

Block

# 7

## **NEOLITHIC AND CHALCOLITHIC CULTURES**

---

### **UNIT 1**

**Neolithic Revolution** **5**

---

### **UNIT 2**

**Neolithic Regional Variants** **22**

---

### **UNIT 3**

**Chalcolithic Cultures** **32**

---

### **UNIT 4**

**Megalithic Cultures** **43**

---

---

## Expert Committee

---

Professor I. J. S. Bansal  
Retired, Department of Human Biology  
Punjabi University, Patiala

Professor K. K. Misra  
Director  
Indira Gandhi Rashtriya Manav  
Sangrahalaya, Bhopal

Professor Ranjana Ray  
Retired, Department of Anthropology  
Calcutta University, Kolkata

Professor P. Chengal Reddy  
Retired, Department of Anthropology  
S V University, Tirupati

Professor R. K. Pathak  
Department of Anthropology  
Panjab University, Chandigarh

Professor A. K. Kapoor  
Department of Anthropology  
University of Delhi, Delhi

Professor V.K.Srivastava  
Principal, Hindu College  
University of Delhi, Delhi

Professor Sudhakar Rao  
Department of Anthropology  
University of Hyderabad, Hyderabad

Professor S.Channa  
Department of Anthropology  
University of Delhi, Delhi

Professor P. Vijay Prakash  
Department of Anthropology  
Andhra University, Visakhapatnam

Dr. Nita Mathur  
Associate Professor  
Faculty of Sociology  
SOSS, IGNOU, New Delhi

Dr. S. M. Patnaik  
Associate Professor  
Department of Anthropology  
University of Delhi, Delhi

Dr. Manoj Kumar Singh  
Assistant Professor  
Department of Anthropology  
University of Delhi, Delhi

### **Faculty of Anthropology SOSS, IGNOU**

Dr. Rashmi Sinha, Reader

Dr. Mitoo Das, Assistant Professor

Dr. Rukshana Zaman, Assistant Professor

Dr. P Venkatramana, Assistant Professor

Dr. K. Anil Kumar, Assistant Professor

---

**Programme Coordinator: Dr. Rashmi Sinha, SOSS, IGNOU, New Delhi**

**Course Coordinator: Dr. P. Venkatramana, SOSS, IGNOU, New Delhi**

---

### **Content Editor**

Professor Ranjana Ray (Retd.)  
Dept. of Anthropology  
Calcutta University, Kolkata

### **Language Editor**

Dr. Mukesh Ranjan  
Associate Professor  
Jamia Millia Islamia, New Delhi

---

## Blocks Preparation Team

---

### **Unit Writers**

Prof. Vidula Jayaswal  
(Unit 1), Ancient Indian  
History, Culture and  
Archeology  
Banaras Hindu University

Dr. Queen Bala Marak  
(Unit 2)  
Dept of Anthropology  
North Easter Hill  
University, Shillong

Dr. Bishnu Priya Basak  
(Unit 3)  
Dept. of Anthropology  
University of Calcutta  
Kolkata

Dr. H.C. Mahanta  
(Unit 4)  
Assistant Professor  
Dept. of Anthropology  
Dibrugarh University  
Dibrugarh

---

*Authors are responsible for the academic content of this course as far as the copy right issues are concerned.*

---

### **Print Production**

Mr. Manjit Singh  
Section Officer (Pub.), SOSS, IGNOU, New Delhi

### **Cover Design**

Dr. Mitoo Das  
Asstt. Professor, Anthropology, SOSS, IGNOU

August, 2011

© Indira Gandhi National Open University, 2011

ISBN-978-81-266-5525-0

*All rights reserved. No part of this work may be reproduced in any form, by mimeograph or any other means, without permission in writing from the Indira Gandhi National Open University.*

*Further information on Indira Gandhi National Open University courses may be obtained from the University's office at Maidan Garhi, New Delhi-110 068.*

Printed and published on behalf of the Indira Gandhi National Open University, New Delhi by the Director, School of Social Sciences.

Laser Typeset by : Tessa Media & Computers, C-206, A.F.E.-II, Okhla, New Delhi

Printed at :

---

## **BLOCK 7 NEOLITHIC AND CHALCOLITHIC CULTURES**

---

### **Introduction**

In this block you are going to read about very important and interesting stages of history of human culture. It is about the times when man was no longer completely dependent on nature but had started to exploit nature to his own advantage. Earlier to this during the last more than a million years man was getting his livelihood from what nature produced freely. They collected wild plant food and hunted wild animals. In course of time the long association of man with the nature enabled him to distinguish some plants and animals which he could manipulate according to his need. He tamed some animals and kept them in pens and took the responsibility of producing plant food by cultivating some useful varieties. They needed to clear forest and tilt the soil for agriculture. They also built their houses near the agricultural fields. From nomads people became settled in villages. New tool types made with new technique emerged. For this reason the stage came to be known as Neolithic culture.

This was a stage of economic revolution. Food became somewhat assured and when they became efficient in food production surplus food was produced and stored. People could devote their time for making crafts like pottery, ornaments and art objects. Some people became expert craftsmen. Neolithic culture was also a period of population explosion. With the surplus food and craft specialisation trade and commerce started.

Some people discovered the quality of metal ores and experimented with them. They learnt to extract metal from the ore. First metal used was copper. Perhaps it was easier to melt. They also learnt to make alloy. Bronze was the first alloy, which was made by mixing copper with small quantity of tin or sometimes zinc. Bronze tools were harder in texture. But remember metallurgy needs expertise. One should know the nature of the ore, type of the fuel and the degree of temperature for becoming a successful smith. Perhaps the skill was kept secret on the one hand and on the other metal tools must have been dear, so the common people still largely made and used stone tools. This stage in which both stone and copper and other metals were used for making tools was called chalcolithic culture.

People always were in awe of death. As you know Anthropologists who studied religion thought that belief in soul perhaps gave rise to the earliest form of religion. From a very early time people had carefully buried their dead and offered grave goods to the dead for use in its afterlife. People erected monuments with huge stones over the graves from the beginning of Neolithic culture. These stones are called Megaliths. Megaliths were more in number in the metal using stages, especially during iron age.

India is a land of diverse geographical features. Over this vast land culture also varied from one area to the other. No unilinear pattern of cultural development is found in our country. As you know that at a time, in the hills and jungles people

continued as hunters and gatherers, while in neighbouring river valleys Neolithic culture flourished. Similarly you shall see that within major cultural phases like Neolithic, Chalcolithic and Megalithic regional variations existed. You shall learn about all the different prehistoric cultures beginning from Neolithic through Chalcolithic to Megalithic culture in this block. You shall also be surprised to learn that there are still people living in this country who continue with the Megalithic practice.



---

# UNIT 1 NEOLITHIC REVOLUTION

---

## Contents

- 1.1 Introduction
- 1.2 What is 'Neolithic Revolution'?
- 1.3 Origins of Food Production Practices
- 1.4 Neolithic Remains of India
- 1.5 Nucleus Areas of Neolithic in India
- 1.6 Peripheral Areas of Neolithic in India
- 1.7 Summary

Suggested Reading

Sample Questions

## Learning Objectives



Once you have studied this unit, you should be able to:

- discuss the stage of human history which turned the progress of man from savagery to civilization;
- describe the origin of agriculture and history of cereal cultivation in India;
- describe the early history of animal husbandry in our country;
- understand forms and production of the earliest tools and equipments of agriculture and carpentry;
- discuss the beginning of the use of earthen pots; and
- describe the beginning of settled and organised life in India.

---

## 1.1 INTRODUCTION

---

You know that man has evolved since the last two million years. The two million years long history of man, is divided within three main technological stages — Stone, Copper/Bronze and Iron. Stone Age itself is classified into three, two of which — the Palaeolithic and Mesolithic have already been covered earlier. In this Unit, the final stage of Stone Age, the Neolithic shall be discussed. Beginning of food production and related technologies were important events in human history. India also contributed to this venture. The Neolithic cultures in close succession gave rise to the metal using cultures. Use of metal, the copper of the Chalcolithic cultures, in India developed from rural to urban stage. In the following unit of this block, details of Chalcolithic cultures shall be discussed.

In this unit, 'Neolithic Revolution' shall be discussed with particular reference to the 'Nucleus Areas and Salient Features of Neolithic Cultures in India'. The term 'Neolithic' has been explained. Also reasons for calling it a 'Revolution', is included. The main characteristics of Neolithic period, the incipient farming and pastoral practices, are mentioned with a brief outline of the tools and equipment, nature of dwellings and settlements, thereafter.

The factors responsible for the initiation of food production are essential to know. A brief outline of West Asia, where the origin of food producing practices is well

documented is very significant for history of Neolithic culture of India. The new technologies originated in this region, and spread to the other parts of the world, including India.

Neolithic Stage is known from the archaeological findings. In India, remains of this period are found from a number of areas. The nature of Neolithic findings, along with the main diagnostic features too is important for better understanding. The main regions of Neolithic occupation are also identified.

The regions of Neolithic spread in India can be identified as — Nucleus and peripheral areas. Kashmir Valley, Vindhya-Ganga region, and Deccan, are marked as Nucleus areas of Neolithic occupation. Salient features of each have been discussed. The findings of the other areas like Ganga plain of Bihar and Bengal, Chhotanagpur plateau and Assam, Neolithic have been discussed under the head Peripheral regions of Neolithic in India.

---

## 1.2 WHAT IS ‘NEOLITHIC REVOLUTION’?

---

### Terminologies and Concept

The literal meaning of ‘Neolithic’ is New Stone Age. It is the last phase of Stone Age. It is marked by a number of new cultural traits. Like use of new technology for making stone tools, new subsistence, new dwelling tendency etc.

All the three distinct stages of Stone Age are characterised by stone tool-making. In the oldest, the Palaeolithic stage, the first efforts of tool making can be seen in very primitive forms of chopping and cutting implements. In Palaeolithic period, the development of stone technology was in the form of decrease in the size and increase in the efficiency of the working edges. As a result, in the succeeding stage, the Mesolithic, large quantities of micro/ pigmy tools were being made. This category marked the culmination of Palaeolithic technology. From the use of the individual tools, the change was to the use of small tools in composite forms. Tools like sickle, harpoon etc., could be made by hafting some triangles on one base. This long practice of development suddenly reversed during the Neolithic time. Large and heavy tools made on hard stones were produced and used. This was a new technological stage.

Neolithic tools are also named as — ‘Polished stone axes’, ‘Ground stone axes’ etc. Two new features came to be in practice. One was making of axes and the other was, grinding of the surfaces of tools. Grinding often resulted in polishing of the surface. Because of these features the new stone tool making tradition was named as above.

During the Palaeolithic and the Mesolithic stages the mode of subsistence was hunting and gathering *jungle* products. Animal and plant food available in natural form was collected and consumed. Contrary to this in Neolithic stage, man for the first time started producing food by artificial means. Two practices were initiated at this time, — agriculture and domestication of animals. There were some wild species of animals, such as — goat, sheep and cattle, which were tamed. Similarly, wild variety of barley, wheat and paddy, were cropped at the initial stage. Since this was the first stage, both these practices were in incipient or primitive form. But, these were new and important innovations in the history of man. Agriculture was such an important invention that a small section of the society was able to produce food for the entire community. It was thus, termed as ‘Green Revolution’ by archaeologists. V. Gordon Childe coined the term Neolithic

revolution in 1920 when he was describing the first agricultural revolution. He considered the beginning of food production as a revolution because food production ushered important and significant changes in the subsistence economy and life of the communities who started this. Surplus food production by the farmers made it possible for large section of the society to master skills of arts, crafts and technologies. A natural outcome of which was a rapid growth of trade and commerce and, economic affluence.

The new subsistence also changed the dwelling pattern. The nomadic tendency of hunting-gathering changed into 'sedentary' or settled life. Wandering from one to other place in search of edibles was not required now. Instead, man's dwelling was governed by the preparation and use of cultivated fields. Construction of durable structures, villages near the farming fields were inevitable. Domesticated animals too required a shelter, which formed part of human dwelling complex.

All the above new beginnings and a number of other cultural traits justify the term 'New Stone Age' for the Neolithic. The term 'Revolution' is attached to it due to the unique innovation of food production strategies, particularly agriculture. It is therefore addressed as 'Neolithic Revolution'.

### Main Tools and Technologies of Neolithic Period

The diagnostic feature of Neolithic period is 'Ground stone axes' or the 'Polished stone axes'. The most common type of a Neolithic tool-kit is axe or celt. Shaped almost like the present day iron axe, this was the form having one sharp cutting edge, and a butt. The type is found in small to large sizes. Variation in shape of the butt in the form of English alphabets V, U and with shoulders can be found. Similar to present day, a Neolithic axe was hafted to a stick with its cutting edge parallel to the haft (Fig.1.1 A). The other common type is adze. Almost similar in look the edge of this tool is so that it is used by hafting it in a way that its cutting edge is placed perpendicular to the haft/ handle (Fig.1.1 B). This is a carpenter's tool. The other forms are ring-stones, chisels, hoe, pick etc. All these types are agriculture and carpentry tools.

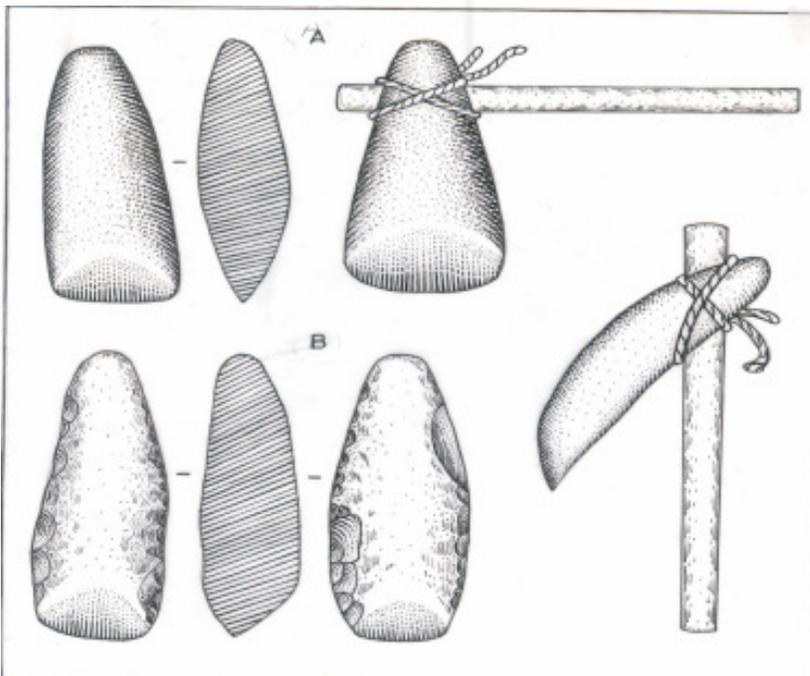


Fig.1.1

A Neolithic tool-kit is made from locally available fine grained, but hard rock like basalt, dolerite, schist etc. After selection of the basic lump of suitable stone, the main form of the tool is produced by knocking off extra mass of stone by a stone hammer (Fig. 1.2. A). This procedure is known as flaking. The initial flaking leaves prominent ridges and depression on the surface of the tool. In the second stage the undulation of the surface is flattened by removing very small chips (Fig. 1.2. B). Remember, metal was not known at this stage, so this flaking too was performed by stone or antler. The fine flaking of the second stage is named 'pecking'. Though pecking flattens the surface of tool considerably, it still leaves surface full of minute undulations. Thus the surfaces of the tool in the final stage were rubbed over a block of stone covered with sand layer (Fig. 1.2.C). Such a grinding operation made the surface completely smooth and also made it shining at times.

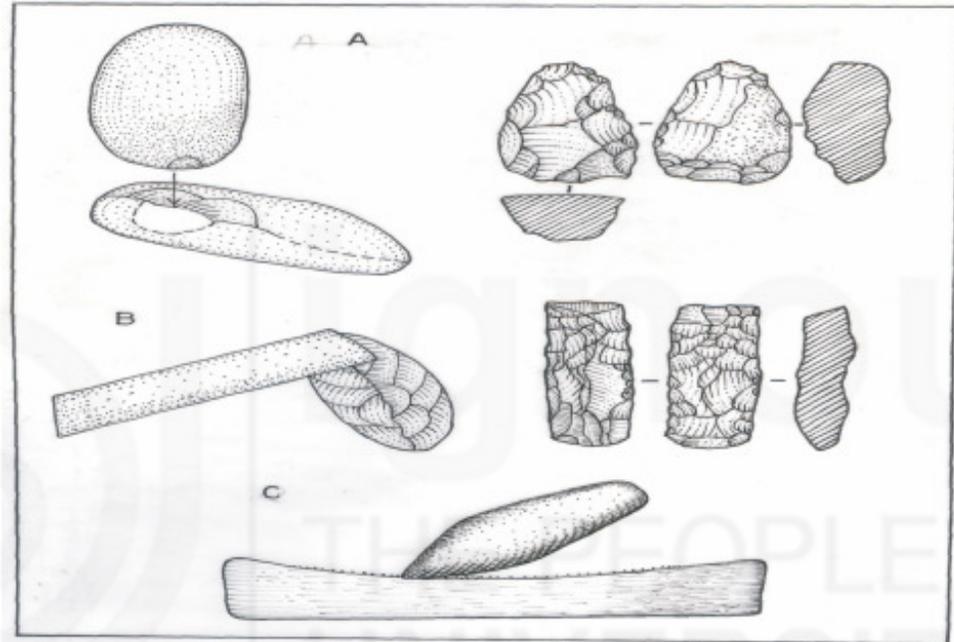


Fig.1.2

### 1.3 ORIGINS OF FOOD PRODUCTION PRACTICES

#### Background for Origins

Archaeological records for the earliest food production practices come from West Asia. In around ninth/eighth millennium BCE (Before Common Era), agricultural and pastoral practices were innovated. Wild animal species like sheep, goat, and pig were tamed. Also wild varieties of wheat and barley were the first crops which were cultivated. The question is why this innovation happened in West Asia? A number of factors worked together prompting the initiation of food production practices, here.

Mesolithic, the preceding stage of Neolithic, was very wide spread in Levant Valley of West Asia. The Savanna climatic condition which prevailed in the early Holocene period, were marked by large stretches of grass land and small patches of *jungles*. In this ecological niche wild variety of cereals like wheat and barley were plenty. Also the population of grazing animals like sheep, goat, cattle, deer etc., was high. Mesolithic man, who had acquired all the physical capabilities of *Homo Sapiens Sapiens*, had a much milder and congenial climatic conditions

than his ancestors. Though hunter-gatherer, he became familiar with the nature and behaviour of edible plants, seeds, animals etc. He got well adapted in Savanna landscape of the post-Pleistocene arid conditions.

### Activity 1

Understand tools of Neolithic Period. Make comparison of main Neolithic tools with those of the Palaeolithic and Mesolithic.

- Draw a chopper of the early Palaeolithic period.
- Draw a side scraper on a flake of Middle Palaeolithic period.
- Draw a knife made on a blade of Upper Palaeolithic period.
- Draw a triangle of the Mesolithic period.
- Draw a Neolithic axe.

While drawing mark the natural surface on the tools. Also note the number and sizes of dressing scars on each of the tool. Make comparison of all the drawn tools on the following:

- Size of all the five tools. Note down the tendency of the decrease and increase of size in all select categories.
- Compare the number of flake scars on the surface of each of the five tools. Note the difference on surface of Neolithic axe from the others.
- Note the length of working edge on the tools in proportion to their size.

Write down your observations on the difference of size, nature of surface and edge form of Neolithic axe from the others. This will give you understanding of features of development of stone technology, particularly during Neolithic period.

It is a known fact that when species get adapted within an ecological niche, their population increases. The increase of Mesolithic population in West Asia created a situation of 'food crises'. The natural resources of both cereal and animal began to lessen. Because, in gathering practices, the seed/ essential part of the cereal yield to be used for next crop was also consumed. Similarly, the hunting of grazing animals and their younger members too was detrimental to keep balance between the consumption and the growth. Thus, a continuous exploitation of natural resources by hunter-gatherers created a situation of food scarcity. It is said that necessity is the mother of invention. This proverb appears to be true in this case. Mesolithic man was not only physically fully developed, but was also familiar with his natural surroundings of edible plants and animals. Thus, he could initiate food production by means of domestication of cereals and animals. These efforts came up as agricultural and animal husbandry practices.

Origin of food production may also be considered as the outcome of ecological niche formation as mentioned above. Human being has got the capability of handling down of knowledge from one generation to the other. Knowledge accumulates in every generation. Mesolithic people had an intimate knowledge about the species of plants they collected and the species of animals they hunted. It appeared that Mesolithic people with their knowledge about the environment and its resources became species specific hunter-gatherers, meaning they preferred certain species of plants and animals over others. The cereal, which we call

domesticated variety are distinguished from wild varieties by a character of its seeds. The seeds in domesticated varieties do not fall off the stalk when ripe. These are known as non shattering types. In case of the wild cereals after ripening the seeds fall off the stalk and shatter around. Shattering of the seed is convenient for natural dispersal of seed. Non shattering types are not. Non-shattering types are mutants of the shattering types. Human beings selected the non-shattering seed type of cereals, namely, wheat, barley, rice, millet etc. for domestication because they could harvest and bring the cereals home with the seeds attached to the stalk. This saved them from picking seeds one by one from the ground. They also took charge of propagation of the cereals by planting the seeds of these varieties near to their homestead.

West Asia, particularly Levant region, has been mainly identified as the nucleus area for the origin and growth of Neolithic strategies. For not only was the above geographical background available here, but also one finds individual efforts of taming of animals and cultivation of cereals at very early date in this region. Wheat and barley were cultivated for the first time in Levant. There are other nuclear areas of food production as well. For example lower Yangtze valley in China is considered as nuclear zone for rice cultivation and Mexico for the cultivation of maize.

### **West Asia**

Levant includes present countries of Israel, Palestine, Lebanon, Syria and Jordan. Zagros Mountain lying north of Rivers Tigris and Euphrates mark a half moon shaped plain of alluvium, which is known as the 'Fertile Crescent'. During early Holocene, this region had savanna climate. The severe post-Glacial climatic conditions were replaced by arid and mild seasonal climatic cycles. There was natural growth of such plants and animals in this region, which were suitable for human consumption. The original inhabitant of the region, the Mesolithic population got well adapted in this ecological niche, between 10,000 and 8500 BCE. As was explained earlier, this background laid the foundation for the origin of Neolithic technologies.

Many sites of Mesolithic and Neolithic period have been discovered and some important ones have been excavated. As a result almost complete sequence of development of Neolithic is known to us from this region. The early dates and details of history of animal husbandry and agriculture have made this region as the nucleus area for the origin and development of Neolithic period. Four following stages have been identified in the history of Neolithic of West Asia.

**Stage I:** Advanced Mesolithic, represented by Natufian. Named after Wadi-el-Natuf, a long strip along the eastern coast of Mediterranean in the present day Israel, this stage was food collecting. Located at the lowest levels of large sites like Jericho, Beidha, etc. The stage appears to lay foundation for successive stages of food production.

**Stage II:** Proto-Neolithic, is a short span (8900 – 8500 BCE), with very limited remains. This is marked by sporadic attempts of beginning of cereal cultivation and taming of wild animals. This phase is marked at Natuf and at Jarmo in Iraq. These are represented with the presence of mortar and pestle – a cereal processing tool and the presence of sickles, the harvesting tool.

**Stage III:** Archaic/ Aceramic (without pottery) Neolithic (8500 – 6000 BCE), is comparatively well represented. Though no pottery was used, it is marked by settlement of permanent nature, a feature of ‘sedentary life’. With the use of unbaked bricks (in the shape of flattened cigar), multi-celled houses were constructed. But, the most imposing feature in this stage was to fortify the settlement. A feature which is taken to be a characteristic of urban centre of historical times. Stone and bone tools, domesticated species of sheep and goat, and cultivated wheat and barley are noteworthy finds. Domestication of cattle appears in the last phase (around 6500 BCE). Needless to mention hunting and gathering of food items continued.

**Stage IV:** Developed /Ceramic Neolithic (6000 – 4000 BCE), is marked by an expansion in size of earlier settlements. At Catal Hüyük in Turkey an area of 32 acre could be demarcated as settlement. An estimate of 10,000 to 8,000 people is calculated to be residing in here. Sun dried bricks now were of bun shape and the houses rectangular. All species of animal and cereal were being domesticated. The society was heading towards the stage of surplus food production.

The follow up of Mature Neolithic by copper using community completed the story of Neolithic subsistence in West Asia. However, it may be noted that in archaeological records a hiatus, desertion of sites, is distinct, between Neolithic and Chalcolithic horizons.

### **Expansion of Neolithic to the other parts**

West Asia thus could be identified as the nucleus region for the origin and growth of Neolithic practices. By 6000 to 4000 BCE, Neolithic was fully developed in this region. Agriculture and animal husbandry through an incipient stage, could give rise to imposing and affluent settlements, which looked similar to cities.

Soon people from Levant migrated to other parts of the world. With them spread the food production strategies. As the evidence stands today, one branch from West Asia migrated to west. Through Anatolia this branch reached and settled in Europe. The other expansion was towards central and south-east Asia. It may be mentioned here that the major crop of South and South East Asia had been Paddy. Cultivation of rice, a complex process of agriculture appears to be of local origin in Asia. This innovation appears to take place in more than one region – the Spirit Cave in Thailand, Yang Sao in China and Belan Valley in India, for paddy farming.

#### **Activity 2**

Would you not like to understand how Neolithic tools were used?

You can do it by comparing specific form of the Neolithic tool-kit with the modern tools used in kitchen, farming and carpentry. Remember, in modern times metal, particularly iron is used for most of the tools. While in Neolithic period all the tools were made from stone. So compare just the form not the medium of tools.

- Select a Neolithic axe, adze, chisel, pick, hoe, quern and Pestle.
- Draw out line, plan of each, along with cross section showing form and position of edge.

- Go to kitchen. Try to identify the tools and equipments of food processing with your list of tools.
- Draw or note their similarity with your comparable type.
- Note the function of the comparable type.
- Go and repeat the same exercise with the farming tools.
- Repeat the same exercise with carpentry tools.

Draw your own conclusion on following account:

- Categorize your list of Neolithic tools within the three – kitchen, farming and carpentry tools, on account of the comparisons you have made.
- Note down the use of identified kitchen tools of your list.
- Note the use of identified farming tools of your list.
- Note the use of identified carpentry tools of your list.

You will be able to understand major activities which were performed by the Neolithic tool-kit.

---

## 1.4 NEOLITHIC REMAINS OF INDIA

---

### General characteristics of Indian Neolithic

It was explained earlier that the diagnostic feature of Neolithic period is the category of Ground Stone Axes. In India also all the Neolithic sites have yielded polished or ground stone axes in good number. Also adze, chisel, pick, hoe etc. form part of this tool-kit. Mace head or ring stone and stone ball form a separated category, as these appear to be used for defensive purposes. So are the quern, pestle, which were used for grain processing. Since all of these are made on large stone piece and are heavy in weight, these are also called 'heavy duty tools'.

Besides the ground stone tools, Neolithic remains of India include earlier tools, like microliths and blades. Microliths are diagnostic tools of the Mesolithic period. But in many regions, these are associated with the Neolithic deposits, in small proportion. In some regions, like Kashmir Valley, microliths are not recorded from Neolithic deposits.

Bone and antler tools comprised needle, point, arrow head etc. Broken bones of food refuse with point and edge were also used, as tools. At Senuwar this tendency was very pronounced.

Use of earthen pots in large way was a Neolithic feature. But, in regions like Baluchistan and Kashmir, Aceramic Neolithic phase has been recorded. Earthen pots and pans were not in use in these regions. The pottery of Neolithic period developed from simple hand made forms like bowl, to wheel turned forms of bowls and vases. Study of tribes who make earthen pots by hands, like Sema Nagas of the Northeastern India, suggest that bowls can be prepared by coil method. Surface of the pots were often decorated by pressing cord or mat in

semi-dried condition. Grey or dull red colour of a typical early Neolithic pot is due to ill firing.

On the floors of Neolithic period are found remains of simple structures. The post-holes and earthen floors indicate that shelters were constructed by the use of perishable material, like wood, bamboo and earth. There are also examples when under ground dwellings were used. The huts are found in archaeological records in small clusters. These might have looked like simple and small villages. However, in the north-western part of Indian sub-continent, durable rectangular houses similar to the West Asian Neolithic settlements were in use. But, in other parts of the country Neolithic settlements were in the form of small villages made of simple huts.

Neolithic remains also comprise items of arts and crafts. Beads of semi precious stones, like — carnelian, chert, agate, lapis, turquoise, etc. and clay figures of animal like bull, and human, particularly portraying mother goddess, are important categories.

### **Neolithic sites and regional pattern**

Recognition of Neolithic in India dates back to 1852, when an axe was found in Mysore. Many sites have been discovered, thereafter. A number of these were also excavated. Neolithic remains are reported from almost entire length and breadth of our country. But, the sites of the period are confined in small regional pockets. At least six regions, — the Kashmir Valley, Assam, Vindhya-Ganga region, Middle Ganga plain, Chhotanagpur and Deccan have yielded Neolithic sites. All of these are marked by varying characteristics, such as, — density of sites, date of existence, nature of subsistence and dwelling etc. Thus each region needs to be discussed individually. However, on account of the dates and density of sites, it is possible to divide each region of Neolithic occupation within two main categories — the nucleus and the peripheral regions, which are as below.

## **1.5 NUCLEUS AREAS OF NEOLITHIC IN INDIA**

Three regions in India, — Vindhya-Ganga Valley, Kashmir Valley and Karnataka (Deccan), can be identified as nucleus areas for the Neolithic occupation. Evidence for early beginning of food production in India comes from Vindhya-Ganga Valley. While the northern most, the Kashmir Neolithic and the southern most, the Karnatak group are significant, due to their diverse culture formats.

### **Neolithic culture of Vindhya-Ganga Valley**

This region is characterised by two geological formations. One the fertile alluvial plain of the Ganga basin and the other is the hilly tract of Vindhyas (Fig. 1.3). The area lying within the boundaries of Uttar Pradesh is very important for the history of Neolithic remains. A continuous sequence of Stone Age has been recorded in the Valley of Belan, a tributary of the river Ganga. The geological composition of this region was very suitable for the Stone Age cultures. The Vindhya-Kaimur ranges are rich in variety of stones, and, the flat southern plain of Ganga is very fertile. Thus the geographical back ground which is needed for the origin of food producing strategies was available in this region. The cluster of sites of Neolithic, pre-Neolithic, and post-Neolithic in Vindhya-Ganga region provides evidence of origin and developmental stages of Neolithic.



Fig.1.3

The important sites which have been excavated in this region are – Chopani-mando, Mahgarha, Koldihwa, Pachoh and Indri. The recent findings from Lahuradeva and the earlier excavated remains from Adamgarh rock-shelter sites are also important to note. On account of all of these the following stages of Neolithic of Vidhya-Ganga region can be reconstructed.

- i) **Advanced Mesolithic/Proto-Neolithic:** This stage is reported from Period III of Chopani-mando. It is significant to note that through a long continuous development this stage was reached at this site. For example, during earlier two periods size of tools had become tiny and the stone used was of fine grained semi-precious category. But at this stage large tools made on hard rocks like quartzite and sandstone appear. Grinding technology also appears for the first time. Heavy duty tools were ring stone, quern, pestle, and hammer. Microliths in good proportion continue.

Use of earthen pot was initiated at this stage. Bowl and small vase of this phase were hand made and ill fired. A lone example of stone bead and engraved bone piece were the other significant findings.

In Belan valley, shelters were being constructed right from the Mesolithic times. In 'Proto-Neolithic', this tendency becomes pronounced. A group of 13 huts arranged in bee-hive pattern were exposed at Chopani-mando. Floor full of tools, pot fragments and fragments of bones were covered by bamboo, wood and earth. Post-holes suggested that the circular huts had support of wooden frame and thatched roof. However, hearths were made outside the huts, and were used for community cooking, as was the case during Mesolithic times.

This stage is dated around 9<sup>th</sup>/8<sup>th</sup> millennium BCE. It was pre-food producing, as the bones of animals included wild species of cattle and other animals. Also, the paddy husk after analysis was identified as of wild variety. But, the pots and the food processing equipments suggest consumption of such species of wild cereals and animals, which could be domesticated subsequently.

- ii) **Early Neolithic stage:** This stage is reported from sites like Koldihwa and Mahgarha. The most significant finding of this stage is the very early date for the cultivation of paddy, which is seventh to 5<sup>th</sup> millennium BCE. Though

there was doubt expressed for acceptance of this date-bracket, a number of recent sites, like Lahuradeva, confirm cultivation of rice, at this early period in the Ganga plain. .

Remains of settlement of this period from Mahgarha, a site close to Koldiwa, reveals that the huts were associated with cattle-pens. Small animals like sheep and goat were kept there. But, for cattle, a large enclosure was constructed of wooden fence. These places revealed hoof marks. In the domesticated animal bones identification of horses are noteworthy.

Group of 20 huts were exposed at Mahgarha. These were also constructed by use of wood, bamboo and mud. Circular in plan, the floors of these were full of food processing equipments like pestle, muller, quern etc. Axes, microliths, pottery, bone arrow head and animal food refuse were other noteworthy remains.

The earthen pots discovered from this phase are developed and are of diverse fabric. Important types were cord impressed Black-and-Red and rusticated wares. Baking technology now was much developed. The shapes included bowl, vase, basic and *handi*.

Neolithic phase of Belan Valley does not have good representation of ground stone tools. The proportions of carpentry tools were negligible. Axes were few, but food processing equipments were many. Bone tools included hunting tools.

- iii) **Late Neolithic:** The Koldihwa-Mahgarha group suggest that Neolithic in this region continued up to 2nd millennium BCE. The later phase, date between third and 2<sup>nd</sup> millennium BCE, evidence continuation of the earlier culture with intrusion of Chalcolithic characteristics.

It was during this phase that there was migration of farming communities from Belan region to east. Sites near the slope of Kaimur hills in Bihar were occupied during the process. Excavations of Senuwar in Rohtas district support this presumption. From the lowest level evidence for rice cultivation is attested. This is dated to 2200 BCE. A little later, multi crop agriculture which appears to be inspired by Harappan crops, have been identified. This indicates a change from Neolithic to Chalcolithic subsistence in this region.

Recent archaeological evidence suggests that in Vindhya-Ganga region Neolithic food producing practices had very early dates. At more than one place rice cultivation was attempted. One in Belan Valley and the other inner land of the Ganga plain, as is evident by Lahuradeva. Similarly, domestication of animal may also have been initiated in Vindhya-Ganga region. Pastoral practices, around 6<sup>th</sup> millennium BCE, appear to spread to the hilly tracts of the Vindhyan region. Excavation of Adamgarh rock-shelter indicates that this branch was using microliths, but was also domesticating animals like cattle, sheep and goat for their livelihood.

### Neolithic culture of Kashmir Valley

Kashmir Valley was occupied between 3<sup>rd</sup> and mid 2<sup>nd</sup> millennium BCE, by Neolithic communities. Main sites like Burzoham, Gufkral, Begagund, Hariparigom, Pampur, Badatal etc., indicate that small groups of people were

spread in this region. Excavations of Burzoham (16 km Northeast of Srinagar) and Gufkral (41 km East of Srinagar) have given to us full sequence of Neolithic in Kashmir Valley. The Neolithic remains in this region is divisible within the following stages —

- i) **Aceramic Neolithic Stage:** This earliest phase of Kashmir Neolithic has been reported from the lowest levels of Gufkral. Dated around 3<sup>rd</sup> millennium BCE, typical Neolithic findings from this phase were ground stone axes, adzes, chisel, muller made on schist, the local Himalyan rock. Bone tools comprised points and needles. But a number of broken bone fragments with points were also rubbed and used. Two beads of bone and stone paste were noteworthy finds. But, the most significant finding from earliest levels of Gufkral was pit dwellings. Circular or oval pits were dug. Floors of these pits were prepared by ramming earth. Large under ground pit dwellings measured 3 m long, 1.5 m broad and one meter deep. In the centre of this pit was a platform, on which were located three grain storage pits. The under ground pits were covered by thatched roof, which was supported by wooden logs and hay. Under ground huts are suitable for the cold climate of Kashmir.

The earliest subsistence of Aceramic Neolithic of Kashmir Valley was animal husbandry. In the remains of bones domesticated sheep and goat species have been identified. These species were tamed from the local wild forms. Hunting of deer, wild cattle, wolf, bear and Ibex was the supporting edible consume.

Beginning of agriculture was introduced a little later. But, right from its first appearance it was recorded in developed form. Since the cereal remains recovered from the period were wheat, barley, *mansur* and pea. Clove (*Banmethi*) was also cultivated. It is believed that knowledge of agriculture in Kashmir Valley migrated from out side. The seeds of the cereals for initiating cultivation were also brought to the region during this process.

- ii) **Early Neolithic Stage:** In view to food producing practices and also nature of dwelling this stage was similar to the above. But, now earthen pots were being made and used. This Cermaic Neolithic stage has been reported both from the Period IB of Gufkral and Period I of Burzoham. Pottery is hand made and ill fired and are of grey and ochre colour. Main forms of pots used were bowls, vases and bases. On the flat surface of pots, was mat impressed design.

Stone tools in this stage were large in number and also new forms like, — quern mace-head, picks were found along with axes, adzes, chisels etc. Similarly, in the category of bone tools, important forms were, — harpoon, needle (eyed and with out eye), arrow-head, point scraper, etc.

The pit dwelling continued in Early Neolithic of Kashmir Valley. At Burzoham, where good evidence for pit dwellings has come to light, two types have been recognised. One was of circular and oval shapes and the other of rectangular shape. These pits were dug by the use of picks. Side walls were many times plastered by mud. For entering into the pit-huts steps used to be dug at one corner of the hut or wooden stairs were also used. On the living floors were found traces of small and large pits, which were storage of edible items, like grain or also meat, roots etc.

Remains of domesticated species, like sheep and goat increased. Cattle breeding too were added. Findings of Gufkral Period IB suggested that cultivation of pea and clove was dropped at this stage. The economy at this stage appears to be dominated by pastoralism, the subsistence which even now is followed by tribes like Gaddis of Kashmir region.

- iii) **Late Neolithic Stage:** This phase is represented by the findings from Period IC of Gufkral and Period II of Burzohom. The subsistence though remained similar to the earlier stage; it is marked by development in livelihood strategies, e. g. potting technology and change in the nature of dwelling. The list of domesticated animals now includes sheep, goat, humped cattle, pigs, dog and buffalo. Hunting continued. So were the agricultural practices.

The most prominent feature was use of over ground huts. Remains at Burzohom suggest that some of the pits of earlier times were filled. The surface was plastered and used as floors. Two types of structures were constructed. One which was only thatched with the help of erecting posts, and in other the area of the hut was enclosed by mud or wooden screens. Traces for the use of sun dried bricks were also noticed in the excavations.

Earthen pots were made both by hand modeling and wheel. The grey and dull red color of these indicates less perfection of firing technique. Besides, bowl and vase, basin and dish on stand were also found. The surface of pots was decorated variously by impression cord, hay, matt or by incising geometric designs.

Ground stone tools have some new forms like two pointed picks. Cloth weaving is also attested by terracotta or stone spindle whorls. The dead were buried in the residences in pit burials, in which animal pets like dogs were also buried.

Increase in such items which suggest trade included beads, copper tools like arrow head, needle, ring etc. A painted pot contained 950 carnelian beads, which was perhaps imported from Harappan region in Baluchistan-Pakistan. Exchange of goods or trade between far places and Kashmir Valley is indicated by these finds.

Neolithic in Kashmir Valley appears to be migration from out side. As presence of Mesolithic stage was not established here. Perhaps one of the groups from West Asia had reached this Valley. The physical features of the skeletons from Burzohom bear similarities with West Asian population. The local species of sheep and goat, and subsequently, cattle were domesticated by these immigrants. But, the seeds which they sowed for cultivation of cereals were brought by them from out side. The noteworthy variation of Kashmir Neolithic was its' Aceramic stage and the pit dwellings.

### **Neolithic Culture of Deccan**

The plateau of Deccan in Karnatak has a dense concentration of Neolithic sites, such as, Maski, Piklihal, Hallur, Brahamgiri, Tekkalkotta, Snagankallu, Kopagal etc. The southern part of Andhra Pradesh too has revealed important Neolithic habitations, Uttanur, Nagarjunakonda, Palvaya, Rampuan etc. Extension of Deccan Neolithic was also in north Tamilnadu, as is attested by Payampalli site.

The time span for Deccan Neolithic is 2500 – 1000 BCE. The Neolithic remains of the region is divisible into four phases:

- i) **Aceramic Neolithic:** Reported from the earliest levels of Sangankallu, is composed of just flake tools.
- ii) **Mature Neolithic:** This Ceramic Neolithic is pre 1600 BCE. Period IA of Sangankallu and other sites have revealed this horizon.
- iii) **Neolithic-Chalcolithic:** Dated between 1600 and 1500 BCE, it is reported from Sangankallu Period IIB, and many other sites. The Neolithic appears to be in close contact with Chalcolithic communities of the north.
- iv) **Neolithic-Megalithic:** This phase is very common at sites of Deccan, where overlap between Neolithic and Megalithic can be seen.

All the Neolithic phases of Deccan are influenced by the ecology of the plateau. Composed of Dharwar formation, the granite and trap, the rocky terrain is drained by rivers, which have alluvial stretch. Till the mature phase, Neolithic communities of the region were occupying the hilly terrains, which could support pastoral subsistence. In the succeeding phase, when these groups came in contact with Chalcolithic communities, their villages got concentrated in the alluvial plains. For the reason that fertile land for agriculture was available around the water channels.

The main subsistence of the Mature Neolithic phase was animal husbandry. In archaeological remains 80-85 % bones of animals were found to be of humpless cattle, and buffalo. The other domesticated animals were sheep, goat and ass. Agriculture at this stage was secondary. Only coarse grains like, Kuthali, Jowar, lentils and gram were cultivated.

Four types of shelters have been recorded in the Neolithic period of Deccan.

- 1) Pit dwellings were found at Nagarjunakonda and Payampalli. These pits were covered by thatched roof, supported by wooden posts. Smaller pits associate the dwelling which were used for storage of edibles, discard of garbage or burying the dead.
- 2) Circular huts with thatched roof supported by wooden posts have come to light from Period I of Tekkalkotta. The wooden posts were supported by block of stones.
- 3) Circular huts with walls made of wood and mud were covered by thatched roof. Many sites including Tekalkotta have yielded this type.
- 4) Square and rectangle shaped huts were being constructed in the last phase. In this case the mud walls up to half height were constructed. Over which wood and mud walls were made. The conical thatched roof was the upper component.

The later huts resembled huts made by Boya tribes of the region. Small cluster of Neolithic huts perhaps looked similar to these tribal villages. Each of the hut had cattle-shed. Also, cattle-pen, for the village was made adjacent but away from the village. The ash mounds of Deccan Neolithic, like the one excavated at Uttarnur, suggested that accumulation of cattle dung were burnt from time to time.

Burying the dead was an important ritual practice of the Deccan Neolithic. Burials were made within the residential area. Two types of burials have been reported. Pit burials, in which adults were buried along with edible items and pots. Children were buried mostly in earthen pots. This custom appears to continue during Megalithic times in the south.

The culture content of Deccan Neolithic was characterised by polished stone tools which were made of local rocks – dolerite and trap. Small to medium sized axe, adze, pick, quern, pestle, ring-stone etc., were the main types. Continuation of earlier technology, microliths was another feature. Besides usual types a number of flake and blade tools with serrated edge, point and scraping edge were used. In the bone and antler tools the forms found were scraper, point and chisel.

Except for Stage I, pottery was found from all the phases of Neolithic of Deccan. Grey and red ware pots made by hand or slow wheel were characteristic of the region. These were often painted, grey with ochre colour, and red with purple or dark brown. Painting included simple geometric designs.

Terracotta figures of animals like bull and birds associate the collections from Neolithic sites of the Deccan. These forms appear to correspond with Chalcolithic clay models. Similarly, beads of semiprecious stones also looked similar to the Chalcolithic beads. Occurrence of lead bead in the Neolithic horizon of the late phase may be taken to be a Megalithic trait. Similarly small copper objects which occur in the third phase of Neolithic of Deccan, evidence Chalcolithic contacts. Occurrence of gold ornaments, particularly earring is accepted as an important indication of trade between the Deccan Neolithic communities with the Harappans. For, the gold used by city dwellers of the north during 2<sup>nd</sup> millennium BCE, was known to be coming from the Kolar mines of the southern India.

On account of the above it may be summarized that the Neolithic culture of Deccan though retained earlier culture traits, microliths, it does not appear to have originated in this region. As the earlier stages of Neolithic are not represented in this region, and also the time span too is quite late.

---

## 1.6 PERIPHERAL AREAS OF NEOLITHIC IN INDIA

---

The other remains of Neolithic are very late, and also sporadic in nature. There were early farming communities in Ganga plain, — in Bihar and Bengal, — Chhotanagpur plateau, — lying within the boundaries of Bengal and Orissa, — and Assam.

### **Early Farming communities of Middle Ganga Plain**

In the fertile alluvial plain of middle Ganga Valley, many sites were occupied for many centuries. The earliest levels have been identified as Neolithic. Chirand (Saran district), Chechar (Vaisali district) and Sahgaura (Gorakhpur district), are noteworthy. The earliest levels at Chirand (Period IA), was pre-metal, when pit-dwellings were used. The subsistence was characterised by multi-crop cultivation. The cereals found were wheat, paddy, barley, gram and lentils. Also domestication of sheep, goat and cattle were practiced. Pottery is characterised by evolved techniques like Black-and-red ware, and polished red and black wares. Also

evolved forms, like, — spouted and lipped vases associated the ceramic collection. Proportion of ground stone axes was nominal. But, bone and antler tools were many. Called also as 'Neolithic-Chalcolithic', this phase of Chirand is dated between 1800 and 1400 BCE.

Similar Neolithic horizons have been reported from, — Tamluk and Pandurrajardhibi in Bengal. Characterised by ground stone axes and primitive pottery, all these remains fall in the later part of 2<sup>nd</sup> millennium BCE.

### **Neolithic remains of Chhotanagpur Plateau**

Chhotanagpur is a wide spread plateau, comprising parts of Bihar, Bengal and Orissa. Many surface finds of ground stone axes included shouldered axe, round butted axe, chisel, Ring-stone hammer etc., are reported from Santhal pargana, Chakradharpur, Ranchi and Mayurbhanj districts. Only a few sites have been excavated. These too have revealed very limited deposit of habitation.

Dated between 1200 and 800 BCE, Barudih in Bihar, revealed round butted axes, adze, quern, muller, pestle, ring-stone etc. Also hand and wheel made pottery were obtained. Bowls and dishes were the main forms. Like wise Kuchai in Orissa, was a contemporary site. Near Baragaon, in Sundergarh district factory sites of Neolithic tools have recently been discovered, which suggest production of large quantities of stone axes and Celts in this region.

### **Neolithic remains of Assam**

Many surface findings are reported from Assam. The ground stone tools of this region are characterised by shouldered axe. Two sites of the region — Sarutaru and Deojali-handing are significant. Neolithic tools and cord impressed hand made and wheel turned pottery are reported from the excavation of these sites. The evidence of Markdola, near Sarutaru suggests that the Neolithic way of life in this region continued up to first century CE (Common Era).

All the finds of incipient farming from Chhotanagpur plateau, and Assam are late to very late in date. Thus, could be accepted as late survival of Neolithic technologies in these geographically isolated areas. It may be recalled that even to day, Chhotanagpur plateau and eastern India are occupied by tribal population, who live in cultural isolation.

---

## **1.7 SUMMARY**

---

The Neolithic period was the first stage of food production in man's history. In India this period is well represented by beginning of agriculture and animal husbandry. The main regions from where sites of this period are reported are marked by diverse climatic conditions. Accordingly, the cultures of these regions differ in time and contents. The earliest Neolithic culture, with rice cultivation comes from Vindhya-Ganga region. While the other nucleus regions, the northern and southern parts were of late date. In Kashmir, domestication of animals and agriculture of the first stage was associated with the immigrants, who were pit-dweller. The Neolithic communities of Deccan were pastoral. Neolithic of both of these regions were almost contemporary to Chalcolithic cultures of the north-western part of the sub-continent. The other regions like the Chhotanagpur plateau, the middle Ganga plain of Bihar and Bengal and north east, were such areas

where Neolithic way of livelihood survived very late, and may not be classified in the category of true Neolithic.

### **Suggested Reading**

Sankalia, H.D. 1974. *Pre-And-Proto-History of India and Pakistan*. Poona: Deccan College.

Thapar, B.K. 1985. *Recent Archaeological Discoveries in India*. UNESCO

Singh, P. 1991. *The Neolithic Origins*, Delhi: Agam Kala Prakashan.

Vidula Jayaswal, 1992. *Bharatiya Itihas ka Nava-Prastar Yuga* (Hindi). Delhi: Swati Publications.

### **Sample Questions**

- 1) Explain the term 'Neolithic'.
- 2) How was a Neolithic axe made?
- 3) What does 'Aceramic Neolithic' mean?
- 4) What is the diagnostic subsistence of Neolithic period?
- 5) How do Neolithic food obtaining strategies differ from earlier Stone Ages?
- 6) What role did ecology play in the origin of food producing practices of Neolithic period?
- 7) What is the significance of findings of Period IA at Gufkral?
- 8) What was the main subsistence of Neolithic communities of Deccan?
- 9) What was the evidence for the origin of Neolithic in Belan Valley?

---

## UNIT 2 NEOLITHIC REGIONAL VARIANTS

---

### Contents

- 2.1 Introduction
  - 2.2 Neolithic Cultural Complexes in India
  - 2.3 Finds from Northern India
  - 2.4 Finds from Southern India
  - 2.5 Finds from Eastern India
  - 2.6 Finds from North-Eastern India
  - 2.7 Finds from the Ganges Valley
  - 2.8 Pre-Harappan Sites from the Subcontinent
  - 2.9 Summary
- Suggested Reading
- Sample Questions

### Learning Objectives



Once you have studied this unit, you should be able to:

- define the characteristic features of Neolithic complexes in India;
- state the regional variation inherent among them;
- discuss why these characteristic cultures arose in the regions it did; and
- describe how it is a connecting link to the Chalcolithic and later cultures in India.

---

### 2.1 INTRODUCTION

---

You have already learnt that over a time of a million or more years during the Palaeolithic and Mesolithic periods there was a steady but slow technological improvement as evidenced by artifacts and other occupational debris. However the mode of subsistence continued to be based on hunting, fowling, fishing and wild food gathering. This continued till around 10,000 years ago in the vast stretches of mountainous environment in the east coast of the Mediterranean to the eastern edge of the Baluchistan plateau, an area referred to as the “Fertile Crescent” and the nuclear area of cultivation of cereals. This new economy based on food production — the first animals domesticated being dog, cattle, sheep and goat, and first plants cultivated being wheat and barley — had a lasting impact on human culture and environment. Meanwhile, sometime around 7,000 BC in Southeast Asia, cultivation arose. The new plants domesticated included cereals such as rice and millet, and animals such as the pig. It is also believed that certain plants such as beans, cabbages and root crops were first cultivated here.

The advent of food production led to an assured food supply, inclusive of plants and animals, which ultimately led to sedentarianism and settlement of villages. This had a great impact on the cultural life of man. In the new economy men, women and children of varied ages contributed to production, which had not

happened in the economies of the earlier cultural phases. The food supply, based on production, at times led to a surplus, thus enabling many to follow other occupations such as basketry, pot-making, masonry, carpentry etc., thereby leading to diversification in economic and occupational practices. Sedentarianism also had its effect on material culture, the biggest contribution being made to the erection of structures and houses, which were more or less permanent in nature. Besides this, there was an improvement in stone tool technology with the development of grinding and polishing technique, and introduction of pottery making. The technique of grinding and polishing gave rise to the re use of the tool. As the tool became blunt after use, it could be re sharpened by grinding and polishing. Earlier a mistake in flaking and breakage at the time of use would lead to the discarding of the unfinished tool and /or the broken tool, and the knapper would have to start all over again by manufacturing another tool. The technique of the Neolithic was free from such limitations. Religious beliefs increased during this period, with the dead being buried along with weapons, pottery, food and drink in their graves. Although such burials were found sporadically in the earlier periods, its importance and use increased in the Neolithic period.

In India, the beginnings of this “revolution”, as V. Gordon Childe defines it, were seen in different parts of the country. In this unit we will look into the different Neolithic cultures observed from different parts of the country on the basis of archaeological evidences from some specific sites. Additionally, we will see whether there is any regional variation among them. Towards the end of this unit we should be in a position to state how this culture developed and played an important role in the evolution of succeeding cultures in the country.

---

## **2.2 NEOLITHIC CULTURAL COMPLEXES IN INDIA**

---

In India, hundreds of Neolithic sites have been discovered, however a single and uniform Neolithic culture has never been witnessed. This phenomenon led scholars to try and find out the patterns visible in the Neolithic context. As early as 1959, V. D. Krishnaswami studied the Neolithic cultures in India and concluded that four geographical zones corresponding to specific cultural traits could be seen. These included the northern zone comprising of Kashmir, eastern zone comprising the states of Bihar, Orissa, West Bengal and Assam, central and western zone comprising Madhya Pradesh and Maharashtra, and southern zone comprising the states of Tamil Nadu, Karnataka and Andhra Pradesh. It was observed that the northern zone was characterised by pit-dwellings and pointed-butt celts, while the eastern zone was characterised by shouldered celts. The central and western zone featured microliths and potsherds more in comparison to celts, while the southern zone showed the evidence of broad butt-end celts.

In 1962, another well-known scholar H. D. Sankalia tried to look into the Neolithic complexes in India. He opined that in the country two clear-cut complexes could be seen: Pure Neolithic and Neo-Chalcolithic. Pure Neolithic was seen in states such as Assam, Bihar and Bengal. Here shouldered ground axes and very little pottery were found. On the other hand, Neo-Chalcolithic cultures show a combination of both Neolithic and Chalcolithic traits. It was observed that many sites in the country did not show a pure Neolithic nor a pure Chalcolithic, but

rather a combination of the two. This mainly comprised the central, western and southern zones of Krishnaswami. This is a culture mostly seen in the states of Andhra Pradesh, Karnataka and Tamil Nadu where ground stone tools, microlithic blades, handmade pottery, round huts and one or two pieces of metal were found. Early Baluchi cultures, for instance that found in Kili Ghul Muhammad, where hand and wheel made pottery, ring stones, saddle and quern and celts were found, together with Bagor in Bhilwara where microliths, copper arrowheads, pottery and huts with wooden posts were found, were also included in the Neo-Chalcolithic culture.

At present, due to the discovery of newer sites and systematic work undertaken, more specific culture-based zonation is witnessed. This zonation is however broadly based on the earlier works of Krishnaswami and Sankalia. These various cultural complexes are so called since it reveals some characteristic traits or features in the region where it is found. Interestingly, these complexes correspond to various geographical regions in India, viz., north, south, east, north-east and the Ganges valley. These different cultural complexes will be dealt in the next section.

**Activity 1:** Take a map of India and plot out the cultural zones as given by Krishnaswami and Sankalia. Reason what might have been the mitigating factors which led to the zone-specific cultures.

---

## 2.3 FINDS FROM NORTHERN INDIA

---

In the north, the most important sites come from the Kashmir valley. Here over forty Neolithic sites have been discovered, of which the most important ones are Burzahom and Gufkarl. The word *burzahom* in Kashmiri refers to “birch”, and is an indication that a large number of birch trees grew in this region. Two phase of the Neolithic culture is found here – early Neolithic and late Neolithic. In early Neolithic, sixteen dwelling pits were recovered, with dimensions such as circular or oval at the top and square or rectangular at the bottom. Hearths and storage pits were also recovered inside the pits indicating the use of fire and possible use of cereals. The largest pit measured 2.7 metres at the top, 4.6 metres at the bottom and at a depth of 4 metres, with stairs leading into it. There is no doubt that the Neolithic people lived and pursued their daily work inside the pits. However, you would be surprised that hearths and storage pits were also found outside near the covered area, indicating that they also lived outside the pits. How could this have happened? Does it mean that some people lived inside, while others lived outside the pits? It can be however conjectured that the same group of people lived inside the pits in the biting cold of Kashmir, and preferred to sleep and work outside in the warm summers. Some of the important material evidences found includes pottery of grey colour, evidently handmade, coarsely finished and ill-fired. In all probability pottery was made by coil method, husk and grass having been used as tempering material. Celts were also found which included axes, wedges, chisels, adzes, hoes, picks, ring stones, querns and harvesters. Bone tools included harpoons, eyed needles, points and arrowheads. No evidence of domesticated plants was found.

There occurred a change in residential pattern in late Neolithic, when pits were abandoned, filled, rammed and sprinkled with red ochre. Presence of post holes suggests that probably houses were made of mud. A large rectangular

superstructure with forty-two post holes was also seen, probably used as a community assembly hall. Same types of pottery continued, while a new variety called the burnished black ware was introduced. Evidence of human burials in flexed position is witnessed. Interestingly, evidence of trepanning of skull is also seen.

In a neighbouring site called Gufkarl, three phases of Neolithic culture could be seen. Neolithic IA was an aceramic phase comparable to Burzahom. Here underground pits were found together with a large variety of stone tools such as points, scrapers, axes, drills, picks, pounders, querns and mace heads. Bone tools such as needles and points were also found. In Neolithic IB, handmade pottery with mat impressions makes an entry while all other tools continue. In the final Neolithic IC, ground stone celts, querns and pounders appear together with terracotta spindle whorls.

Radiocarbon dates places the Neolithic culture in Kashmir at 2400 to 1500 BC.

**Activity 2:** What do you think was the purpose of trepanning as found in Kashmir?

---

## 2.4 FINDS FROM SOUTHERN INDIA

---

One of the most critical evidences of the new subsistence economy comes from peninsular India, from northern Karnataka and western Andhra Pradesh, and a few sites located in southern Karnataka, coastal Andhra Pradesh and northern Tamil Nadu. Important sites are many and include Palavoy, Utnur and Nagarjunakonda from Andhra Pradesh; Halur, Maski, Parval, Tekkalokotta, T. Narsipur and Sangankallu from Karnataka; and Piyampalli, Dailaimalai and Mullikadu from Tamil Nadu, among others. Results obtained from all these above mentioned sites are similar with a few exceptions. In the earlier Neolithic phase, handmade coarse pale red ware with microliths and ground stone tools were seen. In the later phase, handmade, dull burnished grey ware, ground stone tools like axes, adzes, wedges and chisels, bone points and beads and terracotta are seen. Burials were in extended exhumation with stone grave goods for adults, and urn burials for infants.

The most important finds from this region are the ash mounds (accumulation of burnt cow dung) found in Utnur situated at Mahbubnagar in Andhra Pradesh. What do you think these ash mounds, made up of burnt cow dung, indicate? Well, it indicates that the Neolithic people reared cattle, and that cattle herding was an important component, if not the only one, of their economy. Many authors consider it as a direct evidence of stockade and cattle penning. They are found closely associated with habitation sites thereby giving credence to the evidence of the role of cattle herding in the economy. It is likely that dung from cattle pens was allowed to accumulate and periodically set ablaze in a ceremonial way. This conjecture can be made by observing the present scenario in many places in south India, where during annual cattle festivals; accumulation of dried cow dung is ceremonially set ablaze. The study of the ash in the mounds showed that it had several distinct layers; in some layers it is soft and loose and in others heavily vitrified, suggesting that cow dung was burnt at varying temperatures. In the ash mounds were also found artifactual evidences such as stone and bone tools, animal bones and pottery. At Budihal at Gulbarga district in Karnataka,

hoof impressions of cattle have been found beneath the cow dung, which again shows evidence of cattle penning. Budihal has also produced evidence of a butchering floor. Evidently and proven conclusively, animal husbandry was the mainstay of the economy of the Neolithic people in the peninsular region. However the presence of rubbing stones and querns in the habitational debris suggests that some form of grain cultivation or collection was also done.

The Neolithic people lived in circular or rectangular wattle-and-daub huts with floors having stone paving. Interestingly, large stones were supposedly placed around the huts on the outside. Why do you think it was done so? It has been suggested that this particular structural feature relates to an attempt at protection of the huts from winds. Besides the use of stones, and wattle and daub, the people used thatch for a roof as evidenced by a burnt hut from Sangankallu. The Neolithic people buried their dead, both children and adults in clay urns beneath the floors of their houses. The urns contained sometimes double or multiple burials.

This particular culture in southern India specially those with cattle pastoralism is dated by radiocarbon dating from 3000 to 1000 BC.

---

## **2.5 FINDS FROM EASTERN INDIA**

---

Since the beginning of the nineteenth century, Eastern India, comprising the states of Bihar, Orissa and West Bengal, has also yielded a number of Neolithic sites. Most of tools from these sites are surface collections. In fact there is no dearth of surface occurrence of Neolithic tools, and apparently many manufacturing sites have also been found but dates and stratigraphy pose a serious problem. The Neolithic tools include pointed-butt celts (axes), chisels, bar celts, shouldered celts, hammer stones and perforated discs found in the Chhotanagpur plateau. Direct evidence on agriculture was rarely found. Mostly indirect evidence is gathered from potsherds from Singbhum showing evidence of straw in the paste, except for a site called Barudih, in Singbhum, which was excavated by Dharani Sen of Calcutta University and had yielded burnt rice grains in a small pot. All these suggest that Neolithic people in eastern India subsisted on cultivation of rice.

In the last decade, a few sites from eastern India were excavated partially. These include sites such as Kuchai in Mayurbhanj district, Golbai Sasan in Khurda district, Kuanr in Keonjhar district and Sankarjang in Angul district in Orissa which have provided more evidence about the Neolithic culture of this region. Kuchai is a stratified site that yielded evidence of Neolithic culture after a long sequence of earlier cultures. This site has yielded pointed-butt celts and cord impressed pottery. Golbai Sasan is also a stratified site even though the excavated area is very limited in extent. Here, period I appear to be Neolithic and show a range of dull red and handmade pottery with cord or tortoise shell impressions in association with a few worked pieces of bone and traces of floors and post holes. Additionally, stone celts and an extended human burial have also been recovered. The succeeding period is Chalcolithic since it yields copper objects together with polished stone and bone tools. Similarly, Kuanr has yielded pointed-butt celts, evidence of wattle and daub structures and copper bangles. From Sankarjang too several human burials were excavated in association with bar celts and copper artefacts. Ground stone tools are also very common as surface finds in Dhenkanal

and Keonjhar districts. They also include miniature celts which were probably intended for some ritual function.

Radiocarbon dates from Barudih, Golbai Sasan and Sankarjang suggest duration of 2200 BC to 700 BC for the Neolithic culture.

---

## 2.6 FINDS FROM NORTH-EASTERN INDIA

---

Reports of Neolithic tools from North eastern part of India came out since the pre-independence period. Garo Hills in Meghalaya is reported particularly to be rich in Neolithic sites. As many as eighteen sites have been discovered and studied. These include, Selbalgre, Misimagre, Tebrongre, Rongram, Chitra Abri, Didami, Makbil Bisik, Matchakholgre, Ganolgre and others. Besides these, numerous tools have been reported from the states of Assam, Nagaland, Meghalaya, Arunachal Pradesh, Manipur and Tripura as well. In many of these regions, Neolithic tools have been found as surface finds. Some of these are reportedly factory sites for manufacturing of tools. How can one say whether a site is a manufacturing or quarry site, or not? Evidently, it is possible to infer so, from the presence of a large number of cores, unfinished and discarded tools and large quantity of waste materials which came out while manufacturing of tools. In the Neolithic context, a large number of grinding stones were also found.

The tools found from this region include ground stone celts of shouldered and splayed varieties collected mostly as surface finds. These along with cord impressed pottery found in the excavations of Daojali Hading and Sarutaru in Assam, and Selbalgre in Meghalaya, form important material evidences for Neolithic culture. The pottery is handmade and made of impure clay. These might have been made by coil or ring method. Many sherds carry impressions of cord or string and grooved wooden mallets on their surface suggesting that the vessels were enlarged and shaped by beating with a wooden mallet wrapped with a cord.

Daojali Hading is a stratified Neolithic site from North Cachar Hills, Assam. A large number of household appliances like corn grinders, mortar, pestle, querns and mullers are present at the site. These provide indirect evidence of food production by Neolithic inhabitants of the area. Large quantities of grinding stones and by-product flakes have been found here too. Sarutaro, another excavated site located in south eastern corner of Kamrup district, Assam, showed ground stone celts, pottery and charcoal. Pottery was handmade, coarse, gritty and brown, pale brown or grey in colour. The site is quite late in date as is found by Tata Institute of Fundamental Research. At Parsiparlo, an excavated site from Kamala valley in Arunachal Pradesh, Neolithic cultures preceding the Iron Age is found. Mostly pecked and ground stone implements together with a few sherds were found. The sherds were beaten in such a way that square-grid and honey comb grids were impressed upon them. Few fire places with deposition of ash and charcoal were found. However no structural remains (like post holes) were seen suggesting that Parsiparlo was an open-air site. Selbalgre, the site from Garo Hills in Meghalaya turned out to be a stratified site, with the Neolithic phase overlying geometric and non-geometric microliths. The Neolithic phase yielded handmade pottery, very coarse and grey or dull brown in colour.

No radiocarbon dates are available for the Neolithic culture in north-east India. However H. D. Sankalia inferred that the Neolithic cultures in the region could have been within the time frame of 5000 BC to 1000 BC.

---

## 2.7 FINDS FROM THE GANGES VALLEY

---

South of the Ganges, ground stone tools have been reported as surface finds widely from the hilly tracts of the northern Vindhyas, particularly in Rewa and Sidhi districts of Madhya Pradesh and Banda and Mirzapur districts of Uttar Pradesh. However important sites that were excavated include the sites of Chirand in the middle Ganga plains, Koldihawa and Mahagara in the Vindhyas among others. This is a strategically located area where evidence of the use of rice is seen.

Chirand, situated in district Chhapra in Bihar is a stratified site with Neolithic preceding Chalcolithic and Iron Age. Tools found include bone and antler tools, microliths (blades, lunates and points), picks, scrapers, eyed-needles, bodkins, pierced batons, ground celts, pestles and querns. Pottery used was red, grey, black and red wares, made on a turntable. Terracotta objects, beads, bangles, wheels, bulls, birds and serpent figurines were also found. The use of rice is evidenced from paddy husk impressions on burnt clay. Besides rice, they might have also grown wheat, six-row barley, lentil and green gram such as *masur* and *moong dal*. Evidently they lived in houses that were circular with a diameter of 2 metres, and made of bamboo and mud plastered walls, and paved floors.

Koldihawa, situated towards the south of Allahabad and on the right bank of Belan river, showed a three-fold sequence, namely, Neolithic, Chalcolithic and Iron Age. The people here also lived in circular huts marked by post holes. They used ground stone tools and handmade cord-impressed ware. A cattle pen with post holes at the corners and hoof impressions on the floor were found. The animals domesticated included sheep, goat and cattle as analysed from the faunal remains and hoof impressions. Evidence of an irregular cattle pen also comes from Mahagara, a site on the left bank of the Belan River. This irregularly rectangular cattle pen (12.5 x 7.5 m) was fenced by 20 posts, with wider space for opening. No pottery and tools were found within. Large number of cattle hoof marks was found within. Outside the pen, sheep and goat hoof marks were present. Evidently, Mahagara Neolithic people also lived on stock raising.

Interestingly, rice husks were found in Koldihawa in the paste used in pottery-making. Palaeo-botanical analysis of this rice showed that it belonged to a domestic variety. Radiocarbon dates place it at 7000 BC to 5000 BC. This provides the earliest evidence for rice cultivation in the sub-continent.

**Activity 3:** List the artifactual evidences from different regions. Make a comparative chart.

---

## 2.8 PRE-HARAPPAN SITES FROM THE SUBCONTINENT

---

Whenever we discuss Neolithic culture in India, we very rarely touch upon the pre-Harappan Neolithic sites. The Neolithic cultures of the Indus valley are actually of great importance as they are the fore-runners of the Indus valley civilization. For this reason, these Neolithic cultures are often called pre-Harappan while the Indus valley civilization is labelled as Harappan. Some of the important pre-Harappan sites include Amri, Kot Diji, Gumla and Mehrgarh, which will be dealt with in detail in another lesson. Amri, a site situated in modern day Sind in

Pakistan, showed evidence of well-planned houses. Some of the houses were rectangular and of various sizes, while others were small cells probably used for storage purposes. About 55 per cent of pottery was seen to be wheel-made. In this site, jar burials were also noticed. On the other hand, Kot Diji showed very interesting pre-Harappan features with defensive walls, well-aligned streets and houses, large communal fire-places, wheel-made pottery, terracotta toys etc. In Gumla, which lies to the northwest of Dera Ismail Khan in Baluchistan, a bullhead deity or a horned deity made of terracotta was found.

For several decades, agriculture-based Neolithic settlements in the subcontinent, which used only stone tools, have been known from sites like Kili Ghul Muhammad and Rana Ghundai in the hilly terrain of Baluchistan. Their beginning has been dated to around 4000 BC. However, later excavations at Mehrgarh have pushed back the antiquity of settled village life in the subcontinent to 7000 B.C.

Mehrgarh is known to be the oldest agricultural site in the Indian subcontinent. This is a site which is located near the Bolan Pass, Baluchistan. At this site about seven cultural layers were found, of which the earliest three were Neolithic. The first Neolithic phase (IA) in Mehrgarh showed the evidence of tools such as polished stone tools, microliths and bone tools. There was no pottery at this stage but baskets coated with bitumen were used. Hunting, together with stock-breeding and plant cultivation were the economies of this region. Cattle, sheep, goat and water buffalo were reared while the cultivated plants comprised several varieties of wheat and barley. The houses were made of mud and mud-bricks. Multiple rooms without doors were believed to have been used for storing grain. The dead were buried under the floors of the houses where people lived. Some of the skeletons which were buried have been found sprinkled with red ochre. Necklaces of micro-beads of steatite along with beads of semi-precious stones such as turquoise, lapis lazuli and sea shell were found in the graves. Stone axes and microliths have also been found as grave goods. In two cases, bodies of young goats were also discovered. The next phase (IB) saw the appearance of pottery. The third Neolithic phase datable to 5000 B.C., is divided into three sub-periods on the basis of changes in ceramic technology. In IIA - handmade, basket-impressed coarse ware was used. Quality seemed to have improved in sub-period IIB. In IIC, wheel-made pottery was introduced. The vessels of buff to reddish colour were painted in black pigment with simple straight and curved lines, rows of dots and criss-crosses. One of the interesting finds of this site is cotton seeds. This find is of great importance since it suggests the possibility of the use of this fibre for textile manufacture. Neolithic III saw a marked increase in the size of the settlement and remarkable development in ceramic industry. Vessels were decorated with paintings of birds and animals as also with geometric designs. Oats and another variety of wheat were added. There is evidence of stone bead manufacture and copper smelting at the site too. Architectural remains include a large granary with multiple rectangular cells, much larger than the granaries of the preceding periods.

---

## 2.9 SUMMARY

---

As we come to the end of this lesson, it is very clear that there are different cultural traits as far as Neolithic in India is concerned. Interestingly two different

features are witnessed. At one level, the differences are many and varied while at another level, some traits are similar even though they fall in different geographical zones. It is therefore unlikely that climatic changes and shifting of floral and faunal boundaries at the end of the Pleistocene and the beginning of the Holocene, when Neolithic started, are directly related to the origin of agriculture in India. It was probably the environment and the exploitative technology, combined with adaptability that was more or less largely responsible for the transition from the food-gathering to the food-producing economy. Such a transition came at different periods in different parts of the country, as evidenced from the difference in dates procured. This brings us to the point that India seemed to have witnessed a very fluctuating Neolithic in terms of the great difference in time, for instance, between the pre-Harappan sites vis-a-vis the eastern sites.

In terms of relationships, it would seem that with the exception of the Chhotanagpur region which may have some connections as yet unidentified with the south, the early farming communities in each region were distinct from each other. Of these the Indo-Pakistan community seems to be inspired from west Asia, the north from northeast, the Ganges valley from south, and northeast from south-east Asia and vice versa. In fact, northeast India which is very strategically located in the borderline of Southeast Asia and south Asia has been touted by many as the nuclear area of early rice cultivation. However, this fact is yet to be ascertained.

At the same time it is observed that there is an apparent time lag between the manifestations of the Neolithic economy in the Indian group of regions and their counterparts in the nuclear areas earlier mentioned. In fact, in India it makes its appearance after thousands of years have elapsed. One of the main issues herein is the mechanism of diffusion and its extent which are yet to be ascertained. Therefore, the appearance of the early farming communities or the transition from food gathering to food producing in India is shown to have come about palpably later than in west Asia and southeast Asia which is rather conditioned by several factors including the level of exploitative technology, environment, late continuance or survival of the Mesolithic economy etc. It is also partly due to the fact that we have as yet not investigated the antecedent stages of the food-producing economy especially with reference to the domestication of animals and plants, climate, soil, relief etc., which could, in the light of the present approach to the problem, push the story of early farming in India backwards.

### **Suggested Reading**

Agrawal, D.P. 1982. *The Archaeology of India*. New Delhi: Select Books Syndicate.

Allchin, B and R. Allchin. 1983. *The Rise of Civilization in India and Pakistan*. New Delhi: SBS.

Bhattacharya, D.K. 1989. *An Outline of Indian Prehistory*. New Delhi: Popular Prakshan

Chakrabarti, D.K. 1999. *India An Archaeological History: Palaeolithic Beginnings to Early Historic Foundations*. New Delhi: OUP.

Sankalia, H.D.1974. *The Prehistory and Protohistory of India and Pakistan*.

Subba, T. B and S. C. Ghosh. 2003. *The Anthropology of North-East India: A Textbook*. New Delhi: Orient Longman.

### Sample Questions

- 1) Discuss the Neolithic Culture of Northern and Eastern India.
- 2) Why Neolithic is called revolution not evolution? Comment on it with suitable Indian Neolithic examples.

Write a note on the following

- i) Chirand
- ii) Daojali Hading.



---

## UNIT 3 CHALCOLITHIC CULTURES

---

### Contents

- 3.1 Introduction
- 3.2 Ahar Culture
- 3.3 Kayatha Culture
- 3.4 Malwa Culture
- 3.5 Jorwe Culture
- 3.6 Ochre Colored Pottery (OCP) Culture
- 3.7 Painted Gray Ware (PWG) Culture
- 3.8 Summary

Suggested Reading

Sample Questions

### Learning Objectives



Once you have studied this unit, you should be able to:

- understand the regional diversity of Chalcolithic cultures in western and central India;
- understand the significance of the chronology of these cultures;
- understand how the Ochre Colored Pottery (OCP) culture and the Painted Gray ware (PWG) culture are distinctively different; and
- grasp the problem of how the entire cultural landscape in north, western and central India remained devoid of full-fledged urbanism for almost thousand years following the Harappan decline.

---

### 3.1 INTRODUCTION

---

In post-independent period an interest developed among the scholars for the systematic study of social organisations and political and economic institutions. This was apparent in writings of scholars like D.D. Kosambi. A similar interest influenced the archaeological work during this time when, spearheaded by scholars like H.D. Sankalia, there appeared an effort to reconstruct the past ways of life in different regions. Detailed exploration of Chalcolithic sites followed, particularly in central and western India, with excavations at a few chosen sites. Multi-disciplinary studies at sites like Inamgaon in Maharashtra threw substantial light on past subsistence, religious practices and social organisation. The Chalcolithic culture of a region was defined according to certain salient features seen in ceramics and other cultural equipments like copper artifacts, beads of semi-precious stones, stone tools and terracotta figurines. Migration and diffusion of population groups were often cited as causes for the origin of these cultures, as seen for example, in the idea of an Aryan ‘people’ being the bearers. Often linkages of archaeological sites were sought with names of places mentioned in the Puranas and epics which were believed to have been located in the same geographical region. Many of these ideas have been critiqued in recent years, e.g. defining a culture on the basis of pottery types and explaining change by factors of diffusion and migration (Panja 2002).

On the other hand the Ochre Coloured Pottery, commonly known as OCP, seen at over one hundred sites in Rajasthan, Punjab, Haryana and western Uttar Pradesh, presents a different problem. Opinions are still divided about the authorship of OCP 'cultures'. The dates assigned are diverse, ranging from 2800 BC to 900 BC. The PGW phase, marked by the deluxe ware of the same name has evoked many queries regarding its status. Its association with iron at some sites has been the subject of much scholarly discussion.

The Chalcolithic cultures such as Ahar, Kayatha, Malwa, Jorwe, Ochre colored Pottery and Painted Gray are discussed in this unit.

## 3.2 AHAR CULTURE

The Ahar culture –also known as the Banas culture, the latter term derived from the name of the valley in which most of the sites of this culture are located—is among the earliest Chalcolithic cultures of India. This is seen from the calibrated radio-carbon dates available from many of the sites. The culture has been named after the type site Ahar, in District Udaipur, Rajasthan which was excavated in 1961-62 by H.D. Sankalia of Deccan College, Pune. South eastern Rajasthan, where the Ahar culture sites are found, is known as Mewar. Within this region, the sites are located in the eastern plain and the southeastern plateau, two of the terrains that mark the physiographic condition of Rajasthan. This region is rich in mineral deposits, and archaeologists postulate from available evidence that this region also supplied copper to the Harappan sites.

More than sixty sites of the Ahar culture have been discovered so far, of which the most extensively excavated sites are Ahar and Balathal. The sites of Gilund, Bagor and Ojiyana have also been excavated, while section scraping at Marmi and Tarawat was undertaken to ascertain the culture sequence and chronology. Excavations at Ahar revealed a two-fold sequence of cultures of which the first period (Period I) is Chalcolithic and the second (Period II) is early Historic. Available radio-carbon dates (calibrated) suggest a time bracket of 2025 BC—1270 BC for the Chalcolithic phase. The ancient mound of Balathal is located on the eastern fringe of the village Balathal in Udaipur district, on the west bank of a river locally known as Kataranadi. The excavations were conducted at the site from 1994-2000 by Deccan College, Pune, in collaboration with Institute of Rajasthan Studies, Rajasthan University, under V.N. Misra. This site also revealed habitational deposits belonging to cultural periods like Ahar. A series of radio carbon dates place the Chalcolithic culture at Balathal between the beginning of 3<sup>rd</sup> millennium BC and 1500 BC.

Balathal is perhaps the most-extensively researched site of this culture, the ceramics having been subjected to detailed studies. Based on the material culture of Balathal, and a comparative study with that of the other sites (Misra, 2002-03), has divided the Ahar culture into four phases like Early Ahar/Balathal phase, Transitional Phase, Mature Ahar phase and Late Ahar phase.

The Early Ahar phase has so far been noticed only at Balathal. It is marked by mud and mud brick houses with hearths in some. The material culture is characterised by eight types of wares, the potters having already invented the inverted firing technique of black and red ware and that of reserved slip ware. In the inverted technique at the time of firing the pots are placed in an inverted

manner, so that the parts, which did not get any oxygen became black, while the portion which had access to oxygen became red. A Sturdy Red ware and Red Slipped ware and painted Buff ware are noticed. Beads of steatite and terracotta have been obtained in good numbers. A few stone implements are also found. The faunal and floral remains indicate a mixed economy. This phase is placed at the end of fourth millennium BC.

The second phase, also identified at Balathal is a transitional one which did not have a long time span. In the upper layers the Mature Aharian gradually became prominent. This is evident in the ceramic types.

The Mature phase witnessed a large number of settlements and the emergence of a few key sites and many satellite sites. A uniform settlement pattern is seen at all sites with certain additional features at some sites like a fortified enclosure at Balathal. Houses were now made of stone, mud and mud brick. At Balathal the fortified enclosure is centrally located and surrounded by the residential complex. The reasons for such a plan remain unknown till today. Features associated with the houses are hearths, storage pits, saddle querns and small storage jars. Industrial activities were marked in mass production of ceramics, metal works, and development of bead industries. Beads are made in shell, bone, ivory, semi-precious stones, steatite and terracotta. The diagnostic wares of this period are the black and red wares, red and grey wares. Refinement of technology is seen at this stage with the invention of fast wheel. Hallmark of this stage are the techniques of slipping, polishing or burnishing and embellishing the vessels with many types of decorations. A large number of new shapes and forms emerged during this period. Sankalia and his team had discovered several copper ore quarrying sites within the radius of 32 km of Ahar. For this reason, this region is considered as the source of copper supply to the Harappans.

The evidence of rice has been noticed at Ahar in the form of impressions on potsherds. The other crops cultivated during this period were wheat, barley, millet-bajra and jawar. Faunal remains of domesticated species like cattle, buffalo, goat, sheep, pig, dog and fowl have been recovered from excavations. The wild animals hunted were sambhar, nilgai, chital, blackbuck and wild boar. The evidence suggests mixed economy of cultivation and hunting gathering.

As for social organisation one cannot rule out the presence of specialised classes of craftsmen. But, on the basis of the limited nature of evidence it is not known whether it was a chiefdom society. The evidence of fortification at Balathal implies that there may have been internecine conflicts. A large number of bull figurines appearing in large number from the end of the mature Ahar phase has been ascribed with ideological meaning, but nothing concrete can be said.

An inhospitable climate experienced during the end of the second millennium BC led to the termination of the farming culture in southeastern Rajasthan. Features of decline are evident in the Late Ahar phase.

Regarding the authorship of this culture opinions are sharply divided. Sankalia had seen a West Asian link which was disputed by later scholars. Recent research highlights the affinity between the Ahar culture and a chalcolithic culture in Gujarat.

---

### 3.3 KAYATHA CULTURE

---

This Chalcolithic culture was named after the type site Kayatha, in Ujjain dist., Madhya Pradesh. The excavation was due to the joint collaboration of Deccan College, Pune and Department of Ancient Indian History, Culture and Archaeology, Vikram University, Ujjain. Kayatha has been identified with the ancient Kapitthaka, birth place of the celebrated astronomer-astrologer Varaha. Excavations revealed a five-fold sequence of cultures:

- i) Kayatha culture (Ca. 2450-2000 BC.)
- ii) Ahar culture (Ca. 1950-1700 BC)
- iii) Malwa culture (Ca. 1700-1400 BC)
- iv) Early Historic (Ca. 600 BC-200 BC)
- v) Sunga-Kusana-Gupta (Ca. 200 BC-600 BC)

Over forty settlements of the Kayatha culture have been so far discovered in the Malwa region of Madhya Pradesh, most of them being located on the tributaries of the Chambal River.

The characteristic forms of ceramics include: the chocolate slipped ware also known as Kayatha ware. The types are bowls, high and short-necked storage jars with globular profile and basins. Similarities are evident with the sturdy painted pottery found at some pre-Harappan sites. A red painted buff ware, a concave necked pot with a bulging body, with or without carination, a dish or shallow bowl and a basin, most probably constituted table ware. Some bowls, basins and globular pots represented combed ware. The bulk of the total yield, about 60%, including forms like handis, basins and storage jars were coarse handmade red/grey ware. Use of both copper and stone tools was found. A cache of copper has been found, as well as two exquisitely made copper axes, cast in moulds. A specialised blade industry existed as seen from evidence of mass production of chalcedony blades in the crested guiding ridge technique. Ornaments like two bead necklaces have been found. Beads were manufactured from semi-precious stones. Most of these artifacts were found inside a house, which could not be fully excavated.

People lived in small huts with well-rammed floors and wattle and daub walls supporting a thatched roof. A mixed economy was practiced as seen from evidence on subsistence farming, stock raising and hunting-fishing. Barley and wheat were grown. Domesticated animals included cattle and sheep/goat. Interestingly, horse remains have been found from the Chalcolithic level at Kayatha.

As no antecedent stages of this culture are found in the Malwa region, Dhavalikar (1997) is of the opinion that the Kayatha culture—the earliest chalcolithic culture in the Malwa region— had developed elsewhere. Following which people migrated with the culture to this region. The sudden end of this culture is ascribed to an earthquake. The presence of a sterile layer between the levels of the Kayatha and the succeeding Ahar culture points to a hiatus between the two.

---

### 3.4 MALWA CULTURE

---

The Malwa culture is the most predominant chalcolithic culture of central India, with a wide distribution of sites almost all over Malwa region. It was first

identified in the excavations at Maheshwar, on river Narmada. Maheshwar was identified with the ancient Mahishmati of the Puranas. Navdatoli on the opposite bank also revealed great potential and was subsequently excavated. Other excavated sites of this culture are Nagda, Kayatha, Eran etc. On the basis of calibrated dates the Malwa culture is placed in the bracket of 1900-1400 BC.

Malwa region lying to the east of the Banas valley and Aravalli hills forms a distinct geographical unit, forming a link between the Indo-Gangetic plain and the peninsular region. Two great river systems, the Chambal and the Narmada traverse the region. A very heavy concentration of Malwa settlements is found in the central Narmada basin, which is considered to be a very fertile land.

Sites are mostly found on the banks of the tributaries. They were not affected by flood, unlike those on the main river. A sort of two level settlement pattern existed, consisting of a large number of small villages and a few large villages. Among the latter one may include Navdatoli, Nagda and Eran, Navdatoli being perhaps the largest. There were two parts of occupation at Navdatoli, enclosed by a fortification wall. Perhaps in historical times the centre shifted to Maheshwar. At Nagda, a mud rampart has been recorded- a feature also seen at Eran.

At Nagda, the houses seem to have been laid out in rows along the road and by-lanes. The use of mud-bricks and fired bricks at Nagda is significant as they are absent at other Malwa sites. The houses were multi-roomed with a *chulah* (Hearth/oven) bearing four arms. The floors were rammed hard, and there were several floor levels indicating periodic repair and re-laying. There were pebble platforms as well. Two rooms enclosing squarish pits have also been found, the function of which remains unclear. At Navdatoli, a number of structures were laid bare belonging to four different phases of chalcolithic culture. Both round huts and rectangular houses were found together in each phase. Pit-dwellings were noticed in the first phase. Usually round huts were found in clusters of two, three or four. Dhavalikar (1997) suggests each cluster represented a household, of which one had a hearth while others served different functions. Rectangular structures were quite spacious with thick mud walls and wooden posts supporting the thatched roof. The floor was rammed hard. A circular structure in one of the houses was possibly meant to be a storage bin. An extensive burnt floor has been found, possibly used as a threshing floor.

There were a number of postholes which did not follow any sensible plan; possibly they were stakes where domestic animals were tethered at night. A burnt house belonging to the latest stage of the Chalcolithic phase has been recorded from Navdatoli. Storage jars and squarish pots have been found inside this house. Multi-roomed structures at Navdatoli are particularly evident from a house in phase II which is marked by rows of postholes of which a double set of postholes forms the back wall. The total extent of the settlement at Navdatoli was about 7 ha. At Navdatoli a large burnt red floor was found. It had a squarish pit in the middle. In the four corners of the pit were found charred wooden posts which probably supported a canopy above. Inside the pit were burnt wooden splinters. Two high-necked pots were also found there. The function of this structure is unknown. This pit was part of a one room house as seen from a hearth in the northern part and a circular pot rest in the west.

The Malwa culture spread into Maharashtra by 1700 BC and some of the Malwa sites like Prakash in the Tapi valley, Daimabad in the Godavari valley and Inamgaon in the Bhima valley were quite extensive. At Daimabad, the excavator has identified craftsmen's houses and structures with religious affiliation. The most important structures of the Malwa period at Daimabad were House nos. 32, 33 and 54 which formed one complex, located in an enclosure wall. Large fire pits were found in house no. 54, identified as sacrificial altars; two-armed *chulahs* were also identified. At Inamgaon 20 houses of the Malwa period have been identified, they were large rectangular structures with a low partition wall in the middle. Inside the room were low mudwalls with large fire pits and pit silos meant for storage. Circular pit dwellings also existed at Inamgaon.

The subsistence practices and diet can be reconstructed from remains of carbonized grains of wheat, barley, jawar, rice, legumes, oilseeds and fruits. These are found at different sites due to ecological species types varied from site to site. Animal flesh also formed a part of the Chalcolithic diet.

The material culture constituted chiefly of ceramic types, the Malwa ware forming the principal type. It was essentially buff or cream slipped with painted patterns in dark brown. A pottery kiln belonging to the Malwa period has been uncovered at Inamgaon. Other ceramic wares were white painted black-and-red ware of the Ahar culture, a cream slipped ware, a coarse red/grey ware and handmade storage jars. Dhavalikar drew parallels of some forms of Malwa ware from Navdatoli with forms found in West Asian sites. Other components of the material assemblage were blade tools, copper artefacts and beads of semi-precious stones. Stone rubbers, muellers, querns, grinding stones, hammer stones, sling stones and mace heads have been found pointing to mixed subsistence practices.

Religious beliefs are reconstructed from fragmentary evidence. Terracotta female figurines of indistinct types have been found while a few examples of more definite forms exist. Representations of male figures in painted forms are seen in some wares. Terracotta bull figurines were either mere toys or associated with religious beliefs. Presence of a specific structure has been interpreted as fire alter, evidence of fire worship.

The decline of the Malwa culture has been placed in around 1400 BC which coincided with that of Ahar culture as well. Dhavalikar suggests climatic deterioration for the end of these cultures.

---

### 3.5 JORWE CULTURE

---

The Jorwe culture is the most important and characteristic chalcolithic culture of Maharashtra, extending almost all over the present state, excepting the coastal strip on the west and Vidarbha in the north east. The culture is named after the type site of Jorwe in Ahmadnagar district, Gujrat. The culture was discovered in 1950. In regions, such as, Prakash in the Tapi valley, Daimabad in the Pravara-Godavari valley and Inamgaon in the Bhima valley large centres of this culture were found. This is a notable feature of Jorwe culture.

Although over 200 sites of this culture have been documented so far, only a few sites have been subjected to large scale excavations. Inamgaon and Daimabad are two excavated sites. In understanding the settlement pattern of the Jorwe

sites, ecological differences between different regions have been highlighted (Dhavalikar, 1997). The high concentration of sites in the Tapi valley has been put down to the occurrence of tracts of highly fertile black cotton soil in the region. The sparse settlement pattern of the Bhima valley, on the other hand, is explained by the fact that the whole basin is practically a dry area. Following regional approaches in archaeology, environment was taken as a prime determinant, and attempts were made to characterise different kinds of sites in functional terms. On the basis of the limited data Dhavalikar classifies all the Jorwe sites as regional centres, namely, villages, hamlets, farmsteads and camps (Dhavalikar 1997).

The regional centres of Prakash, Daimabad and Inamgaon are extensive in area, with a very rich material culture. The work in Inamgaon (Dhavalikar et al 1988) was a breakthrough in Chalcolithic studies. Interdisciplinary in nature it incorporated many disciplines which resulted in a systematic study of the past. Several structures were laid bare at the site of which the granary and the diversion channels may be taken as examples of public architecture. Dhavalikar unearthed over one hundred and thirty houses belonging to both Early and Late Jorwe phases. The Early Jorwe houses were rectangular in plan while the Late Jorwe ones were circular. Dhavalikar ascribes the change in house plan to deteriorating economic condition of the people in the Late Jorwe period when the climate became more dry and arid. He also associated the two contrasting house plans to different ways of life, the Early Jorwe rectangular houses to a sedentary pattern, and the Late Jorwe circular houses to a semi-nomadic existence. To arrive at this conclusion he relied on ethnographic observations on dwellings of present-day communities in and around Inamgaon. This use of ethnographic analogy was critiqued by later scholars (Panja, 2002). These houses revealed features like a fire pit or *chulah* and storage bins.

A large number of Jorwe sites can be classified as villages, most of them being about 2 ha in extent. A few of these were excavated. They are Songaon, Chandoli, Apegaon and Walki (Dhavalikar, 1997). A small number of sites, not over a hectare in extent, possibly consisting of a few households are considered as hamlets. Sites located within 2-3 km of the major sites, and situated close to the fields to facilitate the conduct of agricultural operations, have been defined as farmsteads. Walki in Pune district, lying mid-way between Pune and Inamgaon, is an important example. Threshing floors were identified at this site. Transitory camps are not easy to identify but Dhavalikar identified one of these at Pachad, at the foot of Raigad fort near Mahad on the western coast in Maharashtra.

Based on an analysis of organic remains the subsistence base was reconstructed. It was based on dry-farming with stock-raising and hunting-fishing as ancillary activities. A variety of crops were grown, and the Jorwe farmers have also been credited for practicing crop rotation. The principal crops were barley, wheat, jowar, rice, ragi, green pea, grass pea, lentil, and green and black gram. Our knowledge of the early subsistence patterns is mostly formed on the work at Inamgaon. For the first time site-catchment analysis was carried out to understand the link between Inamgaon and its immediate surroundings. The Late Jorwe phase, however, marks the decline of agriculture. A fresh analysis of bones recovered from the Inamgaon excavations (Pawankar, 1996) revealed that the number of bones of wild animals increased drastically in the later levels. From this evidence it was deduced that environmental degradation led to a change in subsistence strategies from agriculture to hunting in the Late Jorwe period.

At Inamgaon the stone blade/flake industry is substantially represented, occurring at all levels. Considerable progress in ceramic technology is seen. The painted pottery was wheel-made and well-fired. Four pottery kilns have so far come to light through excavations. The Jorwe black-on-red painted pottery is characterised by some forms of which the most important are the spouted jar and the carinated bowl. Other forms include storage jars, basins, cups and an occasional channel spouted bowl. The other important ceramic types are a coarse red/grey ware, a handmade ware, and a handmade red ware, the latter occurring in negligible quantities. Metal technology of the Chalcolithic people was in a rudimentary stage. Lime making was a flourishing industry. Like in other aspects of material culture there was a marked decline in ceramics too in the Late Jorwe period.

A noteworthy feature of the Jorwe culture is the mode of disposal of the dead. A substantial number of burials were exposed in Inamgaon and Daimabad. Many child burials were found in urns laid in pits. In case of adults, the portion below the ankles was chopped off. Among the Inamgaon burials the most important and unique is a four legged urn burial with an adult skeleton inside. Religious beliefs were reconstructed from the presence of terracotta figurines.

By analysing these different aspects of material culture Davalikal talked of a chiefdom society which has been critiqued (Panja, 2002).

The antecedents of this culture are seen in the preceding Malwa cultural elements. A large number of the settlements were deserted at the end of second millennium BC for climatic deterioration.

---

### **3.6 OCHRE COLORED POTTERY (OCP) CULTURE**

---

The OCP or the Ochre Coloured Pottery culture is named after a ceramic type which is extremely rolled and fragile. It has a wash of red ochre which is easily washed off and hence its name. It was first recognised by B.B. Lal in 1951 in a small excavation at Bisauli and Rajpur Parsu, the two sites in Uttar Pradesh where Copper hoards were found earlier. Lal also found similar pottery in his excavations at Hastinapura in the levels below those yielding the Painted Grey ware (PGW). Later exploration and selected excavation brought to light several OCP sites in Rajasthan, Punjab, Haryana and western Uttar Pradesh. At a majority of sites the OCP is found in small bits, but some sites in the upper Ganga-Yamuna doab, namely, Bahadarabad, Manpur, Bhatpura, Ambkheri and Bargaon have yielded larger fragments which have enabled one to study the representative forms. It appears from the better preserved specimens from sites like Ahichchhatra that the pottery was treated with a thick slip and sometimes was also ornamented with painted patterns in black. Incised decorations as well. At Atranjikhhera there is a variety of OCP which is decorated with incised patterns, while Lal Qila has provided evidence of a developed OCP. Jodhpura is the only site where the habitational deposit of the OCP had been found in the form of well made floors, mud huts, hearth, terracotta human male figurines and bull figurines. This shows that the OCP people led a sedentary existence, similar to many early farming communities of this period. Remains of domesticated animals like cattle, and evidence of cultivated crops like rice and barley further provide information on their subsistence practices.

The association of OCP with Copper Hoards found from different parts of northern and eastern India is one of the knottiest problems of Indian archaeology. The Copper Hoards consist of implements of different kinds, such as, celts, rings, harpoons, anthropomorphs, double axes, antennae etc. On the basis of their occurrence at different sites the culture is grouped into different zones. Their origin is shrouded in mystery. The presence of OCP and copper objects together at many sites like Ganeswar, Saipai, Bisauli, Rajpur, Parsu, Bahadarabad, Nasirpur and Baharia has been taken as evidence of their association. There are diametrically opposite views regarding this. Other treat them as two completely separate entities. Some assign the OCP either to pre-Harappans, Harappans, or Late Harappans, while others assign this to the Aryans, still others see a tribal association. The chronological span ranges from 2600 to 900 BC.

Although the picture is still very confusing regarding the origin, development and authorship of copper hoards and OCP and their relationship with other cultures, Dhavalikar tries to suggest a framework for the development of the OCP, on the basis of the available evidence. The beginning of OCP is put down to 2800 BC, the evidence coming from Ganeshwar-Jodhpura in Rajasthan. The presence of hundreds of copper objects here has led Dhavalikar to argue that it was a centre for supplying copper artefacts to the Harappans. A close examination of the OCP from the upper Ganga basin shows that it has striking similarities with the pre-Harappan or Early Harappan artifacts from Indus as well as sites in the Yamuna valley. The second stage in the development of OCP is marked at Alamgirpur where OCP shapes are represented at the cultural levels and at Ambkheri and Bargaon where the Harappan influence is distinctly seen in pottery forms. Dhavalikar explains this as a development of 'symbiotic relationship.' The third stage begins from the beginning of the second millennium, marked by a drastic change in climate with the onset of aridity. The people of this culture were forced to move to the upper Ganga basin, and later to middle Ganga valley under the adverse circumstances. Possibly they buried their copper objects at these sites when they could not survive. In the final stage they reached the middle Ganga valley where they could not survive for long as well. Incidentally, the OCP has not so far been reported from Bihar, Bengal, Orissa and Madhya Pradesh (except at Gungeria) where copper hoards have been found.

---

### **3.7 PAINTED GRAY WARE (PGW) CULTURE**

---

Painted Grey Ware (PGW) is a very fine, smooth, and even-coloured grey pottery, with a thin fabric. It was made out of well-worked, very high quality clay. Designs, mostly simple geometric patterns were painted on the pots in black. The uniform colour and texture of the pots indicates very sophisticated firing techniques. PGW seems to have been a deluxe ware, forming a very small percentage of the total pottery assemblage at the levels at which these were found. It occurs along with other pottery types such as plain grey ware, Black and Red Ware (BRW) and black slipped ware, which were perhaps used in everyday life. The dates of the PGW culture range from 1100-500/400 BCE and the sites show a wide geographical distribution, stretching from the Himalayan foothills to the Malwa plateau in central India, and from the Bahawalpur region of Pakistan to Kaushambi near Allahabad in Uttar Pradesh. Apart from the plains it has been found in the hilly regions of Kumaon and Garhwal. Sporadic potsherds were found at a few places like Vaishali in Bihar, Lakhiyopur in Sind and Ujjain in Madhya Pradesh.

The main concentration of the sites is however, in the Indo-Gangetic divide, Sutlej basin, and upper Ganga plains. There are regional variations of this culture both in the pottery as well in associated remains. In the archaeological sequence of the Ganga valley the PGW phase is followed by the Northern Black Polished Ware (NBPW). PGW was first identified at Ahichchhatra in the 1940's but its full significance was understood only after excavations at Hastinapur in 1954-55. Since then important evidence of the PGW material culture is available from excavated sites like Alamgirpur, Mathura, Bhagwanpura, Kaushambi, Sravasti and others. It occurs in four kinds of stratigraphic contexts. At some sites it is preceded by a late Harappan level, with an intervening break in occupation. At other sites there is an overlap between the PGW and the Late Harappan phase. At some sites it is preceded by the OCP culture, with a break in between. And at other sites the PGW phase is preceded by a BRW phase, with a break in between. At the upper end PGW overlaps with the NBP culture. Recent excavations at Abhaipur, Pilibhit district, Uttar Pradesh, have thrown interesting light on this culture (Mishra 2010). It is a multi-cultural site with OCP forming the earliest deposit, followed by the Black-and-Red Ware (BRW) phase, which is succeeded by the PGW phase, the final phase of occupation at the site being that of NBPW. At Abhaipur, human burials have been found, the first such occurrence at any PGW site. However, human skeletons were also discovered in the Late Harappa-PGW interlocking stage at Bhagwanpura.

Structural remains at PGW levels consist mainly of wattle-and-daub and mud huts. Unbaked bricks and one baked brick were found at Hastinapura. Jakhera represents a fairly-evolved proto-urban stage of this culture.

The PGW sites indicate a subsistence base that included cultivation of rice, wheat and barley. Double cropping was possibly practiced. There is no actual evidence of irrigation facilities, but a few deep circular pits outside the habitation area at Atranjikhera are indicative of *kachcha* wells. Animal husbandry was also practiced.

The association of iron with PGW has drawn the attention of archaeologists for long. There have been a series of debates on the impact of iron technology at the beginnings of urbanism in the Ganga valley known as second urbanization. Regarding PGW phase, it is seen that iron is not associated with this cultural level at all the sites. It is not present at the sites in Ghaggar-Hakra area or in the Bikaner region. At sites like Jakhera and Kaushami iron has been found at pre-PGW BRW levels. But in the Ganga-Yamuna doab the earliest iron objects are usually associated with PGW. Most of the iron artefacts seem to be connected with war or hunting, like arrowheads, spearhead, blades, daggers etc. However, clamps, sockets, rods, rings etc. which could have been connected with carpentry have also been found. The mature PGW phase at Jakhera has also given important evidence of iron implements used in agriculture like a sickle, ploughshare and hoe.

Detailed studies of settlement patterns associated with PGW phase have been carried out. Here one could mention Makkhan Lal's study of the Kanpur district and Erdosy's study of the PGW settlements in Allahabad district.

---

## 3.8 SUMMARY

---

To sum up, the scenario in north, west and central India in the period spanning from beginning of the 3<sup>rd</sup> millennium – 800 BCE speaks of a great deal of diversity. At many times it is difficult to put the material assemblage in neatly defined categories. A lot of overlapping of cultural traditions is noticed which speaks of considerable vibrancy and mobility in the cultural landscape. The regional diversity is all the more highlighted when one surveys chalcolithic cultures in northern and eastern India, which however, fall outside the purview of this unit.

### Suggested Reading

Dhavalikar, M.K. 1997. *Indian Protohistory*. New Delhi: Books and Books.

Dhavalikar, M.K., H.D. Sankalia and Z.D. Ansari. 1988. *Excavations at Inamgaon* Vol. I, part i & ii. Pune: Deccan College.

Mishra, A. 2010. *Archaeological Investigations in Deoha River Valley with Special Reference to Excavations at Abhaipur, District Pilibhit, Uttar Pradesh in Archaeology of the Ganga Basin Paradigm Shift*. Volume I (V.Tripathi ed.), pp. 237-257. Delhi: Sharada Publishing House.

Misra, V.D. 2002. *A Review of Copper Hoards and the OCP Culture in Indian Archaeology in Retrospect*. Volume I, Prehistory: Archaeology of South Asia (S.Settar and R.Korisettar eds.), pp. 277-286. New Delhi: Indian Council of Historical research and Manohar.

Panja, S. *Research on the Deccan Chalcolithic in Indian Archaeology in Retrospect: Volume I, Prehistory: Archaeology of South Asia* (S.Settar and R.Korisettar eds.), pp. 263-276. New Delhi: Indian Council of Historical research and Manohar.

Pawankar, S., 1995. *Man and Animal Relationship in Early farming Communities of Western India with Special Reference to Inamgaon*. Ph.D. Dissertation. Pune. University of Poona.

Singh, U. 2008. *A History of Ancient and Early Medieval India: From the Stone Age to the 12<sup>th</sup> Century*. Delhi: Pearson Longman.

### Sample Questions

- 1) Discuss the different types of Protohistoric regional variants.
- 2) What do you understand by Chalcolithic culture? Describe one very important Chalcolithic culture.

Write a notes on the following

- i) Jorwe Culture, ii) Malwa Culture, iii) Kayatha culture, iv) OCP and PGW Cultures

---

# UNIT 4 MEGALITHIC CULTURES

---

## Contents

- 4.1 Introduction
  - 4.2 Types of Megaliths
  - 4.3 Megalithic Culture of India
    - 4.3.1 Burial Rituals and Social Organisation
    - 4.3.2 Ethnic Affinity and Origin
    - 4.3.3 Chronology
  - 4.4 Erection of Megaliths by Some Indian Tribes
  - 4.5 Iron Age Culture in India
    - 4.5.1 Gangetic Valley
    - 4.5.2 Painted Grey Ware Culture
    - 4.5.3 Northern Black Polished Ware Culture and the Second Urbanization
    - 4.5.4 Southern Zone
  - 4.6 Summary
- Suggested Reading
- Sample Questions

## Learning Objectives



Once you have studied this unit, you should be able:

- to study the Megalithic Culture of India;
- to study the Megalithic types;
- to understand the development of Megalithic culture keeping in view the regional variations;
- to briefly outline the main problems of the Megalithic Culture in India;
- to study the Megalithic practices among Indian Tribes; and
- to study the Iron Age Culture of India.

---

## 4.1 INTRODUCTION

---

A megalith is a stone which is larger in size and has been used to construct a monument or a structure. The monument or the structure has been constructed either alone or together with other stones. Megalithic has been used to describe buildings built by people living in many different periods from many parts of the world. The construction of this type of structures took place mainly in the Neolithic and continued into the Chalcolithic Age, Bronze Age and Iron Age.

---

## 4.2 TYPES OF MEGALITHS

---

There are large numbers of megaliths found all over world but we may group the similar types together. The types of megalithic structures can be divided into two categories, the “*Polyolithic type*” and the “*Monolithic type*”. In polyolithic type

more than one stone is used to make the megalithic structure. In monolithic type the structure consists of a single stone. Following are the different megalithic structures.

### **Polyolithic types**

**Dolmen:** This is a type of megalith which is made in single chamber tomb, usually consisting of three or more upright stones supporting a large flat horizontal capstone. Dolmens were usually covered with earth or smaller stones to form a barrow. But in many cases that covering has weathered away, leaving only the stone “skeleton” of the burial mound intact.

**Cairn:** A Cairn is a human-made pile of stones, often in conical form. They are usually found in uplands, on moorland, on mountaintops, or near waterways. In modern times Cairns are often erected as landmarks. In ancient times they were erected as sepulchral monuments or used for practical and astronomical purposes. These vary from loose, small piles of stones to elaborate feats of engineering.

**Cromlekh:** Cromlekh is a British word used to describe prehistoric megalithic structures, where *crom* means “bent” and *llech* means “flagstone”. The term is now virtually obsolete in archaeology, but remains in use as a colloquial term for two different types of megalithic monument.

**Cist:** A cist or kist was used as encasements for dead bodies. It might have associations with other monuments. It would not be uncommon to find several cists close with each other in the cairn or barrow. The presence of ornaments within an excavated cist, indicate the wealth or prominence of the interred individual.



**Fig.4.1: Cist excavated by Sir Mortimer Wheeler at Brahmagiri**

### **Monolithic type**

**Menhir:** A Menhir is a stone Monolithic standing vertically. It could also exist as part of a group of similar stones. They have different sizes with uneven and square shapes, often tapering towards the top. Menhirs are widely distributed across different continents viz., Europe, Africa, and Asia, but are most commonly found in Western Europe; in particular in Ireland, Great Britain and Brittany. Their origin dates back to pre-history. They are members of a larger Megalithic culture that flourished in Europe and beyond.

**Stone Circle:** A Stone Circle is a monument of standing stones arranged in a circle usually dated to megalithic period. The arrangement of the stones may be

in a circle, in the form of an ellipse, or more rarely a setting of four stones laid on an arc of a circle. The type varies from region to region.

### 4.3 MEGALITHIC CULTURE OF INDIA

In 1872, Fergusson brought out his excellent work entitled “Rude Stone Monuments in all Countries: their age and uses. This first attracted the attention of scholars. Although Babington (1823) had published his book, “Descriptions of the Pandoo Coolies in Malawar” and Meadows Tylor (1873) was writing about his observations pertaining to the “Distribution of Cairns, Cromlechs, Kistveans and other Celtic, Druidical or Scythian monuments in the Dekhan”. Fergusson’s work on Megaliths may still be regarded as a landmark because of its wide scope and integrated approach.

In 1873, Breeks tried to correlate Megalithic practices with some of the customs and rituals practiced by the tribals still living in the region of the Nilgiri Hills of Tamil Nadu. All earlier authors showed a strong bias towards tracing the ancestry of the Megalithic builders to the Celts, Druids or Scythians. Breeks, at least, was the first to show that local megalithic bias had survived in the Nilgiris.

As with the descriptive accounts, the first excavation of Megalithic monuments also took place more than a century ago. In the last quarter of the 19<sup>th</sup> century, Dr. Jagor first excavated in the classic site of Adicanallur in the Tirunelveli district, Tamil Nadu. The extensive site of Junapani, near Nagpur in Maharashtra was also excavated on a small scale by Rivett-Carnac (1879). Simultaneously, extensive exploration in the Madras region continued, resulting in the publication of the list of antiquarian remains in the Presidency of Madras by Sewell in 1882. At the turn of the century, Foote (1901) brought out an excellent Catalogue of antiquities, including megaliths.

In the later years of the 19<sup>th</sup> century, Alexander Rea (1902-03) excavated a number of megalithic sites in South India. The classic site of Adichanallur was also re-excavated in 1903-04 by Louis Lapicque. The remarkable variety and distinctive natures of the Indian Megalithic cultures were then placed before the world by Rea in 1915, when he published the Catalogue of the Prehistoric antiquities from Adichanallur and Perumbair. A decade later, Hunt (1924) published the result of the excavation of Megalithic graves in Andhra Pradesh.

By the end of the first quarter of the 20<sup>th</sup> century, a number of Megalithic sites had been excavated. However, the first attempt to place the South Indian Megaliths in a chronological framework was by Sir Mortimer Wheeler (1948), who excavated the sites of Brahmagiri and Chandravalli in Karnataka in 1944.

In 1962, it appeared that the megaliths, that is, huge stone monuments, were a special feature of South India. Preliminary classification had shown regional types. Wheeler’s excavation at Brahmagiri showed that these were not as old as once believed. This was confirmed by subsequent excavations at Sanur, Maski and other places. While studying the Karnataka megalithic monuments A. Sundara (1975) concluded that “the varied tomb types in different geological zones are essentially due to the traditional affiliations rather than environmental influence.” The megalithic builders at Hallur and further south at Paiyampalli, were not

only adept at quarrying all kinds of stones, but they made a judicious use of these rocks. They employed a particular stone for a particular part of the tomb. Again, these people were excellent architects-engineers. The best example is the constructional plan of the passage chamber. Though we still do not know about the houses and habitations of these megalithic builders, the recovery of sickles and plough coulters of iron, rice and *rugi* grains from the excavations at Kunnattur and Hallur respectively, shows that these people were probably dependent largely upon agriculture and partly upon hunting, as proved by the hunting scenes in the rock-paintings at Hire-Benkhal. Animals such as cow/ox, goat/sheep, dogs and horses were domesticated.

So far no evidence of literacy in the form of writing of any kind has been found from the megaliths in Karnataka. Finally, on the question of the identity of the megalithic builders, Sundara (1975) has shown how there was mutual borrowing between the Neolithic-Chalcolithic inhabitants of Karnataka and the megalithic-builders who arrived about 800-700 BC. As Kennedy has said, it is difficult to say anything about the racial types from the study of the extant skeletal remains. Hence, the only thing left to a culture-historian is cultural relics. Amongst these, the only significant thing was the post-holed cist. In this regard Sundara again is of the opinion that all the megalith-chamber types of tombs of North Karnataka or South India, are the passage chamber type that has fundamental resemblances with those of the Mediterranean and Western European megaliths. He further thinks that the South Indian megaliths were derived from the Mediterranean region via the coastal route.

Some idea of the megalithic in Coorg can be had from the work of K. K. Subbayya. Excavation of four sites at Heggadehalli revealed some new types of burials, which seem to be unique. Instead of the stone sides containing a simple pit or underground cist of stone slabs, at this place, the sides contained a pit and at the base of the pit were laid a granitic slab over which the funerary offerings were deposited. The pit was then filled with soft earth. On this lay the large capstone. Another megalith contained only a pit without a stone slab at the base, whereas in the third one was a cairn side, under which was a stone chamber of large granitic slabs, inordinately large in dimension. It also contained an underground passage to the east outside the cist.

Except pottery, nothing else was found from the chambers. This is of the usual kind, black-and-red ware and included bowls, tall three-legged vases and conical vessels. Up till now, any kind of weapons have not been found at these sites. However, the differences in the method of making these three megaliths might indicate a kind of economic and social status their builders enjoyed in their society.

An extension of the South Indian Megaliths to Vidarbha has come to light by the excavation at Junapani and subsequent full-fledged excavations at Khapa and Muhurjhari. The excavations at Khapa and Mahurjhari and another site at Naikund have supported that the megaliths belonged to a particular section of the community or people in each region. The evidence from Vidarbha and Tamil nadu, particularly horse bits and several types of iron weapons suggest that these sepulchral monuments might only belong to a warrior class.

At Khapa, situated on the left bank of the river Krishna there are a number of megaliths in the form of stone circles, whereas on the opposite side at Takelghat there is a habitation site. Both were dug in 1968-69 by Nagpur University. Out

of the nine megaliths, Megalith-1 which was the largest of all having a diameter about 25-26 metres, yielded interesting evidence like pots and pans of black-and-red ware, micaceous red ware, and coarse red ware, utensils and weapons of iron and copper, copper bangles and beads of carnelian and bones, possibly of the horse. Among the other interesting objects must be mentioned the copper dish and a copper lid each with a bird motifs, the copper bell and a chain of copper rings. The excavation of the habitation site on the opposite side at Takalghat gave some idea of the houses these people lived in. The floors are well made with rammed brown clay, and coated with lime, whereas the walls are made of mud, with supports of wood/bamboo posts for roof. This, at present on the evidence of C-14 date from Takalghat, is placed around 556 B.C. Takalghat megalithic culture is believed to be similar to that of Hallur in Karnataka.

Compared to Khapa, Mahurjhari from Nagpur is considered as a megalithic haven. With Junapani, it is said to have more than 300 stone circles. Altogether three localities have been identified at Mahurjhari.

In Locality-I, megaliths yielded iron axes, daggers, copper bowls, bells, bangles, numerous beads of semi-precious stones, black-and-red pottery and gold leaves.

In Locality-II, the megaliths yielded several copper bangles, iron axes, chisels, gold spiral, iron nails etc. This locality seems to be more important because a human skeleton found associated with large number of objects and painted black-and-red potsherds, which were placed near the various parts of the interred body. The other antiquities recorded from the site are gold ornaments with punched decoration, and pottery lids with the goat and bird motifs, in addition to the usual iron and copper objects.

In Locality-III, megaliths yielded full length human skeletons with iron and copper objects, including those for the horse. Gold ornaments and painted pottery belonged to a family or persons who were rich and important- probably warriors of a high status. The pottery particularly the painted black-and-red ware is said to be similar to those found at Takalghat and Khapa.

The megalithic monuments found in Pune district might be just memorial structure. Megalithic monuments had already been reported near Pune in the last century. They, when re-examined in 1940-41, turned out to be memorials to the dead, but not funerary in nature and devoid of any pottery and dateable objects.

A new dimension to the megalithic problem in India was revealed with the discovery of megaliths in the districts of Banda, Allahabad, Mizapur and Varanasi located in south-eastern Uttar Pradesh. The monuments called as cairns and cists are comparatively sparsely distributed near the junction of the northeast slope of the Vindhya, and in the Ganga plains. The east-west dimension of this region is about 320 km. There are differences in the materials used for constructing the structures. This is obviously due to vast extent of territory in which the megaliths are distributed. It has been found at all excavated sites at Varanasi, Allahabad, Mirzapur and Banda, that their makers dug fairly deep pits, deposited the funerary goods and covered them with hemispherical cairns of boulders bounded by stone circle. The funerary goods, though varying in other essentials, had a black-and-red ware. In case of a cist, a similar pit was dug and a box-like chamber was prepared with orthostats. The box was packed with small stones, and covered with massive single stone slab resting directly on the four uprights.

Interestingly, unlike in the south, the Allahabad megaliths reflect the cultural change. The basic types- cairns, stone circles and cists-remain the same, but the grave goods consist, instead of microliths, iron objects like sickle, adze, arrow-head and dagger. There was a significant variation in the livelihood pattern between the two zones. Iron had replaced stone and copper and, as the evidence from Kotia in Allahabad shows, these were made local iron smiths.

On the opposite bank of the River Belan at Koldihwa and Khajuri megaliths belonging to chalcolithic cultures were found, lying between cultures of Varanasi and Kotla of Allahabad. In the former iron is absent, and microliths are scarce while in the latter fragments of iron are associated with microliths. These types of megalithic cultures have also been observed in Mirzapur and Banda districts.

It is interesting to note that in spite of the local variations, the inhabitants used, right from the beginning up to the end, a Black-and Red Ware. For nearly 1500 years the technique of making of pottery, its decoration and firing did not change and the way of life of the people remained the same.

Megaliths have also been discovered at Waztal, about 12 kms from the Matau Spring, and Brah, about 9 kms from Martand in Kashmir. At both the sites a number of huge standing stones were found. But these are scattered around without any regular plan.

Habitation sites are rarely found in association with the megaliths, excepting at Maski, Tekalghat, Paiyampalli and a few others. Recently, a large habitation site along with scores of stone circles has been discovered at Naikund near Nagpur in Maharashtra. However, the ratio of habitation sites to burial sites still remains exceptionally low. This poses problems for the study of settlement patterns, and it is high time that excavation of the few habitation sites are undertaken on a priority basis, before the megaliths are blasted by local bodies for road building. Despite the fact that as early as 1960 an International Commission for the study of megaliths was instituted by the Second International Congress of Archaeo-Civilisation, no planned and conscious efforts have been made in India towards understanding of the settlement patterns of the megalithic people. Further studies must also be undertaken to define the main regional complexes of the Indian Megalithic cultures. The above descriptions are of the South Indian, Northern and Northwestern Megalithic cultures. It is obvious that these complexes are not exclusive of each other. Some common elements can be traced among the cultures. Similarities and dissimilarities of ceramic fabrics and typology, presence and absence of iron, and concentration or otherwise of certain megalithic types in certain regions are all problems for which widely diverging views are available. They can be solved only if planned work is carried out, and it is futile and dangerous to generalise on the basis of sporadic and meagre data.

#### **4.3.1 Burial Rituals and Social Organisation**

The above description of the megalithic culture shows that the megalithic communities were dominated by religious and supernatural beliefs. This is evident from the elaborate objects associated with the burials. Different burial tradition could indicate different social and ethnic groups, but so far no fixed regional conventions regarding orientation of the bodies or the graves have been observed. The burials vary from total to only fractional types. In the Vidarbha region horses were buried with the dead, possibly after sacrifice, and this may have been a local ethnic tradition.

The social organisation of the Megalithic people of India can be worked out only in a sketchy manner, and data on settlement pattern are virtually absent. However, it appears that communities may have comprised different professional groups, such as smiths, warriors, goldsmiths, agriculturists and carpenters. This may be deduced from the types of grave goods offered. Even burial must have involved community effort because setting of such huge stones in a Circle or erection of a gigantic Menhirs, or the placing of massive stone slabs on a Dolmen is not possible by one or two individuals.

### 4.3.2 Ethnic Affinity and Origin

The origin of Megalithic culture in India is not clear. No satisfactory answer is yet found. Some early European scholars put forward a view that the builders were Celts or Scythians. Rivett-Carnac related them to Central Asian tribes. Other scholars tried to relate them to the Dravidians. Practice of erection of megaliths are still found among some tribes in India in the southern, central, eastern and northeastern parts of the country.

The skeletal remains found especially from Brahmagiri, Yeleswaram and Adichanallar show that people were of a mixed racial type. According to Sarkar (1960), the Brahmagiri skeletal remains were probably of Scythians or Iranian stock. Gupta and Dutta (1962) concluded that similar trend is noticed for Yeleswaram remains but Adichanallur skull, however, show different affinities.

### 4.3.3 Chronology

Apart from the ethnic affinities and possible migration, the chronology of megaliths in India still poses certain problems. Wheeler (1948) assigned a date for the megalithic culture approximately to the 2<sup>nd</sup> Century B.C. Gordon and Haimendorf (as quoted by Srinivasan and Benerjee 1953:114) proposed dates between c. 700 to 400 B.C. Seshadri (1956) dated them between 6<sup>th</sup> century B.C. to 1st century A.D. Sundara (1969-70) proposed a date at c. 1100 B.C. for Terdal in Karnataka. Sundara and Aiyappan (1945) extended antiquity of the megaliths as far back as the Indian Neolithic times. The Chalcolithic-megalithic contact period in Maharashtra goes back to c. 700 B.C. Megaliths of Vidarbha is dated to the 6<sup>th</sup> or 7<sup>th</sup> centuries B.C. While the question of date of the megaliths cannot be easily settled, well-organised attempt be made to understand the political, social and economic background of the megalith-builders, be it in Vidarbha, Andhra, Karnataka or in Tamilnadu. It seems almost certain that no ordinary family or individual could erect such huge megaliths. Community effort and activity must have been involved in the erection of such huge structures. Such community involvement is noticed among the tribes of the present-day who are still practicing erection of megaliths.

---

## 4.4 ERECTION OF MEGALITHS BY SOME INDIAN TRIBES

---

The custom of erecting megaliths on a large scale is seen among different communities from the Neolithic times right up to the Bronze Age and the Early Historic period. However, the tradition of erecting megaliths is still found among the tribals living in Northeastern, Eastern, Central and South India. The reasons behind the erection of megaliths are not very clear. In this situation, we can

derive some clues on the megaliths' associations by observing the practices of the tribes who still include megaliths in their religious beliefs, for example, the Gadabas, Gonds, Kurumbas, Marias, Mundas, Savaras, Garos, Khasis, Nagas, Karbis, Tiwas, and Marams. These groups still construct megalithic manuments for the dead. 'Megalithism' may be considered as a living tradition.

The Gonds, Kurumbas, Morias and Savaras plant and worship stone menhirs and sometimes erect wooden pillars. Some of these wooden pillars are curved with a rounded projection at the top to represents the human head. These tribes consider the stone menhirs and the wooden posts to represents their gods, or occasionally, the spirit of the dead. The beliefs of the various tribes differ with respect to the stone and wooden menhirs erceted in connection with the death rites. The Gonds believe that the spirit of the dead resides in a stone. Thus the wooden pillars and stone menhirs are believed to contain the soul of the dead.

The veneration of the wooden and stone pillars is evident in the practices of the Morias who apply turmeric and oil on them. They sacrifice a buffalo and offer rice and worship these stones in the belief that the spirit of the dead resides in them. The Savaras, before sowing, present the seeds in front of the pillars and sacrifice animals to promote the fertility of the seeds. Similarly, the Kurumbas approach the megalithic monuments of their ancestors whom they implore to help them tide over their difficulties. The Gonds mention three reasons for erecting pillars and dolmens: "first, the spirit of the dead not to wander after death; second, they must not worry or harm the descendants; third, they must help by bringing rain and driving away the harmful spirits".

The practices of the tribal people mentioned above indicate their belief that the spirit of the dead resides in the stone or wooden pillars, which they erect. These pillars are venerated and worshipped with various offerings. If the spirits are satisfied they can grant boons and on the other hand they can cause harm, if they are not satisfied (Rao, 2000).

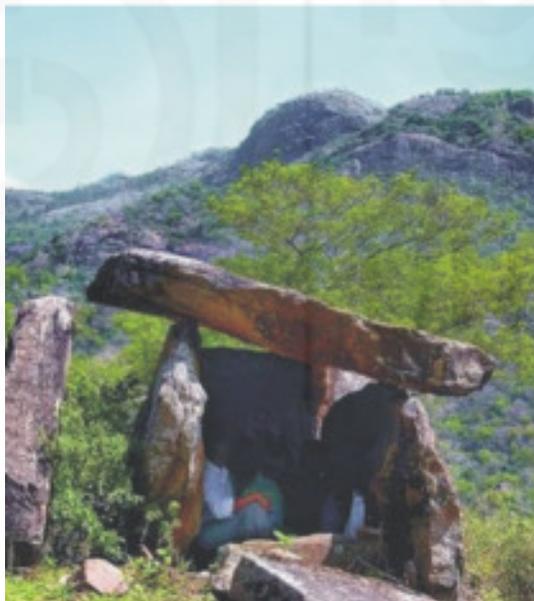
At Mottur in Tamilnadu, a 'headless' anthropomorphic statue was noticed in the middle of a megalithic site. The local people call the megalith *Valiyar Vadu* (house of Valiyar) and the anthropomophic statue *Valiyar Daivam* (god of the Valiyars). There is a very interesting tradition about the *Valiyar* current in this locality. According to the tradition, the Valiyars were pygmies of 10 to 15 cm in stature. They used to plough the fields with the help of rabbits. On one occasion they came to know that there would be rain of fire. If they stayed there they would be perished. To escape the fate of burning to death, they decided to leave the place, and requested their god to accompany them. When their god refused to come along, they cut off his head and took it with them. For this reason the statue stands headless. This tradition suggests that some communities consider the megalithic, anthropomorphic statue to represent their god.

The Savaras of Orissa construct a miniature hut over the place where the dead are cremated or the bones are buried. They keep wooden figures in the huts to accommodate the soul of the dead till the mortuary rite known as Gaur ceremony is performed. Interestingly, figures with female features are used, if the 'soul house' is meant for women. During the elaborate Gaur ceremony, which is conducted by the whole community of a particular village or a group of villages, menhirs are erected to represent the dead, who are believed to have reached the

‘Under World’. That is why during the Gaur ceremony “the stones are washed with water-so that the dead can get bath in the Under World-and oil and turmeric are used so that they can anoint themselves and do their hair. For whatever is given at the Gaur goes straight down to the Under World” (Elwin 1955:360).

The above mentioned practices and beliefs of the tribal communities indicate that wooden and stone statues are mainly meant to represent their ancestors. At Mottur alone, the local people believe that the anthropomorphic statues represent the god of the ancestors. Further, where statues with feminine features are erected they would represent a female member who has passed away.

The erection of megaliths, both commemorative and burial, though is prehistoric in origin, are still practised by many hill tribes of Northeast India and in the Southeast Asian countries like Myanmar (Burma), Indonesia and Thailand. The custom of erecting menhirs or alignments of stone slabs and dolmen in honour of the dead is practised by the Khasis and Garos of Meghalaya, the Tiwas and the Karbis of Assam, the Morams of Manipur and the Nagas of Nagaland. There is another interesting example of megalithic tradition found among the Garos of Meghalaya. They erect a forked wooden curved post of ‘Y’ shape in front of their houses in mamory of the dead member (s) as in Indonesia and Oceania. People erect the ‘Y’ shaped forked wooden post with the belief that they will be protected from the dangers of life, the fertility of the family will increase, they will escape god’s punishment and so on.



**Fig. 4.2: Dolmen**

The Khasis of Meghalaya, who are matrilineal tribes, erect Megalithic structure in accordance with their traditional religion. Upright stones (Menhir), large and small, horizontal table stones (dolmen or cromlech), cist and cairns are seen all over the Khasi Hills but full and precise information about them have never been recorded and is hard to obtain. The Khasi megaliths are memorial stones, called ‘Kynmaw’, literally meaning “to mark with a stone”. In Khasi language it refers to “remember”. The Khasi megaliths are cenotaphs, the remains of the dead being carefully preserved in stone sepulchers, which are often at some distance apart from the memorial stones.



**Fig. 4.3: Menhir of the Khasis of Meghalaya**

Though there are some observable similarities between the megaliths of the past and those of the living tribes, yet it is very difficult to bridge the gap between the past and the present continuum of the traditions. It is well known that the structures built by the contemporary tribal folk are generally linked with the commemorative purpose, whereas those of the past are mostly graves. The porthole opening, a special feature of many of the megalithic cists, is not found in any of the megalithic graves made by the contemporary tribes. It is possible that the people have given up the tradition of making portholes in course of time.

Although all megaliths found all over the world are associated in one way or another with the cult of dead it does not provide sufficient ground to establish a common origin for any two megalithic cultures.

The memorial stones of the Ho and Munda of Chhotanagpur would appear to resemble greatly the Khasi Menhirs. The funeral ceremonies of the Ho and Munda tribe are similar to those of Khasi. Both first cremate the body, collect ashes and bones after cremation and put them in to a grave. They also offer food to the spirit of the deceased. They also have a common linguistic resource in the form of 'Mon-Khmer Family'.

There are other tribes in Northeast India, who erect memorial stones. They are, Karbis and the Tiwas of Assam and certain Naga tribes of Manipur and Nagaland. The Karbis erect Menhirs and Dolmens in honour of their deceased similar to the Khasis of Meghalaya. Similar to Khasis, the Karbis dig a small tank for purification purpose before erecting the memorial stones and give feast after the memorial stones are erected. Anal Nagas and Morams of Manipur and Angami Nagas, Lothas and Konyak Nagas of Nagaland erect memorial stones to show reverence to the memories of deceased ancestors. The Anal Nagas traditionally believed to occupy a site of an ancient market place known as Nortiang (some 26 km Northeast of Shillong), which is an important megalithic site of Meghalaya. In the stone monuments of the Anal Nagas and Angami Nagas, the female principle is represented by a flat stone, lying on the ground, while the male is represented

by an upright stone (menhir). These typical clan mortuaries are same like those still associated with the Khasis and Syntengs of Meghalaya. Haimendorf (1945) was of the opinion that the ritual associated with megaliths of Northeast India is to gain prestige for the living and to establish links with the soul of the dead. This also is at the root of the megalithic cultures of Indonesia. On the basis of this, he suggested a unity in the megalithic complex in the zone extending from the Nagaland and Khasi Hills up to Nias in Southern Sumatra. He further expressed that the Meghalaya complex found in Northeast India and many other parts of Southeast Asia appeared not as an accidental aggregation of various cultural elements, but as a well coordinate system of custom and beliefs, a philosophy of life and nature.

---

## 4.5 IRON AGE CULTURE IN INDIA

---

We study the Iron Age culture here because Megalithic culture is very much a part of Iron Age. The Iron Age in the Indian subcontinent succeeded the Late Harappan culture. The main divisions of Iron Age in India are the Painted Grey Ware (PGW) culture (1100 to 350 BC) and the Northern Black Polished Ware (NBPW) culture (700 to 200 BC). Iron Age in India brings one to the threshold of ancient history. This culture had recorded history. Literary accounts of the contemporary period are recorded in Vedas, Upanishads and other Brahmanic literatures. A combination of archaeological evidences and such literary accounts have become a standard method of dealing with Iron Age culture in India. The origin of iron in our sub-continent still remains a matter of dispute among specialists. It is important also to remember that some tribes of India, such as, Agarias of Madhya Pradesh, prepare iron tools from surface ores with indigenous techniques and trade their finished products among the local villagers. It can be assumed that these communities must have had their knowledge for a time, may be for several thousand years.

The earliest Iron Age sites in South India are Hallur, Karnataka and Adichanallur of Tirunelveli district, Tamil Nadu at around 1000 BC. Technical studies on materials dated c. 1000 BC at Komaranhalli (Karnataka) showed that the smiths of this site could deal with large artifacts, implying that they had already been experimenting for centuries (Agrawal et al. 1985: 228-29). Sahi (1979: 366) drew attention to the presence of iron in Chalcolithic deposits at Ahar, and suggested that “the date of the beginning of iron smelting in India may well be placed as early as the sixteenth century BC” and “by about the early decade of thirteenth century BC iron smelting was definitely known in India on a bigger scale”.

Historical kingdoms of the Iron Age:

Iron Age India	1200-272 BC
Maha Janapadas	700-300 BC
Magadha Empire	648-424 BC
Nanda Empire	424-321 BC
Maurya Empire (Pre-Ashoka)	321-272 BC

With the exception of the earliest phase of the Rigveda, most of the Vedic period, falls within the early part of the Indian Iron Age around 12th to 6th centuries BC. The development of early Buddhism takes place in the Magadha period around 5<sup>th</sup> to 4<sup>th</sup> centuries BC.

The edicts of Ashoka, 272-232 BC suggest that the North Indian Iron Age can be taken to end with the rise of the Maurya Dynasty and the appearance of literacy, indicating gradual onset of historicity. South India simultaneously enters historic age with the Sangam period, beginning in the 3rd century BC. From the 2nd century BC, the cultural landscape of Northern India is transformed with lasting effect with the intrusion of the Indo-Scythians and Indo-Greeks. The kingdoms succeeding these periods, up to the medieval Muslim conquests are conventionally grouped as Middle kingdoms of India.

### 4.5.1 Gangetic Valley

The colonization of Ganga basin by iron users can be taken as one of the best evidence of second urbanization in India. Urban centres, which mushroomed around Indus, Ghaggar and its tributaries during 2600 BC to 1500BC were generally deserted after this time. Understanding of the second colonization in this region needs a consideration of the changes that can be witnessed further west. In Baluchistan, the earliest evidence of copper has been noted at Mehargarh. The occupation at this area was abandoned even before the development of mature Harappan culture but around the same region one can witness the transition of the post Harappan phase at Pirak. Initially Harappan influence can be demonstrated in this occupation centre but very soon and perhaps around 1370-1340 BC first pieces of iron appeared here. The cultural continuity from pre-iron phase is so remarkable that an invasion by iron users as a possibility also can't be entertained. Here the houses are prepared of mud bricks like the pre- Harappan stage. The pottery is coarse with appliqué bands and finger tips impressions. Terracotta figurines become more in frequency of occurrence than the preceding period and they include horse, camel and human figures. The most important feature of this phase is barley and rice cultivation in this zone. Evidence of full-fledged adoption of iron, however, is not seen until another 2 to 3 centuries. Iron Age in the west of the Indus broadly belongs to the time bracket of 1100-900 BC. In the northwest another culture developed. This culture is known from the Gandhara sites. There are large complexes of graves and the culture is entirely known and defined from the accompanying grave goods. Taxila, Charsada and Timargarha are some of the important sites from this complex. The pottery is a red burnished type. City structures in this region are not identified till about 500 BC. Similar to Pirak in south west, in Gandhara iron emerged without any change in the earlier culture in the area. Furthermore these pre-existing cultures are unique in character and does not bear any resemblance to the widely distributed Harappan features.

### 4.5.2 Painted Grey Ware Culture

You have already read about this culture in another Unit in connection with chalcolithic phase. This cultural phase is interesting because it has the use of tools made both from stone and metal. Early phases of this culture are associated with copper and bronze. The phase, which corresponds with Northern Black Polished ware phase in Ganga valley, has yielded iron tools but stone tools also continued. The Painted Grey Ware culture (PGW) is an Iron Age culture of

Gangetic plain, lasting from roughly 1000 BC to 600 BC. It is contemporary to, and is a successor of the Black and red ware culture. It probably corresponds to the later Vedic period. It is succeeded by Northern Black Polished Ware from ca. 500 BC.

Although you are already familiar with the PGW culture, a few words may be added here to establish its relevance in the Iron Age cultures of India. PGW culture is named after the pottery of the same name. This ware was first found at Ahicchatra in Bareilly district of Uttar Pradesh during excavations in 1944 but its importance was fully realised only after its discovery by B.B.Lal in the excavations at Hastinapura during 1950-51.

The first large-scale and effective use of iron in India is associated with this culture. The PGW culture is found in the Indo-Gangetic Divide and the upper Ganga-Yamuna doab, the ancient Aryavarta and Madhyadesa.

The PGW was produced from well-lavigated clay and manufactured on a fast wheel. A thin slip was applied on both surfaces and the ware was baked at a temperature of 600 degree celcius under reducing conditions, which produced the smooth ashy surface and core (Hegde, 1975). The distinctive shapes are dish with curved sides and bowls with straight sides. The vessels are painted in black pigment on both surfaces with geometric patterns like dots, groups of vertical lines, concentric circles, bands, and strokes of vertical and slanting lines, dashes, chains, loops, spirals, sigmas and swastikas. Naturalistic patterns like lotuses, leaves, bunch of flowers and the sun are also occasionally found. The PGW people cultivated rice and wheat and lived in wattle-and-daub houses. They were the first people to have definitely used the domesticated horse.

### 4.5.3 Northern Black Polished Ware Culture and the Second Urbanization

The Northern Black Polish Ware (NBPW) Culture in India is a definite Iron Age Culture, succeeding the Painted Grey Ware Culture. Iron technology accelerated colonization of the middle and lower Ganga valley by farmers around 700 BC onwards. The characteristic pottery of this period is Northern Black Polished Ware. The NBP period saw the emergence of cities and first political entities known as *Mahajanapadas* in the Ganga plains in the 600 BC.

The NBP region is also the locale of the second major Hindu epic, the Ramayana, and of the rise of Buddhism and Jainism. This period witnessed the second urbanization of India. By 600 BC a number of these Mahajanapadas had been assimilated into the first Indian empire known as the Magadhan Empire with its capital at Pataliputra being located at the place where modern Patna in Bihar is situated. The Magadhan Empire was succeeded by the Mauryan Empire in the 400 BC. The best known Mauryan emperor, Ashoka, expanded the empire up to Karnataka in the south, Bangladesh in the east and Afganistan in the northwest. He also patronized Buddhism and promoted its spread within the country as well as outside in Sri Lanka and other countries of Asia. After the long gap between first and second urbanization, lasting about 1500 years, writing again appeared during this period. The script is known as *Brahmi*. Buddhist and Jains literatures were in *Pali* language. The pillar and rock edicts of emperor Ashoka were written in *Brahmi* script. Coinage in the form of silver punch-marked coins appeared in this period.

#### 4.5.4 Southern Zone

This is the area, which developed a fairly consolidated regional character during 1500-1300 BC. Iron Age in this area does not develop any special characteristic of its own like what has been observed in Western Uttar Pradesh.

The Iron Age in South India till today is known entirely from a large variety of burials and their accompanying grave goods. Since these graves are mostly megalithic in nature the cultures are traditionally known as 'Megalithic Culture'. Further, the 'Megaliths of India' may also refer to the memorial and sepulchral stones erected by the tribals living in various parts of India in the historic period.

You have already learnt about megalithic types. Following is the brief information on Iron Age Megalithic types of South India. The Megalithic burials found so far with iron were from South India particularly from Deccan. They can be grouped as follows:

- Large urns with bones collected from previously excarnated dead bodies in them. These urns are kept with grave goods in a pit. The pit after covering can be marked by a circular demarcation made of stones.
- Cists made out of slabs of stones and may at times be covered with a similar flat stone on top. These are sometimes with portholes curved out on one of the chamber wall slabs.
- Legged-urn or sarcophagi used to encase the body before actual burial is another important pattern of these Megaliths.
- Sometimes chambers have been cut out in the compact lateritic floor and the body was placed inside the chamber.

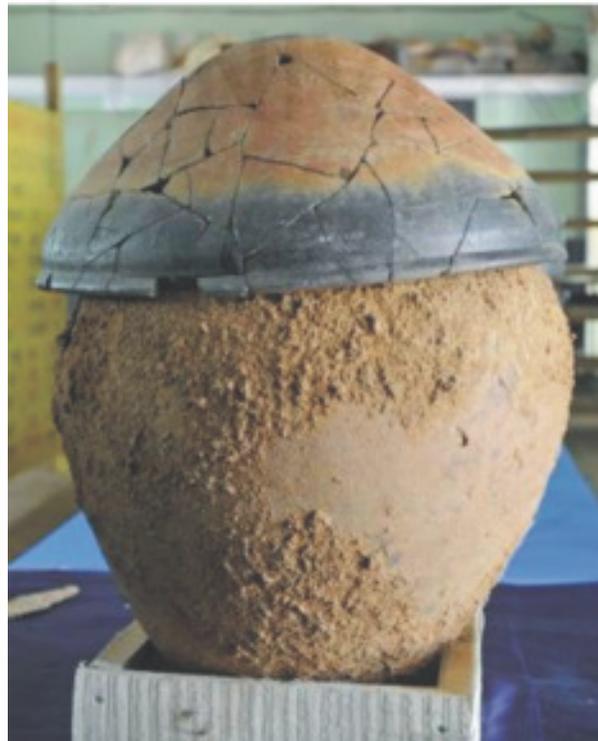


Fig.4.4: Urn burial (Museum specimen in Southern India)

Large numbers of variations are seen in the pattern of disposal of the dead in the region. The Megalithic arrangement on the ground to mark the grave also can vary from one kind of burial system to the other. In all Iron Age sites of Deccan India Black-and-Red ware is seen as the common feature of Iron Age and Megalithic culture. The pottery types include carinated vessels, bowls with pedestals and spouted dishes. A conical shaped lid is found often provided with a loop on the top. The iron implements which are common to all megalithic sites are flat axes with crossed straps, sickles, tripods, tridents, spear heads, lamps, multiple lamp hangers and arrow heads.

The Megalithic builders appears entirely exotic in the pre-existing cultural canvas of the region. And this led many scholars to visualize a new population movement from west. The traditional homeland of Chalcolithic culture, i.e. West Asia, does not show the practice of Megalithic burials and hence cannot be considered as the source of dispersal of the iron using megalithic builders. Instead the coastal regions of South Arabia and the Levant show sarcophagi and cist graves during Iron Age. They probably came by sea route to enter into Deccan India. Apparently, these people did not create any urban settlements, the likes of which we have witnessed in the Harappan period or during the phase of second urbanization in the Ganga valley. Megalithic builders might have maintained isolated gypsy like tented colonies where they might have bred and grazed horses to be traded with the newly rising political centres around the middle Ganga valley. Megalithic Iron Age in Deccan India remained so much self-centred that it did not take much effort for the northern centres of power to spread their dominance into this region within a span of 500 to 600 years.

---

## 4.6 SUMMARY

---

Prehistoric Megaliths or large stone constructions dating before the advent of written history are found in huge numbers in all parts of India. The monuments are usually found in granitic areas. We still do not know exactly who the megalithic people were, whether they represent an immigrant group, or a local development. Since similar monuments are found in many places around the world, right from Ireland, Malta, West Asia, Baluchistan to Southeast Asia it is possible they represent a single group which spread all over the world. Among the possible groups are the Celts originating from Central Asia, who later became great seafarers: some group from West Asia like the ancient Elamites of Mesopotamia: the Central Asian “Scythians”, who roamed all over the world: a group of early Aryan tribes: and more fanciful, the Atlanteans who washed off far and wide.

The facts are known from archeology: the detailed explanations are yet to come.

### Suggested Reading

Deo, S.B. 1973. *Problem of South Indian Megaliths*, Dharwar: Karnataka, Kannada Research Institute.

Deo, S.B. 1978. *The Megalithic Problem: A Review*. in *Recent Advances in Indo-Pacific Prehistory*: Proceedings of the International Symposium held at Poona, 1978, p.447.

Rao, K.P. 2000. *Megalithic Authropomorphic Statues: Meaning and Significance*. Indo-Pacific Prehistory Association Bulletin, 19:110-114.

Sankalia, H.D. 1979. *Indian Archaeology Today*. Delhi: Ajanta Publications (India).

### Sample Questions

- 1) What is Megalithic Culture? Discuss the Megalithic Culture of India with special reference to Northeast India.
- 2) Give an outline of Painted Grey-Ware Culture of India with special reference to the excavated sites.
- 3) How would you classify the megalithic types? Describe the different types of Megalithic monuments found in India.
- 4) Megalithic is a living tradition among many Indian tribes. Elaborate your answer with proper examples.
- 5) Discuss the main features of Indian Iron Age.
- 6) 'Megalithic Culture of South India means iron age'. Discuss.
- 7) Write short notes on the following:
  - i) Cairns, ii) Monolith, iii) Northern Black Polish Ware, iv) Living Megaliths, v) Painted Grey Ware, vi) Dolmen.

