

Recently discovered Upper Paleolithic and Mesolithic Sites of Jodhpur district, Rajasthan, Western India: A Report based on preliminary observations

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Abstract

Intensive and extensive exploration of archaeological explorations were carried out in the Jodhpur district of Rajasthan Western India, by Dibyopama (2010). As the result of these surveys, two Upper Paleolithic and four Mesolithic sites were discovered. This is a significant contribution to the overall Archaeology of the Jodhpur district. This paper presents a preliminary report on the Microliths found in the Jodhpur district of the Rajasthan. Sites are located near the dry channel in the dunes of the Thar Desert. Microlithic tools along with lithic debitage were recovered from few localities in late Pleistocene contexts and some along with historical pottery.

Keywords *Upper Palaeolithic, Mesolithic, Newly discovered archaeological sites, Jodhpur district, Western Rajasthan and India*

Introduction

Rajasthan is well known for the findings of large numbers of prehistoric sites ranging from the Paleolithic to the Mesolithic periods. The Discovery of some Lower Paleolithic, Middle Paleolithic, Upper Paleolithic (Gurha and Nagri site) and Mesolithic sites has also been reported in the district (see Allchin *et al* 1978). Later on, while conducting the Paleoenvironmental projects few Paleolithic Mesolithic and historical sites were also been reported (Deotare *et al*1998, 2004). A systematic archaeological investigation was carried out in the region by Dibyopama (2010) to reconstruct the cultural chronology as well as to throw light on the Archaeology of the Jodhpur district. Only two Upper Paleolithic sites were reported in the Jodhpur district earlier - *Gurha* and *Nagri* (Allchin *et al* 1978). More than twenty Mesolithic sites were reported in the district earlier. There are two Upper Paleolithic and four Mesolithic sites are the latest discovery of Dibyopama (2010). Preliminary observation of stone tools and Microliths recovered from newly discovered Upper Paleolithic and Mesolithic sites from Jodhpur district are below –



Map-1 Google Earth satellite images showing the study area and location sites

Geographical Settings of the discovered Sites of the research area

Two Upper Palaeolithic sites and four Mesolithic sites are situated in the Phalodi Tehsil of Jodhpur district. Archaeological sites of Phalodi Tehsil were found buried on the pediment of intermittent sloppy valleys and well preserved and stable landforms, which are very suitable for the establishment of any cultural and archaeological site at places. Another character of this area is the presence of blocked drainage lead to a high water table. Even without watering crops can grow very well in the areas of blocked drainage. So, the landscape near the blocked drainage was the preferred area for ancient inhabitants.

Phalodi Industrial area

Mesolithic and Early Historic/Rang Mahal site is located 500m southeast of the Phalodi town and known as an Industrial area, situated in Phalodi Tehsil of Jodhpur district. It is located on the southern bank of the dried seasonal stream; it is extended E-W 500m and N-S 800m, the thickness of archaeological deposit 3-5 ft in height from the surface. Microliths, core and blades etc, were found scattered on the surface of the site. Though it is a multicultural site but focus will be given to Mesolithic occupation. Archaeological findings of Mesolithic phase – Microliths and core debitage (Dibyopama; 2010)

Description of Microliths recovered from the site is following

1. Core rejuvenation flakes – Chert (Fig.5)
2. Flakes with cortex – (Fig. 5)
3. Core in situ on the surface of Archaeological site Phalodi Industrial Area (Fig. 2)
4. Core in situ on the surface of Archaeological site Phalodi Industrial Area (Fig. 3)
5. Chopper in situ on the surface of Archaeological site Phalodi Industrial Area (Fig. 4)



Figure 1 - General View of Archaeological site Phalodi Industrial Area



Figure 2 – Core in situ on the surface of Archaeological site Phalodi Industrial Area



Figure 3 - Core in situ on the surface of Archaeological site Phalodi Industrial Area



Figure 4 - Chopper in situ on the surface of Archaeological site Phalodi Industrial Area



Figure 5 – Microliths from Site no.2

Site no. 4 (Khinchan village)

Upper Paleolithic, Mesolithic and Early Historic/Rang Mahal site is located 1km southwest of the Nagaur highway behind Khinchan village and Southern bank of seasonal River, Phalodi Tehsil of Jodhpur district. The extent of the archaeological site is E-W 200m and N-S 50m. Surroundings environment of the site - eastern and western side rows of dunes, Southern side private land and Northern side Khinchan village. The site is situated on a dune almost 10m of height from nearby dry seasonal stream. Scatter of Microliths observed over stable surface of a dune. Archaeological findings – Blade and Microlithic debitage (Dibyopama; 2010).

Description of Microliths recovered from the site is following

1. Blade – Banded agate – no retouch the only blade – left lateral side there is the cortex, edge or utilization mark observe on both lateral side of the blade, Microliths seems to be Upper Paleolithic because the size of the blade more than 4cm, Mesolithic tools are usually less than three centimetres. (Fig.9).
2. Parallel sided blades with retouched, denticulate edge. seems to be Upper Paleolithic because the size of the blade is more than 4cm, Mesolithic tools are usually less than three centimetres (Fig no.8)
3. Flake core rejuvenated (Fig.10)



Figure 6 – General view of Site no.4 Archaeological site (Khinchan Village)



Figure 7 – Blade on the surface of Archaeological site Khinchan Village



Figure 8 – Upper Paleolithic Blade from site no. 4



Figure 9 – Flake core rejuvenated

Site no. 5 (Khinchan village)

Upper Paleolithic, Mesolithic and Early Historic Rang Mahal site is located 4 km southwest of the Nagaur highway near Khinchan village. The latitude and Longitude of this site are N 27°08' - 09.1' and E 072°24' -25.0'. The site is extended E-W 500m and N-S 500m site is situated on the highest point of dune approximately 9ft high. Surroundings environment of the site - eastern and western side rows of dunes, southern side private land and northern side Khinchan village. Microlithic tools are scattered on the surface of the middle of dunes and intense spread of microlithic tools are found. Archaeological findings – Microliths (Dibyopama; 2010)

Description of Microliths/tools recovered from the site is following

1. Retouched blade – Retouched on both lateral sides and the kind of retouch, denticulate. Material grey-brown chert – Upper Paleolithic, size modified from original (Fig.13).
2. Crystal scraper – Side end scraper, has utilization marks also (Fig.14).
3. Retouched blade – Material chert retouched from both lateral sides, type of retouches marginal retouch chert (Fig.14)
4. Flakes – Core trimming, flake with cortex-chert (Fig.14)
5. Core rejuvenation flake – chert (Fig.14)
6. Core rejuvenation flake – chert (Fig.14)



Figure 10 – General View of Site no. 5 (Khinchan Village)



Figure 11 - Microliths on the Surface of the archaeological site no.5



Figure 12 – Upper Paleolithic Blade from Site no.5



Figure 13 – Microliths from Site no.5

Site no. 33(Motoi)

Mesolithic and Early Historic Rang Mahal site is located 12km northeast of Phalodi near Motoi village. The latitude and Longitude of this area are N 27°18` - 20.2` and E 072°36` -22.6`. The site is extended E-W 200m and N-S 300m. Microliths like core and blades etc found scattered over the flat stable surface of a dune. The site is surrounded by dunes all around the site. Archaeological findings – Microlithic tools (Dibyopama; 2010).

Description of Microliths recovered from the site is following

1. Blade – No retouch only blade – left lateral side there is the cortex, edge or utilization mark observe on both lateral sides of the blade. Raw material - banded agate (Fig.17).

2. Blade – No retouch only blade – left lateral side there is the cortex, edge or utilization mark observe on both lateral sides of the blade. Raw material - banded agate (Fig.17).
3. Flake core rejuvenated (Fig.17).
4. Lunate/back blade – Backed on the right lateral side and some retouched observed on the ventral side of artifact, this particular tool is made after breaking a blade, raw material agate and chalcedony (Fig.17).
5. Chunk flake – Chert, quartz, crystal core rejuvenated flake (Fig.17).
6. Core with the scar of removing flakes (Fig.16)



Figure 14 – General View of Archaeological site Motoi of Jodhpur district Rajasthan



Figure 15 – Core with scar of removing blades from it on the surface of Motoi Site



Figure 16 – Microliths from Archeological site Motoi

Discussion and Conclusion

Two Upper Paleolithic sites and four Mesolithic sites with the evidence of microlithic tools are an important addition in the Archaeology of the Jodhpur district. Finding beautiful blades of more than 4cm length is an identical finding from both newly discovered Upper Paleolithic sites. With these two newly discovered Upper Paleolithic sites now there are four Upper Paleolithic sites in the Jodhpur district of Rajasthan and it is an important addition, because evidence of Upper Paleolithic sites, not only in Jodhpur district even in Rajasthan is very limited. Microlithic tools from Jodhpur are mostly non-geometric with few exceptions. Variety of Microlithic tools recovered from all four newly discovered Mesolithic sites of Jodhpur district are - broken blade, blade without retouch and retouched blade, lunate/backblade, cores with the marks of removing flakes. Also, different varieties of flakes were observed, flakes removed from core trimming, flake with cortex, core rejuvenation flake, utilized/edged or damaged flake, scraper with utilization marks also, chunk flake. Raw materials of Microlithic tools are from these newly discovered, Upper Paleolithic and Mesolithic sites are - banded agate, chert, quartz, crystal, chalcedony and quartzite. Locally available riverine based raw materials were mostly used for manufacturing the lithic tools of the site. The sites were occupied seasonally by the late Paleolithic prehistoric hunter-gatherer and evidenced with a thin layer of deposits. The landscape near the stable dunes, intermittent sloppy valley and blocked drainage was preferred by ancient inhabitants in this region. Detailed future studies on newly reported Upper Paleolithic and Mesolithic sites can add important information in the archaeology of the Jodhpur district and the overall archaeology of Rajasthan.

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