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## Planning and Development of Geo-Tourism: A Case Study of Rajapur Tahsil District Ratnagiri, Maharashtra

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### **Abstract:**

Tourism means experiencing a culture, location, language and activities, different from place to place. Maharashtrian culture and heritage have to be preserved, conserved, and promoted to develop tourism. Most villages in Maharashtra having tourism potential to attract tourist but due to insufficient infrastructural facilities, it is lacking behind. For the present study Rajapur tahsil of Ratnagiri district has selected because in Ratnagiri district has number of tourist centers like religious and natural tourist centers, every tourist center has tourism potential during the visits tourist visit to which places comes on the way of their journey. Nowadays, Rajapur is becoming famous for the prehistoric Rock Carvings found here on the lateritic Plateaus so in this research has tried to focus on petroglyphs as geo tourism.

Geo-tourism is a new form of tourism based on the geological environment. Geo-tourism is a form of tourism which focuses on an area's geology and landscape as the basis of fostering sustainable tourism development. It begins with an understanding of the Abiotic environment, to build greater awareness of the biotic environment of plants and animals as well as the Cultural environment of people, past and present.

This work has completed with the help of GIS software, Toposheets, cartographic techniques and statistical method has applied and analyzed result.

**Key words:** Activities, Awareness, Carving, Development, Environment, Heritage, Planning And Development Of Geo-Tourism: A Case Study Of Rajapur Tahsil District Ratnagiri, Maharashtra

### **Introduction**

Geo-tourism is a new form of tourism based on the geological environment. Geotourism is a form of tourism which focuses on an area's geology and landscape as the basis of fostering sustainable tourism development. It begins with an understanding of the

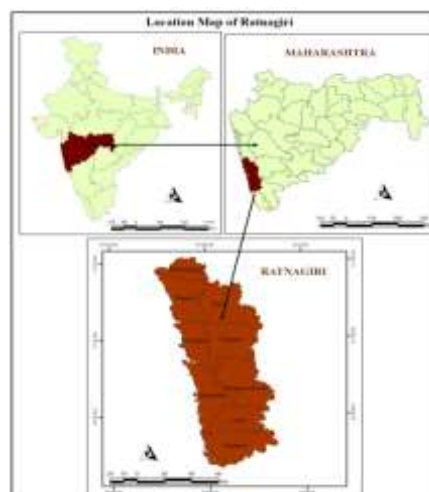
Abiotic environment, to build greater awareness of the Biotic environment of plants and animals as well as the Cultural environment of people, past and present.. Geo-tourism builds on a destination's "sense of place," to emphasize the distinctiveness of its locale and benefit visitors and residents alike. Geo-tourism is a new way to think about travel. In this framework, travel is seen as a positive force in the world we explore and success is measured not just by numbers of visitors, but by length of stay, how they spend their money, and the quality of their experience. Geo-tourism is also a call to action to harness the power of the traveler and invest it in the protection of the world's unique and beautiful places.

"Geo-tourism is a knowledge-based tourism, an interdisciplinary integration of the tourism industry with conservation and interpretation of abiotic nature attributes, besides considering related cultural issues, within the sites for the general public". "A form of natural area tourism that is specifically focuses on landscape and geology. It promotes tourism to geo-sites and the conservation of geo-diversity and an understanding of Earth sciences through appreciation and learning. This is achieved through independent visits to geological features, use of geo-trails and viewpoints, guided tours, geo-activities and patronage of site visitor centers".

### Study Area

Rajapur Tahsil is located in between 16°40' north latitude and 73°31' east longitude. It has occupied area 1201 sq.km. According to census 2011 population of Rajapur is 165882. It was safest harbor and also a huge warehouse during the British period. There are many interesting places in Rajapur tahsil, such as the dense forests, the Konkani wadis in the greenery, Dhootpapeshwar Temple, The Ganga of Rajapur, beautiful waterfalls and the hot water springs near Unhale. Nowadays, Rajapur is becoming famous for the prehistoric Rock Carvings found here on the lateritic Plateaus.

**Map 1: Location Map**



### Objectives

1. To locate sites of Petroglyphs

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2. To find out the flow of tourist to Ratnagiri District from different parts of Maharashtra
3. To suggest solutions for the development of these sites of Petroglyph as a tourist place.

### Data Base and Methodology

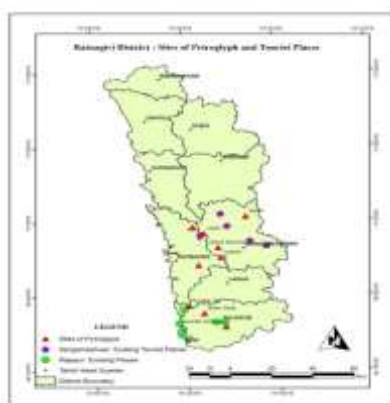
The present study is based on the data; data have been collected from primary and secondary sources. Primary data was collected through field work by visits various destinations in the study region. Three types of Questionnaire was prepared and filled up by the tourist, shopkeepers and local people at the tourist places in the study area.

Secondary data was collected through district census handbook of Ratnagiri district from 1961-2021, Socio-Economic abstract 2012-2015, forest department, Survey of India Toposheet, MTDC site, a booklet from NisragYatri Sanstha, and Newspapers etc. Five years of data collected from different sources to find out the changes in the number of tourists. The flow chart was prepared for finding the tourists visited from the different parts of the Maharashtra state. As well, it also denoted the temporal variation in the tourist from different places. Q- GIS, Arc GIS, MS world software and cartographic techniques and statistical methods are used for preparation of maps and analysis.

### Results and Discussion

There are many interesting places in Rajapur taluka, such as the dense forests, the Konkani wadis in the greenery, Dhootpapeshwar Temple, The Ganga of Rajapur, beautiful waterfalls and the hot water springs near Unhale. Nowadays, Rajapur is becoming famous for the prehistoric Rock Carvings found here on the lateritic Plateaus that is known as petroglyphs. In October 2018, petroglyphs were discovered by archeology department in the Ratnagiri and Rajapur tahsil. These rocks carving took place, might be back to 10,000 BC, depict animals like hippopotamuses and rhinoceroses which aren't found in that region of India. Petroglyphs are images created by removing part of a rock surface by picking, carving, or abrading, as a form of rock art. To see this sites and tourist places in Ratnagiri tourist are visits from different places of Maharashtra.

### Sites of Petroglyphs



Map 1

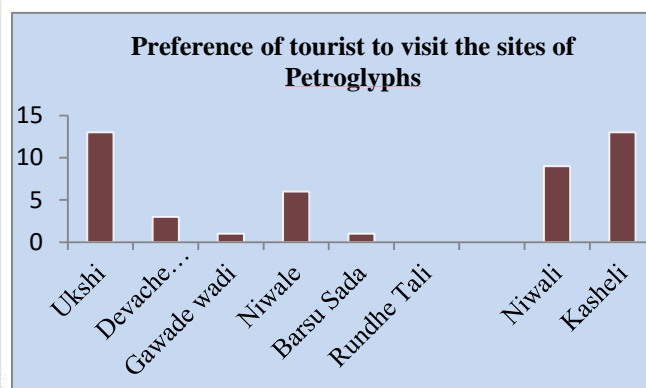


Fig. No. 1

The above figure(fig.1) shows that the information of preference of tourist visit to the sites of Petroglyphs in Ratnagiri, Rajapur and surrounding area, it is clear that most of the people visited the sites of Petroglyphs in Ukshi, Kasheli, Niwali and Niwale

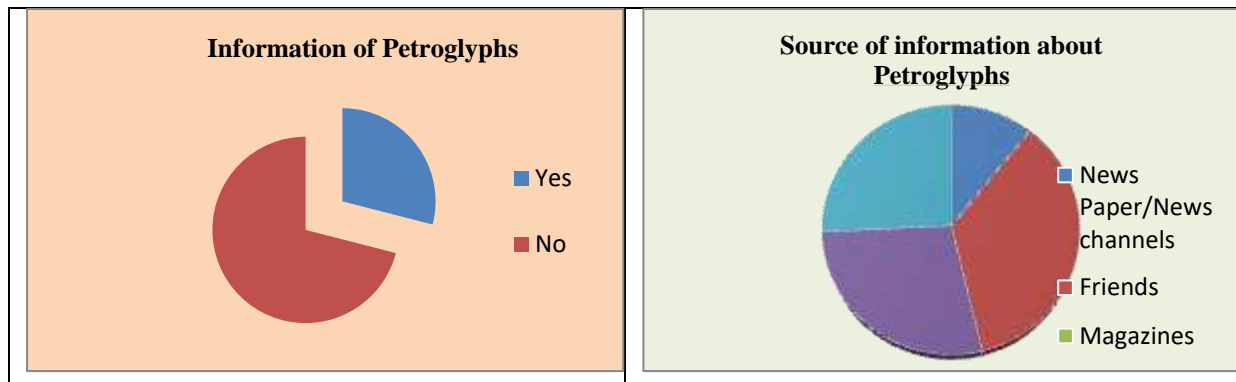


Fig No.2 Fig. No. 3

The above figure (fig.2) shows that the information about the tourist place received from the different sources like newspaper, news channels, friends, internet, magazines, and others source, it is clear that around 35.5percent tourists received information about tourist places through their friends, 25.8 percent of tourists received information from other sources. 28 percent tourist received information from internet and around 10.8 percent tourist received information from newspaper and news channels. No tourist received information from magazines.

The above (fig.3) shows the information about people who know about the Petroglyphs. There is 64.4 percent of people who does not know about Petroglyphs. 35.6 percent of people know about Petroglyphs. From the above data, it is clear that few people have information about Petroglyphs, and more people do not know anything about Petroglyphs. But after excavation tourist number has increased.

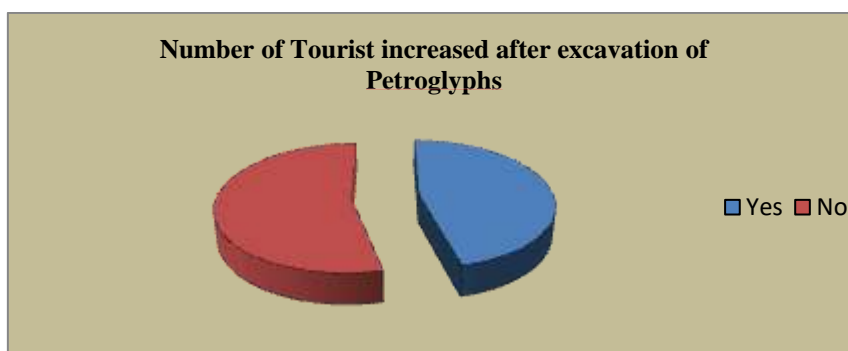
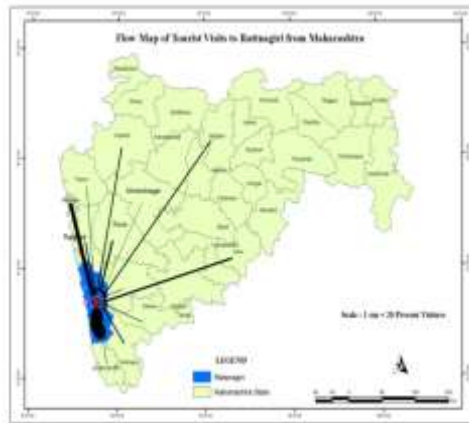


Fig. No.4

**Flow Map**

Flow map is a type of thematic map that uses linear symbols to represent movement. These types of maps can use to show movement of goods, the number of animal species in a specific migration pattern, as well as traffic volume and stream flow. They can also show both qualitative and quantitative data with line symbols of different widths.



Map3 Flow Map

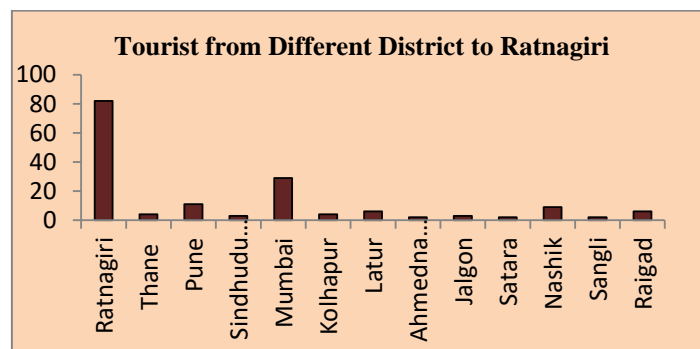


Fig. No. 5

The above diagram and flow map shows the information of tourist visits to Ratnagiri from different districts of Maharashtra. More tourists are visits to Ratnagiri from Ratnagiri district itself. After then the ratio of tourist visits to Ratnagiri from Mumbai. The Ahamdnagar district shows very less flow of tourist to Ratnagiri. From above figure it is clear that the number of tourist visiting to Ratnagiri is more from its nearest districts.

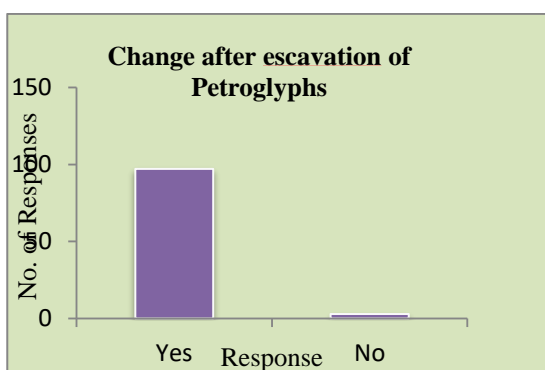


Fig. No.6

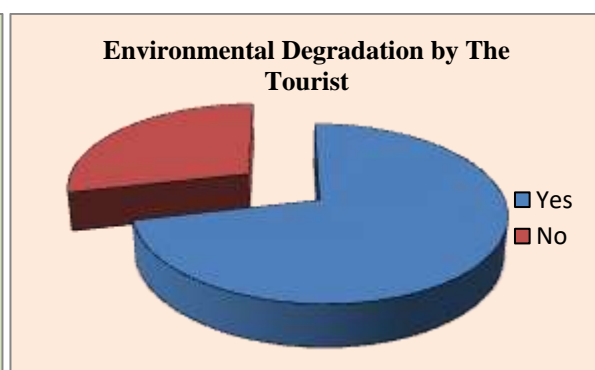
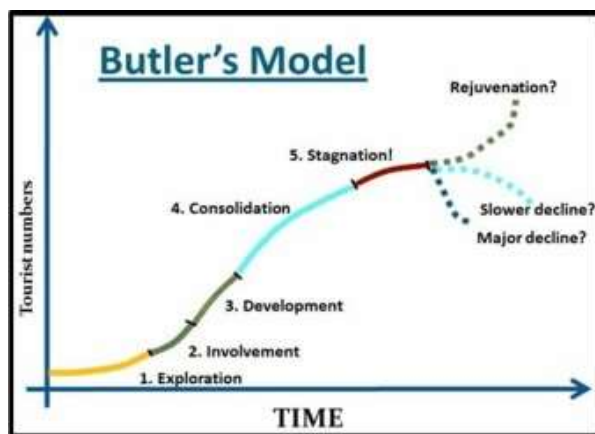


Fig No.7

The above figure gives information about the observation of local people related to the degradation of the environment by tourists. 71.4percent people revels that there is degradation of the environment by tourists at different tourist places and degradation of petroglyphs due to human interference it can destroy easily so we have to protect petroglyphs. 28.6percent people responded that there is no harm to the environment by tourists.

### Butlers Life Cycle model

In the point of view I am trying to suggest this model for the planning and development of petroglyphs because it helps to develop sustainable tourism practices. Butler's has considered six stages to develop any tourism destinations. **Exploration** is the first stage; it marks the beginning of tourism planning. Excavation of Petroglyphs is the first stage of this model, the role of local people, government, and investors are important because **involvement** happens Kasheli is the best example of involvement because local people involved protecting this petroglyphs when numbers of tourist attract to this region and interact with local community. If we provide facilities to the tourist **development** will take place, during the development outsider will take more interest to construct hotels, roads, railways stations, this phase will likely be an increase in marketing and promotion of destination.



Forth stage is **consolidation**, in this stage tourism activity taking major part of local economy, some time they can tie with local economy and tourism industry, but the growth is not that fast anymore because of dissatisfaction from the local people may become manifest. To reach in this it will take time because this region passed two stages.

Next stage is **Stagnation** happens when destinations capacity levels are reached and it begins to lose its status in society. This stage represents the beginning of a decline in tourism. During this time visitor numbers may have reached their peak and varying capacities may be met.

The destination may simply be no longer desirable or fashionable. It is during this time that we start to see the negative impacts of over tourism. There will likely be economic, environmental and social consequences.

### Conclusions:

Most of the visitors don't know about the Petroglyphs in Ratnagiri district. Those visitors are aware about the Petroglyphs through friends about the different sites of Petroglyphs they took interest to visit sites of petroglyphs.

**Suggestions:**

1. Petroglyphs have potential of tourism in Ratnagiri district but the publicity is required from governmental as well as local governing bodies.
2. In present situation Petroglyphs are open without fencing, to protect these petroglyphs there should be proper fencing as well as security is required.
3. The number of restaurants and lodging observed small in number which is insufficient for the tourist. Therefore, number of lodging and restaurants should be increase in this region

**References:**

1. Ghosh Avijit ,Sutapa Mukhopadhyay, SurodeepChatarjee (2021), "Assessment of geo-heritage and prospects of Geo-tourism: An approach to geo-conservation of important geological and geomorphological sites of Puruliya district, West Bengal, India"
2. Nicole Boivin: ( 2015) "Rock art and rock music: Petroglyphs of the south Indian Neolithic"
3. Percy Mabvuto Ngwira, Embassy of the Republic of Zambia and Permanent Mission to UNWTO & UNESCO – "A Review of Geo-tourism and Geoparks: Is Africa Missing out on this New Mechanism for the Development of Sustainable Tourism?"
4. Robert G. Bednarik: (2013) "Myths About Rock Art"
5. <https://www.drishtias.com/daily-updates/daily-news-analysis/the-petroglyphs-of-ratnagiri>
6. <https://www.nationalgeographic.com/maps/article/about-Geo-tourism>
7. <https://www.crowndiscoverycenter.com/Geo-tourism-information>