



Ecological History of Puruliya District: A Geographical Study of Subaltern Space

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Abstract

From the dawn of human history, the response of different societies towards opportunities and challenges imposed by the environment which immediately surrounded them depended upon availability of technology. The form of technology may differ over time and space, but it played the key role to the advancement of a certain human society over the others in a particular time frame. Thus the 'Ecological History' got importance in the interpretation of how a particular society took lead over the others to become 'Hegemonic' and in due process made others 'marginalized'. The present study, bestowed on Puruliya district of West Bengal, interprets the marginalization of the aboriginal people in the light of their ecological history.

Introduction

The journey of human race upon the space called Earth is epic in many senses. Early human beings (*Homo Habilis*) started roaming on earth surface some 2.8 million years ago. Transformation of Hominids into modern human (*Homo sapiens*) took a long time and experienced changes in habitat, prey, social organization and most importantly, the technology. Indeed, development of technology was the key that transformed humans into 'producers' from 'gatherers' and gave an edge over their counterparts. Thus human history is actually created by the interaction of available technology and the mode of resource

utilization. In other words, the interaction between the natural environment, that offers indefinite possibilities in the form of natural resources, and the human society, that reacts in response depending upon the available technology over the space and time, writes the pages of history.

Evolution of modern day human society has experienced several kinds of resource utilization techniques. Although it varies widely over space and time across the societies, the entire human history can be classified into four distinct mode of resource

utilization depending upon the presence or absence of available technology (Guha and Gadgil, 1992). Depending on the higher degree of available technology, they can be termed as gathering mode, pastoral mode, agricultural mode and industrial mode of resource utilization. These modes of resource utilization, except the industrial mode, can be found in the early human societies from the past as well as within the primitive and traditional societies of the present.

Humans, being a player in the ecological relationship within all modes of economy took the most important role in history. Vigor and intensity of resource creation and utilization by a particular human society is driven by their need and greed. Thus “the human history is a patch work of prudence and profligacy” (ibid).

The availability of higher level of technology that ensures greater utilization of resources within a particular time frame played an important role in history. Society with a higher technology and greater resource base expanded faster than their technologically poorer counterparts. But there was and there is, always, competition over space. The society possessing higher technology or the efficient mode of resource utilization eventually succeed in taking control over the neighborhood and became the hegemonic society. On the other hand, the society belonging to lower technology mode had to give up their space to the hegemonic society in this process. They either assimilated with the hegemonic society or concentrated themselves to some geographically secluded space where they continued practicing their own mode of resource utilization. In this process, they become marginalized and termed as ‘aboriginals’ or ‘adivasis’ by the hegemonic society. These marginalized societies, truly counteractive to and suppressed by the hegemony can be called subaltern societies. The

present paper examines the scope of explaining marginalization of a geographical space, Puruliya district, in context of its ecological history.

Materials and Methods

Present paper is a theoretical outcome of a thoroughly empirical study. Thus it does not include any field work or statistical measurements. An inductive method of reasoning has been followed during the course of study.

Materials from the published and unpublished sources have been utilized during the course of study. Thus, all data used in the present paper are secondary in nature. Articles from various journals, magazines and newspapers are corresponded. Collection of folk-songs, folklores and different oral traditions of the aboriginal people of district Puruliya have been considered as key materials of the study.

Location and Back Ground

Puruliya is the western border district of the state of West Bengal in India. Geographically the region is located between 22°42′23″north and 28°45′north latitudes and 85°45′east and 87°east longitudes. It has a long history of socio-cultural revolution. Eastern flank of Chhotonagpur plateau, dissected by the valley of river Subarnarekha, is included in the district of Puruliya. Undulated plains dotted with numerous residual hills made of old granite and gneiss dominates the morphology. The underlain rocks of this district are mainly made of Precambrian metamorphic (Saha, 1997). Average elevation of the district ranges between 200 and 300 meters. Maximum elevation occurs at the west where Ajodhya plateau rose abruptly up to 600 meters from the Baghmundi plains. Damodar, Dwarkeswar, Kangsaboti, Kumari, Shilaboti and Subarnarekha are some of the important rivers of the district. All these rivers are non-perennial in character

and mostly rain-fed. The prevailing climate is moist tropical. Thermal extremity and monsoonal vagaries are common. Alfisols cover most of the district. These are derived laterite, transported and deposited by rivers (Biswas, 2002). Dry deciduous forests of Sal, Palash, Mahua, Asan, Kusum and Shimul dominate the landscape. According to classification of Chapman and Seth (1968) forests of Puruliya district comes under tropical dry deciduous forests (GoWB, 1997). About 14 percent of the district's total land is under forest cover but these forests are too fragmented. In the last couple of decades, forest cover had actually increased in Puruliya. However, canopy density had reduced at the same time. At present only 181 sq.km is considered as dense forest where canopy density is 40 percent or more. 'Open' forest where canopy density ranges between 10 percent and 40 percent, occupied rest 426 sq.km. Apart from that there are 32 sq.km scrub land with less than 10 percent canopy density in Puruliya district (GoI, 1997).

The land is known as the habitat of aboriginal Austro-Dravidian people from Neolithic period. Santhal, Munda, Bhumij, Kora, Sadak, Oraon, Birhore etc. are some eminent tribal groups of this region (Basu, 1968). Puruliya is one of the backward districts of West Bengal in terms of economy and human development (Roy, 2008 & 2017). This district ranks 15th in West Bengal according to population size and 5th in its land surface area. Scheduled caste and scheduled tribe population together form 36 percent of the district's total population. Notably the district has the second highest concentration of Tribal population in West Bengal (Census, 2011).

Puruliya district inherits a rich history and heritage. Numerous archaeological sites scattered across the district are the evidences of its past glory and grandeur. It is a land impregnated with the vestiges of ancient

habitats, inhabited by the oldest human races of the Indian subcontinent. Practically it is a land that have witnessed so many changes in human culture and society through the passage of time; right from the Palaeolithic times that date back to half million years before Christ, through the era of Jainism that started from 3rd century B.C. and reached its peak glory at 9th century A.D, to the advent of British Colonial period and the post-independence changes in recent times. During this enormous journey through the time, the district had experienced so many distinct modes of resource utilization, separated by the presence or absence of available technology, economy, ideology and social organization attached with them. Four modes of resource utilization i.e. Gathering, Nomadic Pastoral, Settled Cultivation and Industrial modes are discussed below in the perspective of Puruliya district.

1. Gathering mode

Peoples of 'Proto-Australoid' race were the first and foremost residents of Puruliya. They were the ancestors of present aboriginal groups like Santhal, Khasi, Munda, Ho and Sabar (Chowdhuri, 2007). These people established their habitat at different river valleys coming out of the Chhotanagpur plateau in Palaeolithic times, around 5,00,000 to 10,000 B.C. These primitive residents of Puruliya had the knowledge of handling fire, but they do not know how to light up the fire. They used to reside in natural caves and shelters and acquired the technology of making core tools, choppers, cleavers, scrapers, chisels, knife and drills from hard rocks. So many tools of Palaeolithic era that belong to Abbevillio Acheulian class had been found by the West Bengal Archaeological Department in an expedition along the valleys of Matha, Hanumati, Nengsai, Amruhasa and Bandu rivers of Puruliya district, in the year 1960 - '61. A classic sequence of tools of different lithic ages had been found in Deul

Tanr village situated in the bank of river Bandu (Chowdhuri, 2007).

Aboriginals of Puruliya were mostly hunter-gatherers. In gathering mode, societies depend almost exclusively on human muscle powers and on naturally available plants, animals and stones to fulfil their material requirements (Gadgil and Guha, 1992). They used to practice group hunting in the dense forests of the river valleys and plateau slopes. Besides they used to collect edible fruits, roots, shoots, bulbs, tubers and leaves from the forests. They also collect eggs, fishes, honey and other eatable animal products from nearby forests and rivers. The society was egalitarian and all resources were common property. The groups were small, endogamous and often formed through kinship. Generally there was a group leader but in no way he was different from other group members but to lead the group at the time of hunt or war. These people practiced animism where they worshiped various trees, animals, hills, forests, rivers and almost all forces of nature. This kind of worship is still visible in several tribal societies of the district, who are the descendant of these ancient people. These hunter-gathers probably shifted to nomadic mode and sedentary agriculture in later days but still some aboriginal ethnic groups of the district like Birhors prefer to practice hunter-gather economy.

2. Pastoral Mode

The long period of exclusive hunting and gathering in human history began to end with the domestication of animals and plants. It began probably in the Neolithic era that coincides with withdrawal of glaciers and warming up of the climate, some 10,000 years ago (Gadgil and Guha, 1992). Agriculture and animal husbandry started parallel and gone hand by hand. Agriculture was prevalent in moist and hot tracts while

in the dryer or colder areas, where agriculture was not feasible, animal husbandry took its pride (Grigg, 1980). It was hard to maintain herds of domestic animals in a single locality as there were dearth of food and water. Thus nomadic pastoralism evolved as a distinctive mode of resource use. Pastoralists had access to animal muscle power and they utilized that in transportation. Animals were also sources of food that can be tapped as required, thus greatly increased flexibility and mobility within the human races (Gadgil and Guha, 1992).

In Puruliya, however, link of this mode of resource utilization is very feeble. But it cannot be denied that, aboriginals of Puruliya had learnt the technology of domestication of wild animals at some point in the Neolithic period. Most part of the Puruliya was then covered under dense forest that provided abundant supply of fodder, which probably encouraged people to practice pastoralism sedentarily, instead of nomadic herding. Though there is still no direct evidence that can prove the aforesaid inference but the popularity of animal husbandry among the present tribal groups of Puruliya and the ritualistic importance of domestic animal worshipping festivals like 'Khuta Parab' in their culture certainly indicates long tradition of pastoralism in this district. Moreover there are several customs regarding animal husbandry that are still practiced within the aboriginal groups in Puruliya that resembles very much the sign of nomadic pastoral society. In such a society, division of labor was based on age and sex. Generally women children were involved in feeding, milking and tending the animals while men decided the route of migration. Herds of animals were owned by separate households but the pastures were invariably common property. This tradition is still very much relevant in present day Puruliya. Thus it can be stated that sedentary agriculture and pastoralism went hand in

hand in Puruliya district and they still co-exist in aboriginal societies in Puruliya.

3. Settled Cultivation Mode

Settled cultivation was started in Puruliya in the Neolithic period, some 10,000 years ago and became the predominant economic activity in the Chalcolithic times. Numerous tools and weapons of Neolithic and Chalcolithic age had been found in several places in and around Puruliya that are used for agricultural purposes (Chowdhuri, 2007). Number of aboriginal groups as well as their total population was increased considerably in the district during the Chalcolithic period and a civilization with finer agricultural and artisan techniques had emerged over the large undulated tracts lying west of the lower Ganga Basin. Campbell discovered 27 celts, made of copper, along the valley of river Barakar (Campbell, 1916). Valentine Ball found spearheads and celts made of quartzite, that belong to Chalcolithic times, in the coal fields of Jharia in 1865 (Ball, 1867). Several celts, bar celts and pick like objects of that age had also been found in the Kulgada village under Hura police station in Puruliya (Chowdhuri, 2007). All these inventories present us the evidences of an agricultural civilization that had emerged in the land of Puruliya around 2000 B.C.

Gradual improvement in agricultural tools and techniques i.e. sharper and stronger celts, invention of plough and draught and incorporation of animal muscle power in agriculture and transportation led to a revolution in the production system that in turn changed the social structure and economic relations in the society. Resource creation got importance over resource collection, although the gathering and pastoralism went side by side with the sedentary agricultural system in Puruliya. For the first time in the ecological history of Puruliya, surplus of production

had been earned that attracted more and more people in agriculture. Clearing of forest lands started along the river valleys of the district for the sake of agriculture. Emergence of surplus in production led to multifaceted reactions in and across the societies. Firstly, the age old egalitarian system finally gave way to the era of personal property rights. Now, the agricultural lands, cattle and other resources were considered the property of the family, not the clan. Disparity in resource distribution started in due course and there emerged some richer families in Puruliya who had the control over large tracts of forests and agricultural lands. Eventually some of these families emerged as regional dynasties in Puruliya. Monarchy of Panchkot, Patkum and Barabhbum were some of those who had emerged during the period 1st century B.C to 2nd century A.D (Goswamy, 2004). Secondly, fast growth in population increased pressure on the ecosystem that started to disrupt the ecological balance of the region that was maintained earlier. Water crisis, drought and famine started to strike the region almost at periodic intervals. When the propagation of agriculture along the valleys of east flowing rivers in the region had pushed the forests to its extreme limit in the west, the famine started and swept away several lives, forcing many others to migrate from the region and gave the forest chance to propagate east ward. Thus the ecological balance of the region was restored in this way (Biswas, 2002). Thirdly, the agricultural surplus along with the valuable forest products, minerals and artifacts attracted people from the outer world to come in the region and to establish trade relations with them. Jains were the first Aryans to enter into the 'land of animism' (Mukhopadhyay, 2003). Jain traders or 'Sreshthis', monks or 'Digambers' and priests or 'Srabaks' started to enter in Puruliya as early as 4th century B.C. At first they were not well received by the aboriginals but eventually Jainism succeeded to rest its feet in Puruliya

and started the process of acculturation.

Jainism reached its peak glory in Puruliya between eighth and ninth century A.D. They succeeded to gather sponsorships from elite class and found some royal families like that of Kashipur and Manbazar, as their mentors. Their influence on the human societies in Puruliya remained till the seventeenth century B.C. But after that, Jainism eventually faded out from Puruliya district and Hinduism; Brahmanism in particular captured that void in the society. Today, only the Sarak tribe of northern Puruliya represents the remnant of Jain culture (Mondal, 2003).

Advent of Brahmanism in Puruliya was started in fourth century A.D. (Mukhopadhaya, 2003). The Susunia edict of king Chandrabarman of that time gives the evidence of Sanskritization in Puruliya. It is also evident from the Chandil edict of eighth century A.D.

and from the writings of Sandhayakar Nandi (ibid). Telkupi and Panchakot were two great centres of excellence of Brahmanism in Puruliya. Several other places emerged with time that bears the relicts of Hindu sculptures that give the evidences of vast Hindu emergence in Puruliya even at the glorious periods of Jainism in the district. At present there are so many archaeological sites in the district those bare the emblems of Jain, Hindu and mixed cultures. Peculiarly, many statues of Jain prophets are now transformed into Hindu deities and are worshipped by Hindu people of Puruliya. A list of temple sites of Puruliya is given in table no. 2.1 stating their age of construction and religious attachments.

Table 1: Temple Sites of Puruliya with Archaeological Value

Sl. No.	Time of Emergence (A.D.)	Historical sites according to their religious attachment.		
		Jain	Hindu	
1.	6 th century	Para	-----	
2.	7 th century	Kroshjuri, Suisa	-----	
3.	9 th century	Pakbirra, Chharra, Deulghata	Budhpur	
4.	10 th century	-----	Telkupi,	
5.	11 th century	Deoli, Dulmi, Arsha	Lagda, Golamara, Puruliya	
6.	12 th century	Polma	-----	
7.	16 th century	Anai	Dhadki Tanr, Tuisama, Achkoda	
8.	17 th century	Budhpur, Ganpur	Cheliyama, Garpanchakot, Balarampur	
9.	18 th century	-----	Baghmundi, Chaklator	

Source: Chowdhury A. K – 2007 and Mukhopadhaya S.C. 2003

Rising importance of Hinduism in the society brought changes in ecological relation also. Unlike the Jain, who were mostly traders and money lenders, Hindus were essentially agriculturalists who came from the fertile tracts of the east and brought with them the agricultural techniques like intensive and flooded cultivation. Grain farming got the supreme priority and the economy had switched over from a balanced

combination of gathering, pastoral and farming to exclusively agricultural mode. The present predominance of rice in the agriculture of Puruliya probably started from that time.

4. Industrial Mode

Industrial mode is the latest mode of resource use that is characterized by drastic change in the energy use

pattern, changing goods into commodity and transformation of the society i.e. prioritizing 'individuals' over the group.

Industrial mode of resource utilization started in Puruliya after establishment of British colonial rule in the region at seventeenth century. British, driven by the ideals of capitalism that emerged from the industrial revolution were keen to maximizing their profits rather than keeping harmony of the local ecology. Thus the mass scale extraction of forest, mineral and agricultural resources from the region started with a great vigor. Aboriginal people of Puruliya could not keep pace with this drastic change of resource use where most of their needed goods for livelihood were transformed into marketable commodities. Now they either had to pay taxes to collect them or they have been simply denied of their rights on those goods, what they enjoyed as a common property for a long time. Many of the ancient rulers of Puruliya lost their holdings due to their failure in keeping harmony with the British fiscal and land revenue policies. Conflict between the aboriginals and the British government became inevitable that resulted into various revolts and rebellions during the eighteenth century.

Puruliya was the hearth of historical Chuar Revolt that started in 1798 with the agitation of Lal Singh, a Tarafder of Saterokhani area in Barabhum. Lal Singh denied paying tax to East India Company and looted many Jamindars who were friendly with the Company. British, unable to tame Lal Singh by force, planned to mediate with him. British magistrate Henry Strachy, who was the then in charge of 'Jungalmahal', planned to render the responsibility of maintaining law and order situation in the region to the aboriginals like Lal Singh. Strachy, by the approval of Lord Wellesley, withdrawn all charges against the Chuars and engaged them in a new system of policing called 'Ghatoal

Police' entirely formed and maintained by the aboriginals (Strachy, 1800).

Ghatoal Police system may have rendered peace for the time being, but it was short lived. Resistance from aboriginal groups from different parts of the district keeps coming one after another. The 'Ganganarayani Hungama' of 1832, Kol revolt, The Santhal rebellion of 1849, 'Tana Bhagat' and the 'Ulgulan' of Birsha Munda are some of them. In most of the cases, aboriginals fought for their rights over land, water, forests and agricultural productions. Whenever the British policy marginalized the rights of the aboriginals on those resources that control their livelihood, they had to protest violently.

Conclusion

Six decades had passed after the formation of Puruliya district in 1956. But there is still no sign of change in governmental policies regarding resource mobilization. Instead, the gap between the hegemonic society and the subaltern society are widening fast. Several policies and rules of the colonial period are still in practice. Marginal groups like Sabars are still termed as 'Criminal tribes' by the hegemonic law. On the other hand, some unstoppable technological inventions like television and cell phones made their way in subaltern society. Their effects on the subaltern space can be a subject of future research, but for the present, it can be said that the ongoing system of conquering subaltern space, both in terms of ecology and culture, must be reconsidered to reconcile the gap between the societies in Puruliya.



Remnant of an ancient Jain temple at Deulpur, Puruliya



A traditional *Chhou* mask



Remnant of an ancient Hindu temple in Garpanchakot, Puruliya



A folk artist performing *Chhou* dance



Nachni; the dancer



Celebration of *Baha* festival observed during the spring season.

References

- [1] Ball, V. (1867). Proceedings of the Asiatic Society of Bengal. Asiatic Society, Kolkata.
- [2] Biswas, A. (1999). Prasanga: Paribeshio Bodh Samiksha; Ed. Roy R, Pratiti Arabindo Biswas felicitation volume, Chinsura, Hooghly.
- [3] Biswas, A. (2002). Forests and people of India: special notes on West Bengal; changing environmental scenario of Indian sub-continent; Ed. Subhasranjan Basu; acb publications, Kolkata.
- [4] Bureau of applied economics and statistics, 2004: District Statistical Handbook, Puruliya District; Government of West Bengal. Kolkata
- [5] Chatterjee, B. and Ghosh, D.K. (2003). Towards a District Development Report for West Bengal; State Institute of Panchayats and Rural development, West Bengal, Kalyani.
- [6] Chattopadhaya, S. (2007) Wild life in Puruliya; Ed. Roy S, Paschimbanga, Vol. 40 No. 11, Ministry of Information and Broadcasting, Government of West Bengal, Kolkata, P 87.
- [7] Chowdhuri, M. (2004). Rivers of Puruliya; Ed. Jana D, Ahalyabhumi Puruliya (Vol. 2). Deep Prakashoni, Kolkata.
- [8] Chowdhury, A. K. (2007). Puruliyar pratnatathya; Ed. Roy S, Paschimbanga Vol. 40 No. 11, Ministry of Information and Broadcasting, Government of West Bengal, Kolkata, P 157.
- [9] Forest Directorate. (1998). Assessment of forest cover; Departmental report, Government of West Bengal. Kolkata.
- [10] Gadgil, M. and Guha, R. (1992). This fissured land: An ecological history of India; Oxford University Press, New Delhi, XIV+274pp.
- [11] Goswami, D. K. (2004). Puruliyar prachin rajbangsha gulir sankhpto parichay; Ed. Jana D, Ahalyabhumi Puruliya (Vol. 2), Deep Prakashoni, Kolkata.
- [12] Government of West Bengal. (1997). First working plan of Puruliya forest division, 1997 – 98 to 2016 – 17; Vol. I and II. Divisional Forest Officer, Puruliya.
- [13] Government of India. (1997). State of Forest Report. Forest Survey of India, Ministry of Environment and Forest, Dehradun.
- [14] Grigg, D. B. (1980). The agricultural systems of the world: an evolution by approach; Cambridge University Press, Cambridge.
- [15] Mishra, T. (2006) Forests of Bengal; Paschimbanga Bigyan Mancha, Kolkata.
- [16] Mondal, A. K. (2007). Problems and prospects of agriculture in Puruliya district; Ed. Roy S, Paschimbanga, Vol. 40(11) Ministry of Information and Broadcasting, Government of West Bengal, Kolkata.
- [17] Mondal, K. K. (2003) The Sarak society; Ed. Sengupta S, Lokayata Manbhum, Antara, Bidhannagar, Kolkata.
- [18] Roy, A. (2008) Status of Human Development in Puruliya. Geographical Review of India, ISSN - 0375 - 6386 70 (01), 80 – 95, Kolkata.
- [19] Roy, A. (2017). Participatory management of forests in Puruliya with special reference to the role of Government Agencies and local people of the district. Victorian Journal of Arts, 10(2): 149.
- [20] Saha, A. K. (1997). Assessment and Management of Ground Water Resources of Puruliya and West Midnapur Districts of West Bengal, Vol. 1, Puruliya District. Centre for Study of Man and Environment. Salt Lake City.