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Newly Discovered Prehistoric Sites in the Seonath Basin, Chhattisgarh, India

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ABSTRACT
Prehistoric cultures shed light on the evolution of human social organization. The development and use of stone tools are significant milestones in human evolution. Prehistoric artifacts provide evidence of early technologies and the progression of tool-making techniques. Presented paper provides a comprehensive overview of the recently identified Prehistoric sites within the Durg and Rajnandgaon districts situated in the Central Seonath Basin of Chhattisgarh. It offers detailed descriptive and contextual data regarding these newly discovered archaeological locations. The discussed sites or site complexes include Palaeolithic, microlithic and individual artifacts finding sites along the Durg-Raipur upland, Rajnandgaon upland and Eastern edge of the Mekal range in Rajnandgaon district. The occurrences vary in terms of their locations, scatters, context and tools typology.

Keywords: *prehistory, palaeolithic, microlithic, seonath river, chhattisgarh*

I. INTRODUCTION

The Stone Age signifies the initial phase of hominid culture, characterized by the utilization of prehistoric stone tools, which have been discovered in diverse landscapes across the Indian peninsula. The Lower Palaeolithic era in India is exclusively defined by the presence of the Acheulian stone technology (Ota and Deo, 2014). Central India holds significant importance in comprehending the process of prehistoric human colonization and behavioural patterns. The initial identification of Acheulian artifacts in India was credited to Robert Bruce Foot, who unearthed them at Pallavaram in 1863 (Pappu, 2001). Kuliana is among the earliest excavated prehistoric sites in India. The oldest recorded evidence of Acheulian technology in India dates back 1.5 million years at Attirampakkam (Pappu et al., 2011) and 1.2 million years at Isampur (Paddayya et al., 2002). Recent investigations at Mehtakheri in the Nimar region of Madhya Pradesh have yielded the earliest known date for microlithic technology in India (Mishra et al., 2013).

The Seonath river in Chhattisgarh, represented by the principal affluent of the Mahanadi river. Occupying the southwestern portion of the Mahanadi basin. The Seonath sub-basin is located between 20°16'N to 22°41'N Latitude and 80°25'E to 82°35'E Longitude. Originating from the Panabaras hill situated at the Chhattisgarh-Maharashtra border, the Seonath river begins its course at an elevation of 624m above mean sea level (AMSL). Spanning a distance of 383km, it ultimately converges with the Mahanadi river near Seorinarayan. The key tributaries of the Seonath river include Kharkhara, Tandula, Amner, Kharun, Surhi, Jamunia, Khorsi, Dotua, Sakari, Hanp, Maniyari, Arpa, and Leelagar.

The major objectives in this paper to describe newly discovered prehistoric sites in the central region of the Seonath basin and understand the cultural distribution in the study area (see Figure 1 and Table 1). There were selected potential spots randomly targeted laterite land surfaces, scrublands, river cliffs, foothills and small streams to locate new sites by using Google satellite images.

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Table 1: Newly discovered prehistoric sites in the Central Seonath Basin

S. No.	Site Name	Coordinates	Geomorphic Context	District	Number of each lithic artifact	Culture/Finding
1	Birkha-1	21°39’52” N; 81°03’05” E	River Bank	Rajnandgaon	216	MP, UP, Micro
	Birkha-2	21°39’34” N; 81°03’18” E	Foothill	Rajnandgaon	112	Micro
2	Singarghat	21°26'51"N; 80°53'36"E	River Bank	Rajnandgaon	80	LP, MP
3	Khouda	21°42'33"N; 81° 5'20"E	River Bank	Rajnandgaon	49	MP, Micro
4	Dhaba	21°42'17"N; 81° 5'45"E	Foot Hill	Rajnandgaon	51	MP, Micro
5	Gumanpur	21°35'34"N; 81° 2'32"E	Foot Hill	Rajnandgaon	46	Micro
6	Gabhra	21°35'11"N; 81° 1'11"E	Foot Hill	Rajnandgaon	78	Micro
7	Ghirgholi	21°34'21"N; 81° 1'46"E	River Bank	Rajnandgaon	01	Ring stone
8	Kuteli	21°32'53"N; 81°3'40"E	River Bed	Rajnandgaon	01	Ring stone
9	Dongargarh	21°10'40°N; 80°43’31"E	Foot Hill	Rajnandgaon	61	UP, Micro
10	Jiratola	21°37'21"N; 80°59'15"E	River Bank	Rajnandgaon	15	Micro
11	Amlidih kala	21°28'36"N; 81°57'54"E	River Bank	Rajnandgaon	63	Micro
12	Khajari-1	21°29'03"N; 81°25'26"E	Laterite Surface	Durg	212	MP, UP, Micro
	Khajari-2	21°29'29"N; 81°25'04"E	Laterite Surface	Durg	170	MP, UP, Micro
13	Mohrenga	21°27'58"N; 81°26'13"E	Laterite Surface	Durg	77	Micro
14	Pandaritarai	21°26'29"N; 81°26'28"E	Laterite Surface	Durg	331	Micro
15	Kusmi	21°31'55"N; 81°32'00"E	Laterite Surface	Bemetara	33	Micro
16	Kharra	21°32'32"N; 81°33'40"E	Laterite Surface	Bemetara	57	Micro

Note. LP; Lower Palaeolithic, MP; Middle Palaeolithic, UP; Upper Palaeolithic, Micro.; Microlithic, Neo.; Neolithic

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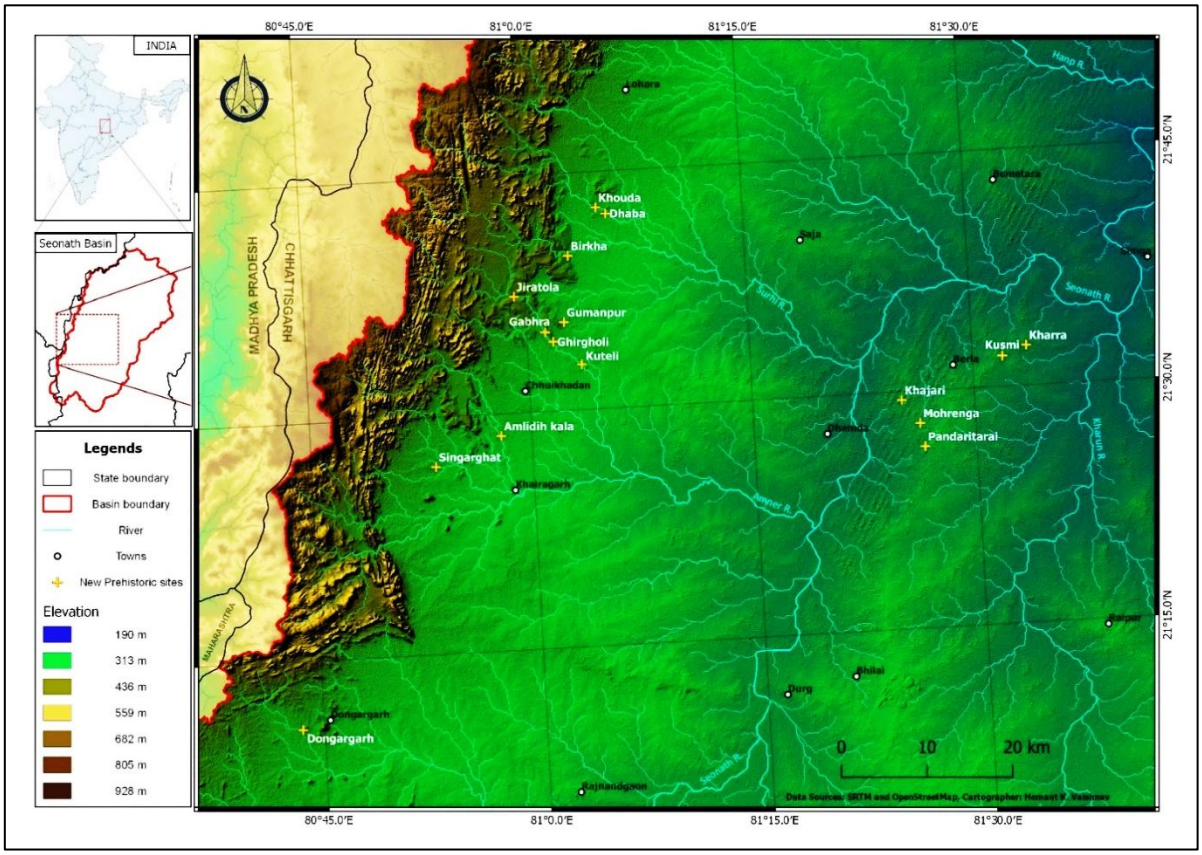

Figure 1: Map showing newly discovered prehistoric sites in the Central Seonath Basin

II. GEOLOGY AND PHYSIOGRAPHIC DIVISION OF THE STUDY AREA

The Seonath river flows on eastern- southern part of the Chhattisgarh basin which is one of the seven Purana basins in India. The River Seonath is starts slowing from the Dongargarh group of Archaean age and thereafter flowing through the Chhattisgarh basin, which is belonging to mainly Raipur and Chandrapur Groups of Chhattisgarh Supergroup. Granite and gneiss rocks usually found in the southern and western part of the basin. The alluvium forms a narrow belt along the Seonath River comprising sand, gravel, clay and silt in varying proportions. Dongargarh group is divided into Amgaon, Nandgaon and Khairagarh Groups. The Amgaon Group is represented by granite gneisses and granites. The Nandgaon Group overlies unconformably with the Amgaon Group and is represented by Bijli rhyolite and Pitapani volcanic. Pitepani volcanic rocks consist andesite and basaltic rocks. The Khairagarh Group is composed of sedimentary rocks and metavolcanic (basalts, tuffs and agglomerates) occurring in alternate layers. The sequence starts with a basal sedimentary formation (see Figure 2).

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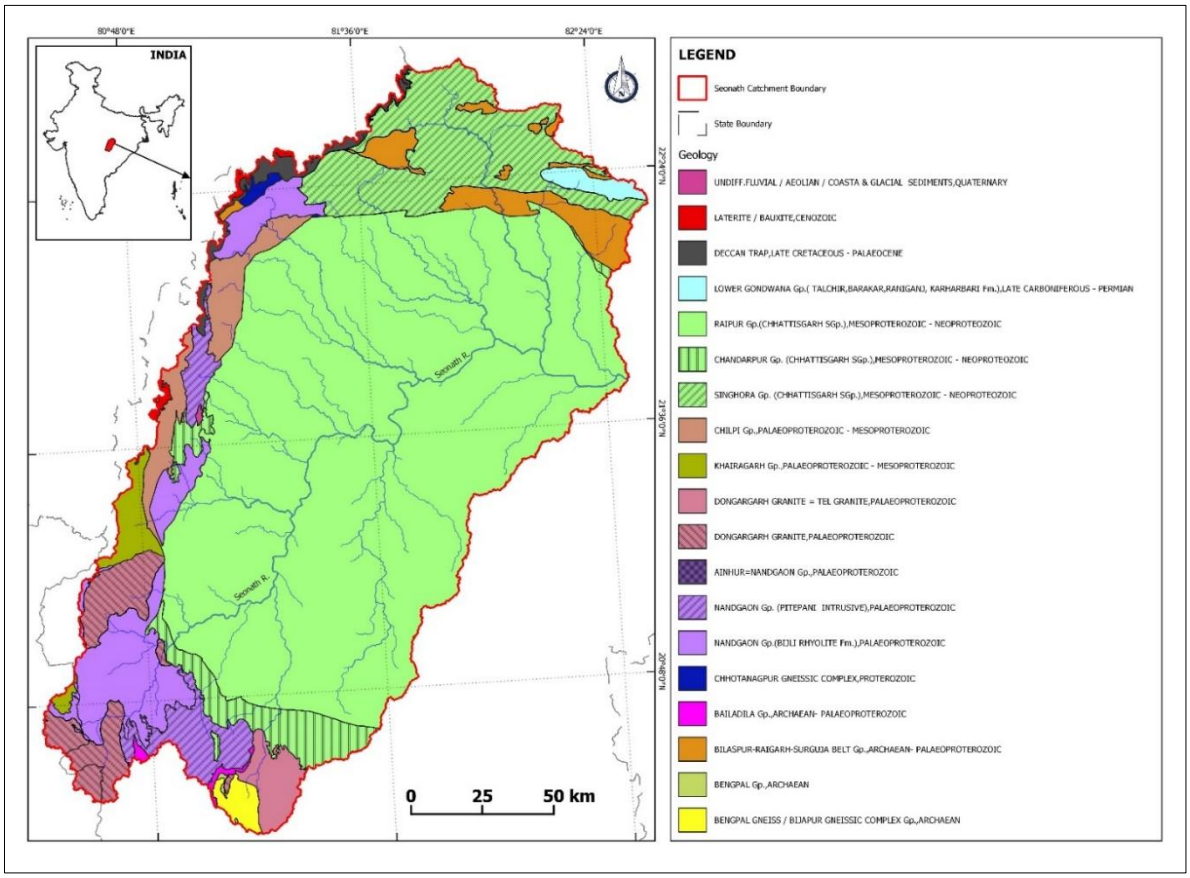

Figure 2: Geology map of Seonath Basin in Chhattisgarh

The rocks of the Chhattisgarh supergroup overlie unconformably over the rocks of Dongargarh supergroup are divided into two groups Chandrapur group and Raipur group. Chandrapur group of rocks consist mainly of sandstones in various forms and Raipur of rocks consist of pink-purple shell, stromatolite limestones and dolomites. A small extension of Dharwad series rocks are in northern Bilaspur, Raipur, Kawardha and Balod districts, comprises mainly quartzite, conglomerate, slate and gneisses. group of laterite patches developed over the limestone in both banks of the Seonath river.

The Central part of the Seonath basin covered with structural hills, structural plains and some part of the flood plain. The western part of the basin bounded by hills of the Mekal range which ranges between 600-1000m and Dallirajhara hills (674m) in the southern part. A large portion of the north, central and eastern part of the basin covered with Rajnandgaon-Kawardha upland, Durg- Raipur upland. The plain area laying on Proterozoic rocks. The plain area can be divided into trans Seonath plain and Seonath-Kharun doab.

III. PREVIOUS WORK

The Seonath basin has been captivating scholars for centuries due to its rich archaeological significance and the abundance of archaeological findings it holds. Over the last six decades, several scholars have extensively explored the Seonath region. Professor R.V. Joshi, Dr. G.L. Badam and Shri Rakesh Prakash Pandey of the Deccan College, Pune Explored around the lower Seonath region and discovered prehistoric sites near Nandghat, Simga and Somnath. Those sites yielded rich Middle Palaeolithic industries in a stratified context. The Upper Pleistocene bone fossils of *Equus*, *Bos* and *Cervus* also recovered from Nandghat. Amlidih site yielded microlithic tool i.e., cores, flakes, blades, burins, scrapers and knives (Joshi, 1980). Some microlithic sites reported by A. K. Sharma in Balod district near Karkabhat and Tengna around Megalithic sites (Sharma et al. 1995). A Palaeolithic site identified at Kurajhar (21°14'N 80°39'E) in Rajnadgaon district by L.S. Rao of Prehistoric Branch, Nagpur. Handaxes and cleavers made on basalt rock recovered from this site (Rao, 1997). Mr. S.S. Yadav of Directorate of culture and archaeology, Raipur, Chhattisgarh, conduct a survey in the Hanp river valley which is a tributary of the Seonath river. As a result of the exploration, the valley yielded Prehistoric sites near Pachrahi, Bakela, Pandaripani, Sontara, Khami, Deosara and Buchi (Pradhan and Yadav, 2013). Some Palaeolithic and microlithic artifacts recovered around the Jamuniya river during Deori excavation (Sahu, 2017) (see Table 2).

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Table 1: Previously reported prehistoric sites in the Seonath Valley

S. No.	Site Name	District	River	Culture	Reference
1	Somnath	Balodabazar	Seonath	MP	Joshi et al. 1980
2	Simga	Balodabazar	Seonath	MP	Joshi et al. 1980
3	Nandghat	Balodabazar	Seonath	UP	Joshi et al. 1980
4	Amalidih	Balodabazar	Seonath	UP, Micro.	Joshi et al. 1980
5	Karkabhat	Balod	Kharun	Micro.	Sharma et al. 1995
6	Tengana	Balod	Kharun	Micro.	Sharma et al. 1995
7	Kurajhar	Rajnandgaon	Local nullah	Palaeolithic	Rao et al. 1997
8	Parsulidih	Raipur	Kharun	Micro.	Pradhan and Yadav, 2013
9	Pachrahi	Kabirdham	Hanp	UP, Micro, Neo.	Pradhan and Yadav, 2013
10	Bakela	Kabirdham	Hanp	UP, Micro.	Pradhan and Yadav, 2013
11	Pandripani	Kabirdham	Hanp	UP, Micro.	Pradhan and Yadav, 2013
12	Sontara	Kabirdham	Hanp	Micro.	Pradhan and Yadav, 2013
13	Khami	Kabirdham	Hanp	UP, Micro.	Pradhan and Yadav, 2013
14	Deosara	Kabirdham	Hanp	Micro.	Pradhan and Yadav, 2013
15	Buchi	Bemetara	Hanp	Micro.	Pradhan and Yadav, 2013
16	Deori	Balodabazar	Jamuniya	LP, Micro.	Sahu, 2017
17	Karamsen	Balodabazar	Seonath	MP, UP	Pandey, 1982
18	Limtara	Balodabazar	Seonath	MP, UP	Pandey, 1982
19	Tulsi	Balodabazar	Seonath	MP, UP	Pandey, 1982

Note. LP; Lower Palaeolithic, MP; Middle Palaeolithic, UP; Upper Palaeolithic, Micro.; Microlithic, Neo.; Neolithic

IV. DESCRIPTION OF THE NEWLY DISCOVERED SITES

Birkha (BRK)

The site Birkha situated about 5km west of Rajnandgaon-Kawardha state highway from the Gandai tehsil in Rajnandgaon district. The site is located at the south bank of the Surhi river which is a tributary of the Seonath river. There were identified two localities at the outer reach of the protected forest.

Locality 1, referred to as BRK 1 (21°39’52” N; 81°03’05” E, 348m AMSL), is situated next to the river and at the base of the foothill. The area reveals an extensive collection of microlithic artifacts scattered across the alluvial deposits. These artifacts have been exposed through natural erosion, with the surrounding soil being reddish and silty, containing rolled and semi-angular cobble and pebble. It appears that the western portion of the site remains buried under the same soil. The site has yielded artifacts from the Middle Palaeolithic, Upper Palaeolithic, and Microlithic traditions, with a particularly abundant collection of microlithic tools. The Middle Palaeolithic artifacts are predominantly made of quartzite, while the microlithic artifacts primarily consist of various types of cryptocrystalline stones, such as quartz, chert, agate, jasper and chalcedony. The assemblage includes tools like scrapers, flakes, retouched tools, cores, blades, backed blades, bladelets, denticulate, burins, lunates, crescents, scrapers, retouched flakes, and flake blanks. Additionally, numerous unfinished and broken ring stones of various sizes and shapes have been found at the site (see Figure 3).

Locality 2, referred to as BRK 2 (21°39’34” N; 81°03’18” E, 348m AMSL), is located 650m south of the Surhi river. Microlithic artifacts are scattered across the rocky surface of the foothill slope. Similar to Locality 1, the raw materials used in the artifacts are the same. Notably, a single abraded tortoise core, following the Middle Palaeolithic tradition, was recovered in association with microlithic tools.

Singarghat (SNG)

The Palaeolithic site of Singarghat (21°26'51"N; 80°53'36"E, 337m AMSL) is situated a distance about 12 km from Khairagarh in Rajnandgaon district. The site located on the right bank of the Deori *nullah* which meets the Muska *nullah* which flows in the northern bank of the Amner river. The sparse vegetation has resulted in surface runoff and topsoil erosion, which has exposed and displaced the buried artifacts. Most of the tools were found to be fresh. The Acheulian tools comprise various types of Handaxes and cleavers. Middle Palaeolithic assemblages consist of borers, scrapers, point, stone hammer, cores and flakes. All artifacts found on the surface, eroded section and rain gully bed. Some Middle Palaeolithic artifacts recovered from the discrete cluster (see Figure 4).

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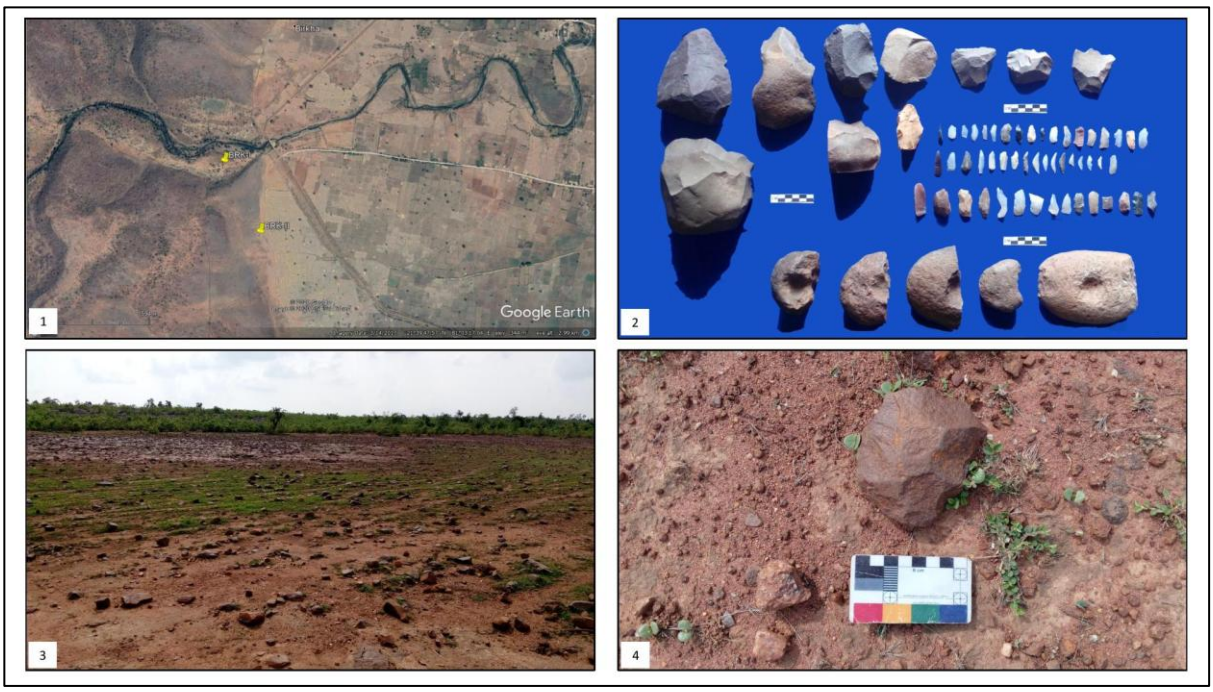

Figure 3: (1) Satellite image of Birkha (BRK) localities, (2) Stone tools from BRK 1, (3) General view of BRK 2, (4) A Middle Palaeolithic core from BRK 2

Khouda (KDA)

The site (21°42'33"N; 81°5'20"E, 340m AMSL) located a distance of 4 km from Rajnandgaon-Kawardha road at Limo village. The site situated on the right bank of Karra river which is a tributary of the Surhi river. This area is highly eroded by rain gullies. Clusters of artifacts lying on the exposed surface. The surface of the site covered with soil mixed angular gravels. A few handaxes, flakes and cores are noticed on the surface and eroded sediments. The Palaeolithic artifacts fashioned on fine grained sandstones. Some microlithic artifacts noticed on the left bank of the river on a reddish silty soil surface. A single unfinished broken ring stone recovered from the site.

Dhaba (DBA)

The site (21°42'17"N; 81°5'45"E, 337m AMSL) located a distance of 4 km from Rajnandgaon-Kawardha road at Limo village. The site situated on the right bank of Karra river. The site situated on the foothill slope. The site yielded middle Palaeolithic handaxe, flakes and debitage on Basalt, quartzite and jasper. Some microlithic noticed below the hill slope but this aera is now under cultivation. The modern quarry section revealed some artifacts.

Gumanpur (GNP)

The site (21°35'34"N; 81° 2'32"E, 342m AMSL) located below the foothill near south of the Gumanpur village. The microlithic artifacts exposed on the surface regolith derived from the weathering of the sandstone. The site comprising cores, blades, bladelets and flakes. Artifacts made on cryptocrystalline stones.

Gabhra (GBR)

The site (21°35'11"N; 81° 1'11"E, 342m AMSL) located adjacent to the right bank of the Amdaniya river. The microlithic artifacts spread on the alluvial deposits. The site comprising cores, blades, bladelets and flakes. Artifacts made on cryptocrystalline stones. Surrounded area of the site is under cultivation.

Ghirgholi (GRG)

The site (21°34'21"N; 81° 1'46"E, 342m AMSL) located a distance of 1.5 km. from Gabhra site. One broken ring stone made on fine grained sandstone found at below the foothill in the cultivated field behind the Sidhh Baba temple of Ghirgholi village.

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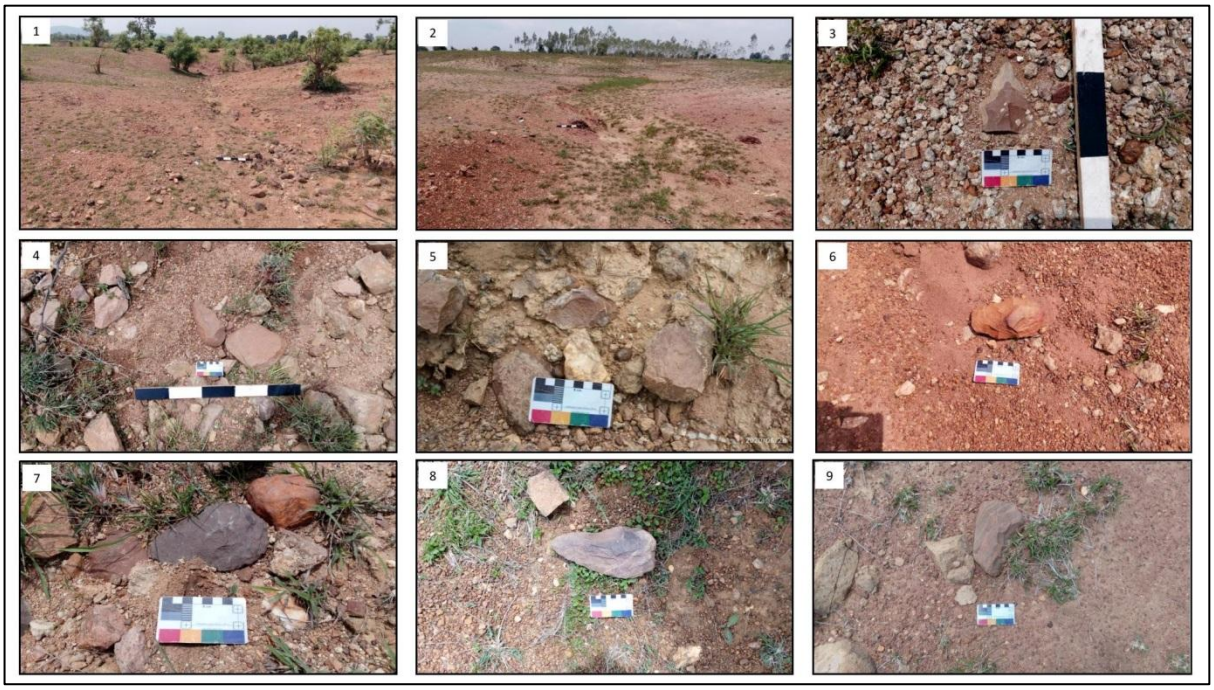

Figure 4: (1) & (2) General view of Singarghat, (3) to (9) Artifacts scattered on surface

Kuteli (KTL)

The site (21°32'53"N; 81°3'40"E, 328m AMSL) located a distance of 7 km. from Ghirgholi village. One broken ring stone made on fine grained sandstone found in the stream bed on sand deposits.

Dongargarh (DRG)

The site is (21°10'40°N and 80°43’31"E, 354m AMSL) situated about 5 km west of Dongargarh railway station and located on the left side of the Chichola road. It is a foothill open-air site. Towards the south of the site, a railway line runs in east-west direction. The site lies on a foothill slope and left bank of the Chhipa river. The landscape is characterized by undulating topography. Weathered granitic rock with occasional inclusion of quartz veins exposed on the foothill. Microlithic artifacts found on the surface which has been overlain on sandy soil formed from weathered granite rocks. Artifacts made on various types of cryptocrystalline silicates. The lithic assemblages consisted of cores, flakes, blades and debitage.

A significant finding from this site is a set of artifacts that can be refitted mutually. there is a core tablet which matched to a blade refitted to its core properly. Refitting artifacts provides a proper way to understand tool reduction sequence which is important for technological analysis.

Jiratola (JRT)

The site (21°37'21"N; 80°59'15"E, 385m AMSL) is located 1km southwest of the Jiratola village. It is situated below the foothill, 100 m north of the Amdaniya river. The artifacts were discovered on the surface. A survey of this site indicated that the artifacts are eroding out on the surface, from reddish soil derived from sandstone. The site yielded microlithic artifacts in a small area consisted of blades, flakes and debitage made on cryptocrystalline silicates. An unfished ring stone and a single broken ring stone fashioned on sandstone found associated with microlithic artifacts. Important findings are two pieces of non-intentional broken bladelet.

Amlidihkala (ADK)

The site (21°28'36"N; 81°57'54"E, 330m AMSL) is situated at a distance of 9 km from Khairagarh. The site lies one km away towards the southern side of the village Amlidihkala. It is located adjacent to the left bank of the Pipariya *nullah* flows west of the village. The northern part of the site is under cultivation. The artifacts were scattered on surface red silt soil associated with angular gravels and pebbles. Artifacts exposed due to rainwater compressing cores, blades, flakes and debitage made on quartz, chert and metavolcanic rocks (see Figure 5).

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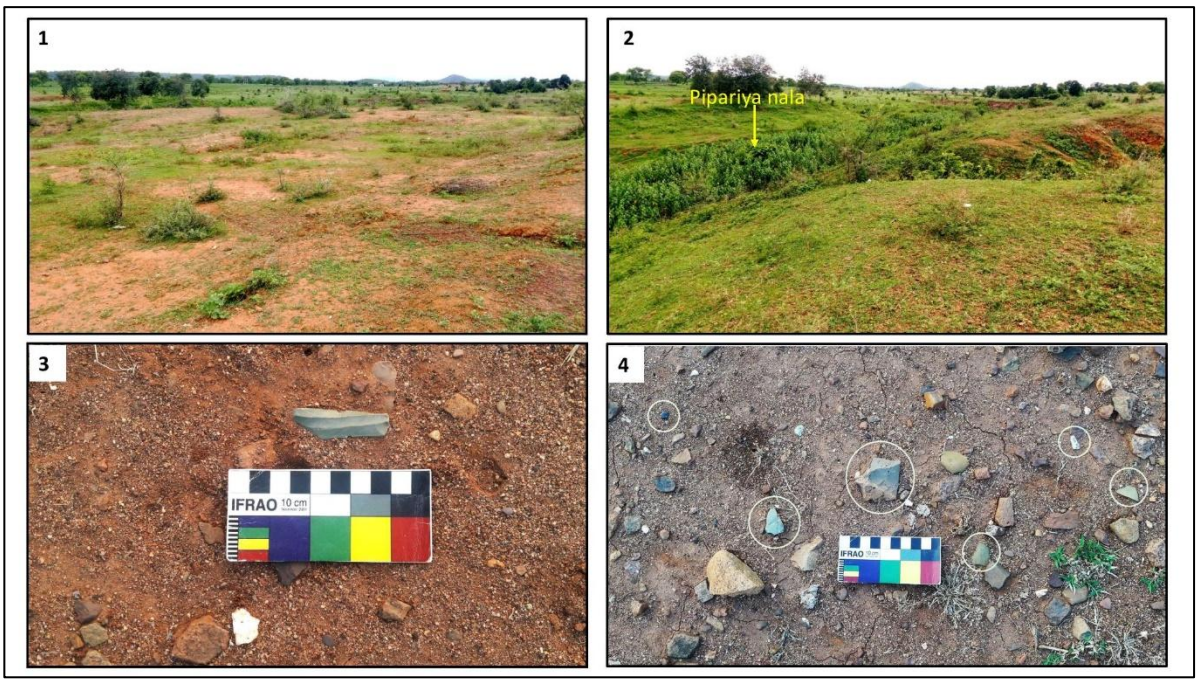

Figure 5: Amlidih Kala: (1) & (2) General view of the site, (3) & (4) Artifacts scattered on surface

Khajari (KJR)

The geoformation of the area belongs to the Tarenga Formation of Raipur group is represented by pink to purple colour rocks with interbedded chert and clay. This formation overlies the Chandi formation. Pink to purple calcareous shale is the lowermost member of the Tarenga formation and is exposed in the southeast of Dargaon, east of Durg-Berla road, in around Mohrenga and along Sond Distributary north of Pandritarai village. A thin horizon of pebbly calcareous shale with pebbles of chert and shale occurs at the entire region. The chert-clay litho-association belonging to the Tarenga formation forms pockets and lenses. The lower shale laterally and vertically grades into the bedded chert and clay pockets. The well-exposed sections of this member are at 0.5 km. west of Gorpa, 0.5 km. south of Nawagaon, in a quarry section, in *nala* cutting 0.25 km. north of village Raksa, 0.5 km. north of Thelka, in and around the Thengabhat. Sometimes, the chert band is about 10 to 20 cm. thick, but it forms a key band and marker horizon (Das, et al., 1991). Scatters of Paleolithic artifacts associated with microliths are identified in two localities.

Locality 1 (21°29'03"N; 81°25'26"E, 306m AMSL) is situated 2km north of Khajari village. based on typology it assumes that the artifacts belong to the transitional phase between middle and upper Palaeolithic culture. A significant finding from this locality is a tanged point that is fashioned on chert stone. A tanged point revealed from this locality.

Locality 2 (21°29'29"N; 81°25'04"E, 306m AMSL) is situated at 400m northwest from locality 1. The artifacts were observed on the laterite surface. The site comprising Levallois cores, blades, bladelets, denticulate, scrappers, retouched flakes and debitage. Artifacts made on predominantly Chert stone in various colours which are easily available at the site. The chert pebbles in angular, cylindrical shapes are spread on the surface. Most of artifacts are highly patinated. It presumes that some artifacts have been chipped for reuse in later time (see Figure 6).

Mohrenga (MHR)

The site (21°27'58"N; 81°26'13"E, 293m AMSL) located on the right side of the canal and southwest of the Mohrenga village. Microlithic artifact scattered on the laterite surface with low density. It consisted of blades, bladelets, core, flakes and debitage made on silicate stone.

Pandaritarai (PDT)

The site (21°26'29"N; 81°26'28"E, 292m AMSL) is located 1km north of the village. the artifacts were exposed on thick laterite owing to modern quarrying at the site. Microlithic artifact scattered on the laterite surface. The site yielded microlithic artifacts consisted of blades, bladelets, core, flakes and debitage made on silicate stone.

Kusmi (KSM)

The site (21°31'55"N; 81°32'00"E, 294m AMSL) located on the left side of Berla-Bemetara road. A few Microlithic artifacts noticed on the laterite surface. It consisted of blades, core, flakes and debitage made on silicate stone.

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Figure 6: Tanged point from KJR 1

Kharra (KRR)

The site (21°32'32"N; 81°33'40"E, 288m AMSL) located on the left side of Berla-Bemetara road at Kharra village. Microlithic artifact scattered on the laterite surface. It consisted of backed blades, points, cores, flakes and debitage made on silicate stone.

V. DISCUSSION

Central Seonath Basin is very rich for the microlithic site. The prehistoric stone tool assemblages that are found in the Central Seonath region in the year 2019-20 are all recovered as surface finds and naturally exposed section. Lower Palaeolithic occurrence from Singarghat is an only a single site that yielded Acheulian artifacts in this season. Lithic assemblages from several sites are representing the transitional phase between late middle Palaeolithic and microlithic industries. The laterite formations in this area is very potential which has contained several prehistoric sites. Some sites have yielded a small quantity of artefacts (as given in table 2) which promises more potentiality if explored elaborately. Most of the sites are microlithic represents pre-pottery microlithic with non-geometric tools. A large amount of debitage noticed from Birkha, Amlidih kala and Khajari site indicates those sites are tool manufacturing sites. There is no evidence found about Neolithic settlement during this session. Extensive exploration is still remaining in this region will complete in next session. It is difficult to determine stratigraphic sequence due to assemblages from surface findings. Selected sites viz. Birkha and Singarghat need to be scientific excavation and obtain precise dates.

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