Prehistoric Archaeology of Alwar District, Rajasthan

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Received: 11 July 2020; Revised: 25 September 2020; Accepted: 07 November 2020
Heritage: Journal of Multidisciplinary Studies in Archaeology 8.1 (2020): 983-1019

Abstract: *Since the British period, north-east Rajasthan has been a centre for archaeological research. In the last two decades, a number of new Stone Age sites are reported from Alwar district located in this area of the state. Most of the tools are reported from surface collection. All of these sites are located in open but some of the tools are collected from surface of the shelters. Some of the other sites are located either on the banks of river or any associated nala of the same. This article throws light on the pre-historicity of the Alwar district, also incorporates about the rock art sites located within the area.*

Keywords: Rajasthan, Alwar, Prehistory, Palaeolithic, Mesolithic, Tools, Rock Painting

Introduction

Rajasthan, the state was formed on 30 March 1949 with Jaipur as the state capital. Once known as the 'Land of the Kings', the state still retains the glory and richness of those times with its marvellous monuments, colourful traditions and customs. The panoramic outlook of the state is simply mesmerizing; with lofty hills of Aravalli's - one of the oldest mountain ranges of the world and the golden sand dunes of the Great Indian Desert - the only desert of the sub-continent with one edge paralleling the Sutlej - Indus river valley along with its border with Pakistan. It borders Pakistan to the west, state of Gujarat to the southwest, Madhya Pradesh to the southeast, Uttar Pradesh and Haryana to the northeast and Punjab to the north. No other region in the country is a conglomeration of so many paradoxes. Rajasthani and Hindi are the widely used languages in the state. The state covers an area of 342,269 km². This state is located in the north-western part of India between 23° 3′ to 30° 12′ north latitudes and 69° 30′ to 78° 17′ east longitudes. It has a rhomb-shaped land with north-south and east-west diagonals, the former measuring about 830 km and the latter about 860 km in length.

The most important geographical feature of Rajasthan is the Aravalli mountain-range which runs through the state from south-west to north-east. It divides the state into two unequal parts with clearly distinguishable features. Its north-western part lies in plain sand hills of Marwar, Jaisalmer and Bikaner. Eastern and south-eastern parts are covered by forests and plains of black loam, furrowed by the perennial water streams of Mewar, Hadoti, Jaipur and Alwar region. The Alwar district (Figure 1) is situated in

the north-east of Rajasthan between 27° 4' and 28° 4' North Latitudes and 76°6' and 77°13' East Longitudes.

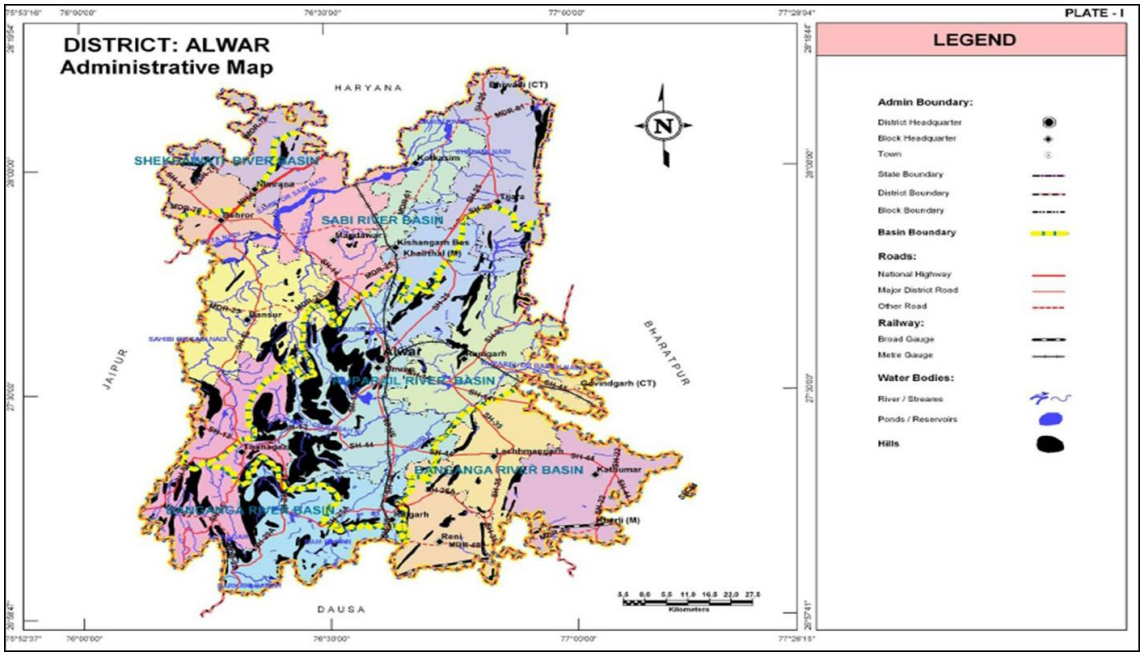

Figure 1: Administrative map of Alwar district (Courtesy: PHED, GOR)

Historical Background

There are many theories about the derivation of the name Alwar. Cunningham told that the city derived its name from the Salva tribe and was originally Salwapur, then, Salwar, Halawar and eventually Alwar. According to another school it was known as Aravalpur or the city of Aravalli (A hill system dividing Rajasthan roughly into third and two-thirds). Some others told that city is named after Alaval Khan Mewati. A research conducted during the reign of Maharaja Jey Singh of Alwar revealed that Maharaja Alaghraj, second son of Maharaja Kakil of Amer (old seat of Jaipur state) ruled the area in the eleventh century and his territory extended upto the present city of Alwar. He founded the city of Alpur in 1106 Vikrami samvat (1049 A.D.), after his own name which eventually became Alwar. It was formerly spelt as Ulwar but in the reign of Jey Singh the spelling was changed to Alwar.

Drainage Pattern

Though, there are some rivers in this region named as Ruparel, Sahibee, Chuhar Sidh, Landoha and Banganga that flow through the district and carry the drainage of the hills, there is no perennial river. There are about 150 lakes and water-tanks in this area. The main water reservoirs are Jai Samand Bund, Siliserh Bund, Baleta Bund, Mansarowar Bund, Vijay Sagar Bund, Training Bund, Atariya Bund, Deoti Bund, Mangalsar Tank, Tijara Bund and Jai Sagar Bund. The district has four important springs at Narayani, Pandupol, Bhartrihari and Bani-Talbraksh. The terrain of Aravalli range is quite hilly (Figure 2). Amounting to both these facts, it has a dense forest area.

The Sariska sanctuary is located here which has a large variety of animals, particularly Tiger, Panther, Sambhar, Nilgai and wild Boar dwelling in the wooded hills with picturesque surroundings. Thus, the ecology of this reason is very conspicuous to the evolution of human civilization. The ridges of Aravalli enclose among them fertile valleys and high table lands which are reserved forests thickly wooded with spontaneous growth used for fodder and fuel and abound in hunts of wild animals.

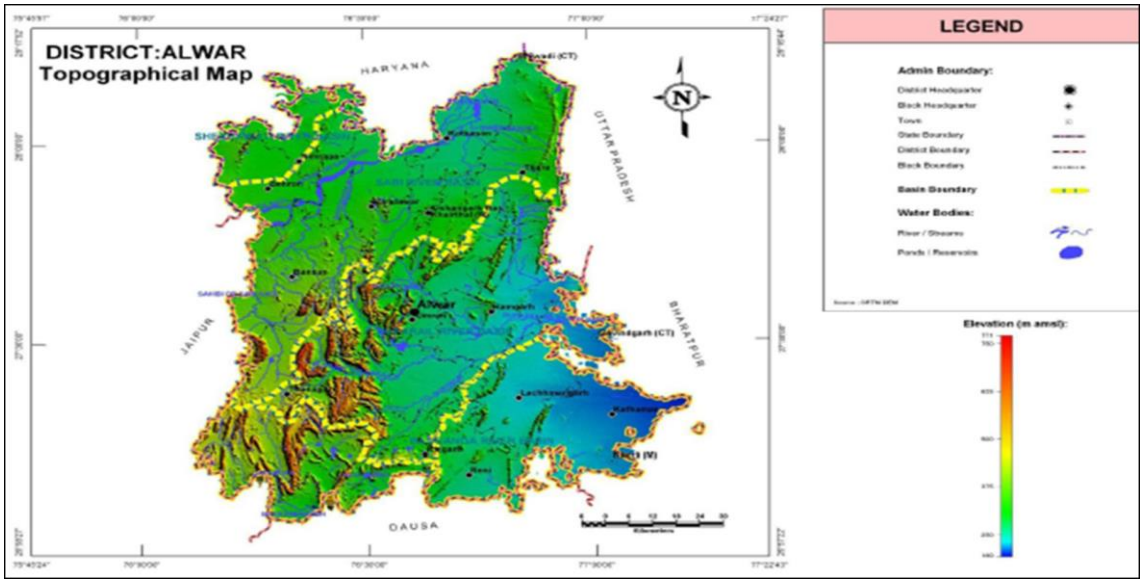

Figure 2: Topographical map of Alwar district (Courtesy: PHED, GOR)

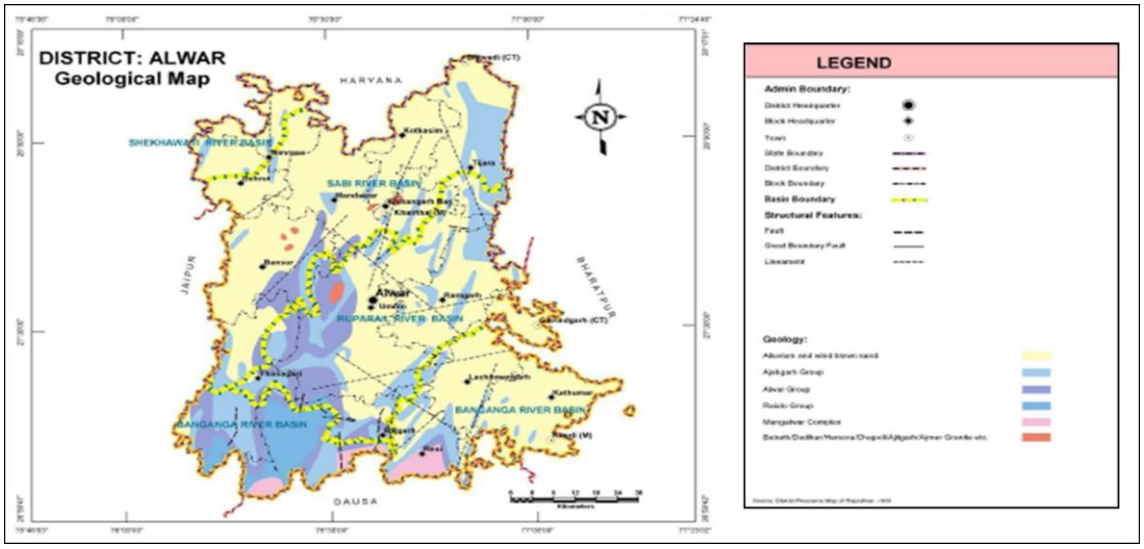

Figure 3: Geological map of Alwar district (Courtesy: PHED, GOR)

Geological Formation

Main geological formations in Alwar (Figure 3) are (i) Aravalli system- comprising schists, granites, schistose quartzite, (ii) Raialo series- comprising crystalline limestone and subordinate quartzite and (iii) Delhi system- consisting of Alwar series Hornstone breccias, Kushalgarh limestone and Ajabgarh series, which comprise quartzite,

phyllites, slates, grits, impure limestone and breccias. Delhi system is exposed over major parts of the district and the rocks of this system are throughout predominating. The hills of south and south-west are fairly rich in minerals such as copper, iron and lead, but they are not being extracted out intensively (Figure 4).

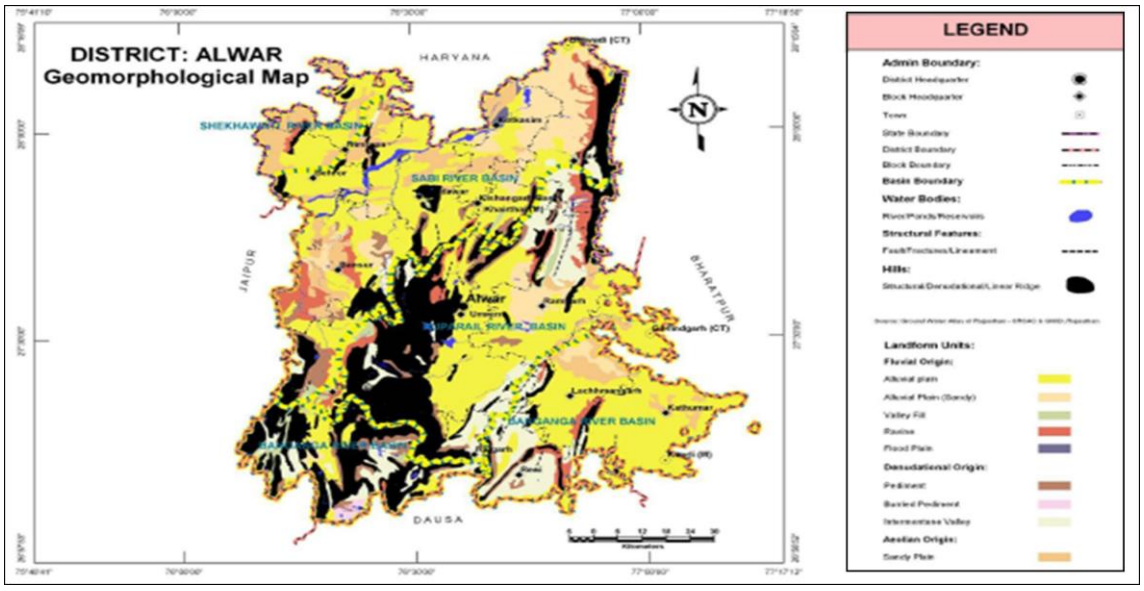

Figure 4: Geomorphological map of Alwar district (Courtesy: PHED, GOR)

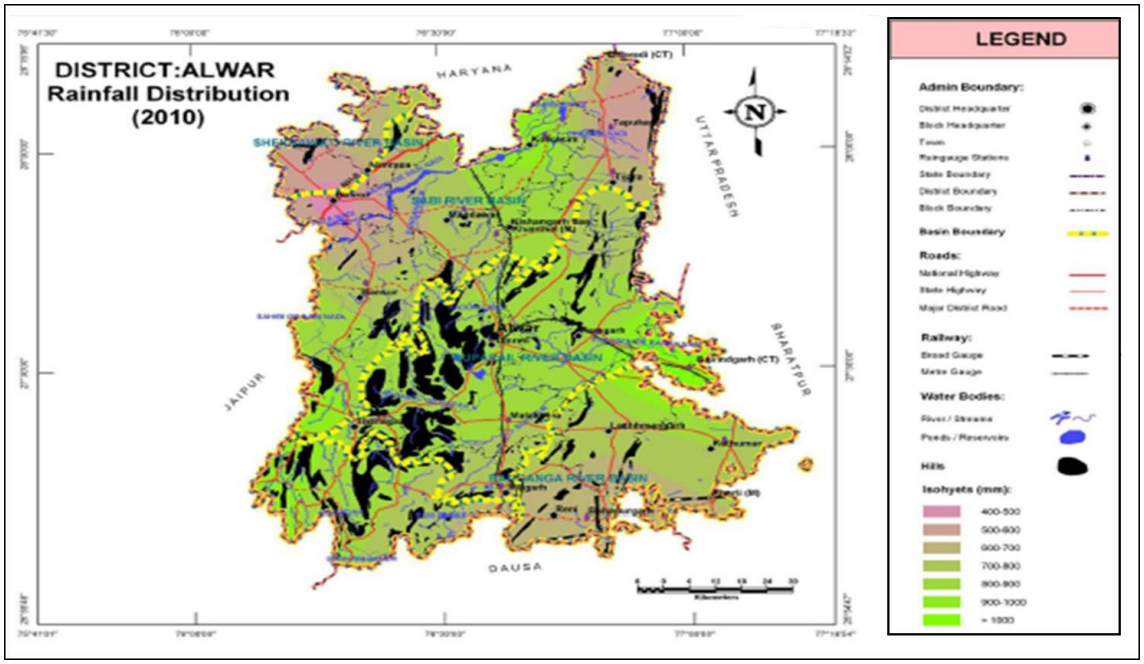

Figure 5: Rainfall distribution in Alwar district (Courtesy: PHED, GOR)

Flora

The forests of the Alwar district fall under the category of dry deciduous forest of the Rajasthan region. The forests are classified as subsidiary edaphic type of dry tropical forest. The hill slopes are covered with *Dhok* (Anogeissus pendula), *Salar* (Boswellia

serrata), *Khair* (Acacia catechu), *Chheela* (Butea frondosa), *Kikar* (Acacia Arabica), *Ber* (Zizyphus spl.), *Lod siali* (Grewia flavescens) and *Har Singar* (Nyctanthes arbortristis) etc. Bamboo (Dendrocalamus strictus) generally occurs in the cool and sandy *nalas* in Dhok forest. Forests in the district have no important timber tree species, but they are valuable for protection of soil and production of grass, fuel charcoal, *Kattha,* etc. Some of the shrubs are utilised for basket making.

Fauna

In the fauna, antelope, ravine deer, tigers, hyenas and *Sambhar* (Cervus Unicolor) are found in the hilly area and leopards almost everywhere. Wild hogs are fairly numerous in parts and wolves are occasionally met with. The natural surroundings and abundance of lakes create a suitable habitat for the different species of fishes and other aquatic fauna. During the rainy season the rivers are connected with each other and thus serve as an ideal breeding ground for fishes. Asian House Geoek, Common Garden, Lizard, Slow Worms, Desert Monitor, Common Worm Snake, Sand Boa, Indian Ery, Common Cobra, Commaon Krait etc. types of lizards and snakes are found in the jungle of this district. There are more than 100 species of birds in the district in which Blue Rock Pigeon (Columba Livia Gmelin), Common Crow (Corvus Splendes Vieillot), Common Babbler (Argya Caudata), Grey Shrike (Lanius Exubitor Linn), Drongo (Dicrurus Macrocercus Vieillot), Red Vented Bulbul (Pyenostus Cafer Linn) are common birds.

Rainfall

The district (Figure 5) received fairly good rainfall in the majority of blocks and slightly less in some blocks (like Behror) in the year 2010. Average annual rainfall in Alwar district was about 761.1 mm based on the data of available blocks. Highest annual rainfall was noticed in Lachhmangarh block (1,250.9 mm) whereas lowest was in Behror block (422.0 mm). The highest average annual rainfall in the district is noticed in Thanagazi block (887.7 mm).

History of Archaeological Research

Before independence, most of the archaeological research work was carried out by the British scholars and officials like Alexander Cunningham, A.C.L. Carlleyle, D.R. Bhandarkar, L.P. Tessatori, Aruel Stein, C.A. Hackett etc in the area of present state. James Fergusson extensively surveyed the ancient monuments between the years 1829 to 1847. He was the first man who published the illustrated history of Indian architecture covering a few monuments from Rajasthan as well (Fergusson 1848, 1876). Cunningham (1873, 1996, 2000) and Carlleyle (1878) toured eastern Rajputana in 1871-73 and 1882-83 respectively. Sir Alexander Cunningham inspected a few monuments in Rajasthan as early as 1861-65. His assistant Carlleyle toured in eastern Rajputana during 1871-73 and reported the monuments located in the region of Rupbas, Satwas and Bayana in Bharatpur, Bairat, Chatsu, Bisalpur and Nagar etc. in Jaipur, Baghera in Ajmer region, Nagari and Bijolian in Mewar region. Subsequently H.B.W. Garrick

(2000 reprint, Srivastava 1981: 19-46) surveyed Punjab and Rajputana in 1883-84 and published the results of his work along with plans and plates of architectural remains, sculptures, inscriptions, coins etc. He surveyed the area of Bairat, Amber and Jaipur in Jaipur region, Adai Din Ka Jhopra, Dargah Sharif, Taragarh in Ajmer region, Jodhpur, Mandor, Nagaur, Pali, Nadol, Juna Khera etc. in Marwar region, Chittor, Nathdwara in Mewar, Bhimganj, Mukundara and Jhalarapatan etc. in Hadoti region during the season of 1883-84. In the seventies of the nineteenth century that C.A. Hackett of the Geological Survey of India had made a surface collection of palaeoliths from Jaipur, Bundi and Indergarh (Agrawal 1995: 1-12). Some of them have been recorded by J. Goggin Brown in the catalogue of Indian Museum at Calcutta (Brown 1917: 66-67).

After 1950, M.N. Deshpande (*IAR* 1953-54: 37), H.D. Sankalia (Sankalia 1956: 99-100), S.R. Rao (*IAR* 1954-55: 58, 1955-56: 68, 1956-57: 5,8, 1957-58: 45), K.V. Soundara Rajan (*IAR* 1955-56: 68), K.N. Dikshit (*IAR* 1962-63: 70), B. Allchin, A.S. Goudie, K.T.M. Hedge (Allchin *et al.* 1978) and V.N. Misra (Misra 1967) made a substantial contribution in the preshistoric studies of the state. Misra's (Misra 1967) explorations on Banas, Berach and Luni basin added a lot of knowledge of Prehistoric age of Rajasthan.

In 1960, the site of Bairath was visited by A. Ghosh, then Director General of Archaeological Survey of India with the proposed excavation in the present township, was of opinion that this valley seems to be an ideal place for the habitat of palaeolithic man. With this background, Shri K.N. Dikshit (Dikshit 1966-68: 26-30) explored the valley thoroughly and brought to light Stone Age industries, natural caves and rock shelters. In 1970-71, R.C. Agrawal and Vijai Kumar conducted a systematic exploration work in the districts of Jaipur, Bharatpur, Sikar, Alwar and Jhunjhunu and a number of protohistoric sites were discovered by the team members (Agrawal 1978a: 72-75, 1978b: 123-24, 1979a: 91-92, 1979b: 159-160, 1980a: 89-91, 1980b: 92, 1981a: 70-80, 1981b: 25-31, 1981c: 59-63, 1981d: 69-71, 1984a: 157-162, 1984b: 89-95, 1995: 1-12, Agrawal and Kumar 1976: 241-44, 1982: 125-135, 1993: 125-135).

Paleolithic tools have been reported from the districts of Pali, Barmer, Jaisalmer, Bikaner, Nagaur, Jodhpur, Udaipur, Chittaurgarh, Jaipur, Alwar, Sikar, Jhunjhunu, Sirohi, Kota and Sawai Madhopur. The discovery of Mesolithic sites in different parts of Rajasthan is very interesting in as much that more than dozen of such sites have been discovered even in Jaipur, Alwar, Sikar and Jhunjhunu districts, all along the river beds of Kantli, Sahibee (Sabi), Sota, Dohan and Kansawati (Allchin *et al.* 1978, *IAR* 1962-63: 70; 1976-77: 45, 1978-79: 20, 1979-80: 64, 1987-88:100-101, 1988-89: 76, 1990-91: 59-60). In the course of exploration, Shri B. S. Negi of the Delhi Circle of the Survey discovered sites yielding Painted Grey Ware at Babain, Bagdhari, Bhandor, Birawi, Sewer, Sinpini and Tatamar. Besides, early historical pottery was collected from all the sites and a few sherds of black-and-red ware from Sewer (*IAR* 1977-78: 46). In 1978-79, again B.S. Negi discovered 11 PGW and six historical sites (*IAR* 1978-79: 19) from Bharatpur district. In the same season, Shri K.P. Chaudhary of the Delhi Circle of the Archaeological Survey of India noticed sites belonging to historical times at Raisisi

and Rawan ka Dehra in Alwar Taluk and Tatarpur, Thikani and Thikani ka Bas in Kishangarh taluka of Alwar District (*IAR* 1978-79: 19). In 1979-80, Vijay Kumar, Shyam Nandan, Harish Chandra Mishra, K.L. Meena, Krishna Lal and Jodha Ram under the direction of Shri R.C. Agrawal of the Department of Archaeology and Museums, conducted explorations in the districts of Alwar, Banswara, Bharatpur, Bhilwara, Chittaurgarh, Dungarpur, Jaipur, Jhunjhunu, Sawai Madhopur, Sikar and Udaipur and reported a number of sites in the areas (*IAR* 1979-80: 62-65). The sturdy pottery and microlithic tools were reported from archaeological site of Bavariya of the same village near Kharnali river in Alwar district (*IAR* 1979-80: 62).

C. Margabandhu and R. P. Sharma, assisted by Budhi Singh, Gurnam Dass and D. D. Dogra of the Archaeological Survey of India explored the banks of the river Sahibi from Kot Qasim in the north to Ramganar in the south with a view to ascertaining the migrational pattern of the protohistoric people and tracing the calender of archaeological cultures of the area. The exploration revealed thirty sites containing antiquities from protohistoric times down to the medieval period. Protohistoric remains, mainly comprising ceramics, were noticed at Qadain, Karnikot and Ramnagar on the eastern bank, and Palawa and Helmana Khurd on the western bank. The protohistoric red ware, the available types being dishes and vase, bears resemblances to the Ochre-coloured pottery of the Ganga valley. On certain sherds dark brown polish was also noticed. It appears that the protohistoric migrations had taken place along the eastern bank of Sahibi. The early historical pottery comprising the Kushana and Rangmahal red ware types and coarse grey ware came from Badawas, Sehali Kalan, Tigaon, Gangapur, Bagheri, Sailkhara, Ajarka, Tejpura, Babiriya, Ramnagar, Bijwara, Jalabas, Sanauli and Khori. Medieval forts were located at Karnikot, Sarai Kalan, and Bijwara. Bronze images of the Jaina pantheon were noticed in a temple at Sanauli (*IAR* 1980-81: 51, 55). A. K. Khanna of Delhi Circle of the Archaeological Survey of India discovered sites of the Kushana period at Badla, Bajora, Goth, Hodaheli, Khelpur, Nandwari and Parbeni, apart from sites of the Rangmahal affiliation at Amarpur, Dungarawara, Googrod and Kodiya in the Rajgarh tahsil of Alwar district (*IAR* 1981-82: 55). R. P. Sharma, B. P. Saxena, D. P. Sinha and A. K. Khanna of the Delhi Circle of the Archaeological Survey explored the Neelkanth valley and found Lower Palaeolithic tools comprising Acheulian handaxes and a cleaver along the foothills at Garh (Neelkanth) in District Alwar (*IAR* 1981-82: 99). Again A.K. Khanna discovered a number of sites from Alwar district in the season of 1984-85 (*IAR* 1984-85: 69-70).

During the last two decades, more than 18 rock art sites have been discovered and explored in this area. In 1992, Sahibi river valley was explored by M.L. Sharma and Late Shri P.T. Sharma (Sharma *et al* 1992: 84*)* from rock art point of view. Twenty eight shelters with paintings were discovered at 16 sites in the Sahibi river valley of Jaipur, Sikar and Alwar district. Few petroglyph sites were also located. Rock art in red colour depicts zigzag lines, handprints, animals, cattle rearing, carts, *Sankha* like designs, human activities etc. ranging in time from Mesolithic age of hunting food gathering to

the historic period. Rock paintings have been discovered from Ajeetgarh, Sohanpura, and Bheetaro in the district of Sikar. Dantala, Kalabhata, Viratnagar (Bheem Dungri, Gnaesh Dungri, Beejak Dungri), Gothari, Papda ki Dungari, Jaisinghpura, Bhainsawal, Baneri, Brahmakunda, Jeenagaur, sarund etc. rock art sites also discovered by scholars and researchers (Kumar and Sharma 1995: 56-59, Sharma 1996a: 153-159, 1996b: 13-14, 1997: 25-35, 2001, 2005: 5-25, 2009: 57-89, Sharma and Meena 2004: 47-52, Sharma *et al* 1992: 84, 2009a: 130-143, 2009b: 1-11).

Historically, the archaeological research and explorations conducted so far in this area has amassed quite a good amount of scientific evidences for existence of prehistoric man. Different places in this area provide us with inklings of presence of Stone Age culture. At the banks of Sanvan River, near Bhangarh, pebble tools have been found (Sankalia 1974: 68). Bairath (Dikshit 1966-68: 26-30), Dingharia, Bhoopsera, Chula, Kala pahar (Kumar & Sharma 1995: 56-59) and Jhirna (Sharma & Meena 2004: 47-52) are also newly discovered Stone Age sites (Sharma 1997: 25-35, 2001). Some very important rock art sites in this region (Sharma *et al* 1992: 84) especially in Alwar district are reported by the scholars (Sharma 2005: 5-25).

Figure 6: Lower Palaeolithic tools from Dhigariya

Newly Explored Prehistoric Sites

Dhigariya: Dhigariya village is situated 10 kilometres east of Viratngar, just before the Thanagazi in the district. In earlier surveys, the Palaeolithic tools were collected by

officials of Department of Archaeology and Museums (*IAR* 1961-62: 38). Along with a water channel on the eastern edge of the village, the locality from Bhopala to Kola Ka Baas, covers approximately 15 kilometres is important from archaeological point of view. Not only prehistoric tools, but ochre coloured pottery, black and red ware and Painted grey ware poetry pieces are collected from this area. This *nala* further merges into Chhitoli Baandh.

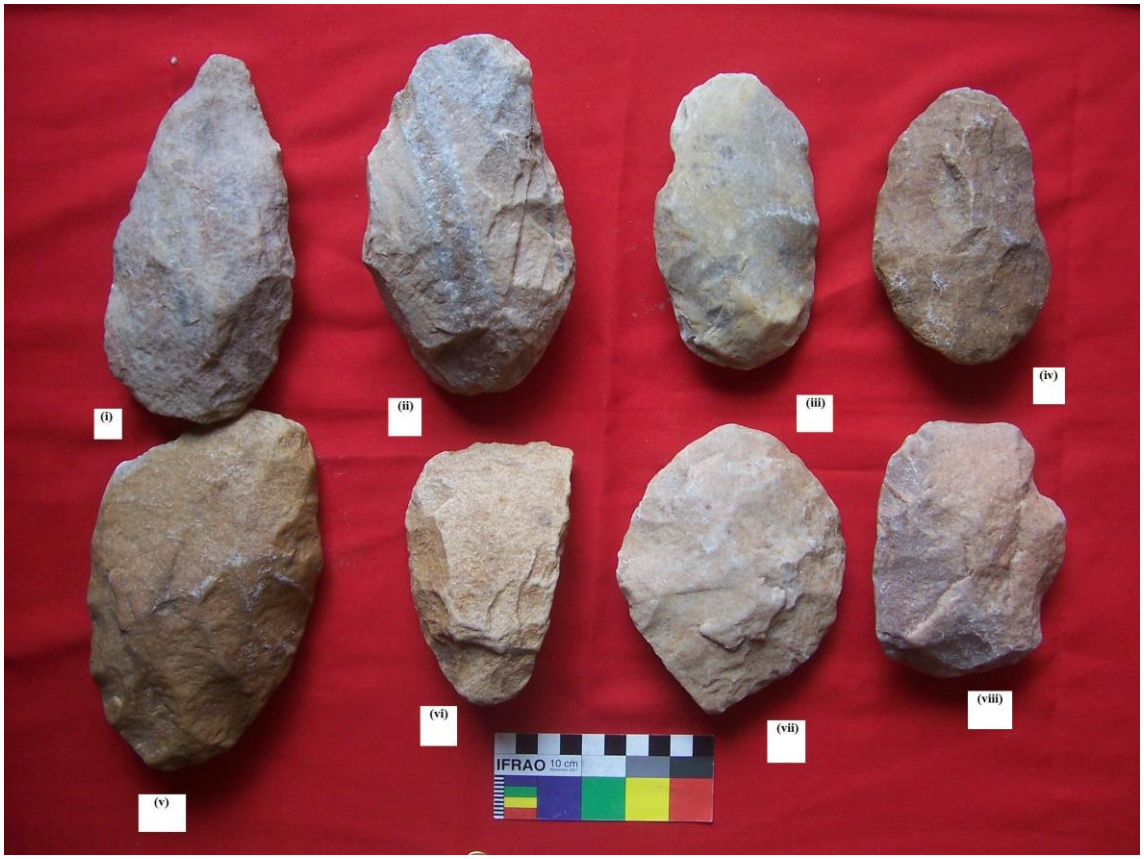

Figure 7: Lower Palaeolithic tools from Harsora

During the survey, 3 tools consisted handaxe, flake tool and unifacial scraper were collected from here (Figure 6). The unifacial scraper is made on dark brown quartzite stone. It is comparatively beautiful tool. It has 15 centimetre length, 9.5 centimetre width and 5 centimetre breadth. This tool is prepared on core. First of all, the original stone was flaked from dorsal face. Further, right portion was flaked from below portion, so that the butt end may be prepared. The left portion was prepared as working end. The tool has been flaked from lower portion also. Subsequently three small flakes were removed from working portion also. In the back side, right side is comparatively similar to dorsal portion of the tool. 75% of the ventral portion has cortex also. Remaining part of the tool has been flaked with control flaking technique.

Another tool is of almond shaped handaxe, prepared on dark brown quartzite stone. On the basis of typology, flaking, size and utility this tool may be put in the series of lower Palaeolithic tools. The working part and central part of the tool has specially

prepared. The butt end portion is comparatively thinner. This tool is prepared on core. From the obverse portion of the tool, comparatively bigger flakes are detached. Although reverse portion consists cortex also. The fore and lower part of the tool has been flaked similarly. Butt end portion is flat surface. There are small flakes are removed from that side. There are cortex is available on reverse portion of the tool in lower part. The butt portion is comparatively similar "U" shape. This tool has 13 centimetre length, 7.5 centimetre width, and 3.3 centimetre breadth.

Another tool, marked as flake tool is prepared on dark quartzite grey stone. It has 13 centimetre length, 4.6 centimetre width and 2 centimetre breadth. It is assumed that probably this is broken part of any tool. There are flaking marks on the tool. Flaking is done from both sides of the same.

Figure 8: Lower Palaeolithic tools from Kala Pahar

Harsora: This is the most important village of the district from archaeological point of view. The village of Harsora (27˚46.8' North Lat., 76˚26.9' East Long.) is situated in Bansur tehsil of Behror subdivision of Alwar district. This village can be approachable via Alwar, Behror and Kotputli. The town of Bansur is approximately 15 kilometre east on Kotputli-Alwar road. Harsora is 20 kilometre away in northern direction of Bansur town. The nearest railway station of Alwar is located 60 kilometres away from here. The flowing of water from the hills during the rainy season joins the Banganga river which merges in Sabi river in northern direction. This area is 10 kilometres away from

Sabi river catchment area. The hills located here are formed of Granite boulders, located in south of the Harsora village. There are two rock shelters are painted in which one shelter bears archaeological deposit also. A number of microliths are also collected from here. This shelter is located in south-western part of the hill having 10 meter height from surrounding level of the hill. The shelter is in good condition. In the context of Palaeolithic tools, 5 handaxe and two cleaver tools are also collected during the survey of the area (Figure 7).

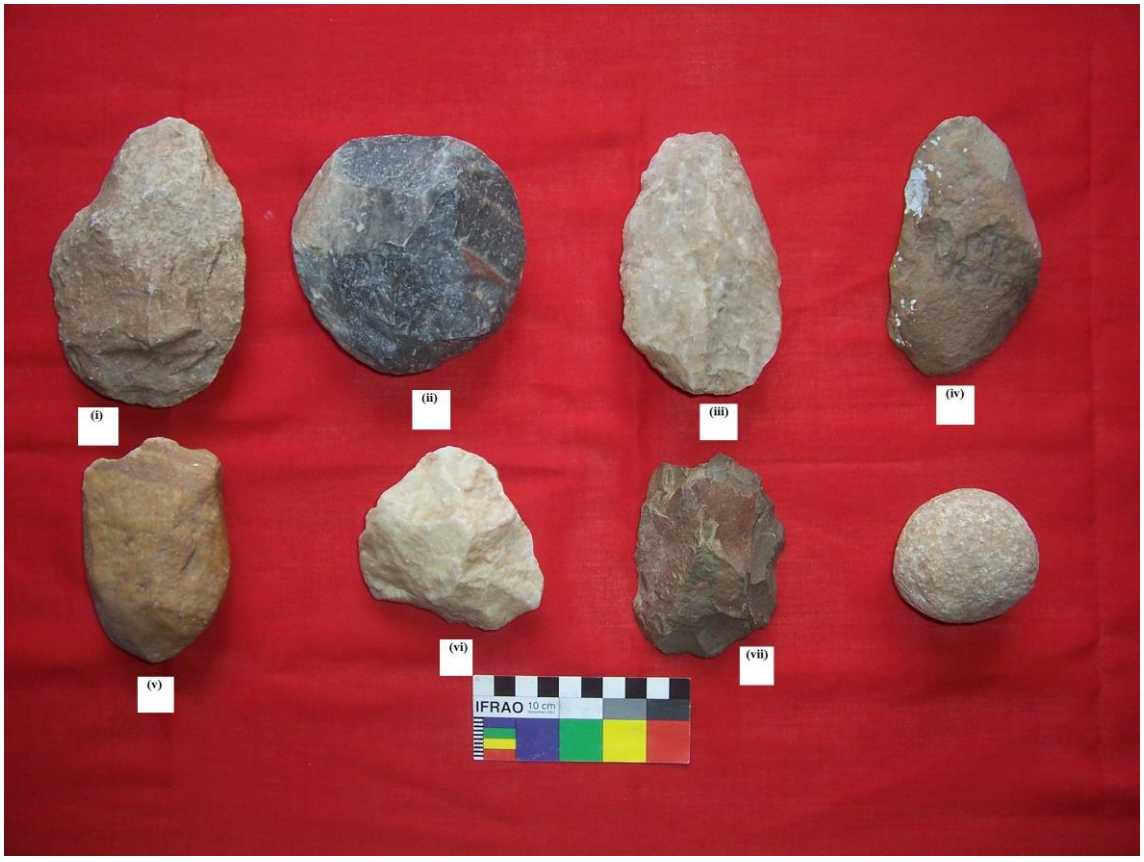

Figure 9: Lower Palaeolithic tools from Jhirna

One of the handaxes, first tool is prepared on quartzite stone. This tool has length of 17.5 centimetre, 8.4 centimetre width and 2.5 centimetre breadth. A major flake has been detached from right side of obverse portion of the tool. The former or working end portion of the tool is broken. Cortex may be seen in central portion. The butt end portion of the tool is of "U" shape. This tool is prepared on core, finished from both of the sides. The working edges have been broken. Deep flake scars are also seen. Both of the edges of the tool are comparatively similar. It may be assume that this tool is prepared by use of wooden hammer.

Another handaxe is also made on quartzite stone in heart shape which length is 16.4 centimetre, width 9.3 centimetres and 4.2 centimetre breadth. It is made on core. There is cortex is available on obverse side of the tool. The dorsal portion is lesser flaked in comparison to ventral portion. This tool represents the developed Acheulian culture.

The working end part of the tool is comparatively longer and asymmetrical shape with "U" design. It is noted that this type tool may be used for detaching the skin of animals from their body and also trees. It is also assumed that the working end of the tool was used as clever. The edge of the working end part of the same is in lunate shaped. The flakes removed from the part are of different sizes. There are comparatively longer and symmetrical shape flakes detached from edges of the tools. The reverse portion is fully flaked and the surface is rough. There are two small flakes are removed from former portion of the reverse side of tool. Both of the edges are symmetrical. The butt end portion is in "U" shape.

Figure 10: Lower Palaeolithic tools from Toli

Another handaxe tool may be placed in developed handaxe culture. This tool is prepared on flake of quartzite stone of milky white colour. It has 13.8 centimetres length, 7.6 centimetre width, 2.4 centimetre breadth. The working end portion of the tool in obverse side is flat and soppy. It is thinner compare to another tool of the collection. Most of the flakes have been detached from right edge of the tool. The striking platform is also seen in the centre. There are cortex is available on the obverse side. Both of the edges are straight and parallel. The butt end of the tool is of "U" shape.

Another handaxe is prepared on quartzite stone of brown colour. It has 14 centimetre length, width 8.3 centimetres and 2.9 centimetre breadth. This tool is prepared on core.

It has almond shape. Cortex may be seen in reverse side. On the obverse side, three flakes have been detached from left side. The striking platform at butt end may be also seen. The butt end portion of the tool is of "U" shape.

Figure 11: Lower Palaeolithic tools from Khola

Figure 12: Middle Palaeolithic tools from Khola

Another handaxe is prepared on quartzite stone of light brown colour. It has length of 13 centimetre, 9.5 centimetre width and 3.5 centimetre breadth. The side ages has been flaked from the obverse side. There are also retouching marks at the edges of the tool. Cortex is also there on obverse side. The butt end is of "V" shape and the remaining part is prepared on roundish core. The edges have been broken for giving the "V" shape. The deep rectangular flake is also detached from working end portion of the tool. Stepped flaking technique is used for making tool. Both of the edges are parallel and comparatively similar. It appears that tool was beautifully prepared. Although the right portion of the tool is comparatively wide.

Figure 13: Middle Palaeolithic tools from Khola

Figure 14: Middle Palaeolithic tools from Chatuala

Along with handaxes, two cleavers are also collected from the area. One of the cleavers is made on core. It has 17 centimetre length, 4 centimetre width and 10.9 centimetre breadth. There are cortex is available on both sides. It may be assumes that this tool was used for both handaxe and clever purposes. The one of the edges is in shape of "V' while another corner is comparatively wider. Both of the edges are parallel to each

other. Obverse portion is more worked. The tool is prepared on light brownish quartzite stone. The former part of working portion is in sloppy and more flaked comparative to another part. This tool is bigger in comparison to other tools. On the basis of flaking, tool typology, size, this tool may be placed in the Acheulian culture. The working end is comparatively wide. Both of the edges are parallel to each other and equal to "V" shape.

Another cleaver is also prepared on light brown quartzite stone. It has 12.2 centimetre length, 7.5 centimetre width and 3.5 centimetre breadth. It is made on core. Both sides have cortex also. Controlled flaking technique is used on both sides. Small flakes have been detached from both of the edges of the tool in obverse and reverse sides. Flakes have been detached for making parallel to both sides also. The working end is comparatively thin and wide. The butte end portion of the tool is of "V" shape. This tool may be compared with developed Acheulian culture of the region.

Figure 15: Lower Palaeolithic tools from Chula

Kala Pahar: The hill called as Kala Pahar extended in 6 to 10 kilometre area from Harsora village. This hill has its orientation from north to south. Due to the blackish colour of the hill, local people called this hill as "Kala Pahar". In the north western side of the hill, there are three comparatively small hillocks are located where grey granite colour boulder stones are located. There are 6 rock shelters bearing paintings in which 2 bear cupules while remaining bear paintings. Two handaxes and one clever tool have been recovered from the area (Figure 8).

One of the handaxes is prepared on white quartzite stone. This tool has 14 centimetre length, 8.5 centimetre width and 5.5 centimetre breadth. Due to the poor quality of the stone, the flakes are not similar and symmetrical, although it is fully flaked. Sloppy flakes have been removed from both of the edges of the tool. Roundish flakes have also been detached from reverse portion of the same tool. Cortex may be seen in lower portion. The butt end of the tools is of "U" shape.

Another handaxe is prepared on dark brown quartzite stone core. It has 14.3 centimetre length, 10.3 centimetre width and 6.2 centimetre breadth. This tool is flaked almost from all corner and given a beautiful shape. On the obverse side, lunate shape flakes have been removed and sloppy working edge is prepared. There are beautiful flakes are detached from corner of the edges of both sides of the tool. The middle portion is comparative thinner. There are rectangular flakes are detached from butt end portion. It makes sloppy so that the butt end may be catch easily in hands. There are right side has been flaked from reverse portion. Cortex is also available. Probably the working end has been broken.

The cleaver recovered from here is prepared on quartzite stone. It has 13.1 centimetre length, 9 centimetre width and 3.5 centimetre breadth. The working end of this tool is wider. Signs of Primary and secondary flaking may be seen on the obverse and reverse side. Small and medium sized flakes are detached from edges of left side in obverse portion. Somewhere these flakes are deep and somewhere shallow. Both of the edges are parallel and working end is comparatively good and wider. The butt end portion is of "V" shape. There are cortex is also available. The striking platform is also seen on the surface of the tool.

Jhirna: Another site called as Jhirna is located southern portion of the Kala Pahar. There are rock shelters bearing paintings at this place. During the rainy season, water accumulates in lower portion of the nearby area. There are different sizes round granite boulders may be seen. The shelters bears rock paintings on the ceiling and central portion. 3 handaxes, 2 discoids and 2 flake tools are collected during surveys of this area (Figure 9).

First handaxe is prepared on dark brown quartzite stone flake, which length is 14 centimetre, width 10 centimetres and breadth 3 centimetre. There are patination is also seen on this tool. The working portion is flaked with detaching of small flakes. Big flake has been detached in right side of dorsal face. The length of the detached flake is more than width. The butt end portion is of "U" shape. Both of the edges are parallel of the tool. The ventral face is totally flaked with detaching of different sized flakes. Cortex is available in lower portion. There are some flakes removed from cortex area. The tool is prepared bifacial so that it can be used easily. It is comparatively lighter in comparison to other tools.

Another handaxe is prepared on whitish colour quartzite stone. It has 13.4 centimetre length, 7.7 centimetre width and 4.7 centimetre width. This tool is not flaked properly.

There are small flakes are detached from working portion of dorsal face. The stone nature is not good for preparing tools. The flakes are not detached properly. There are two big flakes are detached which are comparatively long but in narrow. Two small flakes are detached from butt end portion also. Ventral part is also flaked totally. Symmetrical flakes are detached from both of the sides of ventral side. Cortex is also available at there. It has "U" butt end. Both of the edges are parallel. The working end portion is wider.

Another handaxe is prepared on medium brown quartzite stone which has 12.5 centimetre length, 7.5 centimetre width and 4 centimetre breadth. Both of the edges are not parallel. Somewhere tool is taking round shape. There are small flakes are detached from working end. Flakes have been detached for preparation of working end. Cortex is also available on stone tool. This tool is prepared on core. Comparatively deeper flakes have been detached for levelling of the tool from both of the sides. The butt end portion is of "U" shape.

The discoid tool is prepared on light blue quartzite stone core which length is 11.3 centimetre, width 11.1 centimetres and breadth 7 centimetre. Due to the environmental conditions, this tool is rolled. There are light brown patination is also in left side of the tool. There are striking platform is seen in the centre. Stepped flaking is seen on the tool. On the dorsal face, cortex is also there. There are small flakes are also removed from edges of the tool. There are signs of comparatively deep and big flakes are also on this part of the tool. Primarily, comparatively bigger flakes are detached on the ventral face of the tool but there are secondary marks are also there. On the ventral face, deep flakes are detached from left side of the tool.

Another Discoid tool is prepared on dark brownish chert stone. It has 9.6 centimetre length, width 7.5 centimetres and 8 centimetre breadth. It has been flaked from all around. There are cortex may be seen on ventral face. Small flakes are also detached from corners of the tool. The flaking from corners also informs about the stepped flaking. There are round deep marks are also seen on dorsal face.

Toli: Another site called as "Toli" is situated 150 meter away in western direction from Kala Pahar. There are some round granite boulders are located. There are rock paintings in on vertical surface of one of the shelters. 3 handaxe tools and one discoid is collected from here (Figure 10). One of the handaxes is made on light brownish quartzite stone. It has 16.1 centimetres length, width 9.8 centimetres and 4 centimetre breadth. It has been rolled. The dorsal face has been flaked from right side and in the central part of the right edge. Original cortex is also seen in the centre. Comparatively bigger flakes have been detached from left side of the dorsal face. Small flakes have also been detached on dorsal side. Butt end has sloppy surface for easily catching the tool during the utilization. Small flakes are detached from ventral face of the tool. Most of the part have original cortex also. Although both of the edges of this tool are parallel to each other but one is more waiver comparison to other. The butt end portion is in "U" shape.

Figure 16: Middle Palaeolithic tools from Chula

Figure 17: Lower Palaeolithic tools from Dadikar-Hajipur

Figure 18: Upper Palaeolithic chert tools from rock shelters of Dadikar

Another handaxe is of medium size, which has 11.8 centime length, width 7.2 centimetres and 3.7 centimetre breadth. This tool is prepared on light bluish colour of quartzite stone. Dorsal and ventral face is totally flaked of this tool. Small flakes are detached from working end while around the edges, comparatively bigger flakes are detached. The working end is comparatively broader and wider. It is assumed that this tool was used for detaching the skin of animals as well as similar purposes. Striking platform on the dorsal face of the tool in the centre may be seen. There are deeper flakes have been removed from right side on the dorsal face. It is also observed that controlled flaking technique is used for the same. Stone hammer was used for the detaching of the flakes. The butt end portion is in "U" shape of the tool.

Another handaxe tool is prepared on light bluish colour quartzite stone which length is 10.8 centimetre, width 7.7 centimetres and 5.2 centimetre breadth. The dorsal and ventral face of the tool is totally flaked. There are striking platform is also seen on the dorsal face of the same. Comparatively big flakes have been removed from the tools. The lower portion or butt end portion is sloppy and comparatively thinner for using the tool. Both of the edges of the tool are parallel to each other.

Another tool collected from here is discoid tool made on white quartzite stone. It has length of 10.9 centimetre, 9 centimetre width and 5 centimetre breadth. It is comparatively rolled tool. The flaking work is not properly done on the tool.

Secondary flaking is observed on the edges of the both sides of the tool. Three flakes are removed from butt end portion.

Figure 19: Rectangular shape design in rock Painting

Figure 20: Depiction of Human figures

Khola: The site of Khola is situated on western portion of southern edge of Kala Pahar. There is a shelter with comparatively bigger rock is located in the foothill. There are Acheulian tools are collected from this area. When we throw stones on the rock, it sounds. Local people called this rock as "Bajni Bhat". There is another stone is located as sitting place before this shelter. Habitation remains may be seen between both of the stones. Three fine handaxes are collected from this area (Figure 11). These tools are comparatively developed and beautiful.

One of the handaxes is prepared on white quartzite stone. It may be placed in developed Acheulian culture. This tool has 18 centimetre length, 4 centimetre width and 7.5 centimetre breadth. The working end portion is in good condition also. This tool is flaked by controlled flaking technique. Sometimes, the small flakes have been detached after removing of big flakes. It also informs about the secondary flaking technology. The cortex can be seen on the ventral face only. Butt end portion is in "U" shape. This tool is prepared on core. On the basis of shape and developed size, this tool may be placed in later phase of Lower Palaeolithic period. It is assumes that this tool was prepared with extra ordinary efforts. This tool is in almond shaped. The flakes are detached by use of wooden hammer.

Another handaxe prepared on whitish quartzite stone has 14.9 centimetre length, 3 centimetre width and 7 centimetre breadth. This tools is seems to be prepared on flake of a core. Both sides of the tool are properly flaked. Big and small both types of flakes are removed. The butt end portion is properly flaked so that the tool can be handled easily. Both edges are parallel to each other. Cortex is also seen on the dorsal face. The butt end portion is in "U" shape. There are marks of retouching also seen on the edges of the tool. There are totally flaking from ventral face. No cortex is available there. The flakes removed are comparatively deeper. It is also seen that the secondary flaking is also done on both sides of the same. Although there are deep flakes are removed from edges also. This tool is prepared on good quartzite stone. Both of the edges are parallel to each other. The flakes are removed by controlled flaking technique by wooden hammer. The striking platform is also there.

The third handaxe, has almond shape, is prepared on light brown quartzite flake stone. It has 12.7 centimetre length, 4 centimetre width and 8.7 centimetre breadth. This tool is properly flaked, made by controlled flaking technique, may be placed in developed acheulian culture. There are signs of retouching also seen on the edges. Cortex is seen on the butt end portion of dorsal face. The both of the edges are parallel to each other. The butt end portion is of "U" shape. There are secondary flaking is also seen on the edges of the ventral face of tool. Dorsal and ventral faces are comparatively similar to each other. It is also seen that there are deeper flakes are detached from ventral face, make similar to dorsal side.

Some of the Middle Palaeolithic tools are also collected from this site consisted scrapers, triangular core tools, Levalloisian flakes and handaxe (Figure 12-13). One of

the unifacial scraper tools is prepared on light brownish quartzite round pebble stone. This unifacial tool's length is 11.9 centimetre, width 7.3 centimetres and breadth 4 centimetre. There are comparatively long and narrow flakes are detached from working end of dorsal face. The edges are also flaked. Some narrow flakes of minor size are also removed from left edge of the tool. The striking platform is seen in the centre. Cortex is also there.

Another core tool, prepared on light brownish quartzite stone flake, is of 12.2 centimetre length, 7.2 centimetre width and 3.7 centimetre breadth. Comparatively this is triangular but the lower part of the same is in roundish shape. The butt end portion is sloppy due to the detaching of flakes. There are rectangular and half circular shape flakes are also detached. The striking platform may be observed in the central part of the tool. The butt end portion is comparatively wider.

Figure 21: Depiction of Floral design with Swastika

Another discoid Levalloisian tool is prepared on light brownish quartzite stone. It has length of 8.6 centimetre, width 6.3 centimetres and 3.8 centimetre breadth. The tool has been totally flaked. There are small flakes have been removed from working end and butt end portion of the dorsal face. Triangular flakes are removed from butt end portion also. Same like this, the ventral face is also flaked. It may be assumed that the prehistoric man was detaching the flakes with the use of small sized stones. There are small flakes are also removed from edges of ventral face. Both of the edges are parallel to each other.

Another discoid Levalloisian tool is prepared on medium brown colour round quartzite pebble stone flake. It has length of 7 centimetre width 7 centimetres and 2.7 centimetre breadth. There are small flakes are detached from working end which also shows stepped flaking on the tool. The big flakes are also detached from working end for making tool for properly working. Both edges of the dorsal face are flaked properly. The striking platform may be seen in the centre of the tool.

Handaxe is made on flake of quartzite stone; which has length of 10.7 centimetres, width 2.4 centimetres and 6 centimetre breadth. It is comparatively small tool. There are big flakes are removed from dorsal face. It has almond shape. The butt end portion is of "U" shape. It has parallel edges. The tool is flaked from both sides. There are cortex is available on dorsal side also. On the basis of size, shape and design this tool may be placed in the category of middle Palaeolithic tool. This tool is prepared by the using of wooden hammer. The flakes detached from left sides are sloppy outwards. The striking platform may be seen in the centre. There are small flaking work is also done in lower part.

Another tool of Levalloisian flake is made on dark brown chert stone, which length is 6.6 centimetre, width 7.5 centimetres and breadth 2.4 centimetre. This tool is prepared on flake. There are small flakes have been removed from working end of both sides dorsal and as well as ventral. The butt end portion is similar to as "V" shape. It is assumed that this tool was used as scraping purposes. There are small flakes are detached after retouching on ventral face.

Another Levalloisian flake is also made on chert stone. There are small flakes are detached from dorsal face of the tool. It has 7.5 centimetre length, 3 centimetre width and 8.4 centimetre breadth. Cortex is also available on dorsal face. The working end is as similar as a cleaver tool. The butt end portion is in "U" shape. There are lower number of flakes are removed in ventral face. The working portion of the ventral face is retouched. On the basis of size and shape, this tool may be placed in category of middle Palaeolithic tools.

Chatuala: Another sheltering place is called as "Chatuala" has a tortoise shape shelter located in the foothill of the same. The shelter has its orientation from north-west to south east. The ceiling of the shelter bears rock painting. Stone tools of Palaeolithic and Mesolithic period are collected from nearby of the shelter.

Two middle palaeolithic tools consisted medium size of handaxe and scraper is collected from this area (Figure 14). The handaxe tool is prepared on white quartzite stone which length is 13.7 centimetre, width 8.4 centimetres and breadth 4.7 centimetre. It is almond shape. The small flakes are removed from working end of dorsal face. Subsequently comparatively bigger flakes are removed from butt end. There are striking platform may be seen in the centre. Indication of controlled flaking technique is also observed. There are evidences of round flaking also. Big flakes are removed

from ventral face. The butt end portion is in shape of sloppy towards corners and edges. The edges of both side of the tool are not equal to each other.

Another tool is scraper, made on white quartzite pebble stone. It has length of 11 centimetre, width 6.5 centimetres and 3.2 centimetre breadth. The working end has round shape of the tool. There are small flakes are removed from working end. It shows controlled flaking as well as secondary flaking also. The edges of both sides of ventral face also flaked completely. The striking platform can be observed on the tool. Both of the faces of the tool have cortex also. It is noted that wooden hammer is used for preparing this tool.

Chula: The hill of "Chula" is situated 10 kilometres away from Harsora in southern direction. 4 kilometre length lower height hill is located in southern direction in the area. The hill is formed of granite boulders. The area can be approachable from Bhupsera village, situated 22 kilometres away from Kotputli on Kotputli-Alwar road. The village of Chula is one kilometre away from Chula village in eastern direction. The hill comes under the village of Chula so it is called as "hill of Chula". A temple of Sundari Devi is located in northern edge of the hill, so it called as "Devi Ki Dungari". The water accumulates from the hill merges in River Sahibi through Banganga river. There are deposits of archaeological remains in eastern edge of the foothill. There are some shelters bearing rock painting also. Two scrapers, one cleaver and one flake tool is collected from here (Figure 15).

The unifacial scraper tool is prepared on white quartzite sand stone. It has length of 13 centimetre, width 10 centimetres and breadth 3 centimetre. There are two small flakes are removed from left side in dorsal face. Although before that, big flakes were also removed. There are marks of detaching big flakes also. Left side has given roundish shape for easy use. There are three big flakes are removed for making working end of the tool. Cortex may be seen on the dorsal face. It is observed that this tool is prepared on flake. Three minor flakes are removed from ventral face also. There are cortex can be seen. Both of the edges are parallel to each other.

Another scraper is made on light brownish quartzite stone flake. It has length of 12.2 centimetre, width 9 centimetres and breadth 3.5 centimetre. The former portion of dorsal face is comparatively thinner and the surface is in roundish shape. There are two big flakes are detached from working end of the tool. Cortex can be seen in ventral face. The big flakes are detached in sloppy side of butt end portion. Stepped flaking also observed.

Cleaver is prepared on white quartzite stone. This tool's length is 8.8 centimetre, width 8 centimetres and breadth 3.5 centimetre. The length and width of the tool are comparatively similar to each other. The tool is broken from lower side which also indicate that probably this tool was used with hafted in wooden. There are big flakes are detached from dorsal as well as ventral face. Cortex is also available. The flakes are removed by controlled flaking technique. This tool is prepared on core.

There are four middle Palaeolithic tools consisted 3 scrapers and one flake tool (Figure 16). The one of the scraper tools is made on light brownish quartzite stone. It has length of 10.6 centimetre, width 8.4 centimetres and breadth 3.7 centimetre. This tool is prepared on round pebble stone. On the dorsal face, the right side is making as working end. There are no any types of secondary flaking on the tool.

Another scraper tool is prepared on milky quartzite white stone. It has length of 10.5 centimetre, width 7.6 centimetres and breadth 4 centimetre. There are small sized flakes are removed from working end of dorsal face. The small flakes are removed from right side which is working end. Striking platform is also seen at there. There are also flaking has been done on ventral face of the tool. Small flakes are also removed from the same area.

Another bifacial scraper tool is prepared on light brownish quartzite stone flake. It has 12 centimetre length, 6.1 centimetre width and 3 centimetre breadth. The left portion of the tool works as working end. Both sides have controlled flaking and small flakes have been removed from dorsal as well as ventral face.

Another flake tool is made on light white quartzite stone. It is 8 centimetre long, 4.9 centimetre width and 3.2 centimetre breadth. This tool is in shape of a triangular. The working end is comparatively straight.

Figure 22: Depiction of Swastika

Dadikar Hajipur: Behind the fort of Balakot, which is located on the top of the hill in Alwar, a mettle road leads to some interior villages such as Dadikar, Hajipur of Dehara Village Panchayat. These villages are located at a distance of 10 km from Balakot fort.

These villages are surrounded towards north, south and west by two parallel lines of hills of Aravalli range. Some medieval structural remains are also observed in the south east part of the village of Dadikar. It is very interesting feature that the Dadikar village is also settled on the heap of slag. This village lies 2 km south of Hajipur. Nearby a beautiful bowl shape valley exists, which has its opening towards the east. It extends south to north from 27° 34' to 27° 35.5' North Lat. and the 76° 34' East Long. Inner part of the hill, which has medium height (537 MSL), have different type of boulders made of granite. There are different types of cavities which were used by human beings for a long time since prehistoric period for sheltering. The archaeological remains have been collected from these shelters. There are total tool number is eight in which one handaxe, 3 scrapers, 2 cleavers and 1 core tool and 1 discoid consisted (Figure 17).

The scraper tool is prepared on light bluish quartzite stone. It has length of 13.3 centimetre, width 3.5 centimetres and breadth 10.1 centimetre. This tool is prepared on flake. Although this tool has "V" shaped handle but both of the edges are wider. There are striking platform can be seen on the dorsal face. Cortex is not present on the tool. Small flakes have been detached from working end. It is observed that wooden hammer is used for removing small flakes from the tool.

One of the cleaver tools is prepared on milky quartzite stone which has length of 14.3 centimetres, width 8.7 centimetres and 4 centimetre breadth. This tool may be placed in category of flake tools. There is cortex is available in some portion of working end of the tool. The long flakes are detached from both edges of the same. Secondary flaking may be seen on the edges also. Some deep flakes are also removed. Butt end is of "U" shape. It has comparatively uncontrolled flaking. There are triangular flake is removed from butt end also. The flakes are removed from both edges are resemblance in size and shape. Stepped flaking is also seen on this tool.

This scraper tool is prepared on brown quartzite stone which has length of 12.5 centimetres, width 4.8 centimetres and breadth 7.7 centimetres. This tool is prepared on core. There are cortex is available in the central part of dorsal. Flakes have been removed by controlled flaking technique from edges of the tool. The butt end portion is also flaked from both of the sides a dorsal and as well as ventral side. There are flaking is also done on working end portion also. The butt end portion is of "U" shape. There are comparatively bigger flakes are removed from left side. Although the flakes are removed from centre but they are small in size. Cortex is also in ventral portion. Both of the edges are parallel to each other.

Discoid tool is prepared on milky white quartzite stone which has 12 centimetre length, width 3.5 centimetres and breadth 10 centimetres. This tool is prepared on round pebble which is flaked from all sides. Although some of the small flakes are detached from corners around the pebbles also. This tool may be placed in category of lower Palaeolithic artifacts. The butt end portion is of "V" shape. There are cortex is

seen on the dorsal face. It is observed that the flakes are removed through controlled flaking technique. There are similar flakes are detached on dorsal face. Some of the small flakes are also detached. Secondary flaking is also done on the tool.

One core tool is also collected prepared on brownish black quartzite stone. It has 13 centimetres length, width 5.5 centimetres and 10.4 centimetre breadth. Small size flakes are detached from this tool. Evidences of minor flaking are also seen. There is no cortex on the dorsal face. This tool is asymmetrical triangular.

One middle Palaeolithic handaxe is also collected from here. It is 12 centimetre long, 4 centimetre width and 9 centimetre breadth. Flakes have been removed from both of the edges of dorsal face. It is made on core. The flakes are removed from working end. The butt end is of "U" shape. Both of the edges are parallel to each other. There are only edges are flaked from ventral face. Both of the corners are retouched. There is no cortex on butt end portion. This tool is prepared on rectangular flake. The butt end portion is wide and heavy from using point of view.

Some of the upper Palaeolithic chert tools are also collected from these painted rock shelters (Figure 18).Some of these shelters located here having pictographic evidences on their walls and ceilings (Sharma *et al* 2008: 83-88, Sharma *et al* 2012a: 102-111, Sharma *et al* 2012b: 59-72).

Figure 23: Motif in white colour

Currently, some of the shelters are using by "Sadhus" for isolation from public and perform meditation in the natural and peaceful environment. Hence, this hill has some religious importance for the villagers. At the southern part of foothill area there is a

small well *(Kui)*, which is called as *"Banjara ki Kui"* by local villagers. According to a legend, once upon a time there was a *Banjara* (mobile traders), who constructed it on the occasion of birth of a child. According to the lore, he was the creator of the rock paintings on the walls and ceiling of the rock shelters. There is a modern temple known as *Shyamsa* temple at the top of the hill. Towards the north, *Geena-Manak* and *Jaipal baba*'s small temples are located on a rectangular small platform. *Geena-Manak* and *Jaipal baba* are probably those monks who were stayed here for meditation and performed some other religious rituals in the past years. This is the only hill in this area which provided some natural facilities like sheltering and water for the ritual and meditation purposes. More than 200 rock shelters have been seen at these places and they are divided into two groups for study purpose, namely (1) Dadikar group and (2) Hajipur group. There are 173 rock shelters in Dadikar group, in which twenty nine contains rock paintings where as Hajipur group has 144 rock shelters; only twenty three are painted rock shelters. Most of the paintings are depicted by use of Hematite. In the regarding of motifs, a rectangular shape design is frequently drawn in the shelters (Total number of this type designs: 28, Figure 19). This type of design has a long tradition in Indian culture. Some human figures are also painted in this design. It indicates that it has a special importance. It may be a family or not. Local people, most of them are Gurjars, believes that it was a beautiful home of deity, related to fertility cult especially mother goddess of the children (Figure 20).

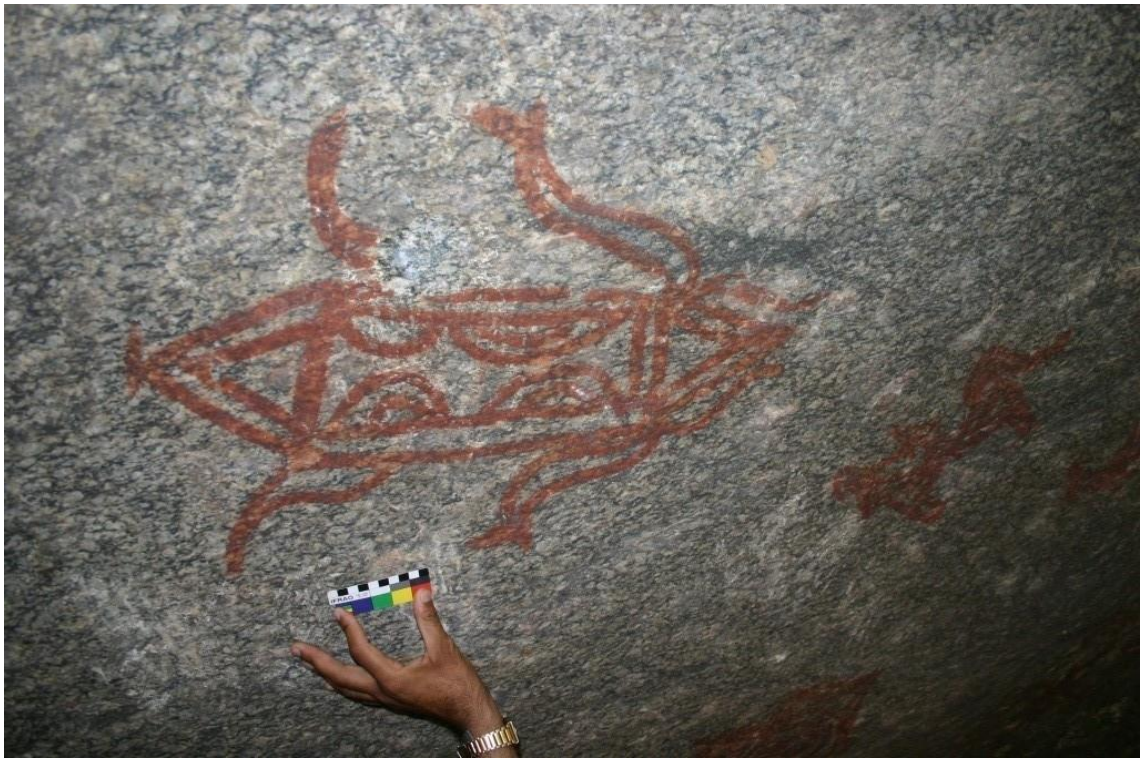

Figure 24: Ladder like design in red colour

Floral design is also frequently depicted in the paintings. Execution of swastika is very prominent and stylistic (Figure 21 & 22). These motifs must be related with community

beliefs and rituals. These symbols are using in daily life of various functions, rituals and festivals. A few shelters have ladder like structures in red and white color (Figure 23 & 24). One of the most important rock shelters is located at the southern part of hill, in the right side of *Shyamsa* temple, approximately 150 meter above the MSL. It has wide front area, facing eastern valley. This shelter has very important location from the view point of safety. It is the largest shelter in this hill. Its orientation is north to south. It has 11.65 meters wide opening towards east, 6 meters deep and 4.50 meter height. Its height reduces to 2.00 meter at the end. Southern part of shelter is 16.30 meter long and gradually narrows down to the extent of being closed from eastern side. This side is 3.25 meter deep and 2 meter high. The northern part of shelter which is facing east is more important when considered from point of view of availability of rock paintings. Some archaeological deposit also observed in this shelter. The rock art depicted is in the range of height varying from 1.5m to 3.15 m and it has colourful diversity of rock art. Paintings are made in different shades of red colour like light red, bright red, dark red, violet red etc. Few pictures are made by black and white colour also.

Figure 25: Depiction of masked hunter

All the pictures are not executed at a same time and not also in same colour. In the central part of this shelter, a round shape large picture have some rays type lines towards the upper and lower part, indicates some important theme. Towards northern part of it, there is a beautiful depiction of an elephant which is in motion with open mouth because his trunk also straight and upward, looks like that he is climbing to some upward direction. This figure, though made by simple lines, provides very

important information such as the environmental conditions of this region and artistic approach of the artist etc. Downward to this figure, a wild buffalo (90 x 46 cm) is depicted. Its lateral and visible portion is depicted. It is not a solitary figure, a masked hunter ready to hunt (Figure 25). The hunter is also depicted with his hunting equipments. It is pictorial evidence of the hunting technique. Downwards, there is a group of human beings depicted in this shelter. They are five in numbers. It may be a family. However, figures are depicted in the abstracted form but some facts are clear. First figure (southern) depicts a man (30 X 8cm), second is a child (10 X 4 cm) and third is a woman (25 X 7 cm), while fourth and fifth are also children (10 X 4 cm, 8 X 3.5 cm). Artist was very careful in the depiction of woman. Though it was highly abstracted and simple line drawing, but it is showing that the children are moving under the protection of the man and woman that may be the parents. In this shelter there are two more remarkable figures. Thematically, one of them is fish like animal which is presented in the desiccative manner. Inner part of the body is shown by three or four wavy lines from snout to tail. Both the arms and leg are depicted in the form of the fins. Lines and colour are totally different from the previous figures. This colour is slightly violet red and lines are more thick. Similarly, in another figure (60 X 24 cm), two forearms and two legs are executed towards the outer side of the body portion (Figure 26). Outer line of this motif is made by red colour and inner portion is filled with white colour. This type of tradition is in general, found at Panchmarhi region in central India. This Figure is clearly superimposed by a light red curved line drawing. Here is another line drawn abstracted figure, in which nine members of a group of human beings are painted in black colour. They are in a queue and with the leader, who is in between and well equipped with headgear.

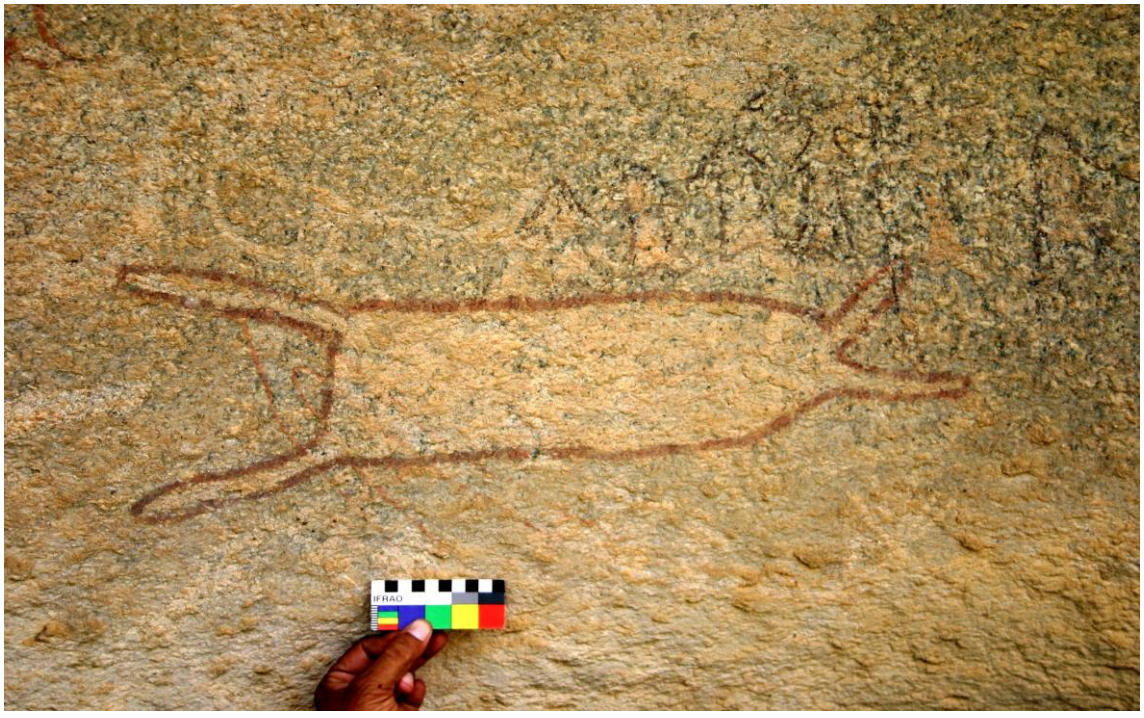

Figure 26: Depiction of a figure in red colour

At northern upper part of shelter, there is a beautiful hunting scene executed with the fine lines. It is very informative figure of the Mesolithic hunting technique. A double lined oval structure with an opening which looks like as an ambush is depicted. A deer is ready to enter in ambush is executed at the opening and in the centre of the structure; a masked hunter is also ready with his equipment (weapon) to hunt this animal. For the hunt, hunter has a long shaft with Mesolithic tools (barbed shaft). It is very important depiction for the presentation of Mesolithic technology adopted for the hunting process. In this picture animal and hunter both are presented in a special situation. Animal is in motion at the opening of ambush and most probable he is entering in the ambush and in front of it, hunter is ready to hunt this animal. Thematically, this indicates that the artist have selected a particular movement of the event for painting. We know that he was totally free for the selection of a theme, which could be some time before it and may be after the hunting process, but he was preferred to select this movement. It indicates that the Mesolithic artist was very careful for the selection of the themes of the paintings. Hence, we must be very aware regarding the study of rock art. At outer side of this structure, upwards, there is a beautiful line drawing of a humped bull which has a prominent tail in realistic form. It is very interesting that artist clearly indicated the loose skin below the neck. Perhaps, it is not a solitary figure but shows some association of the hunting scene. Colour and lines are showing some similarity with it. Eastern part of the hill has various types and size of rock shelters. Among these there are some painted rock shelters. Different types of motifs are depicted in these shelters. Some of those are very interesting, such as depiction of hunting techniques and type of tools. Elephant, bull, buffalo, horse and other animals are depicted in these paintings. Human figures are also depicted in various styles. Rectangular decorated motifs, floral designs and swastikas are also executed in a good numbers. Peacock depictions are general at the *Shyamsa* hill.

Samdha: The village of Samdha (27° 48.95' North, 76°25.5' East) is located in Bansur tehsil of Behror subdivision of Alwar district. A hill formed of Granite boulders is located in the village. From the area of foothill, some of the microliths are collected. Some rock paintings of Mesolithic period also observed on the shelters of the hill. There are some animal figures are depicted in these paintings.

Indor: The major medieval remains of the village of Indor lie at the north-eastern edge of Alwar Distict, straddling the Aravalli lineament that serves as the border between Haryana and Rajasthan. In 2015 and 2016, two seasons of an intensive surface survey and excavation project were conducted by Mudit Trivedi, Graduate Student, the University of Chicago in collaboration with the Department of Archaeology and Museums, Government of Rajasthan.

On the Aravalli tableland a succession of prehistoric occupations was documented. These included a significant Acheulian occupation marked by frequent surface finds of hand-axes, cleavers, a variety of cores and broken core-fragments alongside a wide range of utilized flakes. All artifacts were fashioned from the local quartzite. The

Palaleolithic occupation in the Mewat hills is likely extensive and within the Indor valley a number of localities were documented. In addition to this, extensive surface scatters were documented by Trivedi. At these locations, which are not infrequent expedient lithic reduction appears to have targeted veins of the intrusive quartz known to occur in this Aravalli region. Preliminary analysis suggests that the principal aim of reduction at these scatters was a range of utilizable flakes and a few side and end-scrapers but not blades (Information provided by Mudit Trivedi Trivedi 2015).

Discussion and Conclusion

The study of the archaeological materials in the above pages reveals an interesting image of the primitive man in Alwar district. It shows that during the prehistoric period, the region was also inhabited by primitive man. We may now try to see how the prehistoric culture was developed through the lower to upper palaeolithic in the specified region and also in nearby area.

The lack of palaeontological evidence from any of the sites precludes the establishment of a relative chronology on the basis of the comparative study of the tools recovered from the different parts of the country. Typologically, there is homogeneity among the tools of the all of the sites. Even we did not picked more than 15 tools from any of the site but on the basis of the recovered material we can assume that this area was also suitable region for primate man in ancient period. We have not seen any of the river section in the area. Spatially the Acheulian culture is better known in the eastern part of the Berach basin.

Raw Material: All the artifacts are made of quartzite stone of a good conchoidal fracture. The artifacts of the district have deep flake scars. It produces good conchoidal fracture and is suited for tool manufacture. Evidences for three techniques are seen in the Alwar industry called as, stone hammer, wood hammer and Levallois. The stone hammer technique is seen in the manufacture of a small number of handaxes, a majority of cleavers and in core scrapers and large flakes. All these exhibits deep, large scars, irregular outlines and uneven surfaces. The use of cylinder hammer technique is seen in a majority of handaxes, some cleavers and in secondary work on flakes. It has produced small, shallow scars, regular outlines, thin section and even surfaces.

Technique: There is no evidence of the use of heavy stone hammer seen in the large, thick flakes of the early Stone Age. In the preparation of tools, all the flakes were detached either by a light stone hammer or a wood or bone hammer. The same technique was mostly employed in the preparation of core tools. Prepared core technique is more common in this culture than in the lower and middle palaeolithic period. Flake scrapers and points bear very fine retouch on their margins. This could have been produced by the use of a sharp, pointed instrument, possibly of bone or tooth.

Raw material has its own importance in the life of human being. Quartzite stone was the first priority of lower Paleolithic man for making the tools. Scrapers, handaxes and

cleavers are the main tool of the primitive man. In the middle palaeolithic period, the continuity of handaxes may be observed with the variation in sizes on the same raw material. Small sized handaxes are of middle palaeolithic period. The lower palaeolithic industry was based on core tools while middle palaeolthic tools are made on flakes. Upper palaeolithic industry is totally based on flakes. Although no other sites of upper palaeolithic period are located in the region.

We have collected some Paleolithic and Mesolithic stone artifacts from open space area near the painted shelters during the exploration. At foothill, near Shyamsa point, (local people calls it 'Naitor'), an archaeological mound is located. Few sherds of Black and Red (B&R), and Painted Grey Ware (PGW) were collected from the mound. It indicates that this site is very important not only by archaeological view-point but also by research opportunities in rock art in this region.

Dadikar-Hajipur rock art site is very important site for the rock art study in granite region of Northern India. This site is located in the heart of Sariska sanctuary which has a dense forest area. This area is considered as Matsya Janpada and associated with the epic Mahabharata Period. Archaeologically, we have already mentioned that it was the area where we had got various type of archaic material which indicates the continuity of human activity and habitation from Paleolithic period to the present. The technologies for hunting adopted by the humans during the Mesolithic period are depicted in the form of a complete picture.

More than fifty painted rock shelters have been discovered at these sites. Most of the paintings have been depicted by using different shades of red color. It has been noted that thickness of patina is also one of very important factors for presenting the variation in colors. As a long span of time has passed after execution of paintings, some of them are not clearly visible and some of them are faded. Environmental moisture and sand particles deposited on the ceiling or wall surface of rock shelters in the form of a thin glassy layer. During the rainy season humidity goes to higher range in this area. This phenomenon leads to covering of every shelters open surface by this type of layers. It has also been observed that the rock shelters situated at upper part of hills have a thin transparent and glassy layer on the paintings, while foothill shelters are covered with thick layer of sand particles.

Thus, in general, lower parts of hill which have painted shelters are covered with thick layer made by heavy sand particles. This type of layer on the paintings towards the upper side of hill gradually becomes thinner and transparent. This type of deposition on the paintings is known as patination. As humidity increases in Monsoon season, this patination phenomenon augments. Though in open air, it would not be stable due to presence of light, wind and water but some parts of shelters would be inaccessible to these environmental factors and hence deposition shall become permanent in form of layer or patina. After a long time, decay of surface of shelter starts to happen. This process is known as exfoliation and can be seen in form of tiny chips coming out from the wall or ceilings of shelters.

It is interesting that paintings are not depicted in all available shelters in a specific region. Artist may have selected some important shelters for the art. The criteria of selection of shelters for paintings may be location of shelter, availability of water, light and strategy. Thus, most of the shelters near water sources show signals of art. Such a conducive environment leads to formation of patina over the paintings in these shelters; hence these motifs are not clearly visible.

Probably the early settlers of the rock shelters had a pragmatic outlook and vision behind such meaningful and beautiful paintings. The painted figures might be the beginnings of are cord keeping system by the early settlers to as on the information from generation to generation and appears to be a beginning of information technology. From these figures or icons the children and younger generation might have given information about herbivores and carnivores dwelling around, further the animal figures might have been used to team not only about their shape habitat and their behaviour but also about the danger perspectives. Rock art is the evidence of earlier art activity in India since prehistoric period. Rock art provides an insignificant into the world view of hunting gathering population. It tells us about the hunting gathering techniques and weapons and also about their material culture, dress, ornaments and social and cultural life of ancient communities.

Acknowledgement

The maps used in the article are taken from ground water publication reports of Public Health Engineering & Ground Water Departments of Rajasthan Government. I am thankful to Public Health Engineering Department & Ground Water Departments of Rajasthan Government for the maps. I am also thankful to Mr. Mudit Trivedi for providing information about prehistoric occupation at Indor. Last not the least, I am also thankful for those researchers whose references are used in this article also.

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