New Evidence for Upper Palaeolithic Material Culture from North West Kashmir

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Abstract

In a recent systematic survey of the north western Kashmir two sites suggesting human activity dating to c. 18,000 (Upper Palaeolithic Period) were located in Baramulla District. Among the two sites, one has an in-situ rock engraving and the other yielding lithic artefacts. These new sites and their material culture – after analyses informed us about the chronology, site types and the landscape during the upper Palaeolithic period in Kashmir.

Through this paper, we aim to propose new interpretations about Upper Palaeolithic material culture and their settlement patterns for the regional landscape of north western Kashmir. This is achieved by considering interpretations of material culture from these two newly found sites, the previously known in the region and also the choices and interactions people made with respect to landscape.

Introduction

Baramulla District lies between 33^0 15′ to 34^0 N (latitudes) and 73^0 45′ to 74^0 20′ E (longitudes) and is one of the 10 districts of the oval shaped Kashmir, commanding an average height of 1580 masl. The district is hilly and abounds in difficult terrain (see Figure 2). Baramulla District is bounded by Kupwara in the north, Budgam and Poonch in the south, parts of Srinagar, Bandipor and Ganderbal in the east and has the line of control between India and Pakistan in the west (see Figure 1)

Baramulla District is located on two ancient routes - from the earliest periods, it has held an important place in Kashmir and is mentioned in ancient literature such as the Nilmatpurana (thought to be a 6th century account about the cultural history of Kashmir) and the Rajatarangini (an 11th century account of kings and their kingdoms in Kashmir)

(Ghai 1994; Stein 1989a,b; Agrawal 1992; Burbank 1982; De Terra and Paterson 2003; Husain 2008). The north west Kashmir provide a geographically diverse area for the investigation of human settlement patterns as they contain mountains, lakes, rivers, agricultural and horticultural lands, karewas, and margs (high altitude pasture land). Place names of ancient habitations can be identified corresponding to existing settlements, such as Suyyapura for modern Sopore, Varamulla for modern Baramulla, Samkarapura for modern Pattan and Pratapapura for modern Tapar (Stein 1989b, 481-489; Sufi 1996). Also of importance are the adjoining regions of ancient Wular Lake in Sopore tehsil connected with one of the ancient trade routes in Baramulla District (Mitra 1984; Shali 2001; Yatoo 2005).

New Evidence

A single open air site (4.6) with material culture resembling that is known from the Upper Palaeolithic period yielded several lithic tools. These tools were found towards the north west of the site within 4.5 sq meters (50 sq feet) adjacent to a large Neolithic site on the slope of a mountain. The tools collected from this site, when analysed, resembled the Manasbal (Bandey 1997; 2009) and Sombur (Pant et al. 1982) type tools. The tools collected at site 4.6 comprise a dis-coidal convex side scraper with a few deep and shallow flaking scars, a uni-facial pebble scrapper or core tool and an elongated chopping tool with deep flaking and a broken butt end (see Figure 3). The tools are medium sized, thick and broad, and are of volcanic type of rock called 'trap'. Many other specimens were also collected which were doubtful in terms of being genuine lithic tools.

Towards north east of this Upper Palaeolithic site and 1 km away from it, was located an Upper Palaeolithic site (see Figure 5) along the same mountain range. A bi-facial scraper was found some 3.5 meters down the mountain from an in situ rock engraving. Three rock shelters were also found surrounding the rock engraving although no material culture was found in their vicinity. Based on extant tool typologies of this period in Kashmir, the tools were thought to belong to the Upper Palaeolithic period of Kashmir (Bandey 1997; 2009: 55). The rock engraving - first of its kind recorded in Kashmir, and thus had no comparators in this region. However, on the basis of subject

matter and style, it had some similarities with the Bhimbetka rock art in India (such as masked figures, hunting scenes, and people running in one direction). The earliest date for the Bhimbetka rock art dates to the Upper Palaeolithic period c. 18000 BCE (Wakankar 1984; 1985: 176). However, there is great debate over the dating of rock art, and some of these issues, along with the interpretations of the rock art and its relevance to the Upper Palaeolithic site recorded in Baramulla District are discussed below.

The new Upper Palaeolithic material culture in context

With varied nomenclature in use, and different interpretations given to the Upper Palaeolithic in India (Agrawal and Kharakwal 2002: 99; James and Petraglia 2005: 12; Murty 1979: 303; Paddayya 2008: 783) it becomes necessary to provide context for the Upper Palaeolithic material culture. Therefore, in the present study the Palaeolithic phase of Kashmir is discussed, as comparisons will be made specifically with the Upper Palaeolithic sites of Kashmir to discern how north west Kashmir fits within the Palaeolithic sequence of Kashmir.

Previous models of Palaeolithic settlements in Kashmir

From the extensive work of De Terra and Paterson in the Kashmir aimed at building Pleistocene history and associated human cultures in the region, the only substantial archaeological remains located by them was the Neolithic material culture at Burzahom. They failed to locate any Palaeolithic sites in Kashmir, although a large number of Palaeolithic sites were reported by them in the neighbouring Potwar Region of Pakistan. They suggested that towards the south of Kashmir, the Pir Panjal mountain range was treacherous and inhospitable to cross, thus forming a natural barrier. As the Potwar Region lies to the south and west of Kashmir, and as Palaeolithic tools had already been found there and dated to c. 18,000 BP (De Terra and Paterson 2003: 224-234), it was thought that the barrier of the Pir Panjal had prevented the spread of people and tools further east and north during the Palaeolithic period.

Sankalia (1971) challenged De Terra and Paterson's theory by surveying the Pahalgam region in southern Kashmir. He reported an Abbevillian handaxe and a massive flake from well-stratified deposits, besides several other tools found along the

Liddar River at an altitude of c. 2134 masl, dating to the first interglacial and second glacial periods of the Lower Pleistocene (Lower Palaeolithic, c. 2.5 - 1.9 MY BP) (Sankalia 1971: 558; 1974, figure 4). The Liddar River at its origin point is c. 3575 masl: a major tributary passing through Pahalgam at c. 2164 masl and feeding the Jhelum River below at c. 1584 masl at its confluence in Kashmir. More tools were reported by Joshi et al. (1974) around Pahalgam, who suggested that the tools collected by his team and by Sankalia belonged to the Middle Pleistocene (c. 1.9 MY BP). Joshi et al. suggested this date because they believed that there was only one glacial phase and they called it the Pahalgam phase occurring at c. 2134 masl in the Kashmir region where the Palaeolithic tools were found by him (Joshi et al. 1974: 374-375).

Bandey's (1997; 2009) focus was northern Kashmir where he surveyed Manasbal Lake in district Ganderbal. Manasbal Lake is at an altitude of c. 1584 masl and is situated north east of Srinagar surrounded by mountains and karewas. Bandey found a few caves at c. 1981 masl on the mountains surrounding this lake and found tools of the Middle Palaeolithic period in the vicinity of the caves (see figure 4). Bandey suggests that only high altitude areas were initially habitable as the valley floor towards north was covered by raised water levels (Bandey 2009: 53-54). He believes people started exploiting new places and moving to lower grounds as the conditions improved and waters receded from Kashmir between c. 45,000 to c. 18,000 BP.

Upper Palaeolithic (c. 18,000-17,000 BP) tools were recorded for the first time by Pant et al. (1982) in the Kashmir Palaeoclimate Project. These tools were excavated from beneath the loessic deposits of karewa surfaces at Sombur in Srinagar, and Pant et al. also made reference to the presence of similar tools at three other places (Pant et al. 1982: 38, see figure 4). These tools were relatively dated to c. 18,000 BP which is the date of the second palaeosol where they were found buried (Agrawal 1992: 215-216; Pant et al. 1982). Sombur is located 5km south east of Srinagar on the alluvial terraces on the right bank of the Jhelum River, at an altitude of c. 1584 masl. The results of this study indicate an important aspect relevant to the discussion here: Upper Palaeolithic material culture was found on the karewa tops on the valley floor c. 1584 masl, which is in contrast to the Lower and Middle Palaeolithic material found in high river valleys such as Pahalgam c. 2134 masl and Manasbal c. 1981 masl.

The evidence of the Palaeolithic rock art site in north west Kashmir

The only in-situ Palaeolithic material culture in north west region was reported in the Bumai area of Sopore in Baramulla district (Yatoo 2005; Vahia et al. in press), when an Upper Palaeolithic site was recorded along the Yemran Mountains, 1 km north east of site (4.6), at an altitude of 1664 masl.

The chronological date for this site was based on typological similarities drawn with tools from Manasbal and Sombur, and some consideration of the style and subject matter of the rock engraving. Although tool typology is relatively straightforward, it is nevertheless difficult to support dating with analysis of rock art and its iconography. Dating rock art remains controversial and it is very difficult to build a chronology using it. Bednarik's (2002: 1213-1214) critique of rock art suggests iconography and style can produce useful supplementary information, but this area remains subject to many criticisms. Illustrating this with a case study of the Coa Valley petroglyphs in Portugal, Bednarik (1995: 877-878) discusses how radio carbon estimates and micro-erosion analysis suggested most of the rock art dated to 3000 BC rather than the Pleistocene, as earlier thought. However, Bednarik (1995; 2002) along with Pettitt and Pike (2007) suggests these scientific dating methods are themselves sometimes subject to criticism when dating rock art, for example accretion of organic matter, or contamination of rock surface that can falsify the results. In view of the Bednarik's (1995; 2002) and Pettitt and Pike's (2007) strong comments and suggestions of dating rock art, it is interesting to note how despite these reservations, Jacobson (1979: 480) and Murty (1979: 317) stated that the Upper Palaeolithic art in India, at Belan Valley, Patne, and the rock paintings and carvings at Bhimbetka, date to c. 20,000 to 18,000 years BP. The evidence of engraved ostrich egg shells at Patne and alternative dates for the rock art of c. 8,000 to c. 5,000 BP (Tewari 1986) offer a very different interpretation.

Given the difficulties of dating rock art and the controversy date estimates for rock art have generated, in this current work I will follow the stone tool typologies and estimated date ranges, which place the Upper Palaeolithic in Kashmir between c. 18,000 BP and c. 17,000 BP.

New evidence of activity during the Upper Palaeolithic period in North West Kashmir

The new evidence of the Upper Palaeolithic material culture adds a great deal to the existing knowledge of Palaeolithic activity in the Kashmir. The tools recovered during new systematic survey were typologically similar to those of Sombur, and those found during previous work in Baramulla.

One new Upper Palaeolithic site was found (4.6), and was located at an altitude of c. 1646 masl, making it 18 meters lower than the Upper Palaeolithic rock engraving site but higher by 64 meters than Sombur as reported by Pant et al. (1982). Sombur (c. 1584 masl) is considerably lower in altitude than Manasbal Middle Palaeolithic site (c. 1981 masl) and Pahalgam Palaeolithic sites (c. 2134 masl). This shows that the Upper Palaeolithic site located on the slopes of the Yemran Mountains in northern Kashmir in the recent survey is higher than Sombur Upper Palaeolithic site located in southern Kashmir and this difference in altitudes of sites might be due to unsuitable land or higher water levels in the north of Kashmir. Agrawal (1992) suggested that it was the south Kashmir which drained first, around c. 85,000 BP, leading to the first formation of karewas where the Sombur material culture was found (these were therefore called lower karewas. Agrawal further suggested that during the terminal phase of the Upper Pleistocene period c. 20,000 BP the Kashmir valley floor stabilised and became habitable.

Another important issue is the period between the known Upper Palaeolithic sites and materials, and the much later Neolithic. Pant et al. (1982) suggested that there was a transition from Upper Palaeolithic to Neolithic, but this was based entirely on surface finds from their survey and does not stand up to critical analysis. The new site (4.6) is located towards the north west corner of a large Neolithic site, that has pottery and ground stone tools scattered further down the slopes of the Yemran Mountains. In Kashmir, there is an absence of the Mesolithic phase - not a single Mesolithic (or Microlithic) site has been reported to date (Jayaswal 2008: 328; Shali 2001: 58-59: Thapar 1985: 36). The juxtaposition of the Upper Palaeolithic and the Neolithic material and/or sites in both my survey and in Pant et al.'s work raises further interesting

questions about settlement history and chronology in this region. Excavation at selected sites would be useful to find out more about the period in between the two chronological periods, and also the form of the Mesolithic, or intervening period here.

Therefore the present information indicates that the Upper Palaeolithic sites tend to be located along the mountain ridges (at an altitude of c. 1646 masl in north west Kashmir) and karewas (at an altitude of c. 1584 masl in Sombur), both considerably lower in altitude than Lower or Middle Palaeolithic period sites in Kashmir. The results and findings of this study for the first time shed important light on the Palaeolithic activities over the landscape of north west Kashmir in particular and Kashmir in general, that go beyond describing tool typologies and art forms.

Conclusion

Two sites belonging to the Upper Palaeolithic period were located in Baramulla District along the Yemran Mountains in the district to date. Apart from Sombur site (Pant et al. 1982), there is hardly any information about the Upper Palaeolithic period of Kashmir. The small amount of information we have about the broad Palaeolithic periods of Kashmir (the Lower and Middle Palaeolithic phases) have been obtained from Pahalgam (south Kashmir) and Manasbal (north Kashmir), both located along high mountain valleys. The information that could be deduced from these Palaeolithic sites in Kashmir is their chronological timescale, altitude and material culture. Analysing this available information about the Lower, the Middle Palaeolithic and the Upper Palaeolithic sites (apart from differences in chronology and tool typology), the Lower and the Middle Palaeolithic sites were observed to be situated at higher altitudes (c. 2134 masl) than the known Upper Palaeolithic site at Sombur (c. 1584 masl), which is on a karewa on the valley floor. Furthermore, studying the Pleistocene history of Kashmir, it become known that Kashmir was submerged under water and its valley floor was inaccessible for habitation at least up to c. 85000 years BP, when due to physical changes water drained and the karewas on valley floor in the southern part of Kashmir first appeared (Agrawal 1992). These karewas thereafter witnessed the first activities of the Upper Palaeolithic people at Sombur around c. 18000 BP in Kashmir.

The new Upper Palaeolithic information from Baramulla District is in contrast to the information we have from Sombur in Kashmir. The new site located in the present research (at 1647 masl, 63 meters higher than Sombur) along with the Upper Palaeolithic site reported in my MPhil survey along the Yemran Mountain range (at 1664 masl, 17 meters lower than the new site), suggests that the Upper Palaeolithic activities took place towards north Kashmir on the slopes of mountains rather than karewas on valley floor as found towards south Kashmir. If we sum up the whole information about the Palaeolithic period of Kashmir, it can be said that in the Lower Palaeolithic people were exploiting high altitude zones (e.g. Pahalgam or Manasbal), and then tending to make more use of the valley floors during the Upper Palaeolithic following extreme landscape changes (e.g. Sombur). However, in Baramulla District (the northern side of Kashmir), people seem to have remained on higher altitudes till at least fourth millennium BC probably on account of raised water levels or threat of flooding or swampy land which has since stabilised after the draining of the water.

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Figures

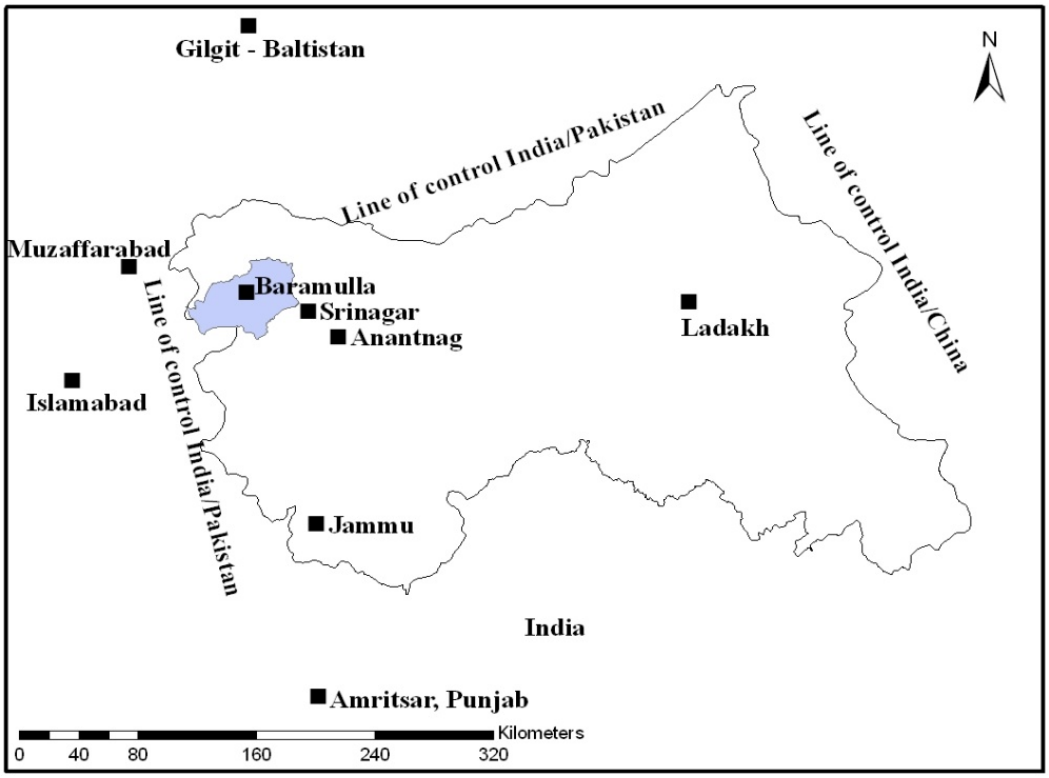

Figure 1. Location map of Baramulla District showing it in Jammu and Kashmir

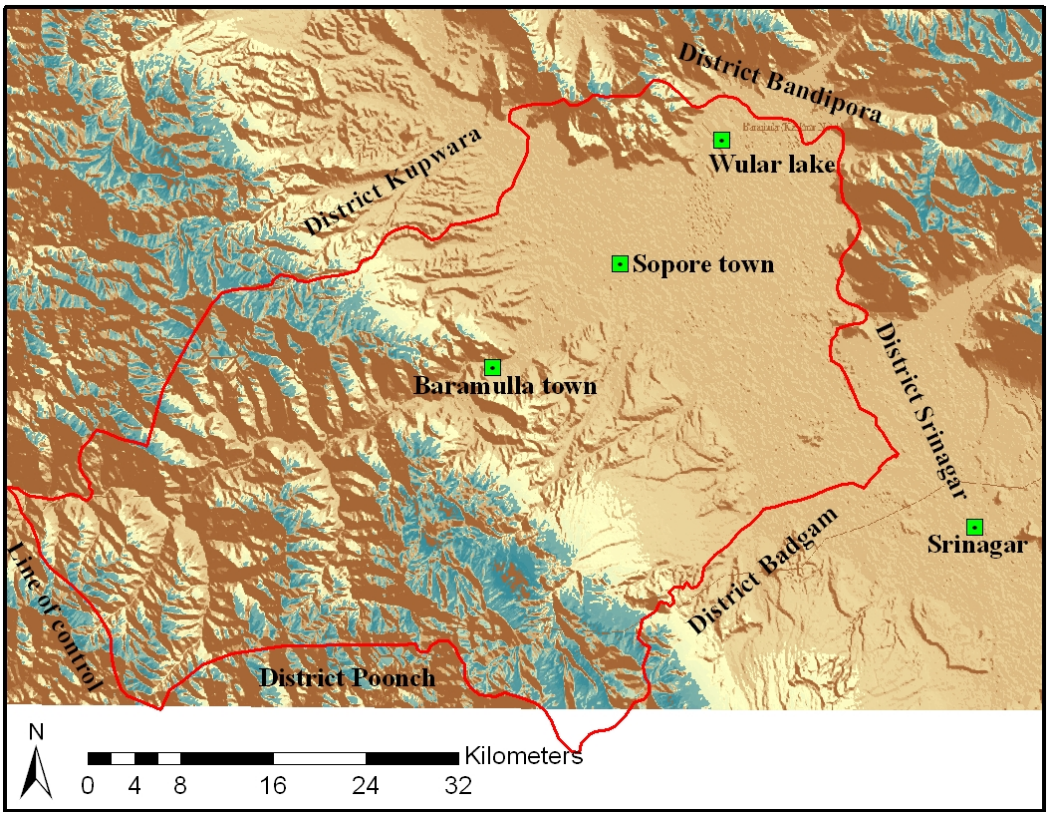

Figure 2. Showing topography of Baramulla District and its neighbouring districts

Figure 3. Upper Palaeolithic tools from site 4.6 (Photo: Mumtaz Yatoo 2009)

Figure 4. Taken from western end shows the rock engraving on the face of the rock along the Yemran mountains in Bumai area of Baramulla District (Photo: Mumtaz Yatoo 2009).

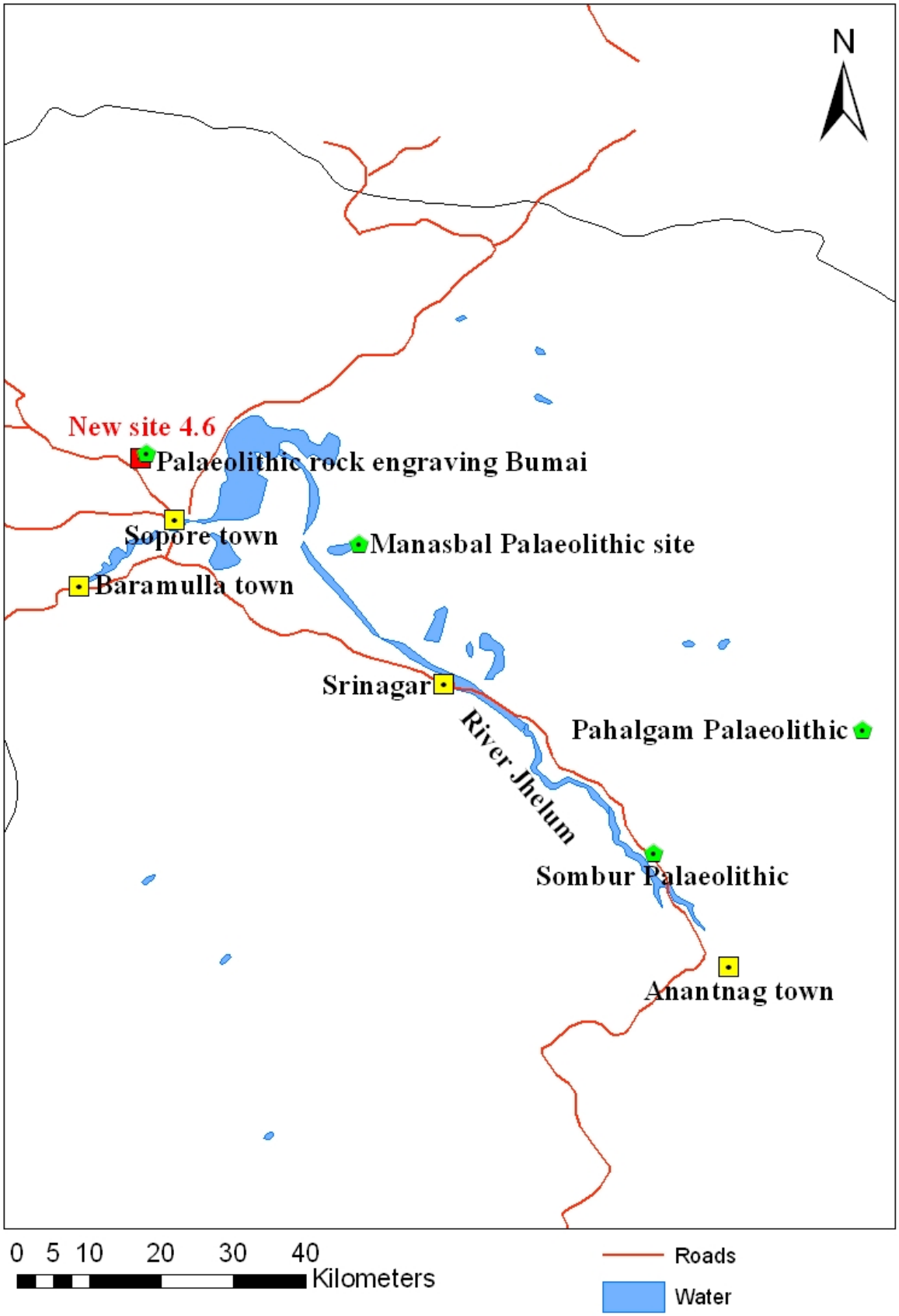

Figure 5. New Upper Palaeolithic site 4.6 in context with known sites in Kashmir