CHAPTER - II

PRE-HISTORY

The pattern of wet and dry periods for a considerable part of India was suggested by Burkitt and later confirmed by Zeuner. It was noticed that the study of stone implements and climatic changes that have taken place in south-east India are to a large extent linked up with the origin of laterite, the peculiar subaerial alteration product and a widely occurring geological formation. The earliest relics of pre-historic man in the shape of stone implements of palaeolithic type are found embedded in large numbers in the low lying laterites. The formation of laterite, a decayed clayey mass, consisting largely of hydrated silicate of alumina and iron can only take place where there is considerable rain fall. In fact it is only in tropical areas and even then in areas of very heavy rainfall that laterite has formed. It would appear that water logging of the soil is an important condition for its formation. It is likely essential that there may have been an alternation of distinct wet and dry seasons in south east India. The presence of extensive deposits of laterite may indicate that the pluvial or wet period must have been very protracted.

After the formation of the laterite a dry spell seems to have set in causing the breaking up and weathering of upper part of the laterite previously formed. It is in this or underneath decayed laterite either in situ or washed down and re-deposited
that implements of the Early Stone Age occur. During the dry period the surroundings have become more congenial and the earliest inhabitants lived on the laterite.

Again during the period of torrential rain-fall the relics of ancient man were swept partly into the river gravels and partly into shallow detrital beds. When a second dry period followed areas which have been deserted earlier were repopulated. Finally a wet phase deposited an alluvium which covered the remains of the inhabitants of the preceding dry phase. During this and succeeding period in which rain fall decreased to the present day conditions more advanced stone industries made their appearance. In general it can be said that during dry periods, aggradation or a general rise took place and in wet ones there was a weathering of surface or down cutting of the rivers flowing with greater force through a narrower channel.

The above phenomena are clearly noticeable along the right bank of the river Krishna to the east of Bhimavaram village in Alampur taluk of Mahboobnagar District. The riverine shingle mostly of quartzite deposited during a wet period is found at as high a contour as 244 mt. M.S.L. The ancient deposit is more than 100 ft. high than the present bed and 2 km. away from it. It can inferred that during the Pleistocene the bed of the river was more than 3 to 4 km. wide. The quartzite shingle over the terraced and now abandoned flood plain was made use of by the earliest inhabitants to make their tool kit.
The section at Bhavanasi, a tributary of the Krishna river in Kurnool district near a small village, Krishnapuram on the Mandikotkur-Atmakur road gives an almost complete picture. There would appear to have been an initial period of laterite formation under conditions of considerable humidity denoting the first wet period. During the succeeding dry period Palaeolithic Man of the Middle Plesstocene lived on the dried out laterite plain. Then there appears to have been a period of torrential rain during which artefacts which show signs of laterite staining were washed down and redeposited in a pebble bed. As the rainfall became less violent but still fairly considerable a red clay was deposited. We therefore get a double cycle of wet followed by dry with a final wet phase.

**Amrabad**

The Early Stone Age Site lies on the sloping mounds at the foot of the hill range on the west of the village. The range which has no specific name but known by some approach paths runs to a length of 6 to 8 km, in the east-west direction and takes a southward turn near the main road from Mannanur to Srisailam. The road from Mannanur to Amrabad which almost perpendicular to the above main road runs exactly parallel to the above said range.

The above hill range which is 749 meters high is covered with thick jungle and scattered with quartzite pebbles. The
flat surface on the top of the hills is covered with red soil. There is a small lake about 100 sq. mts. wide, always filled up with water.

Few nullahs originated at the foot of the hill merge into a single nullah known as the Kathava Vagu at the lower reaches, which is a tributary of the Manda Vagu.

The sloping mounds at the foot of the hill were eroded at several places due to the nullahs and at few places the nullahs are as deep as 2 to 8 mt. There are very few spots where a complete stratigraphical sequence could be obtained.

The section noticed above the nullah bed is basal disintegrated and weathered granite rock upon which is a deposit of quartzite pebbly bed associated with Acheulian hand axes, cleavers, choppers, and flakes. The pebbly deposit was overlain by a well cemented weathered laterite of pale brownish colour and granular composition. This was covered by red alluvial clay to a thickness of about 40 to 60 cm. carried-down and deposited from the hills.

Most of the tools were found slightly below the pebble deposit. At few places both the raw material and the implements were mixed-up. As the nullahs have cut the deposit deep at many places the tools mixed-up with pebbles were found over the beds of the nullahs. In fact most of the best specimens I collected have been found over the beds.
During the examination of the deeper sections at the lower reaches of the Kathva Vagu where the weathered and cemented laterite deposits are very thin, but the overlain red silt is more than a meter in thickness.

Typologically the tools belong to early and late Acheulian Stages. The collection (about 120 tools and flakes) included excellent specimens of hand-axes, cleavers, chopping tools, scrapers, points and flakes etc. The cleavers are more than 50 per cent of the total collection but the hand axes are only 18 per cent, small axes of biconvex points and scrapers accounted for 3 per cent only. The rest are flakes or worked flakes. These points, scrapers and flakes is a part and parcel of the Acheulian industry.

In view of the raw material, i.e. quartzite pebbles, flakes, and finished tools, the site, but for natural agencies, is an undisturbed factory site of the early Palaeolithic period, and must have been inhabited by the Palaeolithic Man for a considerably long period. The surface exploration, no doubt, revealed almost a complete sequence of typology, but other associated finds such as fossils or chopping tools, etc., may possibly be gleaned only through excavation.

Nadimipalli

The road from Mannanur to Achampet after descending from the Nallamalai range to the plains, runs parallel to the hills and crosses several nullahs of which the Chandravagu appears to
be the eldest and wider. It is a tributary of the Dindi River across which a minor irrigation project was recently completed.

The Chandravagu had changed its course several times in the past. The present road and the adjacent area were once the bed of the rivulet. During the periods of aggradation, the heavy load of sand, silt and rubble had been deposited. But during denudation the river changed its course cutting the softer bed deeper and deeper. Thus the previous bed of the river which is about 3 to 9 mt. higher than the present bed, served the Early Palaeolithic Man eminently for supply of raw material to manufacture his implements.

Exploration at the place where the road crosses the Chandravagu, about 6 km. from Achampet, revealed hundreds of pebble choppers, a few cleavers, and proto hand-axes. All these tools were worked out of the riverine pebble. The industry is definitely more primitive than the one noticed near Amarabad and technologically may be termed as true Abbevellian with a little mix-up of Early Acheullan. Thus both the industries noticed at Amarabad and Nadimpalli put together will give us a continuous sequence from Abbevellian to Late Acheullan. In most of the Palaeolithic sites noticed in South India Pebble choppers and Proto-hand-axes have been found along with Acheulian tools. Here we are noticing a clear cut distinction between the Early and Late Industries.
At Giddaluru the Sagileru river meanders and where it strikes the opposite bank the section noticed above the water level is basal weathered rock, upon which is a deposit of cemented gravel overlain by a layer of river silt and this again is capped by a loose pebbly deposition of a comparatively much later horizon. Among the tools noticed at Giddalur the earlier types such as the Abbevelleo-Acheulian hand axes and the rostro-carinates are more rolled than the evolved Acheulian coups-de-poing and cleavers and other flake tools. The Giddalur collection consisted of a largest number of Abbevelleo-Acheulian hand axes. Comparatively the rostro-carinates are very few. The number of cleavers is also not high.

Nagarjunakonda

The explorations conducted at Nagarjunakonda on the banks of the river Krishna have revealed extensive sites of Early Stone Age. On the one hand the Palaeolithic Man who settled near the Krishna River had access to the great supply of fine riverine shingle for making pebble tools, while on the other hand, those who settled along the nullahs and near the hill saddles applied themselves to the Clactonian, primitive core tools and restroid, Victoria-West types. In Nagarjunakonda valley two industries of Early Stone Age and one of the Middle Stone Age have been found in clear and distinct horizons. The industries belong to the Acheulian phase of the Chelles-
Acheulian industry. The tools were manufactured from the riverine pebbles by detaching primary flakes by the block-on-block technique. The Nagarjunakonda industry consisted more of cleavers than any other type of tool. Hand-axes constituted 17.2 per cent; cleavers 21.4 per cent, choppers 5.9 per cent and scrapers 2.9 per cent.

Yeleswaram: 10

The Early Stone Age at Yeleswaram is concentrated near the nullahs emanating from Mallannagutta west of Yeleswaram village.

Karimnagar Region

The Karimnagar region was ill explored in the past but for the pioneering work along the upper reaches of Godavary by the Deccan College under the able guidance of Dr. Sankalia.

Early and Middle Stone Age artefacts like hand axes and flake-scrapers were reported by Munn from Allur and Jangean villages in Peddapalli taluq. In association with these artefacts he also found few fossilised bones like humerus of Bos-Frontalis and possibly radius of the same species and fragment of an antler of cervus Sp. Ind. Cores and flakes etc., belonging to Neolithic culture (probably microlithic) were noticed at Gunjapadiga (Manthani taluk) Parlapalli, Keheda and Sanigaram (Karimnagar taluk) and Vemulavada (Sirsilla taluk).
From Adilabad Haimendorf\textsuperscript{13} collected large number of scrapers and blades (now in London University). Flake artefacts were noticed by S. Nagabhushana Rae\textsuperscript{14} at Asifabad in Adilabad District.

Dr. Nandikeswara Rae\textsuperscript{15} reported the occurrence of Early Stone Age tools in the Pranahita valley of Adilabad District. He noticed that the lower and middle pebble horizons containing Chello-Acheulian artefacts and the upper zone of Early and Middle Palaeolithic technologies respectively. He also found the Early Stone Age artefacts in soil terraces of residual mounds, ridges and scrap foot zones within the altitude of (137-150 m). The lower gravel horizon contained few artefacts entirely composed of choppers and hand axes. The middle gravels consisted of core and flake tools. The intermittent gravel lenses overlying the middle gravels showed some upper Palaeolithic elements which composed of side scrapers, scrapers and few flakes worked on chert. The second quaternary unit of old alluvium consisted of microlithic blades and scrapers etc., chipped from agates and chalcedony. This occurrence near flood basin in the vicinity of the river at 120 m. high is of significance as pointing out the migration of Late Stone Age Man to fertile alluvium.

Dr. Rae also noticed some organic remains such as dentition of Bos, Hystrix, Equus Crecuta associated with Early Palaeolithic cultural levels.
In the recent years Sri Thakur Raja Ram Singh had explored many Early, Middle and Late Stone Age sites. He also discovered Upper Palaeolithic elements at many places. Some of the Early and Late Stone Age sites have been discovered on eroded or bed rock surfaces or loosely in the nullah beds which will not help to know their true horizon. Most of the tools have been noticed from the factory or open air sites.

The Middle Stone Age artefacts too were found from factory or open air sites and eroded bed rock surfaces. The nullahs on the west of Godavary Khani, the area locally known as 5th, 6th and 8th Inclines in Peddapalli taluk, cut across gravel sections denuding middle stone age artefacts. Few trenches excavated by road contractors near Ramagundam, Godavarikhani, Medipalli, Malkapur villages all in Peddapalli taluk, reveal implementiferous gravel sections to a thickness ranging between 3-4 meters. The MSA artefact bearing gravel sections are capped by clayey silt to a thickness of 15 cm. to 2.50 meters and lying directly upon the weathered sandstone.

The blade burin industry was noticed at Chittiyalpalli in Peddapalli taluk in a gravel section to a thickness of 20-35 cm.

Sites Recently Discovered:

Most of the Stone Age sites, except those at Pechera and Chittialpalli, so far discovered are situated between parallels of 79 and 79.46 long. East and 18 & 19 Lat. N. and are found in between 450-500 contour lines along the Godavary river from
Dharmapuri in Jagtial taluk to Khanapur in Manthani taluk. The hand axes, cleavers and flake artefacts are found in between Anthergoan and Manthani (west to east) in Peddapalli taluk a stretch of 35 km. and Naspur of Laxettipet taluk in Adilabad to Ramagiri hills in Peddapalli taluk (north to south) - a stretch of 20 km. Few of these sites have been described here.

Gedavarikhani is the modern name for the Coal bearing area which includes parts of old villages viz. Jangam, Andugulupalli, Malkapur, Sundilla, Jallaram, Chandanapur, Veerlapalle, Venkatarapalle, Allur, Vakilpalle etc. Early Stone Age tool types like hand axes cleavers, chopper-chopping tools, ovates and discoids are found on weathered surfaces on the north, south and west of the 6th Incline. The Middle Stone Age tools such as scrapers, points, borers, small hand axes and Bifacial points are found in the vicinity of the above two places and also east of 5th Incline, south of 8th Incline, north-east of 9th Incline etc. The Late Stone Age artifacts are found west of the Guest House, near 4th and 2nd Inclines, south of 6th/A Incline, east of 8th Incline and south of 8th/A Incline etc. Many of these sites are, in fact, factory sites. The tools are fresh but in some cases patinated due to contact with brown or red soils.

The site east of the Regional Hospital yielded more than 40 hand-axes in an area of 10 sq. meters besides few
cleavers, discoids and pebble choppers etc. The hand axes were made either on round or flat pebbles of quartzite. Both pointed and tongue shaped are found. The cross sections of these tools are biconvex, plane-convex, triangular, rectangular and trapezoidal. As a rule the edges are straight and neatly chipped or in some cases retouched. There are good number of fully worked hand-axes. The size of hand-axes ranges between 8 to 20 cms. The cleavers are much less in number with sizes ranging between 11 to 16 cms. Typologically the industry can be designated as mid/late Acheulian.

The 6th Incline yielded variety of MSA flake tools which included side and end scrapers, bifacially worked scrapers, notches, pointed flakes, unifacially and bifacially worked points, small hand axes, borers, tanged scrapers and arrow heads on thin blades. Most of them are fairly retouched.

The flakes are either simple or Levalloisian in type. It may be noted that MSA tool-types found at Dubbapalle, Vakilpalle and 9th/A Incline are much diminished in size compared to tools found elsewhere.

LATE STONE AGE:

In Europe, West Asia and North Africa the flake culture was replaced by Upper Palaeolithic Blade and Burin Industries. The situation in India was presumed to be different and it was concluded that no such blade and burin industry ever existed independently in India. It was also presumed that the Late Stone Age (Mesolithic) was directly derived from Middle Palaeolithic. Occasional discoveries of blade cores,
blades and even blade tools were announced now and then. Burkitt\textsuperscript{17} working on the Kurnool industries designated them as Series-III. Such tools were also reported at Nagarjunakonda\textsuperscript{18} Kurnool\textsuperscript{19} and Ganga valley\textsuperscript{20}. Recent studies by Murthy\textsuperscript{21} in Renigunta in Chittoor District and Betamcherla Caves\textsuperscript{22} in Kurnool and Paddayya\textsuperscript{23} in Sherapur Deob, Karnataka, Reddy\textsuperscript{24} on Venula Industry in Cuddapah proved beyond doubt that the blade and burin industry existed sandwiched between Middle Palaeolithic and Mesolithic in India.

As already noted the blade and burin industry was first noticed in Godavari Khani and Ramagundam in Peddapalli taluk and later at Gullaketa in Laxetipet taluk. Very recently in 1976 Rajaram Singh discovered two important sites near Pochera waterfalls and Chittialpalle on the Suvarna river in Adilabad District.

The Pochera site (78.22 1/2 Long. E, 19.20 Lat. N.) yielded fluted cores and blades exactly in the nature of microliths, but much bigger in size (3.5 to 5 cm. Long. 1.9 to 3.2 cm. bread). The blade tool kit includes side and end-scrapers, notches, noses, points, borers, and a good number of burins. Among these blades, a collection of M.S.A. cores, flakes, and flake tools are mixed up, reminiscent of the earlier industry existing at the region.

Chittialpalli is situated on the right bank of the Suvarna river on Mirmal-Shainsa road in the Adilabad district. The site is much exposed due to cultivation and erosion. The silt capping the morrum gravel is now eroded away. Here the
blade-burin industry is associated with M.S.A. artefacts.

Late Stone Age Sites: 25

The Late Stone Age sites are noticed in Ramagundam and Godavari Khani areas and also in Karimnagar, Jagtiyal, Manthani taluks of Karimnagar district and Luxettipet taluk of Adilabad district. The L.S.A. people lived and worked not only on the heights of red sandy soils but also on the top of the hills and foot hills, wherever a water source like rivulet, spring or waterfall was available in the vicinity. A few sites are also noticed over the rocky outcrops, in the midst of black soil.

The important L.S.A. sites in Peddapalli taluk are Bugga (around a spring) at the foot hills of Takkellapalli range, Devunipalli, Rangapur (foot hills), Gopiahpalli, Kasulapalli (hamlet of Paltem), Sultanabad (among the rocky outcreps) Kangarthy, Kadheem (outcreps and foot hills) in red or brown soils, around Peddapalli outcreps, Dharmabad (a spring in the hills) and top of the hills, Mutharam, near a rock shelter in Mallanagutta hill, Puligundam, Gudisalpet (foot-hills), Rachapalli (foot hills), Vemmur (nullah) and Sabbitam village facing the Gourigundam water falls and also on the hill top.

The Gourigundam site, 26 jointly visited by the author and Raja Ram Singh is unique and most prolific of all the sites so far discovered. The site is situated over a sandy silt plateau facing the Gourigundam waterfalls, and literally yielded hundreds of cores, blades, blade tools and waste flakes.
The cores found here are of three kinds, flat, pointed and obliquely based. The tools are blunted backs. The assemblage also includes primary flakes, chips, parallel sided blades, lunates (large number) variety of points, obliquely blunted backs and occasionally trapezes and triangles. No scrapers are noticed.

Apart from surface collection a 3 x 3 meters wide trench cut to a depth of only 12 centimeters yielded the following material, cores-160, blades and primary chips, 2,813, tools 416 and waste flakes 579, totalling 3988 artefacts. The site spreads to an area of 60 x 48 meters.

A Late Stone Age site discovered by Raja Ram Singh and later visited by the author is situated between Buchaayapalli and Warsanpalli, both hamlets of Maidampalli village in Peddapalli taluk of Karimnagar district. The site is situated among the sandstone out-crops on the right bank of the rivulet, which meets the river Godavari within 4 kms. The outcrops are of brownish sand stone of Sullavai series of Purana rocks. A hundred meters away is found a full-fledged Microlithic site over sandy bed rocks. The plain bed-rock was incised with graffitti marks such as triangles enclosing a rayed circle, a bow, a fish, squares and rectangles with dots, inside, probably representing the way of life and the nature of tool kit of the microlithic people.

Slightly away, about 100 yards from the Microlithic site is noticed a loosely cemented breccia formed of the angular
fragments of sandstone besides rounded quartzite pebbles and cobbles, quartzite cores, flakes, blade flakes and tools of M.S.A. or Late M.S.A., pebbles of chert and chalcedony, L.S.A. cores with flakes, blades and tools. The cementing agent is sandy earth. The mass is not fully cemented but it is in the process.

Raw Material used:

The lower and Middle palaeolithic tools were mostly made on quartzite, coarse to fine grained and occasionally on chert. The sites where Middle and upper Palaeolithic were made exclusively on chert in Gullakota, Pochera and Chittialapalli. The material used for upper palaeolithic tools invariably is chert, chalcedony including agate, jasper and cornelian.
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