is 19.2°C / 34.6°F. The highest humidity rate of the year was seen in August with 77.50%; The lowest level was seen in April with 20.19%. The rainiest day is August with 19.30 days, and the least rainy day is November (0.90 days).

Table 1 : Climatic data of Ranthambore

Months	Avg. Temp. (°C) (°F)	Perceptional Rainfall mm (inch)	Humidity (%)	Rainy Season	Avg. Sun Hrs
January	15.5 °C (59.9 °F)	10 (0.4)	55%	1	9.1
February	19.3 °C (66.7 °F)	9 (0.4)	45%	1	9.9
March	25 °C (77 °F)	6 (0.2)	30%	1	10.7
April	31 °C (87.7 °F)	4 (0.2)	20%	1	11.5
May	34.7 °C (94.5 °F)	7 (0.3)	22%	2	12.0
June	33.7 °C (92.7 °F)	70 (2.8)	40%	6	11.8
July	29.2 °C (84.5 °F)	226 (8.9)	69%	14	8.9
August	27.5 °C (81.5 °F)	217 (8.5)	77%	14	7.6
September	28 °C (82.5 °F)	77 (3)	64%	7	9.4
October	26.7 °C (80.1 °F)	13 (0.5)	43%	1	10.1
November	22 °C (71.6 °F)	8 (0.3)	45%	1	9.6
December	17.1 °C (62.8 °F)	6 (0.2)	54%	1	9.3

Source: Rajasthan census report 2011

Drainage

The basin of Sawai Madhopur consists of rivers such as Chambal, Morel and Banas rivers.

Moral - Sawai flows through Mitarpura, Piplda, Jastana, Shayempura and Rorawad village of Madhopur. The Dunde River, Cancrawley River and Calisier River are the main tributaries of the Morel River. The total basin area is approximately 5491 square kilometers.

Chambal - Also known as Charmwati River in Rajasthan, 376 km long.

Banana - It originates from the Kinno hills of Aravalli (Rajsamand district) and flows northeast of Mewar, meeting the Chambal at Rameshwar village. Dubhi, Shyampura, Lollavall, Bagroli and Sawai pass through Padra towns of Matopur.

Soil

The soil structure here is influenced by rocks from previous periods. Ancient alluvial soil was found in Bamangas in the Paoli region. In mountainous areas, rocky soil and hard soil are found. New alluvial soil was found in Gangapur, Melrana, Barwara district. In the west of the region, there are lateite and loess soils rich in iron but devoid of nitrogen and biogenic carbon materials.

Natural vegetation

Natural vegetation of the region includes Neem, Berry and other trees (*Ziziphus jujuba*), Dhok (*Anogiessus pendula*), Aranja (*Acacia lencopholoca*), Tendu (*Diospyros melanoxylon*), Girjan (*Linea Caromaandelica*).) is found), Salar (*Boswellia serrata*), Khirmi (*Wrightia tomentose*), Suncia (*Buhinia reemosa*), Kairia *tomentose* *Syzygium cumini*), Jamun (*Syzygium cumini*), Bamboo (*Dhandracalamus btricius*), Pila (*Saluadora oleotgyopiteamin*) Sea) other. Grasses and grasses include *Achvranthus aspora*, *Apludamutica*, *Hetropocomcontortus* and *Aristida*.



Wild life

You can also see many animals, birds, reptiles, tiger, wild dog (Dhole), leopard or black panther, sambar, sloth bear, medaka. Birds include budgies, egrets, lake herons, gray doves and purple herons, nooks, laughing teals, whistling teals, spot grosbeaks, peacocks, coots, owls and comb ducks.



Ranthambore National Park Problems And Solutions

People living around Ranthambore Tiger Reserve are mostly farmers and animal breeders. The habitats around the lions are affected by wild animal attacks, poaching, etc. has been exposed to some negative effects such as Tourism is an important source of income for local people, but many people are of the opinion that tourism is not good for the survival of tigers. which already exists. There are serious problems with the "economic development" of the protected area. Based on the above conditions, the lion's zone of influence (ZI)

has been determined as "long" as the area within a radius of 10 kilometers from the legal zone of the borders. Generally speaking, this is the area where most human-animal conflicts occur.

There are no villages in the Ranthambore National Park area, but there are many villages, places of worship and some small churches. village in all other parts of the tiger reserve. All of these areas existed for many years before the area was declared a protected area.

Behind the protected area, the ZI can be further divided into two parts. The first part is about 2 kilometers from the border and is the most important in every respect. These areas are most dependent on forests, and protected areas have the greatest impact on these areas. There are 112 villages in the region. The area is classified as an "ecological development zone". Residents in the area see the border as a place for their own use and get angry when it is banned, but this is slowly changing.

When we go beyond the protected area boundaries, people's expectations of hope decrease, but seasonal dependence on reserves continues. Since the negative impact of the border is not significant in the region, which is more than 2 kilometers away from the border, the opposition of the people in the region to the border is very low.

Protected forest affects the lives of local people in many ways, causing a negative impact of the protected area on local people. The main problem is that development is believed to be stopped because of the protected area; For example, roads, dams, power lines, etc. in the blocked protected area. construction is not allowed. The construction of large enterprises is not allowed in the region. Economic losses occur when wild animals kill crops and livestock destroy animals. Restricting access to protected areas for food and other needs has led to the loss of natural resources and affected livelihoods. Park authorities do not allow locals to visit religious sites in the reserve.



The negative effects of protected areas on humans affect the survival of protected areas, and it is the management of these affected areas that affects survival depending on the protected area. Advantages or disadvantages of tiger reserves.

One of the main advantages of Ranthambore is that the people living around the border are very tolerant towards wild animals, especially tigers. They get along well with the wild animals around them and make a big difference. Their biggest complaint about wildlife is that ungulates are killing crops. They rarely encounter cattle being killed by poachers.

Based on the previously identified and prioritized results, the following objectives have been set:

★ Protect and improve the ecosystem of Ranthambore Tiger Reserve. Aesthetic, cultural and ecological value.

- ★ Create ecotourism destinations outside the main areas.
- ★ Increase the production of grass, trees and other animals in weak areas to reduce the height of the main area.
- ★ Reduce the negative impacts of humans on the protected area, improve the environment in the affected area, and relocate villages from the Project Tiger area.
- ★ Improve and maintain existing pathways to support wildlife expansion.
- ★ Promote socio-economic research and ecological research to achieve the above goals.



Improving the capacity of staff and strengthening the infrastructure through appropriate training programmes.

Degradation of habitat due to erosion of topsoil and siltation of water bodies

The feature of the tiger reserve is that no water enters from outside. All of the water flows across the border into the environment. Therefore, but P.A. The land is changing. Lost forever. This, together with pressure from grazing and wood harvesting, is slowly leading to permanent soil loss in the reserve. In the long term, this will lead to changes in vegetation quality and reduced vegetation, ultimately affecting the quality of the area and wildlife. Erosion of topsoil and siltation of existing water bodies are major concerns. Due to the arid nature of the land, water availability to wildlife may be reduced during times of drought.

Alienation of local people

Ranthambore has gone through various stages of development. Ownership passed from the princely states to the government. Local people are becoming increasingly isolated over time through the state's resource management process. In the past, local people restricted access to the forest. After the Forest and Wildlife Protection Law came into force, free access is restricted. Tourism has also increased in the park. Most of the tourists are foreigners. Of course, they enjoy many features and services after paying the price. This suggests that the park was built for foreigners and local people have no rights.

[i] During the construction of the protected area, the local population was gradually isolated. Twelve villages were moved to the foothills of Ranthambore National Park.

[ii] India's Forest Act and Wildlife Protection Act restrict access to forest resources.

[iii] There are restrictions on collecting and collecting small items in the forest. cattle.

[iv] Only access to national parks is limited, while visitors can enjoy all the facilities and benefits. There is a growing belief that these parks are designed for foreign tourists. The park no longer has a responsibility to society.

[v] Wild animals damage crops and animals.

Propagation of Prosopis Juliflora

In the past, *Prosopis juliflora* was the tree of choice in agriculture in Rajasthan to meet the needs of the state. Cowpea fields growing around tiger reserves cause serious problems for the ecosystem. *Prosopis juliflora* is rapidly spreading in Ranthambore National Park, Sawai Mansingh Sanctuary and Kela Devi Sanctuary. Grazing of goats and sheep helps spread cowpea. About 10,000 hectares of the total tiger reserve of 1.30 million hectares are infected with *Prosopis juliflora*. Unfortunately, *Prosopis juliflora* has been neglected in the past. It grows densely and has thick trunks, so it does not help reduce the height of the forest, which needs good trees or small trees for agricultural products. The area covered by *Prosopis juliflora* is expected to double in the next 10 years. Between 1999 and 2000, 149.5 hectares of fruit trees (*Prosopis juliflora*) were cleared. Local cleansing techniques have been used with mixed results. Despite the lack of protection, propagation from seeds is attractive.

II. Conclusion :-

Located in the heart of Rajasthan, Ranthambore National Park is a sanctuary where wildlife prevails and natural beauty flourishes. For wildlife lovers and adventurers, Ranthambore Safari offers an unforgettable journey to the kingdom of the invisible tiger. The famous Ranthambore safari company Eye of the Tiger offers a unique opportunity to see these beautiful animals in their natural habitat. But like every adventure, Ranthambore Safari has its own challenges. To get the most out of this adventure, it is important to understand and prepare for the challenges involved. Everything from the intricacies of booking a spot to exploring the woods and moving into the actual terrain makes for a complete hunting trip. By being aware of these challenges, visitors can make traveling through the wonders of Ranthambore with Tiger's Eye easier and more enjoyable.

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