

PREHISTORIC SURVEY IN LOWER SUVARNAREKHA VALLEY

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Abstract : Paschim Medinipur is located in the western part of the West Bengal. It is touching the border of Jharkhand state in the west and Orissa in the southwest. This district is well known in archaeological literature for its rich cultural heritage. Social evolution has been started in this region as before as 15,000,00 years ago. Pre-historic features of this region can be proved from its Stone Age evidences, which are collected from the river-beds of Subarnarekha, Kansavati and Tarapheni.

The sites here have not been so well known except to a select band of scholars. The sites have been described on a regular basis over almost the past two centuries. Some later scholars have reviewed the early sites to see if they can yield further data. As a result, this rich yield needs to be contextualized and put together. The area of my present study is concentrated in southwestern part of the district mainly in lower Subarnarekha basin. Extensive explorations were carried out in this area in November 2011. The present paper covers the Prehistoric culture which, would project a scenario of the Prehistoric way of life of the prehistoric hunters-gatherers in this region.

Key Words : Culture, heritage, social evolution, prehistory, stone age, Holocene, Pleistocene, Subarnarekha, Chhotonagpur plateau, artefact, Palaeolithic

Introduction

Paschim Medinipur is located between 20° 23' and 22° 56' N ; 86° 34' and 87° 54' E, the western part of West Bengal. It is touching the border of Jharkhand state in the west and Orissa in the southwest. It shares its northern boundary with Bankura and Hugli district and eastern boundary with Hugli and Purba Medinipur. The district is noted for its great geographical diversity (Fig. I).

The north and north-west region of this district is a part of the Chhotonagpur plateau in its eastern end and is covered with hard laterite stone. The eastern part of Medinipur (undivided) is a formation of recent alluvial and the southern sandy region is a part of coastal plain.

Four major rivers go through this region, namely Hooghly, Kasai, Rupnarayan and Subarnarekha. As the land in Medinipur (undivided) slopes from the north-west to the south-east, these rivers course towards the south-east.

If the geographical features of this district are discussed, it would be found that these stone formations belong to 'recent' (Holocene), Pleistocene, Pliocene, Miocene, etc. Almost in 2/3 part of this region, 'recent alluvium' can be found and then 'laterite'. Other rocks are

conglomerate, epidiorite and niche. These are hard and stony and not at all cultivable. The State Highway is stretched from Garbeta to the north of Medinipur town and from Dantan in the south to Kharagpur, and the rail-track goes just on its parallel line and this may be treated as the apportioning line of these two land-formations. The portions on the east are plain and of alluvial soil but on the other side, the western portion is the eroded part of the Chhotonagpur plateau. This wavy upland descends towards the east with slopes.

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The sites here have not been so well known except to a select band of scholars. The sites have been described on a regular basis over almost the past two centuries. Some later scholars have reviewed the early sites to see if they can yield further data. As a result, this rich yield needs to be contextualized and put together. The present paper covers the prehistoric culture which would project a scenario of the prehistoric way of life of the prehistoric hunters-gatherers in this region.

Area of Investigation

The area of my present study is concentrated in southwestern part of the district. Extensive explorations were carried out in this area in November 2011. An exploration in lower Subarnarekha Valley which was mainly concentrated in and around 20 km area of Gopiballavpur resulted in the discovery of some prehistoric sites from that region.

Paschim Medinipur is a neighbouring area of Jharkhand and Orissa. This very upland is of 2029 sq. k.m. and the lands look wavy in this area. Some small ranges and 'depression' are found here. It's a part of Chhotonagpur plateau, which is formed with laterite. In the extreme north, some hills can be seen, which range from 82 meters to 223 meters in height. The slope of the land is from north-west to south-east. In its hilly surface some rivers and streams course with their move. Among them, some rivers meet the flow of Kasai in the north, and some of them meet the Subarnarekha. Among them, the major one is Dulung, which is on the right side of the Subarnarekha. It is originated in Binpur region and meets the Subarnarekha in Sankrail block. The Subarnarekha may be called the controlling river of this upland region. This river comes from Bihar and enters into Gopiballavpur-I block of this district and heads towards east and then flows like a natural border of West Bengal and Orissa in the western part of Dantan-I block.

The soil surface of this western region is dry, non-fertile and unsuitable for habitation and cultivation. In the lower hilly areas bush and 'dwarf' sal trees are found. Blocks like

Binpur-I and Binpur-II, Jhargram, Sankrail, Jamboni, Gopiballavpur-I & II, Keshiary, Dantan-I are totally or partially included in this region.

Although prehistoric sites are known for quite a long time in Paschim Medinipur, the lithic industry of this district, from the Kasai, Tarafeni and Subarnarekha river valley shows continuation of stone age culture since the Palaeolithic period. Actually the transition of these cultures shows continuity as well as trying to move in a new inventory and a new environment.

As per tradition, gold was mined near the origin of the river at a village named Piska near Ranchi. This is why it was named Subarnarekha, meaning 'streak of gold'. Legend has it that traces of gold were found in the river bed. Even now people look for traces of gold particles in its sandy beds. The name is a combination of two words meaning gold and line/streak in Indian language (Fig. II).

After originating near Piska/ Nagri, near Ranchi, the capital of Jharkhand, the Subarnarekha traverses a long distance through Ranchi, Seraikela, Kharswan and east Singhbhum districts in the state. Thereafter it flows for shorter distances through Paschim Medinipur in West Bengal for 83 kilometres and Balasore district of Orissa. There it flows for 79 kilometres and joins the Bay of Bengal near Talsari. The total length of the river is 470 kilometres (Fig. III).

The basin of the Subarnarekha is smaller amongst the multi-state river basins in India. The rain-fed river covers a drainage area of 1.93 million hectares.

The swath of the Subarnarekha river that meanders through Orissa, Jharkhand and Bihar besides parts of Bengal in a typical zig-zag course with various types of rocks and stone slopes might induce a curious visitor into believing that the site could really house stony relics of the earliest man in India and South Asia that lived there without a break from as early as 2 million years ago. But, as seeing is not always believing, it will be little premature to rush to a firm conclusion that the site could really alter the already known history of the ancient man in the country.

This is basically Precambrian landmass. Geographically this area of the district comes under the lower Subarnarekha valley. The Chhotonagpur plateau of which the Subarnarekha belt is a part, does belong to the Gondwana landmass, considered as one of the world's most ancient rock formations. The undulated regions of this valley are covered with dense sal forest and the rest is covered with both *sal* and mixed forests. The nature of evidence suggests of its being an open-air station in southwestern part of the district.

This region, drained by the Subarnarekha and its tributaries, comprises the southern parts of Medinipur and Singhbhum, the latter being considered the focal area. The majority of the find-spots are on the river banks. Thick vegetation covers most parts of this outcrop

barring only patches that are treeless. A lateritic outcrop occurs in all the areas. Microlithic tools occur on the surface of this outcrop which has come up due to erosion. The preliminary exploration here (IAR 1968-9) suggested that there could be the possibility of finding of more than one complex of lithic industry at this location. This is the aim with which we carried out a detailed investigation in the session 2011-2012 (Fig. IV).

Important Prehistoric sites are :

Bankati: This site is under Sankrail PS of Jhargram sub-division. Hundreds of stone tools and artefacts have been discovered here. Stone tools and artefacts made of quartzite and belonging to Palaeolithic, Mesolithic and Neolithic periods and microlithic artefacts of Mesolithic age are also found. Stone tools and artefacts like pebble tool, scrapper and cleaver have also been discovered here.

Chuagarha: This site is under Gopiballavpur PS of Jhargram sub-division. Lots of stone tools and artefacts have been discovered here, most of the pebble tools are made of quartzite. Blades of Mesolithic age, scrappers and arrow-heads are made of chert. Pebble tools made of sand stone and dating to Palaeolithic age are also found here.

Chhototukri: This is a village in Gopiballavpur PS of Jhargram sub-division, different stone tools and artefacts dating back to Mesolithic and Neolithic period have been found. Mesolithic stone tools and artefacts like blades scrappers and arrow heads are made of chert.

Dhansol: This site is in Gopiballavpur PS of Jhargram sub-division where stone tools and artefacts of lower, middle and upper Palaeolithic age are found. Stone tools and artefacts like hand axe, scrapper and cleaver etc. made of quartzite are also available.

Dolki: This village is under Nayagram PS of Jhargram sub-division. Stone Age tools and artefacts are found here in a large number. These stone tools and artefacts are of lower-Palaeolithic age to Neolithic age. Lower Palaeolithic stone tools and artefacts made of quartzite and hand axe, arrow head, scrapper etc. are of upper Palaeolithic phase and made of chert. Middle Paleolithic stone tools and artefacts like, blades and arrow heads are made of same stone. A celt made of sand-stone, dating back to Neolithic age was also found here.

Ghorapincha: This site is in Gopiballavpur PS of Jhargram sub-division. Various types of stone evidences of lower Palaeolithic age to Neolithic age have been discovered here. Stone tools and artefacts like hand axe, cleaver and pebble tools are found here. Hand axe and arrow heads are made of quartzite and dating back to middle Palaeolithic age. Arrow head etc. of Neolithic age have been discovered here.

Hatibari: This site is in Gopiballavpur PS of Jhargram sub-division. Different stone tools and artefacts have been discovered here which dates back to lower Palaeolithic age

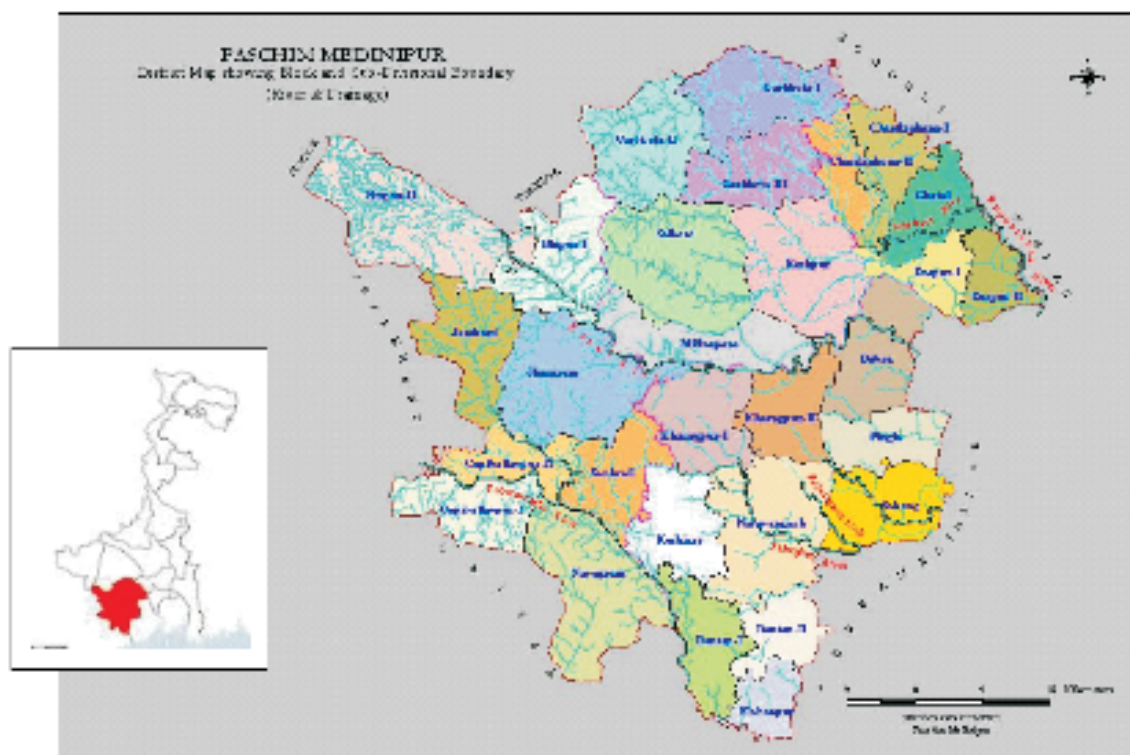


Fig. 1: District Map of Paschim Medinipur in West Bengal



Fig. II : General View of River Subansirekha



Fig. III : Area Map of Lower Subarnarekha Valley, Courtesy: Survey of India

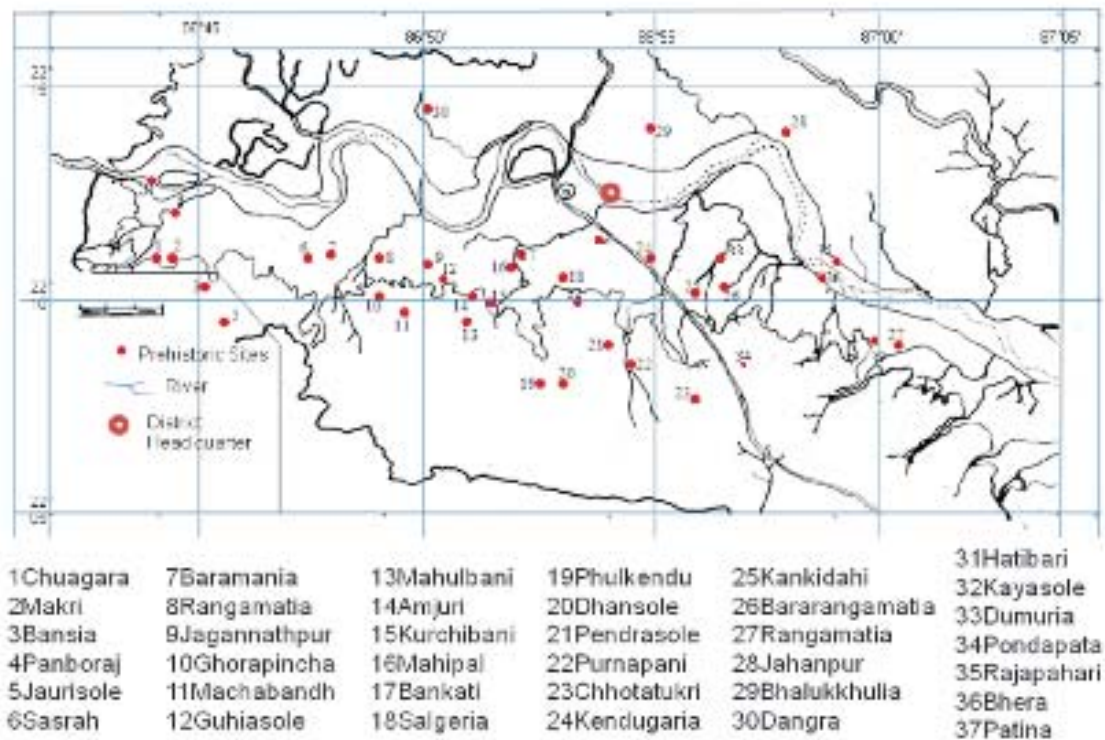


Fig. IV : Location of Prehistoric sites in Lower Subarnarekha Valley

Some photographs of the stone Age sites of the Studied Area



Chotatukri



Dhansol



Jarnagura



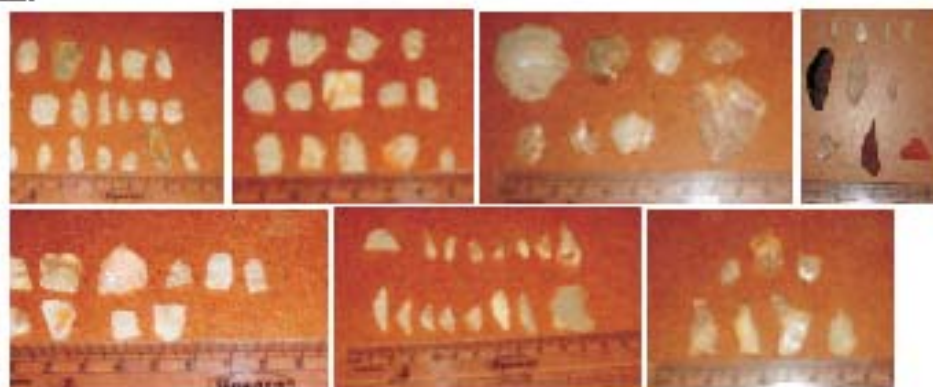
Kaysal



Kurnuberia



Hatimara

Some photographs of Stone tools collected from the Studied Area**Palaeolithic Tools:****Microoliths:****Neolithic Tool:**

and made of quartzite. Neolithic tools are also found here. Palaeoliths both of Abbevillian and Acheullian types are found here.

Hatimara: This site is in Gopiballavpur PS of Jhargram sub-division. Hand axes and cleavers made of quartzite dating back to lower Palaeolithic age and blade and scrapper made of chert dating back to middle Palaeolithic age are found here.

Jamagara: This site is in Gopiballavpur PS of Jhargram sub-division, where evidences of lower and middle Palaeolithic ages have been found.

Karkata: This is a village in Binpur PS of Jhargram sub-division, where an important pre historic site has been discovered. A great number of stone tools and artefacts were collected from this place. These mostly belong to Palaeolithic ages. No evidence of Neolithic phase was found here.

Kayasol: This is a village in Gopiballavpur PS of Jhargram sub-division, from where a good number of stone tools and artefacts have been discovered. Stone tools and artefacts of lower and middle Palaeolithic and of Mesolithic ages have been found here.

Kele Jharia: This site is under Jhargram PS. Stone tools and artefacts of lower and middle Palaeolithic and Mesolithic phases are found here. Mesolithic stone tools, such as scrappers, arrow heads, blades and triangular stone tools have been found here. These are made of chert.

Kurchibani: This site is in Nayagram PS of Jhargram Sub-division. Stone tools and artefacts of lower Palaeolithic and Mesolithic ages have been found here. These are mainly made of quartzite and Mesolithic stone tools are made of chert.

Kurumberia: This site is under Gopiballavpur of Jhargram sub-division. Remains of lower Palaeolithic and Mesolithic cultures have been discovered from this site. Eleavers of lower Palaeolithic and blades and arrow heads of Mesolithic culture have been found here.

Macha Bandha: Evidences of Palaeolithic, Mesolithic and Neolithic ages have been discovered here. Hand axes, made of quartzite and dating back to lower Palaeolithic phase, have been found here. Among the Neolithic tools mention may be made of ring stone tools.

Other important pre-historic sites:

Besides this, the sites of Subarnarekha basin, mention should be made of Sasara, Taldangra, Tenlate, Tikayetpur, Urusbhanga, Astajuri, Amarshi, Barabhum, Baludi, Baharasol, Champakhal, Champahati, Garbeta, Gidhni, Gopagriha, Kalgaon, Kukrakhupi, Karnagarh, Lalgarrh, Salboni, Sapkota pahar and Bhelia etc. also.

The Artefact Assemblages

The lower palaeoliths in this region are handaxes, cleavers, chopper-chopping tools, different types of scrapers, retouched blades, flakes, cores etc. The geological horizon of the lower palaeolithic industry in this state was either lower gravel bed or secondary laterite/detrital lateritic conglomerate.

The evidences of the middle Palaeolithic period are also reported from this area. The presence of flake tools and use of Levallois technique mark the middle Palaeoliths of this region. The main artefact types are scrapers, points and borers, and are made mainly on quartz and quartzite.

Discussion & Conclusion

Present surveys resulted in the discovery of stone-age tools of various periods on the banks of the Subarnarekha River. From the nature of the exposed clusters of artefacts it can be suggested that there were evolutionary stages of development of stone age cultures along the river bank that range from early Palaeolithic age to the Neolithic age.

The artefacts were collected from different areas of the region. The sites have yielded a rich collection of hand axes from Hatimara which is considered to be an important locality of lower Palaeolithic occurrence. All the four major tool types, hand axes, cleavers, choppers and scrappers have been recorded in this region, the hand axes being the best representation. These tools were used by early hominids of the lower Palaeolithic age. The upper terraces of rock layers that comprise metamorphosed quartz, lateritic-sandstones have evidences reportedly suggesting that the primitive men made extensive use of hand axes, cleavers and machetes which were believed to have been carved out of single boulder. Although blades had been used from an early stage of the Palaeolithic, they were made by percussion flaking. The technology of producing a large number of thin, strictly parallel-sided blades from a single core by pressure flaking was however a characteristic of the Mesolithic Period. We have reliable stratigraphical evidence to show that this technology evolved. These people used very fine grained quartz in earlier days which were available in the locality. But later people switched over to chalcedony and chert for making these new tools. Good quality tools were made on chert and Quartz. This does not lend itself to the production of good blades. This was also sometimes used probably because of the limited availability of chert and chalcedony but that is very rare. The existence of blade-based microlithic industry at least on three surfaces suggests at least three phases of colonization, the last phase being closer to the time segment of the Neolithic culture. Although problem remains as to whether the perfection of pressure and punch technique could have led to the grinding and polishing technique. The explorations in the site have so far yielded a large number of stone-age tools that apparently belonged to different ages, starting from the Palaeolithic, Mesolithic and Neolithic. It is definite from the available evidence that early stone age people lived in the Subarnarekha valley without a break. The area is extremely rich both from the archaeological and anthropological view points and requires a thorough investigation.

The relevant maps and photographs are presented at the end of the paper.

**Location and Cultural Distribution of Prehistoric sites in the
Lower Subarnarekha Valley:**

Site	Lat	Long	Toposheet No	Culture
Jahanpur	22° 14'	86° 59'	73 J/16	LP
Hatibari	22° 12' 42"	86° 44'	73J/12	LP, Meso
Panbaraj	22° 12'	86° 44' 30"	73 J/12	LP, MP
Chuagara	22° 11'	86° 45'	73 J/16	LP, MP, Meso
Makri	22° 11'	86° 45' 20"	73 J/16	LP, MP
Bansia	22° 10' 15"	86° 46'	73 J/16	LP, Meso
Jaurisole	22° 09' 30"	86° 46' 30"	73 J/16	LP
Sasrah	22° 11'	86° 48' 20"	73 J/16	LP, Meso
Baramania	22° 11'	86° 48' 58"	73 J/16	LP, MP, Meso
Rangamatia	22° 09'	87° 01' 30"	73 N/2	LP
Ghorapincha	22° 10'	86° 50'	73 J/16	LP, MP, Meso
Guhiasole	22° 10' 30"	86° 50' 30"	73 J/16	LP
Machabandh	22° 09' 40"	86° 50' 30"	73 J/16	LP, Meso
Jagannathpur	22° 10' 45"	86° 51' 07"	73 J/16	Meso
Amjuri	22° 10'	86° 52'	73 J/16	LP, MP, Meso
Mahulbani	22° 09' 30"	86° 52'	73 J/16	LP
Bankati	22° 11'	86° 53'	73 J/16	LP, MP, Meso
Mahipal	22° 10' 45"	86° 53'	73 J/16	LP
Kurchibani	22° 10' 20"	86° 52'	73 J/16	LP, Meso
Kayasole	22° 09' 57"	86° 53' 25"	73 J/16	LP, MP, Meso
Phulkendu	22° 08'	86° 53' 30"	73 J/16	LP
Dhansole	22° 08'	86° 54'	73 J/12	LP, MP, UP, Meso
Patharchaki	22° 11' 30"	86° 54'	73 J/16	LP, MP, Meso
Salgeria	22° 10' 30"	86° 54'	73 J/16	LP, MP, Meso
Pendrasole	22° 09'	86° 55'	73 J/16	LP
Purnapani	22° 08' 30"	86° 55' 30"	73 J/16	LP, MP, Meso
Kendugaria	22° 11'	86° 56'	73 J/16	LP, MP
Dumuria	22° 11'	86° 56' 30"	73 J/16	LP
Kankidahi	22° 10' 10"	86° 57'	73 J/16	LP
Pondapata	22° 08' 30"	86° 57'	73 J/16	LP, MP, Meso
Chhotatukri	22° 07' 45"	86° 57'	73 J/16	LP, Meso
Bararangamatia	22° 10' 20"	86° 57' 35"	73 J/16	LP
Rajapahari	22° 10' 55"	86° 59' 10"	73 J/16	LP
Bhera	22° 10' 30"	86° 58' 50"	73 J/16	LP, Meso
Taldangra	22° 10' 15"	87°	73 J/16	Meso
Patina	22° 09'	87°	73 N/4	LP
Dangra	22° 14' 30"	86° 51'	73 J/16	LP, MP
Bhalukkhulia	22° 14'	86° 56'	73 J/16	LP
Kharrapara	22° 10' 65"	86° 52' 16"	73 J/16	MP
Karabhasapal	22° 40' 10"	86° 47' 50"	73 J/14	Meso

REFERENCES

- Agrawal, D.P. and M.G. Yadava. 1995. *Dating the Past*. Pune: Indian Society for Prehistoric and Quaternary Studies.
- Ball, V. 1865. 'Stone implements found in Bengal', *Proceedings of the Asiatic Society of Bengal*, Calcutta, pp.127-128.
- Ball, V. 1867. 'Stone implements found in Bengal', *Proceedings of the Asiatic Society of Bengal*, Calcutta, pp.136-153.
- Ball, V. 1870. 'Stone implements discovered in Singhbhum', *Proceedings of the Asiatic Society of Bengal*, Calcutta, p.268.
- Ball, V. 1880. *Jungle Life in India or The Journal and Journeys of an Indian Geologist*, London: Thos. De. La. Rue & Co.
- Banerjee, M. and P.K. Sen 1987. 'Palaeobiology in Understanding the Change of Sea Level and Coast Line in Bengal Basin During Holocene Period', *Indian Journal of Earth Sciences* 14 (3-4) : 307-320.
- Basak, B. 1997. 'Microlithic Sites in the Tarapheni Valley, Midnapur District, West Bengal', *Man and Environment* 22 (2) : 11-28.
- Biswas, A. C. 1991. Occurrence of Microlithic Tools in Kattara Site in Midnapur District, West Bengal. In : A. Datta (ed.), *Studies in Archaeology*, pp. 77 – 108. New Delhi : Books and Books.
- Chakrabarti, S. 1986. Kopai Valley Post-Palaeolithic Settlers in Birbhum. In : *The Pleistocene Perspective*. Vol. 2, Sec. D, pp. 1 – 9. Southampton : The World Archaeology Congress.
- Chakrabarti, S. 1998 – 99. 'The Context, Character and Chronology of Microliths from Paruldanga : An Upland Settlement in Birbhum District, West Bengal', *The Bulletin of the Deccan College Post-Graduate and Research Institute* 58-59 : 3-10.
- Chakrabarti, S., D. K. Bhattacharya and D. K. Chakrabarti 1982. 'The Context of Microliths at Paruldanga, Santiniketan', *Man and Environment* 6 : 150 - 52.
- Chatterjee, A., S. Majumder and G. S. Chattopadhyay 1988. Quaternary Geology and Geomorphology of Districts, West Bengal. *Geological Survey of India. Unpublished Final Report for 1978 – 79 to 1985 – 86*.
- Datta, A. K., D. K. Roy and B. Samanta 1984. Chamargora : the Microlithic Site of Tarafeni Basin, District Midnapur. In : A. Ray, H. Sanyal and S. C. Ray (eds.) *The Indian studies, Essays presented in Memory of Professor Niharranjan Ray*. pp. 21-30. Delhi : Caxton Publications.
- Ghosh, R. N. and S. Majumder 1991. Geology and Morphostratigraphy of West Bengal : A Database for Archaeological Exploration. In : A. Datta (ed.), *Studies in Archaeology, paper presented in Memory of P.C. Dasgupta* pp. 7 – 37. New Delhi : Books and Books.
- Mumford, L. 1975. (First Published in 1961) *The City in History*. Harmondsworth : The Penguin Books Ltd.

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