# Antiquity of Bead Manufacturing at Mahurjhari and Its Relevance in Early Iron Age Megalithic Culture of Vidarbha

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**Abstract**: The evidence of beads of semi-precious stones was well-known from many megalithic sites in peninsular India. In Vidarbha, the evidence of bead manufacturing came from the site of Mahurjhari. Though scholars had in the past expressed a strong belief of the presence of a bead manufacturing area in the site, it was found only in the context of the early historic habitation mound. The recent discovery and excavation of the Early Iron Age/megalithic settlement at the site by the second author though was remarkable, yet bead manufacturing evidence were not found in context of the megalithic period. In this background, the first author explored the area around and was able to trace a small bead manufacturing area in context of the megalithic period.

*Keywords*: Bead Manufacturing, Roughouts, Mahurjhari, Megalithic Culture, Vidarbha, Exploration, Excavation

#### Introduction

The Early Iron Age in Vidarbha is better known from the vast number of megalithic burials spread over the landscape of Nagpur, Wardha and Chandrapur districts of Vidarbha region of Maharashtra. These burials were excavated by many researchers over the period of one and half century (Rivett-Carnac 1879, Pearse 1869, IAR 1961-62, Deo 1970, 1973, Deo and Jamkhedkar 1982, IAR 1978-79, 1980-81, 1981-82, 1982-83, Mohanty 2003a, 2004, 2005). These excavations have yielded enormous remains in the form of burial goods. This data has been providing insight about the life of megalithic people and scholars have written about it from time to time (Deo 1985, Moorti 1986, 1994; Mohanty and Joshi 1996, Mohanty and Selva 2002).

Among the ornaments quite often semiprecious beads find presence as accompanying grave goods. The antiquity of semi-precious stone bead manufacturing and its appearance in archaeological context goes back to the Neolithic period coming from sites like Mehrgarh (Jarrige 1986, Vidale 1995) in Baluchistan region. These semi-precious stone beads were manufactured in a few places (Bhan *et al.* 1994) but were

distributed to far off places. The attractive colour of the beads often with self-designs and continuous improvement of shapes and sizes probably fascinated people of different ages. The technique of manufacturing of these beads continuously improved and various kinds of semi-precious stones were procured from places of their availability, brought to the manufacturing centres and were fashioned looking into the contemporary ethos of the period. As has been mentioned by several scholars the manufacturing of beads starting from the collection of raw materials to the finished products using traditional manufacturing processes or methodologies was highly timeconsuming. So much so that the beautifully crafted long carnelian beads found in Harappan context, created by master craftsmen must have taken long hours of preparation, may be some days together. Hence, these beads were not probably commonly used and not easily available to all strata of the society. They were certainly expensive in relation to the past economy of any given period (Kenoyer 1986). For that matter, the finding of beads exclusively manufactured using rare varieties of stones or complicated shapes are often very rare. Their distribution probably depended on acceptance and liking of these beads as an ornament and projecting as a social status. The manufacturing to distribution to its valuation and procurement of these beads, the entire process also depended on the distance between the centres of production to the final destination.

When these beads are offered they certainly speak about the economic capabilities of the person who is offering them in the burials as grave goods. Apart from a rich variety of grave goods pertaining to household objects, offensive weapons, craftsmen tools, agricultural tools and ornaments; there have been reported beads of semi-precious stones of varying sizes and shapes from the burials in Vidarbha. The study of beads and bead manufacturing process in ancient India has been carried out intensively by many scholars. A scientific and systematic approach towards the study of beads in ancient India can be attributed to Beck (1927) and followed by Mackay's work on the process of agate bead making at Chanhu-daro (Mackay 1937, 1943). Some of the major work on the bead manufacturing can be assigned to by Dikshit (1949), Deo (1955), Kenoyer (1986), Kenoyer and Vidale (1992), Rajan (1997-98) and Mohanty (1999, 2008). A detailed analysis of the beads in cultural, historical and ethnographical context was carried out by Deo (2002). The most recent work devoted to the techno-typology of megalithic and early historic beads of Vidarbha region was by Tilok Thakuria (2010).

# Bead Manufacturing at Mahurjhari and its Association with the Megalithic Culture

The antiquity of beads in Vidarbha so far can be traced back to the Early Iron Age (Thakuria 2010). Not only the beads were being found in the megalithic burials but the evidence of manufacturing appears. The beads of semi-precious stones continue as a specialized craft during the Early Historic period. The evidence for this can be seen at the Early Historic site of Mahurjhari (Fig. 1) which is one of the largest bead manufacturing site known anywhere in the archaeological context (Mohanty 2008).

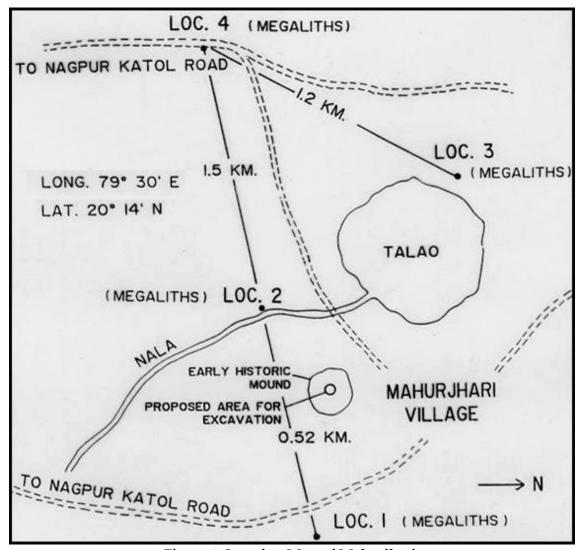


Figure 1: Location Map of Mahurjhari

The evidence of bead appearing in Early Iron Age/megalithic context comes from the site of Kaundinyapur (Dikshit 1968) from the habitation level. The beads found mainly comprised of etched carnelian variety. Dikshit therefore in an unhesitant way assigned the layer to megalithic period since such beads were well known from the megalithic/Early Iron Age graves excavated by then in peninsular India. Similarly, beads of semi-precious stones were found in the excavations of megalithic burials in Vidarbha at a later date such as Takalghat and Khapa (Deo 1970), Mahurjhari (Deo 1973), Naikund (Deo and Jamkhedkar 1982), Borgaon (IAR 1980-81) and so on.

Among all these sites, Mahurjhari gave evidences of bead manufacturing found extensively on the surface from the early historic settlement. This evidence was reported as early as 1933 by Hunter during his visit to the site. He reported the scatter of some perforated and unperforated beads of carnelian, agate, jasper, garnet, marble quartz, rock-crystal and so on. Hunter had identified their affinity to the Early Historic period. He in fact also identified Mahurjhari as a factory for bead manufacturing

during Indo-Roman trade. Later, Banerjee (IAR 1958-59: 21) found similar evidences near the present-day village and he also collected similar kind of beads and bead debitage from the site. The megaliths of this site were subjugated to excavation by Prof. S.B. Deo (Deo 1973). He recovered around 409 beads from the two seasons of excavation. Out of these 380 came from the stone circles excavated though all burials did not yield beads in them (Deo 1973, Thakuria 2010). Deo reports that many unfinished beads and debitage as well as finished beads were found from the megalithic burial rubble filling especially from megalithic burials of Locality I and II (later Mohanty has named it as Locality A and B, whereas locally it is called Rajasaheb-ki Tekdi). Deo therefore believes that the beads were locally manufactured not only in the Early Historic but during the Early Iron Age period. Though the site was known to have megalithic burials which can be dated to about beginning of first millennium BC and continued to 5th-4th century BC, there was no evidence of megalithic settlement which could have presumed to have manufacturing centre nearby which could have provided the unfinished beads and its refuses coming into the burials. The Early Historic settlement though had extensive bead manufacturing remains, it didn't have the evidence of occupation during the Early Iron Age. It was a situation with plenty of evidences of bead production during early historic period, beads of different stages of production and debitage appearing in megalithic burials when the burial building had already stopped and no evidence of a settlement of megalithic period was yet known. It was argued by all the scholars working at Mahurjhari and in Vidarbha that the megalithic burials were extremely rewarding as far antiquity remains was concerned. It is so much so that Mahurjhari is the richest burial site not only in Vidarbha, but in India in general. This aspect is presumed to have some kind of relationship with the lapidary work at the site which probably provided such kind of wealth which got incorporated into the burials.

Mohanty (1999), in his research article has pointed out that all the nine stages of bead manufacturing, viz. heating, primary chipping, bead roughouts, micro-chipping, pecking, grinding, dimpling, drilling, polishing were noticed in the bead-manufacturing locality near the village, i.e. the Early Historic Mound. He rightly points out the importance of bead manufacturing and bead trade during the period and the economic impact. Hence it can be seen that there was special attention towards Mahurjhari by the Vakatakas such that it got political importance (Mirashi 1963). He in fact feels that there were many reasons to believe that bead manufacturing already existed in the Early Iron Age apart from what Deo had stated earlier. He thinks that the prosperous nature of the burials from Mahurjhari was probably due to bead manufacturing. This assumption also led him to believe that the site should have an Early Iron Age habitation which certainly was active in bead-production (Mohanty 1999: 88).

This background led to further investigation at the site not only to understand the early historic bead manufacturing potentiality of the site but to look for Early Iron Age settlement along with evidence of bead-production. The Early Iron Age settlement

which was not found earlier from a research spanning to about 70 years at the site was finally found in 2003 (Mohanty 2004, 2005) and excavated. However, the Early Historic settlement and the megalithic settlement were different and were separated by about one and half kilometer from each other. They exploited different ecological niches, probably suitable to their contemporary necessities and activities. The excavation at the megalithic settlement gave an evidence that the people occupied this region much prior to it has been believed. The earliest level gave ceramic evidence and lithic tools which probably have affinity to the late Neolithic tradition of Southern India (Mohanty 2015). The site continued to be occupied prior to the Early Historic period and was abandoned. There is a cultural gap between the end phase of megalithic/Early Iron Age settlement and the beginning of the Early Historic settlement at this location. The excavation at the Early Iron Age habitation however, did not yield evidences of bead manufacturing (Mohanty 2003b, 2008). Thakuria (2010) therefore believed that the beads were specifically manufactured by the Early Historic people and not earlier. This enigmatic situation needed further investigation. There was one possibility that the burials containing unfinished beads with debitage could have happened due to site formation processes where the early historic people using the landscape, might have intentionally-unintentionally left such bead remnants. These remnants might have percolated down due to various activities such as crack developing on the surface of the burials or the trees growing over the burials allowing the surface material to be merged with the lower level material. This could have happened however, in a couple of occasions and that too remains of such activity might have got restricted to the upper levels of the burials. However, this evidence of unfinished beads is found from the beginning of the burial construction and also in various depths of the burial architecture in good numbers. This was again noticed during the megalithic excavation at Locality A, burial no. 10, which was excavated systematically to understand the relevance of artefactual remains in context of burial architecture, disposal of dead and insertion of grave goods along with them. He therefore feels that beads were brought from outside by means of exchange and were an exotic item. In his study, he has categorically classified burials yielding burials and burials which are non-bead yielding. His work helps to visualise the ubiquitous nature of carnelian beads and its profuse circulation in the burials in the region. Apart from this he identifies chalcedony as the other material used more frequently to make beads.

# **Recent Exploration and Evidence**

The above discussed matters compelled first author to explore the region. The main question was that according to the assumption of Mohanty (1999) whether there was presence of megalithic habitation? Then how a locality of bead-manufacturing could not be present? It was essential to explore again since the megalithic people might be making beads as earlier scholars thought (Deo 1973, Mohanty 1999) and that some types of beads were specific only to Mahurjhari (Thakuria 2010). These considerations point out the essentiality of a local bead production area. Hence, conducted fresh explorations near and around the Early Iron Age habitation of Mahurjhari in 2013.

It proved fruitful since a separate small mound was located (Fig. 2 and 3) which yielded megalithic pottery and few fragments of early historic potteries. But the early historic pottery fragments found here was disturbed material, found on the slope towards the *nalla* along with some middle Palaeolithic material as well as deposit of *nalla*. Hence, it can be said that the mound proper belonged to the Early Iron Age/ Megalithic period. This mound was just adjacent to the Early Iron Age/ Megalithic settlement and is towards its North. It is not easily noticed from the settlement since a 7-8 m road which leads to the stone mine beyond, has cut it from the settlement. It is also a separate mound and is somewhat behind the settlement. The mound is not having a deposit of more than 0.60 m. At this mound the scholar came across some micro chips of carnelian and chalcedony (Fig. 4) and also some roughouts suggesting some bead manufacturing (Fig. 5). Apart from this, the southern slope of the habitation mound excavated earlier which almost merges with this locality has also given evidences of micro-chips of carnelian as well as roughouts of chalcedony.

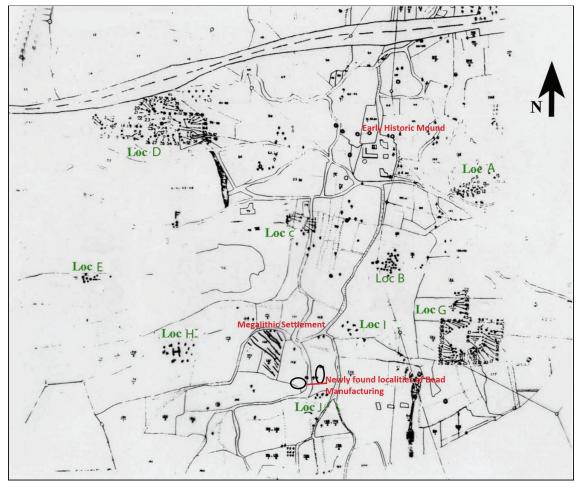


Figure 2: Site plan showing newly found bead manufacturing area

The debitage was mostly carnelian as stated above again is more important since it was the maximum used raw material in the Early Iron Age (Thakuria 2010: 182) followed by chalcedony. The micro-chips found are mostly an outcome of stage four when the

bead roughouts are chipped to obtain a definite shape. Such micro chips are found in not abundance but their presence on the surface can be well noticed only in the rainy season and not in dry season when the author visited. The roughouts were of carnelian (Fig. 6 and 7) and chalcedony thus again suggesting beginning of local bead manufacturing.

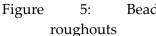


Figure 3: Site of Bead manufacturing-general view



Figure 4: Bead debitage with mostly carnelian micro-chips







Bead Figure 6: Carnelian bead roughout



Figure 7: Chipped Surfaces of Stone debitage

### **Discussions and Conclusions**

This was the first site where bead manufacturing evidences are found in Vidarbha in the Early Iron Age context. The location of the settlement and its environs do not suggest a very promising condition for intensive agriculture and surplus. The burial repertoire suggests the importance of various craftsmen. The raw material used for bead manufacturing is found in plenty in the surrounding regions which was exploited. This was probably the reason for continuous production of bead manufacturing at the site. It took an industrial nature only in the Early Historic period. The megalithic folks at the site had knowledge of bead manufacturing and were aware of the various technological know-how of it along with other craft specialisations they pursued lapidary work as the environs supported the required raw material. Bead was an exotic item in the early Iron Age (Thakuria 2010) and this evidence further supports this statement. However, now since the authors have found a bead manufacturing area it is clear that the habitation was intended to use the local raw material like chalcedony, jasper, agate and carnelian for the manufacture of beads. The association of bead manufacturing refuses at the megalithic settlement along with Early Iron Age ceramics provides the contemporaneity of the craft production. The surface evidence also suggests manufacture on small scale. Hence it can be said that the bead manufacturing was not on a large scale as it was in the Early Historic period. Further intensive investigation and excavation is needed to bring out all aspects and the antiquity of the bead manufacturing at the place.

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