

ARCHAEOLOGICAL RECONNAISSANCE IN THE SANJAI VALLEY,
SINGHBHUM DISTRICT, BIHAR

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THE SURVEY.

Eight days (22 to 29 March 1984) were spent on a walking search of the dissected terrain which lies immediately above and on either side of the present incised Sanjai river bed. A zone approximately 50 metres wide on either bank was scanned wherever terrain permitted, although rough ground and modern villages frequently intervened to reduce visibility. 42 kilometres were covered on both sides of the river from Chakradharpur to the Sanjai-Kharkai junction, less two unsurveyed gaps (marked in Figure 2) of eight and four kilometres respectively, left out due to shortage of time and difficulty of access. The survey was designed merely to illuminate the Holocene archaeological potential of the valley, and did not involve exhaustive search. The site sample thus reflects erosional visibility only, and site numbers cannot necessarily be taken to indicate habitational or population density vis-à-vis archaeological period. All visible sites represent erosional lags (although some clearly contain underlying stratified deposits), and many appear to have secondarily mixed components on their surfaces.

RESEARCH FOCUS.

The Chota Nagpur plateau, especially its Gangetic fringes, has botanical and linguistic features which suggest a considerable potential antiquity for rice cultivation in the region (Chatterjee 1978:80 for rice biogeography; Zide and Zide 1976 for Proto-Munda and Proto-Austro-Asiatic vocabulary reconstructions). A number of archaeological sites in the eastern Gangetic basin and flanking valleys place rice cultivation firmly back into the second millennium B.C. and before; the better-known ones include Koldihwa and Chopani-Mando in the Belan valley (Sharma *et al.* 1980), Chirand in the Gangetic basin in northern Bihar (Sinha 1980), and the lowland West Bengal sites of Pandu Rajar Dhibi and Mahisadal (Das Gupta 1964; Ray 1978). The Sanjai valley clearly has the archaeological potential to contribute to knowledge of early rice cultivation - one of the major economic developments in human prehistory, and one reliably dated to at least 5000 B.C. in the lower Yangtze region of China (Hemudu, Zhejiang Province) and possibly at Koldihwa.

THE SANJAI VALLEY (Figure 1)

The Sanjai is a tributary of the Kharkai, in turn a tributary of the Subarnarekha river. It is therefore a part of the western drainage pattern of the lower Gangetic plain, and joins these lower plains with the interior uplands of Chota Nagpur. The present river is sharply incised to a depth of at least 10 metres within alluvial deposits, and is typically flanked by sheer cliffs on the outer sides of bends. The alluvial deposits at cliff-top level above the river comprise sands and silts, and these can be seen to overlie boulder gravels at certain points in the cliff sections. Following the geomorphic survey of the middle Son Valley (Uttar Pradesh) by Williams and Royce (1982), it may be hypothesised that the ground surface on top of the Sanjai cliffs represents the terminal Pleistocene and basal Holocene flood plain, and that the present incised Sanjai course is a result of Holocene downcutting. All sites located in 1984 lie on the surface of the upper flood plain (as do the modern villages), and since this zone would presumably have been subject to annual flooding in the Late Pleistocene most settlement at this time may have been located further away from the river course. This circumstance implies that most of the 1984 preceramic sites are likely to be of Holocene date, although it is quite possible that some could represent seasonal Late Pleistocene river-bank camping. This is a question for future excavation to answer.

Palaeolithic artefacts recovered from Pleistocene deposits beneath the upper alluvium have been described by Ghosh (1970), but no deliberate search was made for artefacts in the Sanjai cliff sections in the present survey. No detailed geomorphic observations

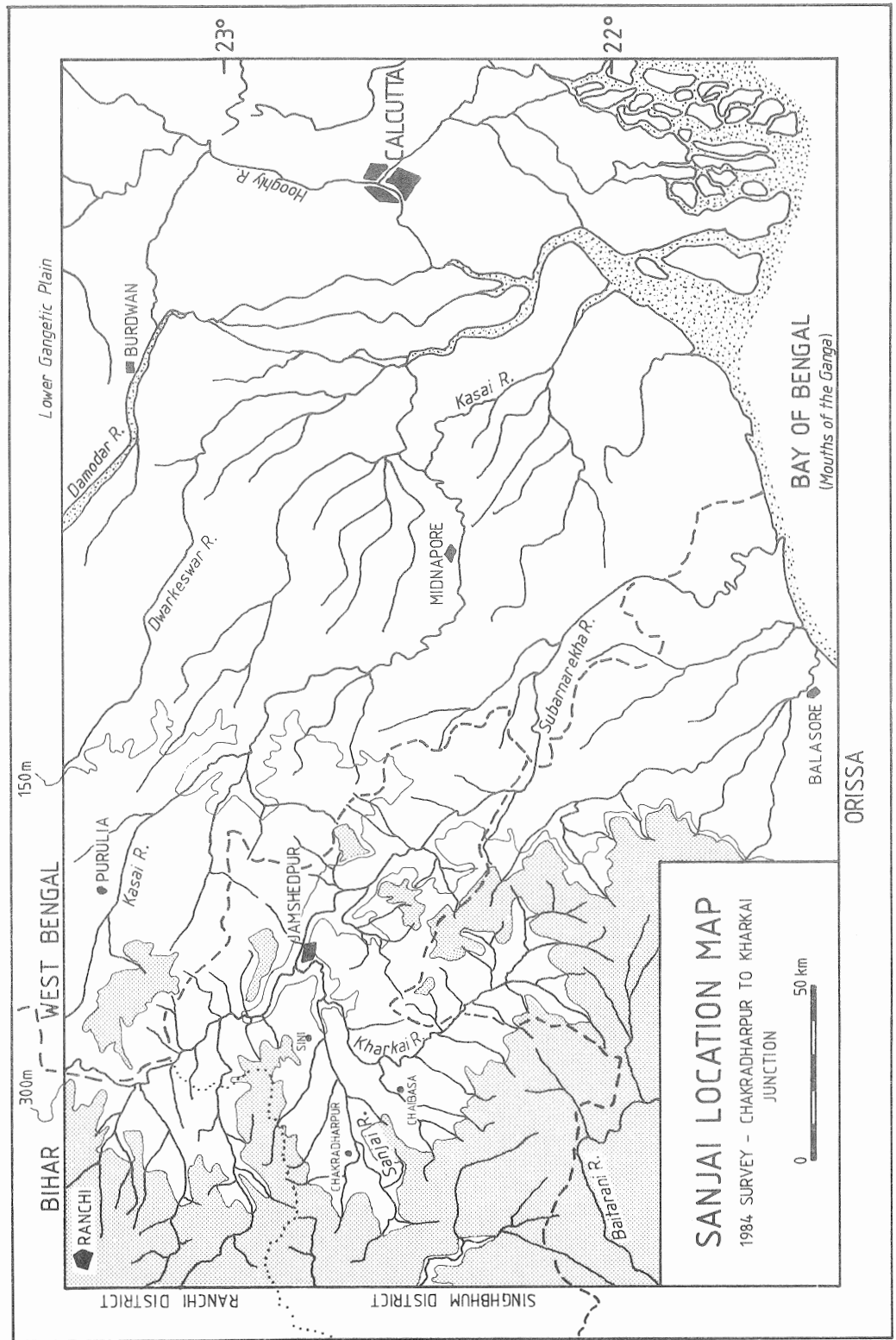


Figure 1. Location of the Sanjai Valley.

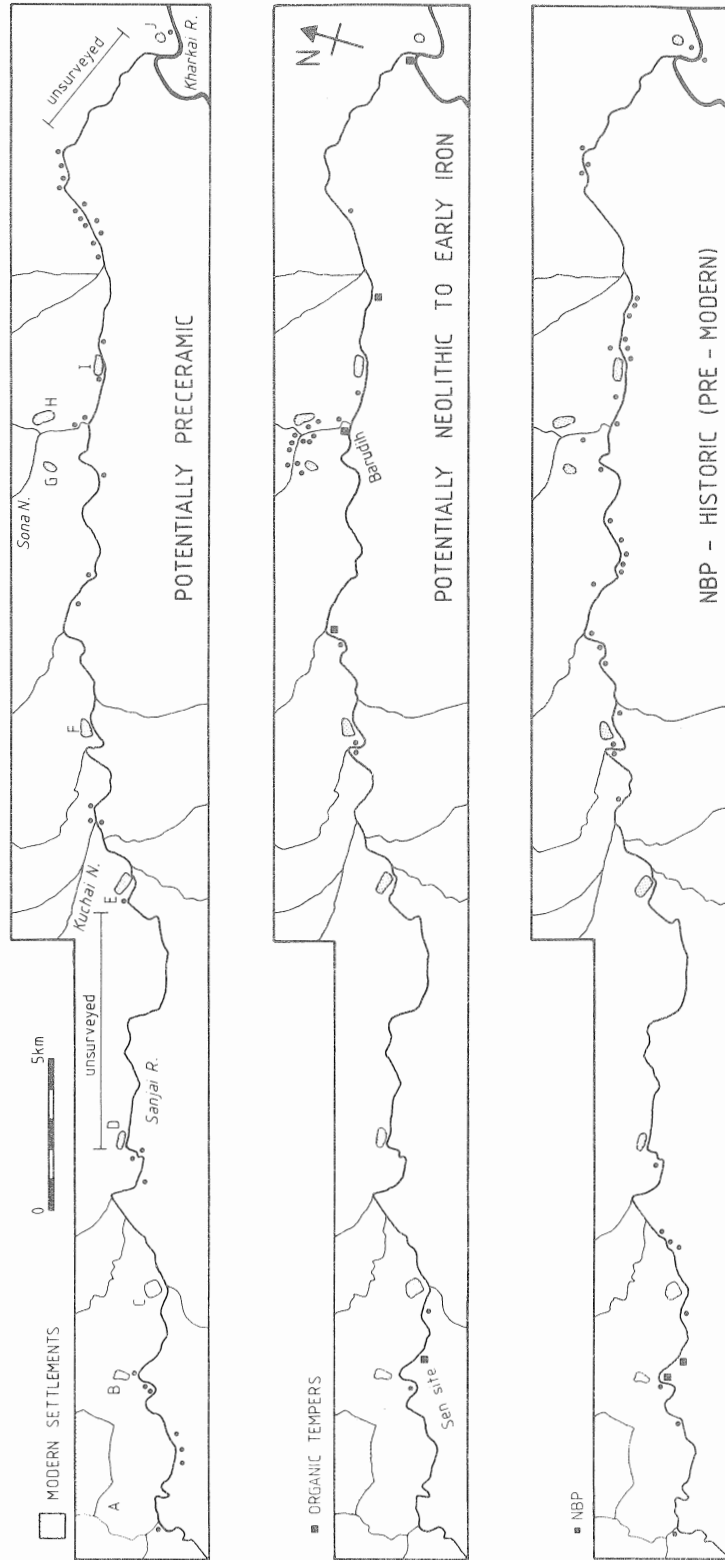


Figure 2. Site Distributions by Period in the Sanjai Valley. Modern Settlements: A, Chakradharpur; B, Barda; C, Chainpur Khas; D, Gandamara; E, Janumbera; F, Potka; G, Jojo; H, Ukri; I, Dugni; J, Ganjiya.

have yet been made, but a parallel study to that of Williams and Royce will be attempted in future field seasons.

The surveyed bank top of the Sanjai river appears to be entirely an erosional landscape, and many of the sites discovered have lost their original stratified deposits entirely. Ploughing and forest clearance have doubtless accelerated the rate of Holocene erosion.

PRIOR RESEARCH.

A number of reports indicated the high potential of the Sanjai valley for Neolithic research prior to the 1984 survey (Anderson 1917; Sen 1950, 1969, 1975; Sen and Chaturvedi 1958; Das 1964; Ghosh 1970; Ghosh, Ray and Chatterjee this volume; and cf. Allchin 1962 for Santal Parganas). Excavations at Barudih in the 1960's indicated the presence of rice-husk tempered pottery at about 1000 B.C., and stone axes had been found in very large numbers at Barudih and at sites near Chakradharpur and Dugni. All these locations were re-examined in 1984.

THE 1984 RESULTS.

Prehistoric components in the valley can be ordered loosely into three divisions: preceramic, Neolithic to Early Iron Age, and 'Historic' (i.e. NBP and later). As noted above, many sites possibly contain mixed artefact components. Furthermore, most pottery collected is eroded and of small size, and the matching of rim sherds to published profiles is often an ambiguous exercise. For instance, many Sanjai wheel-made rim forms are of chronologically complacent types for which parallels can be found in a range of contexts from early historic Pataliputra to modern village sherd dumps. Dogmatic periodisations at this stage of research are therefore premature.

1. Preceramic.

These sites produce mainly a prismatic blade industry on fine-grained siliceous rocks with conical or cylindrical blade cores, and occasional microblades. Backed blades and geometrics are rare, and there are no points. Similarities with Birbhanpur in West Bengal (Lal 1958) are apparent, especially in the bias away from geometric forms, although the Sanjai sites are, unlike Birbhanpur, not dominated by the use of quartz. It appears unlikely that the non-geometric nature of the Sanjai industry necessarily indicates an early date, and it probably spans a long period from the Late Pleistocene onwards, to overlap with the use of ground stone axes and perhaps even iron. 34 of the Sanjai sites (in all cases very small) are considered preceramic (Figure 2, top), and in another 46 the flake-blade industry occurs with pottery. Without excavation

the nature of this apparent over-lap must remain unknown, and as noted above some sites may be contaminated by secondary deposition.

A striking cluster of preceramic sites with a blade industry occurs between Dugni and the Kharkai junction - these deserve future examination.

2. Neolithic to Early Iron.

At the outset, it can be stated that painted, incised and cord-marked pottery is so far absent in all our surface collections (both prehistoric and historic), and comparisons on the basis of plain and predominantly small sherdage are difficult to make. No animal bones or bone tools were found (although these are known to survive within stratified deposits at Barudih), and for these reasons no useful comparisons can yet be made with the important Neolithic sites of Chirand, Koldihwa and Chopani-Mando. Nevertheless, five sites (see Figure 2, middle) have produced organic and rice-husk tempered sherds which in terms of fabric, rim type and surface finish correlate well with the 'black-and-red' (non-megalithic) and associated wares of Pandu Rajar Dhibi and other West Bengal lowland sites. This type of pottery has been excavated in situ at Barudih.

Stone axes were recovered from 16 sites, including the badly-eroded site reported by Sen near Chakradharpur (indicated as the 'Sen site' on Figure 2) and Sen's Dugni site (Sen 1975). Most have the usual lenticular cross-section and pointed butt, but a few have squared-off butts and rectangular cross-sections. Interestingly, the latter type occurs with historic pottery in one site, but again questions of secondary deposition intervene. No shouldered axes of Southeast Asian type were found, although they have been reported from Chota Nagpur in the past (Allchin 1962).

Sites of this phase often indicate the survival of mounded occupation deposits, possibly up to 2 metres thick, and the largest probably exceed 100 metres in maximum dimensions (no measured surveys were undertaken owing to lack of time). Sites worthy of future examination include the Sen site and the one immediately to its east, and an impressive cluster of eroded mounds with sherds, blades and axes along both banks of the Sona nala upstream from Barudih near the modern villages of Ukri and Jojo. The pottery from this Sona group appears to lack the organic-tempered type (except at Barudih), and includes a characteristic gritty orange ware which shows no particularly 'historic' characteristics. As Barudih has shown, it is likely that some of these sites will span a long period of occupation from at least the second millennium B.C. into the Iron Age, and excavation of one site within this group is a major priority for future research. It may be added that no copper or bronze tools were found during the survey, but one site produced

copper slag.

3. Historic.

'Historic' sites are defined by the presences or fast-wheel turned pottery (always plain, apart from occasional slips, and easily differentiable from the prehistoric types in terms of rim complexity and cross-section) and prolific quantities of iron slag. They make up the largest category of Sanjai sites in terms of number and size (up to 250 m across). Two sites have produced single sherds of Northern Black Polished Ware, and at least two have ceramic characteristics which overlap with 'early historic' sites such as Arikamedu (Wheeler, Ghosh and Deva 1946) and Pataliputra period II (Sinha and Narain 1970). The valley also contains a number of burial sites which are characterised by the placement of cremation burials in jars beneath horizontal stone slabs, often associated with tall prismatic stone uprights (Chatterjee and Das 1929). The pottery in these burial sites, which are traditionally connected with the local Ho population, appears to be relatively recent and certainly has no parallels in the standard Iron Age black-and-red and associated wares.

The sites in this 'historic' category clearly run through the past 2000 years to merge with the modern villages which occupy the same upper bank zone close to the river. All are of undoubted village or hamlet status, and no fortified or large urban sites have been located; they would indeed be out of place in what was certainly a remote region with respect to the historical Mauryan and post-Mauryan kingdoms.

PROPOSALS FOR FUTURE RESEARCH.

To re-cap suggestions made in the above report, proposals for future fieldwork include the following:-

1. A geomorphic survey of the valley.
2. Small-scale excavation to provide a stratigraphic order for artefact classes - sites worthy of attention in this respect include the preceramic cluster downstream from Dugni, the 'Sen site', the Ukri-Jojo mounds, and at least one historic mound.
3. Large-scale excavation on one Neolithic site (to be chosen after a basic sequence for the valley has been identified), to be combined with detailed analysis of rice and other plant remains.
4. Expansion of the site survey to a 100% 'catch', probably in the region between the Sona nala and the Kharkai.

5. examination of the megalithic burial sites, in this case of course with the concurrence and co-operation of the local Ho community.

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