

ARCHAEOLOGICAL INVESTIGATION OF THE OUTER PLAINS OF JAMMU: SETTLEMENTS OF THE NEOLITHIC TO EARLY HISTORIC PERIODS

SYNOPSIS

The archaeological potential of the region of Jammu was mainly brought out by the explorations and excavations done in the area by Archaeological Survey of India from the 1960's onwards (IAR 1961-63; 1965-67; 1968-69; 1971-74; 1976-77; 1978-87; 1993-94; 1997-01; 2006-2010). These investigations have provided a basic information of the presence of different cultural periods which has been valuable for providing a baseline for further investigations. These preliminary researches have also brought to light the potential the area holds in studying the relationship between the physical landscape with that of the cultural landscape. This complex relationship of one area with other areas can be successfully explored through settlement pattern studies. Therefore, the main challenge of the present research is to understand the ancient land use patterns of the study area.

Geographically, the area of current research covers the outer plains of Jammu with focus to Jammu district (RS Pura and Akhnoor Tehsil). Some sites in the adjoining districts of Samba and Kathua were also explored. The main aim of the research was to locate sites belonging to different cultural periods and assess their role in the economic production and overall development of the region in a settlement pattern perspective. The above study area, bounded by 32° 53'N 74° 44'E to 32° 29'N 74° 55'E, was surveyed on foot (village to village survey) for this purpose.

Objectives of the Study

The primary objective of the research is to delineate the role of landscape in the development of cultures in the region from Proto-Historic to the Early Historic period. The work is aimed at the following:

1. Examining ecological niches which were preferred by the settlers in different periods.
2. Assessing local man-land relationship in terms of exploitation of regional resources.
3. Examining factors responsible for the development and expansion or subsequent decline of the early settlements in the Jammu region.
4. Understanding the links between various cultural periods in the adjoining regions in order to find out interactive relationship shared by them and sites in Jammu. This can be done by understanding the concepts of migrations and diffusions in the light of development of interregional trade and communications routes that may go back to the Proto-Historic period.
5. Accessing the role of river Chenab and Tawi in the development of settlements belonging to different cultural periods.
6. Assessing the sites based on their functional categories like seasonal camps, trading centres, villages etc. in order to delineate their articulation with the environmental setting of the region.

Outline of the Thesis

Chapter-I: Introduction

This chapter primarily discusses the scope of the present work with a general discussion on the present state of settlement studies in India. It also includes the description of the previous research carried out in Jammu. The importance

of the spatial location of the research area, its political and geographic affiliation, and the limitation of using historical sources to understand the development of socio-cultural processes, is also part of the discussion of this chapter. In addition, the chapter also outlines the major objectives of the research.

Chapter-II: Research Methodology

The chapter focusses on the methods employed for the collection of data dealing with both explorations and literature survey and their limitations. The methods adopted for the classification and analysis of the data are also addressed in this chapter. Some areas of the research required specific application of scientific techniques like XRF, SEM and ICPMS etc., for checking the provenance of the artefacts, especially pottery and therefore forms part of the discussion in this chapter.

Chapter-III: Geographical and Environmental Setting of the Research Area

The chapter deals with geographical features like spatial location, physiographic division, geology, soil, land use pattern, present climatic conditions, vegetation and drainage pattern of the research area. It is done with a view of providing proper physiographic setting of the area.

Chapter-IV: Archaeology of the Plains of Jammu

This chapter will be dealing with the archaeological data from the extant studies and the data collected through the current research. A detailed description of the newly explored sites which includes the recording of the important details related to the site (exact location, geographic setting etc) are recorded. In addition, important ethnographic data which gave information about the cultural practices of the present day is also recorded.

Chapter-V: Material Analysis

The prime focus of this chapter is the analysis of archaeological material for formulation of interpretation. The artefacts from explored sites and those collected through section scraping are chronologically placed based on the comparison made with the excavated materials from the research area and adjoining regions. The classification is mainly done on the basis of changes seen in the shapes of pottery and their fabric. Documentation in the form of drawings and photography of important pottery sherds and other artefact are done. Based on this analysis, an attempt is made to chronologically categorise all the earlier explored sites as well as the sites surveyed by the researcher.

Chapter VI- Settlement Patterns

This chapter deals with understanding the functional organization of various sites through time in the region in terms of settlement pattern perspective. Interaction of sites with the physical environment, relation of one site with another, distribution of sites in the landscape are the major topics to be discussed in this chapter. This chapter will also incorporate other sources like coins for the reconstruction of settlement patterns in the research area.

Chapter VII- Conclusion and Future Work

This chapter outlines the major findings and a summary of results of the research. It deals with the significance of the present study, the limitation of the research and its future scope.

STATEMENT-I

(Statement showing the particulars, on which the work is based, the discovery of new facts and of new relationships between facts observed by others and how the work tends to help the general advancement of knowledge).

The outer plains of Jammu, a bridge between the mainland India and valley of Kashmir is important mainly because of its location and ecological setting in North-Western India. Routes passing through Jammu make it a key passage for cultural as well as material exchange. The earlier archaeological investigations in the area mainly focussed on the explorations and small-scale excavations in order to primarily report the sites. These surveys although important for bringing out the chronological sequence, which has indeed helped to unravel the archaeological potential of the area, have studied the cultural processes in Jammu as an isolated phenomenon. The study of these sites in the backdrop of socio—cultural and economic processes has not so far been attempted. The present research is an attempt to understand these complex processes.

This dissertation adds up the following advancements in the existing archaeological knowledge of the plains of Jammu:

1. More than 30 sites falling into different chronological periods have been discovered and their geo coordinates have been properly documented. Many of the already reported sites by the ASI were revisited and the information e.g., their physical environment, the approximate size of the settlement etc. which was lacking from the earlier works was properly recorded.
2. The identification of the sites with the pottery belonging to Rangmahal Culture has been brought into light for the first time in the region. This

has helped to extend the territory of this distinctive pottery which was confined to Haryana as its northern most border.

3. The chronological timeframe of glazed ware in the research area has been rearranged from Medieval (as identified in the previous surveys) to contemporary to Rangmahal culture (by cross cultural analysis). This has further prompted other interesting research questions e.g., the provenance of this glazed ware in Jammu plains, its elemental composition etc. These questions were answered through the scientific analysis like XRF, SEM and ICPMS, which in-turn proved valuable to form a sound database for this rare pottery type in the plains of Jammu.
4. The confusion regarding the chronological sequencing in the research area has been solved to some extent through this work. This was achieved by scraping exposed sections at two different Early Historic sites. Two charcoal samples thus obtained gave Carbon 14 dates which helped to fix the chronological strata of these exposed sections. This became a major tool in placing the pottery from the research area in the proper sequence, as there was absence of any index material from the area. In addition, the explored materials from the sites were compared with the material of already excavated sites of nearby regions.
5. The role of the river Chenab and the Tawi in the distribution of sites belonging to different periods is analysed. The change of course of these rivers and its effect on the placement of sites in the past keeping in view the present-day behaviour of the settlement around them is studied using satellite imageries, maps and toposheets. It was observed that there is a direct relation between the meandering of river Chenab and settlement formation, which has been studied for the first time.
6. The archaeological data collected from the research area is a major contributor in reconstructing the political history of the region which faced major lacunae hitherto. The complex processes like the wave of

first and second urbanisation, the coming up of Janapadas and the sway of influential dynasties over the area of Jammu is an inevitable fact but has not been studied. The present research therefore analysed the data both from the literature and archaeology and brought into light evidence which would help to untangle the political history of the region.

STATEMENT II

(Statement indicating the sources of information and the extent to which the thesis is based on the works of others and the portion of the thesis claimed as original).

The prime focus of this research is the study of settlement pattern of the outer plains of Jammu, which was mainly done by the explorations undertaken in Jammu districts between 2015-2019 by the researcher. The previous works mainly in the form of IAR reports have been useful in providing data for further investigations.

The portions claimed as original in this thesis are the discovery of new sites belonging to different cultural periods, identification of Rangmahal pottery repertoire in the area, reanalysis of glazed ware in the backdrop of scientific investigations, dating of exposed scraped section by C14 method for chronological sequencing, studying river system in sync with cultural system, systematically bringing out to light the political history of the region prior to the Medieval period.

The following is the list of selected references upon which the basic concepts of the thesis has been formulated.

1. Bala, M. 1992. *Archaeology of Punjab*. Delhi: Agam Kala Prakashan.
2. Binford, L.R. 1980. "Willow Smoke and Dogs' Tails: Hunter-Gatherer Settlement Systems and Archaeological Site Formation". *American Antiquity*. 45: 4-20.
3. Butzer, K. 1982. *Archaeology as Human Ecology: Method and Theory for a Contextual Approach*. Cambridge University Press.

4. Chandra, M. 1977. *Trade and Trade Routes in Ancient India*. New Delhi: Abhinav Publications.
5. Chang, K.C. 1972. Settlement Pattern in Archaeology in *Addison-Wesley Module in Anthropology*.24: 1-26.
6. Dales, G.F and J.M. Kenoyer, 1986. *Excavations at Mohenjodaro, Pakistan: The Pottery*. USA: University of Pennsylvania.
7. Fish, S.K. and S.A. Kowalewski (Eds) 1990. *The Archaeology of Regions: A Case for Full Coverage Survey*. Washington DC: Smithsonian Institution Press.
8. Ghosh, A. 1973. *The City in Early Historical India*. Simla. Indian Institute of Advanced Studies.
9. *Indian Archaeology- A Review*. 1960-61 to 1971-72, 1973-74, 1975-76 to 1985-86, 1987-88 to 1988-89, 1990-91 to 1994-95, 1996-97 to 1999-2000, 2000-01, 2006-07 to 2009-10. New Delhi: Archaeological Survey of India.
10. Joshi, J.P. 1993. *Excavations at Bhagwanpura 1975-76 and other explorations and excavations 1975-81 in Haryana, Jammu and Kashmir and Punjab*. New Delhi: Archaeological Survey of India
11. Kowalewski, S.A. 2008. Regional Settlement Pattern Studies. *Journal of Archaeological Research*. 16: 225–285.

12. Lal, B B. 1954-55. Excavation at Hastinapur and other Explorations in the Upper Ganga and Satluj Basins 1950-52. *Ancient India* 10 & 11: 5-151
13. Mani, B.R. 2002. Dating of Akhnur Terracottas in the light of Recent Excavations at Ambaran in *Marg* 51(1): 42-47
14. Margabandhu C. 2014. *Excavations at Sanghol (1985-86 to 1989-90)*. New Delhi. Archaeological Survey of India.
15. Marshall, J. 1951. *Taxila: An Illustrated Account of Archaeological Excavations Carried Out at Taxila Under the Orders of the Government of India Between the Years 1913 and 1934*. Vol. II. Cambridge: Cambridge University Press.
16. Mohan, M.V.D. 1974. *The North west India of the second century B.C.* Ludhiana: Indological Research Institute
17. Parsons, J.R. 1972. Archaeological Settlement Patterns. *Annual Review of Anthropology* 1: 127-150.
18. Ray, H.P (Ed). 2010. *Sanghol and the Archaeology of Punjab*. New Delhi: Aryan Books International.
19. Rydh. H. 1959. *Rangmahal The Swedish Archaeological Expedition to India 1952-1954*. Sweden. CWK Gleerup Publishers.

20. Shaffer, J.G. 1986. Cultural Developments in the Eastern Punjab in *Studies in the Archaeology of India and Pakistan* (Ed. J Jacobson). New Delhi: Oxford & IBH Publishing Co: 195-235
21. Sharma, Y.D. 1953. Exploration of Historical sites. *Ancient India* 9: 116-69
22. Trigger, B.G. 1967. Settlement Archaeology- Its Goal and Promise. *American Antiquity*. 32: 149-160.