Vol.3 No.2 (2024) ISSN: 2583-0570

# A STUDY OF THE CULTURAL RESOURCE MANAGEMENT OF THE ROCK ARTS OF SHYMALA HILLS (IGRMS) OF BHOPAL DISTRICT IN MADHYA PRADESH

# Keya Chanda and Dr. Debasis Kumar Mondal

Department of Anthropology, University of Calcutta, Kolkata Corresponding Author: E mail: anth.keyachanda@gmail.com

#### **ABSTRACT**

Shymala hills is situated in the IGRMS (Indira Gandhi Rashtriya Manav Sangrahalaya) of Bhopal in Madhya Pradesh. The hills have 22 rock shelters. These were inhabited by prehistoric people. Ancient paintings are found on the wall and ceilings of the rock shelters. These Rock arts preserve all the tangible and intangible cultural heritage of our ancestors, their daily life, rituals, hunting, believes as well as their thoughts. Chronology of painting style, techniques, colours used are found. In short these rock arts have a colossal impact for all of our past and present as well. So this things need to be protected, preserved and conserved in well manner. These paintings have been eroded day by day. The present paper focuses on the preservation of these precious rock arts in the light of problems and prospects of Cultural Resource Management in India.

**Key words**: Heritage, Rock art, Shymala hills, CRM, Preservation

#### **INTRODUCTION**

The definition of heritage is broadening day by day all over the world. Cultural heritage includes archaeological sites, cultural landscapes, industrial heritage, urban centers, crafts etc. Present focus is given on the arts of rock shelters which includes in the archaeological sites. In India, the concept of preservation of heritage came into existence in the year 1873, which is very early (Mondal, 2014). Management of heritage is a global issue now a days, which plays an important role in the protection of different archaeological sites. A number of legislations are also present in India to protect this archaeological sites (Mondal,2021). India is a land of diverse and rich cultural heritages from prehistoric time period. Early human preferred to stay in rock shelters because these were naturally protect them from sunlight, rain and thunders. During living in the rock shelters they decorated the walls with different kinds of rock arts, which helps us to understand the cognition, artistic activities, experiences and information about the surrounding flora and fauna, social and cultural aspects of our ancestors.

Rock art is our national wealth and people like to experience the aesthetic natural beauties of both these rock arts and rock art shelters within its natural environment (Srivastava 2021). World's three

Vol.3 No.2 (2024) ISSN: 2583-0570

largest concentrations of rock art is present in Australia, South Africa and India. Rock arts are distributed unevenly in the whole world. Different kinds of motifs have been discovered and many of them are still being found by the rock art researchers. Rock arts are the evidence of our ancestors' cognitive and artistic views. This gives visual information about the beliefs, technologies and life's of the distant past. In India rock arts are found in many parts from north to south. But the largest concentration is found in central region mainly in Uttar Pradesh, Rajasthan and Madhya Pradesh (Chakravarty & Bednarik 1997). It helps to understand the spiritual relationship of prehistoric human with their surrounding landscape. It also help to shed light on daily life of prehistoric human. Rock art help to study and analyze the cognitive evaluation of the human. Digital image, digital photography, digital image processing, GIS (Geographical Information System), and 3D modelling are some of the advanced tools which help in better understanding and giving new dimensions in rock art studies. Rock art studies in India were started in 19<sup>th</sup> century (Agarwal 2021). Preservation of Rock arts is very much important because rapid destruction happens due to lack of awareness of visitors in different rock shelters of India. From many decades threats from vandalism is also seen in many rock art shelters. Except that growth of fungi, bacteria and algae in the walls and the ceilings results into stains. Constant superimposition and waterborne chemicals are also threats to the open rock shelters (Malla 1999).

Shyamla hills is present inside IGRMS (Indira Gandhi Rashtriya Manav Sangrahalaya) which is situated of Bhopal district in Madhya Pradesh. It is also one of the largest museums in India with 12 indoor galleries and 8 open-air exhibitions. With pre-historic rock art shelters, Veethi Sankul, River valley culture, reference library, Desert village, Mythological trial, Sacred groves, Himalayan village, Costal village this place has not only aesthetic views but also depicts the story of our prehistoric people and contemporary people. This museum gave an opportunity to visit the rich heritages of India. Present paper focuses on the Cultural Resource Management (CRM) of the rock shelters and rock arts of Shyamla hills, which is situated inside IGRMS. When we talk about rock arts heritage two things come across. One is rock shelters and the other is the rock arts. Rock shelters of Shyamla are naturally made of big stones. So the erosion or destruction of those rock shelters are gradually very long process. But when it comes about the rock arts which are present inside those rock shelters, its destruction happens faster due to varieties kind of natural agencies and manmade reasons. These rock shelters not only providing rich cultural information, these can help in the economic development of our country with holding hands with tourism.

# **OBJECTIVES**

1. The present study focuses on the cultural Resource Management of Shamla hill's Rock arts heritage. It also focuses on the agents of fading of those paintings.

Vol.3 No.2 (2024)

ISSN: 2583-0570

2. There is also an aim to find out alternative remedies of preservation of these rock arts.

# LITERATURE REVIEW

Rock art study was initiated in India by Archibald Carllyle in 1860s, in the northern Vindhya Ranges, which is situated in the Mirzapur district of Uttar Pradesh (Carllyle 1885). V.S. Wakankar is considered as "father" of Indian rock art studies. He discovered Bhimbetka rock art shelters in the year 1957. Not only that he also worked on both the rock arts and excavation in Bhimbetka (Wakankar 1975). Yashodar Mathpal showed three broad periods of rock art studies in Indian. Rock art research studies first from 1867 to 1931, second from 1952 to 1972 and the third which prevails still now (cited as Hussain 2015). Srivastava in 2001 studied rock arts and tourism development and created model with untapped and unexplained rock art tourism in Hadoti of Rajasthan in India (Srivastava 2021). Emphasis is mainly given on the monuments or historical sites in case of management. Prehistoric sites get less attention about it. Cultural heritage management on the prehistoric sites of Odisha is done by Dr. Debasis Kumar Mondal (Mondal 2014).

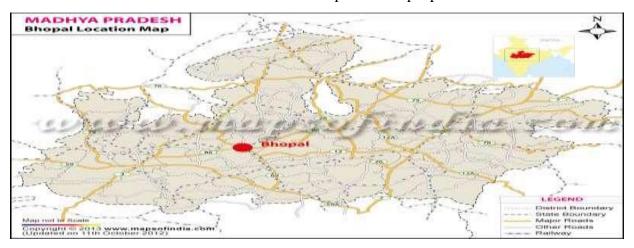
#### **METHODOLOGY**

A proper methodology is needed for scientific research work which initially starts with gathering knowledge about the previous work of the research topic. It is also necessary to find place of work. Different kinds of procedures and techniques and methods are used to collect data. First step is exploration. Exploration work needs to organize a camp according to time and money. Except that a good research team with necessary equipment is also necessary. After fulfilling all the procedures, actual fieldwork with exploration was started mainly with walking, reaching and careful observation of the rock arts of that place of work. After observation photographs should be taken. Satellite map and Google Earth Time lapse map of more than one decade is compared to notice the surrounding vegetation. Photography is very much reliable, authentic and scientific method for recording as well as documentation rock arts. Photographs help to get the accurate size and colours of rock arts. Those precious rock arts have been faded day by day due to natural agencies, prolonged exposure to sunlight, rain and dust and for their long age as well. Present paper focuses on the deterioration

causes and suitable remedies to protect this rock arts. The agents of destruction also have been observed.

#### AREA AND THE SITE

IGRMS or Indira Gandhi Rashtriya Manav Sangrahalaya is situated in the Bhopal district of Madhya Pradesh with covering an area which is more or less 200 acres. The whole IGRMS also situated in the prehistoric landscape. In one part of that sangrahalaya more or less 22 rock shelters are present with presence of rock arts both in the ceiling and the walls. These rock arts are present at the top of the Shyamla hills. It's longitude is 23<sup>0</sup>14'16" N and latitude is 77<sup>0</sup>23'06" E. The length of these rocks shelters where the rock arts are present is more or less 407.94 m (Source-https://earth.google.com). Near the rock shelters there is Van Vihar National Park Bhopal and upper lake which were main resource of flora and fauna for prehistoric people.



(Map showing the position of Bhopal in Madhya Pradesh and the position of Madhya Pradesh in India) (Source- www.mapsofindia.com)



(Map showing position of Shyamla hills, 23<sup>0</sup>14'16"N; 77<sup>0</sup>23'06"E) (Source- https://earth.google.com)



(Map showing the length of the top of the Shyamla hills where rock shelters and rock arts are present) (Source- <a href="https://earth.google.com">https://earth.google.com</a>)

# **DATA COLLECTION**

Present data is collected through photographs to analyze and understand the management of those rock arts. These pictures of Shyamla hill rock shelters are also compare with Bhimbetka rock shelters to understand the difference of preservation and documentation between these two places. Map is also collected to compare the development process surrounding these rock shelters, which directly or indirectly affects the rock arts and rock shelters as well.

#### **OBSERVATION**

After visiting both the rock shelters of Bhimbetka and Shyamla some differences and similarities about the preservation of these rock shelters have been found. Barricades are present in front of the rock shelters of Bhimbetka. This provides both the rock shelters and rock arts protection from unnecessary interaction with visitors (Plate 1). Where as in Shyamla hills of IGRMS, the rock shelters are not covered with Barricades. So the rock arts can be touched and contamination can happen (Plate 2). Placards, notice, direction boards, maps are present everywhere in Bhimbetka. These things are helpful to identify these rock shelters and written records also help to know the cultural content of any particular rock shelter of that area (Plate 3). But in Shyamla hills rarely found anything like that. Only nine boards were found with rock arts drawn in each rock shelters respectively. Except that there is no information about those art and the cultural phases as well (Plate 4). In Bhimbetka concrete roads, pave made lanes are present from one rock shelter to another and there is direction map also (Plate 5). But when it's about Shyamla, due to its position on the hill, there is a very small passage for visiting (Plate 6). The only thing, have found similar in both the rock shelters are that they had security guards present, who were doing continuous surveillance about the rock shelters.

Once these rock arts were darker red in colour. But now a day these became more faded, due to lack of protection and preservation of these rock arts and those rock shelters as well. More over environmental effects are also playing a vital role in the process of gradual destruction of these rock arts. Weather has a vital role in the process of destruction of these rock arts day by day. Long exposer to the sun both the rock shelters and the rock arts undesired distortion (Plate 7). More over due to water soaked in the walls and the ceilings during rainy season, helps to grow mosses. These mosses die in less humid times. But impression of those mosses left and destroys the surface of rock arts (Plate 8).

#### ANALYSIS OF MAPS

Maps are taken from "Google Earth Timelapse" from 1984 to 2020. The gap from one satellite map to other is taken 10 years. This shows, how due to modernization process and increase of population the scenario surrounding the Shymala hills of Bhopal is changing gradually. The effect of increasing population increase pollution and increasing pollution is destroying these heritage of our ancestors gradually. Due to rapid urbanization process the pollution rate of the area has been increased. There was an explosion (Bhopal Gas Explosion), which happened in the year 1984 due to methyl isocyanides gas escaped from an insecticide plant. This disaster happened not so far from the IGRMS and due to the bad effect of that explosion the colour of the rock arts have faded day by day. Except Van Vihar National Park (because of its identity as national park and protected area) the rest of the surrounding area of Shymala hills are changing rapidly in between 2014 to 2020 (https://earthengine.google.com/timelapse/).

#### RESULTS AND DISCUSSION

After comparison of both the rock shelter (Bhimbetka and IGRMS Shyamla hills) this is clear that the rock shelters of Bhimbetka are in much better condition. Although agencies of weather are also affecting the rock shelter, but different initiatives are helping to sustain these rock shelters and the rock arts. When it comes about the IGRMS Shyamla Hills, lack of protection and promotion is visible. This is giving threats in the process of sustainability of this particular rock shelters. Although it is present inside IGRMS, but due to its position, it is difficult to access. Lack of access willingly and unwillingly causing lack of awareness, and communication to promote and protect these rock shelters.

Vol.3 No.2 (2024)

ISSN: 2583-0570

#### SOME SUGGESTED REMEDIES

- ➤ <u>Having fine system:</u> People are reluctant and less aware about the importance of these priceless heritages. The fine system can play an important role. If contamination from touching any rock art on the walls or ceilings have to be stopped. This kind of initiatives help a lot to protect this rock shelters and rock arts as well.
- Making visitors aware (throwing garbage, graffiti): Visitors who come to visit rock art sites some times are not aware. They throw garbage here and there. Write on the cave walls which is known as graffiti. So making visitors aware is also an important task.
- Well communication: Well communication in the sense of transport and technology is very much needed when it comes to the protection of these rock art sites. Because well communication will bring lots of tourists, visitors here and that will also spread the information and get attention about those heritage sites to the world.
- Spreading more information about rock art sites: While studying tool, pottery or artefact we have to apply experimental archaeology, ethnography to understand about the cognitive thinking of our ancestors. But rock arts are those things which are expressing our ancestors' cognition, landscape, flora, fauna, rituals, economic practices without putting effort. We can visualize this with our open eye how prehistoric people used to spend their daily life. So, spreading more information about the rock art sites is also very necessary to save these colossal heritage of rock arts. These could be done by arranging seminar and workshops on regular basis.
  - Having digital display or placards, posters of information in front of every rock shelter: Having digital display in front of each cave or rock shelters play a vital role when it comes about rock art. Those display help visitors to know about the importance and gathering knowledge of those places without any efforts. But if digital display is expensive, there is a substitute of it, which is placard.
- ➤ <u>CCTV (Closed-Circuit Television):</u> CCTV camera is one advance technology which can provide surveillance and security to all those rock shelters which are present there. Security guards can use this technology by sitting in one place. They do not need to watch every rock shelters again and again and they can do their work more conveniently.
- Sustainable tourism: Sustainable tourism is one thing which can help to sustain the heritage sites by the process of increasing tourism. By these increase tourism and tourists the economic development of any place can happen. These economic development and increased money, development of that particular heritage site can be done. So tourism can play a vital role in the sustainability of these heritage sites for our future generations.

Vol.3 No.2 (2024)

ISSN: 2583-0570

Vol.3 No.2 (2024) ISSN: 2583-0570

- ➤ The environment of the area should be protected. Because the more green environment protect these rock arts from direct sunlight.
- ➤ Commodification: The use of heritage for the economic development of local people is one of the positive thing which can help to provide a long life of all kind of heritages. Although it has some negative effects also. Sometimes heritages loose its authenticity and sanctity due to the process of commodification. Except that commodification plays a positive role in the sustainability and continuity of endangered heritages.

# **CONCLUSION**

Both the rock shelters and the rock arts are our heritage. These rock arts are not only for the aesthetic beauties or eye pleasuring scenario. These are the treasures which are left by our ancestors to know the past. These rock arts not only says about the ritualistic practices, flora, fauna, and landscape of past but many more other things also. These rock arts can be preserved for a longer time by sustainable tourism and commodification. These are the things which bring some light in the protection of the rock art sites and the economic development of the local people and their employment as well. Although these have some negative effects also. When to much tourists come they make these places full of garbage and touches rock arts. Therefore well surveillance is always needed to protect these rock arts for our future generation.

# SOME INSTITUTES ENGAGED WITH THE MANAGEMENT OF ROCK ARTS.

Here are some institutions who are engaged in the preservation and protection of these rock art shelters and these are- RASI (Rock Art Society of India) was founded in 1990 in a national conference, which was held in Dayalbagh Educational Institute. It works for rock art discipline with more than 200 members and is the member of IFRAO (International Federation of Rock Art Organization). Then comes UNESCO (United Nations Educational, Scientific and Cultural Organization) also works for rock art studies. They make World Heritage List. And in the year 2003 they inscribed Bhimbetka's painted rock shelters on World Heritage List (Ota 2008). IGNCA (Indira Gandhi National Centre for the Arts) in the year 1993 had taken an initiative jointly with France for the purpose of conservation and study of rock arts (Malla 1999). ASI (Archaeological Survey of India) also took part in the preservation process of rock arts in India.

#### **REFERENCES**

- Agarwal, H. (2021). Rock art research and recent trends in Indian context. *Vidyabharati International Interdisciplinary research Journal* 13 (1), 659-663.
- Bednarik, R.G. (2002). The development of Indian rock art studies since Independence. *Indian Archaeology in retrospect*, 1,353-375.
- Carllyle, A. (1885). Report of tours in Gopalpur and Ghazipur. *Archaeological Survey Report22*, Calcutta.
- Chakravarty, K.K. and R.G.Bednarik. (1997). Indian rock art and its global context. *Motilal Banarsidass Publishers Private Limited*, Delhi, India.
- Hussain, S.M.G. (2015). Rock art history of India and its importance in Indian archaeology: An empirical study. *International Journal of Management, Technology and Engineering*, 5.
- Malla, B.L. (1999). Conservation and management of rock art sites in B.L.Malla (Ed.) *Conservation* of Rock Art. IGNCA.
- Monadl, D.K. (2014). A study of prehistoric cultural heritage and management in Odisha, India.

  Archaeological Heritage Policies and Management Structures. *Archaeopress Publishing LTD*.
- Mondal, D.K. (2021). Problems and prospect of management of archaeological sites in West Bengal. *Journal of Heritage, Archaeology & Management (JHAM)*, 1 (1).
- Ota, S.B. (2008). Bhimbetka. Archaeological Survey of India.
- Srivastava, S. (2021). Rock art tourism development and conservation challenges. *South Asian History, Culture and Archaeology*, 1, 89-101.
- Wakankar, V.S. (1975). Bhimbetka-The prehistoric paradise. *Prachya Pratibha*, 3 (No.2), 7-29.

#### WEB SOURCES

https://indianculture.gov.in/MoCorganization/indira-gandhi-rashtriya-manav-sangrahalaya (accessed on 7.3.2023 at 3:10 pm)

https://rockartindia.org/the-rockart-society-of-india-rasi (accessed on 7.3.2023 at 3:30 pm) https://www.britannica.com/event/Bhopal-disaster (accessed on 7.3.2023 at 3 pm)

# **SOURCES OF MAP**

https://earthengine.google.com (accessed on 8.3.2023 at 11 am)

https://earthengine.google.com/timelapse/ (accessed on 8.3.2023 at 11 am)

www.mapsofindia.com (accessed on 8.3.2023 at 11 am)

https://www.google.com/search?q=bhopal+map&sxsrf=AJOqlzVj1KKcFlBSMrSt9-

<u>17mP05d12yoA:1678093076244&source=lnms&tbm=isch&sa=X&ved=2ahUKEwjWj9bt98</u>

b9AhVfUWwGHZDWCfUQ\_AUoAXoECAEQAw&biw=1366&bih=657&dpr=1#imgrc=uIIs5C

WgTaW9aM(accessed on 8.3.2023 at 11 am)

# **PHOTOGRAPHS**



Plate 1: Barricades in Bhimbetka rock shelters



Plate 2: Barricade is not present in Shyamla hills Rock Shelters



Plate 3: Bhimbetka description boards



Plate 4: Shyamla hills



Plate 5: Paved lane of Bhimbetka



Plate 6: Due to narrow passage and vertical position making lane is not possible here.





Plate 7: Faded rock arts of Shyamla hills





Plate 8: Dark stains in the cave ceilings and walls of the rock shelters of IGRMS