

THE MESOLITHIC INDUSTRIES OF THE GAMBHEERAM VALLEY,
EASTERN COASTAL INDIA

*P. Vijaya Prakash
Andhra University
Waltair*

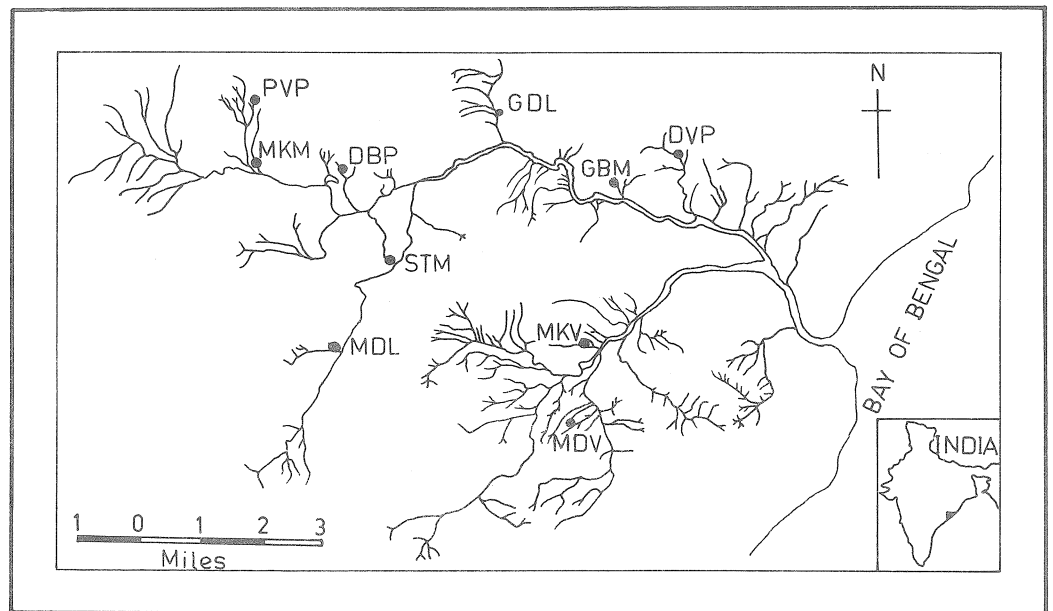


Figure 1. Location of prehistoric sites in the Gambheeram River Valley, northern Andhra Pradesh.

The occurrence of microlithic industries in north-eastern coastal Andhra Pradesh, India, was first reported by Cammiade and Burkitt (1930). Since then, except for an isolated site at Rampachodavaram (Rao 1972), no evidence has been reported from this region. However, prehistoric explorations in the Gambheeram valley since 1978 have resulted in the discovery of several Mesolithic sites. Only a brief report of one of them - Madhyakadamam (MKM) - has been published so far (Reddy and Prakash 1985).

The Gambheeram river ($18^{\circ}40'$ to $18^{\circ}55'N$ and $83^{\circ}10'$ to $83^{\circ}30'E$) originates in the Kottavalasa Hills and flows for about 35 km in an easterly direction, finally to debouch into the Bay of Bengal (Figure 1). A network of streams originating in the hill ranges feeds the river with both spring and rain water. The hills themselves are part of the Eastern Ghats, and are of pre-Cambrian age. They enclose a number of basins and narrow valleys which contain red soil deposits. The red soil has been heavily dissected by gullies and nalas, and reveals a marked "bad land" topography.

Scattered as well as concentrated surface occurrences of microliths have been found near the villages of Pappalavanipalem (PVP), Madhyakadamam (MKM), Dibbapalem (DBP), Sontyam (STM), Mamidilova (MDL), Gudilova (GDL), Dukkavanipalem (DVP), Gambheeram (GBM), Madhuravada (MDV) and Marikavalasa (MKV). The microliths are found both in a pelley ferruginous gravel and on the eroded red soil surface. In order to confirm their original stratigraphic position, trial trenches measuring 2 x 2 metres were laid out at sites MKM, STM, GDL and MKV. At all four the microliths made their appearance between 60 and 80 cm below the surface of the red soil deposits.

Milky and glassy quartz is the chief raw material in all sites, while chert and cherty quartz were occasionally used. These raw materials are found as veins in the local Khondalite rocks.

Site	Finished Forms								Debitage		
	Blades	Points	Scrapers	Chisel-edged tools	Borers	Burins	Simple blades	Total	Flakes	Cores	Total
PVP	11	6	19	-	2	2	18	58	26	18	44
								(3.17)			(4.02)
MKM	210	44	57	11	25	12	105	46	215	178	393
								(25.40)			(35.92)
DBP	2	5	30	-	3	2	11	53	11	9	20
								(2.90)			(1.83)
STM	10	19	32	2	10	5	35	113	27	13	40
								(6.19)			(3.66)
MDL	16	10	20	2	6	3	33	9	46	11	57
								(4.93)			(5.21)
GDL	128	61	79	9	30	25	82	41	182	92	274
								(22.66)			(25.04)
DVP	6	6	11	-	3	3	13	42	12	6	18
								(2.30)			(1.65)
GBM	5	5	16	-	5	6	20	57	9	3	12
								(3.12)			(1.10)
MDV	15	29	152	2	4	5	102	30	37	152	189
								(16.91)			(17.28)
MKV	50	20	26	2	16	10	103	22	32	15	47
								(12.42)			(4.30)
Total	453	205	442	28	104	73	522	1827	597	497	1094
	(24.79)	(11.22)	(24.19)	(1.53)	(5.69)	(4.00)	(28.58)	(54.57)	(45.43)		

Percentages are given in parentheses

Table 1. Type and site-wise distribution of microlithic artefacts in the Gambheeram Valley sites.

Tool Types	Made on blades	Made on flakes	Other	Total
Points	153	52	-	205 (24.06)
Scrapers	270	172	-	442 (51.87)
Borers	58	29	17	104 (12.21)
Burins	22	46	5	73 (8.57)
Chisel-edged tools	28	-	-	28 (3.29)
Total	531 (62.33)	299 (35.09)	22 (2.58)	852 (100.00)

Table 2. Occurrence of blades and flakes in the Gambheeram industries (excluding backed blades).

The total collection of artefacts from all 10 sites amounts to 2,921 pieces. The material can be divided into both finished forms (1,827) and debitage (1,094). The finished forms include backed blades (453), points (205), scrapers (442), chisel-edged tools (28), borers (104), burins (73) and simple blades (522), while flakes (597) and cores (497) form the debitage. Figures for each site are given in Table 1.

It is clear from Table 1 that simple blades, followed by backed blades, dominate the collection. Backed blades are further divided into lunates (163), backed points (150), backed knives (102), triangles (22) and trapezoids (16). The remaining tool types can be further sub-divided into tools made on blades or flakes, as shown in Table 2.

The microlithic industry of the area under study is predominantly a blade industry, as indicated by the high proportions of backed blades, simple blades and other tool types on blades. Together, these constitute 82.43% of the total tool kit.

The presence of geometric forms and the absence of pottery suggest that the Gambheeram industry can be considered both geometric and aceramic.

REFERENCES

Cammiade, L.A. and M.C. Burkitt. 1930. Fresh light on the Stone Ages in south-east India. Antiquity 4:327-40.

Rao, S.N. 1972. Late Stone Age hunter gatherers of the Lower Godavari Valley: a functional approach. Bulletin of the Department of Anthropology, Dibrugarh University.

Reddy, K.T. and P.V. Prakash. 1985. The Upper Palaeolithic and Mesolithic in the Gambheeram Valley, Northeastern Andhra Pradesh.. In Recent advances in Indo-Pacific prehistory (eds. V.N. Misra and P. Bellwood), pp.157-158. New Delhi: Oxford and IBH.