



Pitted cobbles from mid-Holocene sites of NW sub-Himalayas of India



Anujot Singh Soni ^{a,*}, Vidwan Singh Soni ^b

^a Department of Punjab Historical Studies, Punjabi University, Patiala, India

^b 444/1, Urban Estate, Patiala 147002, India

ARTICLE INFO

Article history:

Received 18 July 2015

Received in revised form 15 February 2016

Accepted 16 March 2016

Available online 2 April 2016

Keywords:

Sub-Himalayas

Pitted cobbles

Pitting experiment

Soanian tools

Mid-Holocene

ABSTRACT

By exploring a region of the north-western sub-Himalayas, 74 fluvially rounded pitted cobbles mixed with other artefacts were collected from 16 sites. Each cobble had one to ten pits and, in most of the cases, the pits were placed irregularly on the surface and sides of the cobbles or overlapping each other. From the dating of the terrace surface, wherefrom the pitted cobbles were obtained in maximum number, and comparing it with the dates of the other sites from different parts of the world wherefrom such cobbles have been found, it can be affirmed that these artefacts (including the Soanian type tools associated with them) were fabricated during mid to late mid-Holocene. The pits appeared to be made intentionally for utilization and were not an outcome of any natural process. An experiment successfully replicated the pits found on these archaeological cobbles, indicating some possible functions. It can be concluded that the pits on these archaeological cobbles found in the part of the Indian sub-Himalayas appeared to be utility-oriented as they were made by percussions.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Some recently conducted experiments exploring the activity-related marks on cobbles have shown battering traces on the stone cobbles resulting in 'pits' (Sánchez Yustos et al., 2015; Roda Gilbert et al., 2011; Field et al., 2010; Goren-Inbar et al., 2002; Spears, 1975). Though Sánchez Yustos et al. (2015) studied the Early Stone Age sites and Roda Gilbert et al. (2011) focused on sites belonging to Mesolithic times, many other sites have been reported belonging to mid-Holocene showed presence of multi-pitted cobbles (Soni and Soni, 2011; Xeuchun et al., 2003; Fitzgerald and Jones, 1999; Adams, 2001; Breschini and Haversat, 1993; Sim, 1990; True and Baumhoff, 1985; True et al., 1979). Seventy-four pitted cobbles with quite varied morphology and probably used for different functions have been discovered for the first time in the NW sub-Himalayas of India. These tools were found in association with the Soanian tools and late-Harappan pottery (Soni and Soni, 2011, 2012; Soni et al., 2008). A brief examination of these cobbles found in mid-Holocene sites close to the ephemeral and perennial sources of water points to their intentional fabrication. An experiment was conducted to replicate the pits observed on these archaeological specimens.

2. Geomorphology of the sub-Himalayas and the occurrence of stone tools in them

The sediments of the sub-Himalayas or Siwaliks were deposited by the rivers flowing southwards from the greater Himalayas,

resulting in a multi-ordered drainage system. Following this deposition, the sediments were uplifted through intense tectonic regimes (commencing from Upper Miocene times), subsequently resulting in unique topographical entity—the Siwaliks. The Siwaliks are located within the political boundaries of Pakistan, India, Nepal, and Bhutan and are spread between 6 and 90 km in width (Acharyya, 1994). These hills are divided stratigraphically into three major sub-groups: Lower, Middle and Upper. Ongoing erosion and tectonic activity has greatly affected the topography of the Siwaliks; and their present-day morphology is comprised of hogback ridges, the valleys of various orders, gullies, Choes/Khads (seasonal streams), semicircular Choe-divides, water-gaps and Choe terraces (Mukerji, 1976). Geographically and stratigraphically, the outer parts of the Siwaliks consist of Pinjurs (named after the occurrence of such rocks in the Pinjaur town of Haryana-India), followed by boulder conglomerate stage. In regard to our study area, in the last section of the Siwaliks, the tributaries of River Satluj seem to have formed terraces on Pinjaur rocks as well as on boulder conglomerate formations, after emanating from the Miocene rocks. The raw material (fluvially rounded coarse to medium grained quartzite cobbles) used by the stone-age hominins was drawn from the clasts within the boulder-conglomerates and derived gravels. The Soanian tools have since been known to have occurred in the three sub-groups of the sub-Himalayas of India and Pakistan (de-Terra and Paterson, 1939; Mohaptra, 1974). Virtually all the previously known stone-age sites in this region are in un-datable surface contexts, and the resulting collections are often inadequate for accurate technological or chrono-typological analyses. Most of the researchers in India (Lal, 1956; Mohaptra, 1974; Karir, 1985; Singh et al., 1998) relied heavily on the work of de-Terra and Paterson (1939);

* Corresponding author.

E-mail address: anujotsoni@gmail.com (A.S. Soni).

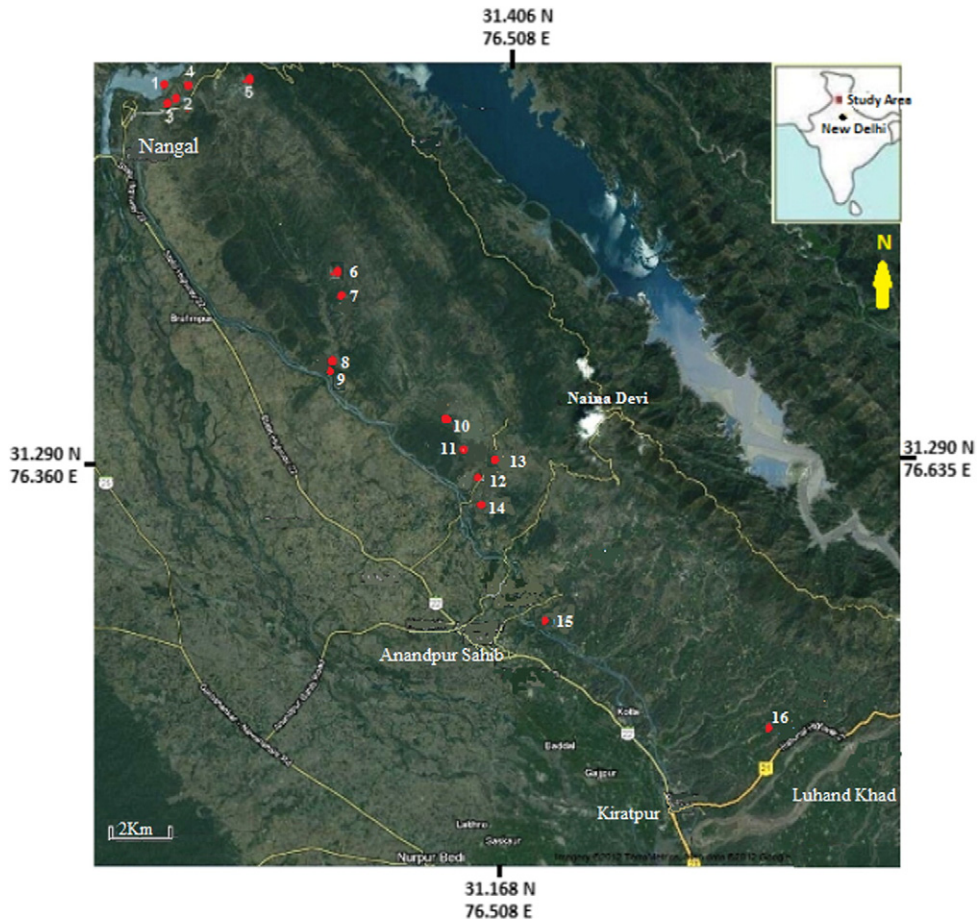


Fig. 1. Location of the archaeological sites: 1) NGT-1; 2) NGT-2; 3) NGT-3; 4) Barmala; 5) Goyalthai; 6) Nangethakur North; 7) Jandori-1; 8) Jandori-3; 9) Dabat; 10) Bika-Khad; 11) Kangowali; 12) Dhru-Di-Khad; 13) Khuh Sab; 14) Dhrot Nanowal Choe; 15) Nard.

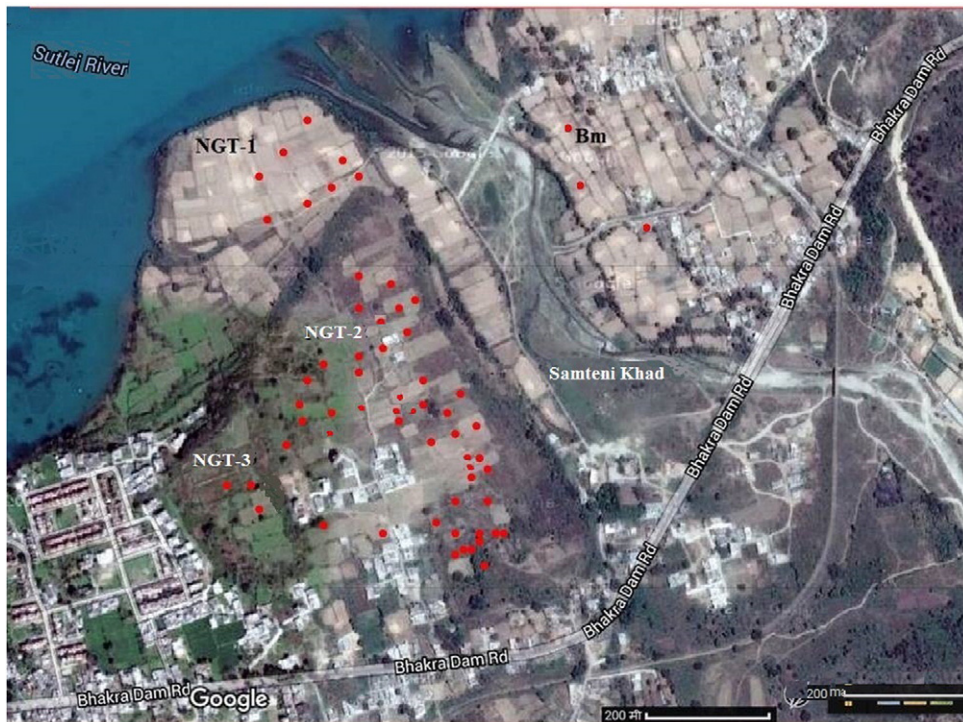


Fig. 2. Red spots (superposed on Google picture) approximately show the positions where the pitted cobbles were found in the sites NGT-1, NGT-2 and NGT-3.

Download English Version:

<https://daneshyari.com/en/article/7446574>

Download Persian Version:

<https://daneshyari.com/article/7446574>

[Daneshyari.com](https://daneshyari.com)