SYNOPSIS
PREHISTORIC AND HISTORIC SETTLEMENT PATTERNS IN SIKAR AND JHUNJHUNUN DISTRICTS OF RAJASTHAN

SYNOPSIS

The present study is an attempt to understand and enunciate the position of prehistoric to early historic settlement patterns in the research area. The planned research is designed to structure inference concerning settlement location, function, distribution and trend in settlement density at regional scale, with a view to understand ecological adaptation and cultural changes through prehistoric to early historic periods. In the light of this resolution, exploration was undertaken between north latitude 27° 15' to 28° 15'; east longitude 75°30' to 76°00', which falls within the limits of Sikar and Jhunjhunun districts of Rajasthan.

AIMS AND METHODOLOGY

It is found that none of the previous studies in the research area gives sufficient information on the geomorphic features and their relationships with the archaeological evidence. Thus, the present study offers the first attempt in this direction.

In brief the main aims of this work are:

1. to reconstruct and understand the dynamics of settlement patterns from Prehistoric to Early historic periods, in a selected region of Rajasthan in the context of ecological and cultural factors.
2. to use the methods of regional analysis to develop models for explaining economic and functional relations between settlements. Economic development is understood through analysing variations in style and technologies used for certain artefacts like ceramics, lithics and metals. Functional differences in terms of raw material resources, smelting sites, processing sites and possible interaction between these are probed.

General Outline of the Thesis

Chapter I Introduction

This chapter has four sections. The first section gives brief outline on the present trend of research; research carried out in the study area and its implications for the settlement pattern studies. The second section reviews the previous work done that relies on the published and unpublished data relating to archaeological, geological and metallurgical studies. The third section highlights the aims of the research which focuses on the study of settlement pattern by using geology, geomorphology and ecology as parameters to infer information on settlement - location, density, distribution and its function at a regional scale. It also aims to understand geomorphic adaptation of archaeological sites and their possible interaction with old metal-working areas and metal-processing activity areas. The fourth section elucidates the methodology adopted during exploration and classification of sites - through pottery, lithic, rare antiquity, old metal working areas and metal processing activity area.

Chapter II Environment

This part of the study highlights a brief account of the environmental setting viz. geology, quaternary geology, geomorphology and drainage system. The general parameter of major river (Kantli River), minor rivers/streams, characteristic of Kantli River, generalized chronological sequence of geomorphic units in Kantli block with geology, soil type, and
flora & fauna is also analysed by duly incorporating the strategy of adaptations followed during different cultures. This chapter deals with the following sub-heads:

i. Introduction – Rajasthan and Research Area.
ii. Geology - Rajasthan and Research Area.
iii. Quaternary Geology - Rajasthan and Research Area.
iv. Geomorphology - Rajasthan and Research Area.
v. Drainage System - Rajasthan and Research Area.
vi. Soil Type.
vii. Flora and Fauna.

Chapter III  Explorations

The third chapter is divided into five sections: Palaeolithic culture, Mesolithic culture, Chalcolithic culture, Early historic culture and Ancient Mining and Metal Processing Activity Area. Over all it gives a brief account of material culture found by the present researcher during exploration. It discusses the location of sites along with their geomorphic setting and nature. The periodizaton of sites are based on comparative study of ceramics, lithic assemblages, minor antiquity and metal processing indicators.

Chapter IV  Results of Analysis

Divided into three sections, the first section deals with lithic classification where the result obtained from typological classification of Palaeoliths and Microliths is presented in a comparative format to highlight correlative aspects. The second section discusses the pottery classification in which the result obtained from typological classification of Chalcolithic and Early historic pottery is presented after investigating relationship between vessel form, fabric, function and highlighting the data to assist in a better understanding of the above said cultures. The last section examines the classification of ancient mines and metal processing indicators. The result obtained from typological classification is presented here, in a comparative format to highlight correlative aspects.
Chapter V Settlement Pattern Study

This chapter is also divided into three sections. Whereas the first section discusses the concept of settlement pattern, the second deals with the development of settlement pattern study while the last section covers the settlement pattern study carried out in research area by using geology, geomorphology and ecology as parameters by categorizing the sites based on the spatial extent and potentiality and distributing these into different ecological zones.

Chapter VI Conclusion

The concluding chapter examines the data generated from the above-mentioned analysis, with the over-all view of the discussion to seek the position of the research area in Rajasthan in particular and in India in general.
**Statement I**

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

**Palaeolithic Culture**

Palaeolithic research carried out by Central and State government bodies viz. Archaeological Survey of India, Geological Survey of India and State Archaeology Department has surveyed the region along the River and its tributaries in Rajasthan, such research has brought to light number of sites in the southern Rajasthan whereas central, western and northern Rajasthan was shown to be devoid of any Palaeolithic sites. Research Institute of Deccan College under the supervision of Sankalia (1956) and later followed by Misra (1967) carried out their research on the same footings as previously carried out by the government agencies and extended the horizon of Palaeolithic findings to eastern and western Rajasthan. The foreign collaborative work of Allchin, Goudie and Hegde (1978) has further extended the horizon in Great Indian Desert. In spite of all these collective work by different agencies, the research area was shown devoid of any Palaeolithic findings except Upper Palaeolithic tools reported by Allchin (et. al 1978) around Nim ka Thana. In the present survey, three Lower Palaeolithic sites were reported from the research area. The finding of these sites has given lead for the future research in the central and northeastern part of Rajasthan known as Shekawati region, where as Middle Palaeolithic and Upper Palaeolithic sites are still not discernible in the research area.

**Mesolithic Culture**

Generally lithic assemblages are taken to predate the use of metal. So, the Mesolithic of Rajasthan is believed to be necessarily earlier than the Chalcolithic. However, there is some, as yet insufficient, evidence to suggest that sometime the technological transition from Lithic to Chalcolithic was not as total as one had previously been led to believe, nor sudden and universal. However, the Mesolithic site of Bagor and Ganeshwar indicates that microlithic using hunter-gatherers inhabited the region even when Chalcolithic stage has
been firmly established in parts of these regions. This implies that some degree of hunter-gathering lifestyle continued to be in existence even when a more advanced technological skill had come into use. In this direction present survey on Mesolithic research was carried out to find sites showing single culture having microliths with or without pottery and multi-cultural site having microliths with other cultural materials. In the light of these assumptions twelve Mesolithic sites reported from the research area have given a single culture with microliths and lithic debitage; multi-cultural sites with Chalcolithic and Early historic pottery and few sites near to the mining areas.

Chalcolithic Culture

For the first time in the history of Indian Archaeology a rich find of Chalcolithic copper objects has been found at a single site of Ganeshwar (Agrawala, 1981; Agrawala and Kumar, 1982). But these findings have raised many important questions that need to be properly understood and answered:

- The site is near to the mines and in association with so-called “OCP” from beginning to the end (Hooja, 1988).
- The copper objects such as thin blades, arrowheads and fishhook show similarity with the Harappans copper objects (Hooja and Kumar, 1995).
- The presence of round terracotta cakes is also equally important for the inter-relationship with the Harappans (Hooja and Kumar, 1995).
- The findings of microliths along with the copper objects at Ganeshwar suggested that they have developed metallurgical technology while still being in foraging stage (Hooja, 1988; Possehl and Rissman, 1992).
- They have exploited and successfully worked on the nearby mining areas as early as 3rd millennium B.C. (Hooja and Kumar, 1995).

In the present survey, 33 Chalcolithic (Ganeshwar related sites) are reported. In the central and northeastern region of Rajasthan that is Ganeshwar culture sites are known from a typical kind of pottery called as “OCP” (Ganeshwar), which emanate as an archaeological entity in its earlier stages of development. The term “OCP” for Ganeshwar pottery was a
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Ganeshwar pottery is defined as red slipped painted pottery with profuse incised design, executed with the help of a sharp, comb like instrument (Agrawala and Kumar: 1982). Due to the sketchy availability of information on Ganeshwar pottery, hitherto nothing much has been said or understood about the culture as a whole. In the present study, an attempt has been made to examine the explored pottery with the aim to present complete picture of its classification into typological aspect.

Thus Ganeshwar culture emerges as an amalgamation of Early Chalcolithic culture from northern Rajasthan and Semi-Nomadic Copper using culture from southeastern Rajasthan. The Ganeshwar culture is marked by incised Red ware, Black painted Red ware and Red Slipped ware. The sites of Bagor and Gilund from southeast Rajasthan and Kalibangan from north Rajasthan show resemblance in ceramic tradition with the Ganeshwar incised ware. The incised pottery from Bagor phase 2 (Misra 1973, Fig: 22-23), incised pottery from Gilund in Chalcolithic level (IAR 1959-60, plate: XLIV) and fabric D from Kalibangan (Madhu Bala 1997, plate: 13.11), show the resemblance in design pattern with the Ganeshwar incised red ware. Hence, Ganeshwar culture marked the influence from both the Chalcolithic Culture from northern Rajasthan and Semi-Nomadic Copper using culture from southeastern Rajasthan to form an individual entity in the central and northeastern region of Rajasthan that is known as Ganeshwar Culture.

Early Historic Culture

The research into Early historic period carried out by me to identify the dispersion of sites in the research area. Early historic period in the study area can be divided into two sub-periods. Early Historic I represented by unpainted PGW, unpainted black and red ware and NBPW. Early Historic II is represented by Rang Mahal ware. In the present survey 4 Early Historic I and 22 Early Historic II sites were reported from the research area.

Ancient Mining and Metal Processing Activity Area

Ancient mining and metallurgical research was carried out by me to probe its relation with the archaeological sites. In the present survey 18 ancient mining-areas and 14 metal-
processing activity areas have been identified from the research area. Hence, this region gives the evidence of exploitation of metals by the inhabitants in different periods. A preliminary investigation was carried out by Hoffman, Randal and Raghubsans (2005) of lead isotope analysis to determine the provenance of copper ore during Harappan period. The copper sample were derived from Harappa and were compared with seven regional copper source areas i.e. Ganeshwar and Singhana in Rajasthan, Chagai hills in Baluchistan, Shin Kai copper deposit in Waziristan, Iran and Oman. The analysis indicated that Harappans perhaps acquired most of copper ore from the west of Harappa and some of its copper ore was also obtained from Rajasthan. This has given a lead for further metallurgical research in the study area.
Statement II

(Statement showing the sources of information)

There was substantial body of published and unpublished data relating to archaeological, geological and metallurgical studies on which the present work is relies upon. Despite the fact that details of various variables were missing to carry out the meaningful study relating to the topic of the research, this data has proved to be useful when combined with the investigations carried out by the present researcher. The research is based on the exploration carried out in the limited area with incorporation of the recent trends of research.

References


