AN ANTHROPOLOGICAL STUDY OF IRON SMELTING COMMUNITY OF BANKURA, WEST BENGAL, INDIA

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Introduction

The mineral is the source of elements which is forthcoming in nature as a substance with a characteristic chemical composition in usually inorganic forms and ores, which were formed in nature from ancient times. From the Chalcolithic these concepts have had a long history. India has had a long history of mining and metallurgy from the early Harappan phases (5500 BCE to 2600 BCE). Chalcolithic culture was started with copper and its alloy and later it was replaced by widely iron using culture. Iron using culture played a great role in the emergence of civilization. Iron in the first half of the 2nd millennium BCE in India, after the later phase of chalcolithic culture around 1500 BCE. In India, the earliest date for iron have been found from Raja Nal Ka Tila in Uttar Pradesh, Chirand (1200BCE) in Bihar, Barudih (810 BCE) in Chhattishgarh, Pandu Rajar Dhibi (3rd century BCE), Bahiri and Hatikra (1000BCE) in West Bengal. Iron extract from the iron ore. Iron ores found in different varieties throughout eastern India. Iron found in a various type of minerals such as oxides, hydro-oxides, carbonates, sulphides and silicates like hematite (Fe_2O_3), magnetite (Fe_3O_4), siderite, limonite ($2Fe_2O_3, 3H_2O$), laterite and pyrite. In West Bengal iron started with the evidences of copper from Chalcolithic period. So the iron technology and copper technology was emerged as well as same time period in West Bengal.

Objectives

The present study is an attempt to reconstruct the evolution of iron technology from the past to the present. There will be an attempt of tracing the continuity of tradition in the present day communities through generations in the light of ethno-archeology.

Material and Methods

The present field work done in Birbhum and Bankura districts of West Bengal. For the present study anthropological methodology will be largely followed. The early evidences of iron reduction from the ores will be studied from the existing literature. To collect the data about the socio economic condition of the artisans and iron technology different methods were

adopted in the field. Data have been taken about the occupation, education, and economic background of the people. The technology was studied from the sources of raw materials, techniques of collection, processing, firing, core reduction process, collection of iron. Elaborate technology was followed in every stage of reduction. The makings of iron implements were also studied. They demand and supply of the finished products to the local market as well as to the surrounding communities was taken through interview.

Result

People are still practicing the indigenous method of iron smelting in different parts of India. This help to understand the past technology of iron smelting. Indigenous iron smelting was studied in respect of social and economic aspects of the people. The economic condition of the people is very poor and the problem is that there is restriction from the Government to use the iron ores. The people have good knowledge about the source of the iron, method of collection and smelting process; however they are living in very low socio-economic status. The different workshop was used by them. This is very simple in technology. All the sides are open to ventilate the smokes. The thatched roofs are made with hay and are rests on the piles from the ground. The males are mainly engaged with the smelting process and the female folk are engaged in cleaning the workshop, collection of charcoals etc.

Conclusion

The method of indigenous iron smelting is very important in Anthropological point of view to study the evolution of iron technology from its emergence after Chalcolithic period and also its variation through the space. The documentation of the technology is necessary to understand past technology otherwise it will be disappeared through the time.

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