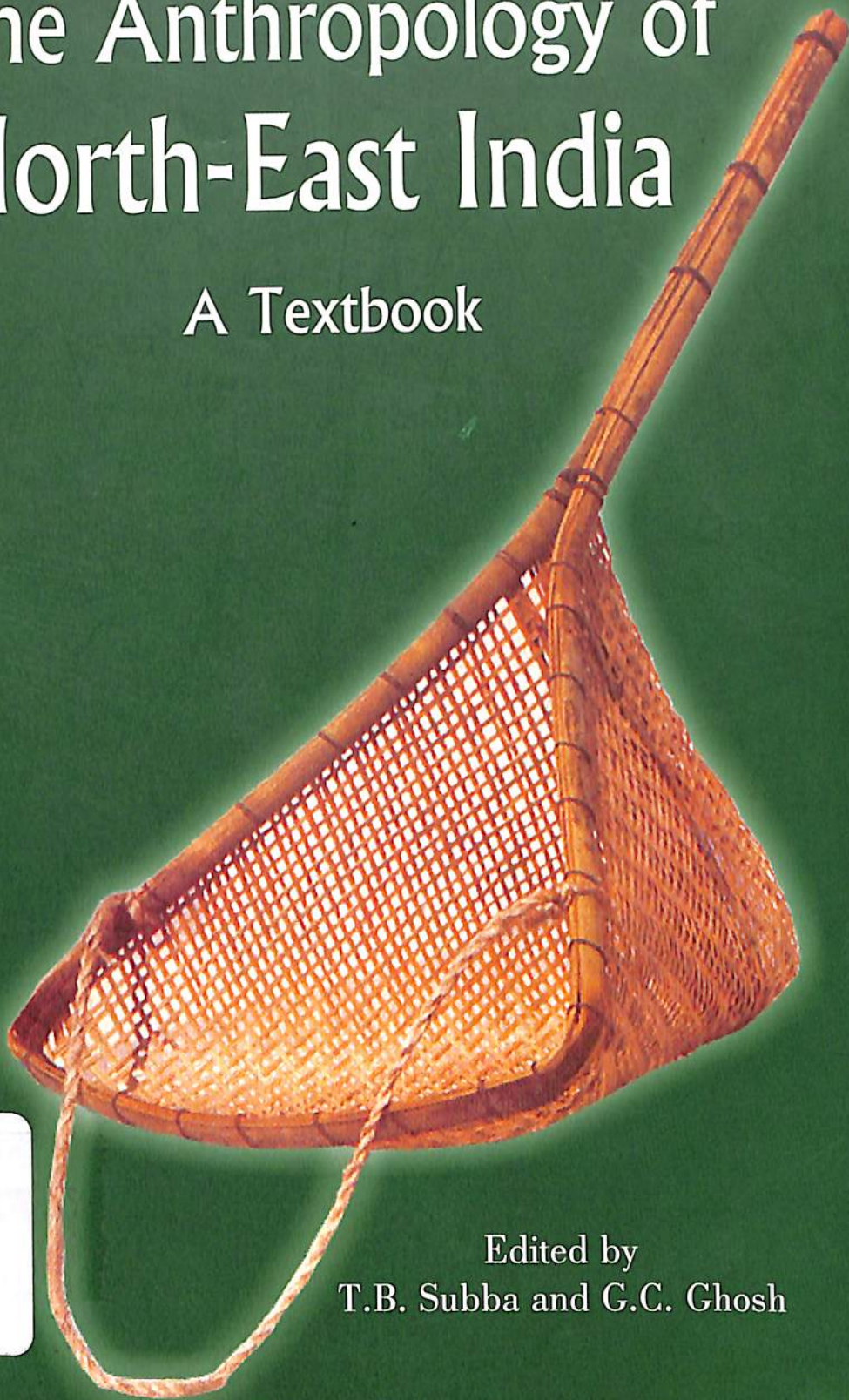


Orient Longman

# The Anthropology of North-East India

A Textbook



Edited by  
T.B. Subba and G.C. Ghosh

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# The Anthropology of North-East India



T.B. SUBBA AND G.C. GHOSH



**Orient Longman**

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# Anthropology of North-East India

T.B. SUBBA AND G.C. GHOSH

This book has been written to cater to the needs of undergraduate and postgraduate students of Anthropology and Sociology in India in general and North-East India in particular. Many teachers in these disciplines voiced the need for such a book on various occasions but it was only in March 1999, that for the first time, anthropologists working at the Anthropological Survey of India, Kolkata and those teaching at North-Eastern Hill University, Shillong, came together to organise a seminar to discuss the contents of this book.

Though primarily aimed at students and compiled as a textbook, it is formatted in such a way that it can also cater to a wider audience as a standard reference book on the region. The contributors and editors have taken a lot of care to see that information is given clearly and unambiguously. At the same time, they have refrained from making any value judgments. One of the efforts of this book has been to raise curiosity in the minds of the readers, about the environment, the biology, and peoples of North-East India. The book exposes its readers to various view and debates open in the hope that students might probe further into research problems identified or indicated by various contributors to this book.

Another effort has been to provide reading material as well as comprehensive reading lists in several branches of Anthropology. These branches of Anthropology are no less important than those

dealt with here but are unfortunately rather ignored by most anthropologists in the country, who may be broadly categorised into Physical/Biological and Social/Cultural anthropologists. Thus, we have brought together readings from Prehistoric Archaeology, Physical/Biological Anthropology, and Social Anthropology. Regrettably, we have not been able to include Linguistic Anthropology here. The Department of Anthropology at North-East Hill University is one of the few Anthropology departments in the country which is making a sincere effort to rectify this lacuna. We seek the support of other department of Anthropology in the country in this venture.

This book aims to provide as much information to the students and researchers as possible, to take stock of the ground that has been covered during the last fifty years or so of Independence, and identify the research gaps, which are many. Clarity of concepts has been given as much attention as clarity of method in handling various research issues. The effort has also been to get the best person in the field to do this. The present volume is an attempt by the current generation of anthropologists to give the next generation a carefully worked overview of the issues in Anthropology today. We see it as a beginning, and hope that future generations will add to this work.

We shall now dwell briefly on the relationship between Anthropology and Sociology, particularly in the Indian context. Of all the branches of Anthropology, the closest link that Sociology has is with Social Anthropology and this relationship is very competently and cogently discussed by Andre Beteille, one of the finest teachers that India could boast of, in his *Essays in Comparative Sociology*. In fact, there are a number of university department in India, which bear the title Department of Sociology and Social Anthropology. The differences that were *there between* them in origin, theory, or methodology are no longer visible. It is difficult to say whether M.N. Srinivas or *S.C. Dube* or Beteille himself are sociologists or social anthropologists. It is practically impossible to know the disciplinary background of an author from a book or an article.



If we look at the titles of some recent these in Geography, Economics, and Political Science at some of the Indian universities, we often wonder if students of Sociology or Social Anthropology had submitted them. In fact, the distance between Sociology and Social Anthropology is less than the distance between Physical Anthropology and Social Anthropology, or for that matter, between Prehistoric Archaeology or Paleo-anthropology or Linguistic Anthropology and Social Anthropology. Actually speaking, each branch of Anthropology is more closely connected to some other disciplines than the other branches within the discipline. Hence, although some anthropologists might take pride in saying that their discipline is one of the most inter-disciplinary, which is quite right, they are equally unsure of the future of the discipline as an integrated science of 'man'. Anthropology is better prepared to change content without compromising on the basic objective of the discipline, or its identity. Forced integration is more a liability than an asset.

It is also important to dwell in some detail on the question of the identity of the Northeast as a region. In 1998, who published an article in which it was argued that the existence of the North-East as a region is a myth. Of course, it has its historical and even mythical antecedents in Pragajyotish and later Assam, despite the fact that Manipur and Tripura, the then two princely states were outside Assam. The region also has an extremely long international border, surrounded as it is, almost from all directions, by foreign countries. Tribes who have almostly taken to Christianity during the last one and a half centuries mostly inhabit the hills. Non-tribal or Hinduised tribal populations, on the other hand, inhabit the Brahmaputra, Barak, and Imphal valleys. In terms of economic pursuits, settled cultivation is practised in the valleys and river-banks whereas the hills have widespread practice of shifting cultivation. It is a food deficit region with growing unemployment problems due to the absence of any industrial activities, which in turn, is due to the lack of infrastructural development and also insurgency. Moreover, the tea gardens and other entrepreneurial efforts of this region, are under great stress due to the insurgent situation



prevailing there for almost two decades now. Trade might have proved to be very important to the economy of this region but for various political and (non-) diplomatic reasons, it has not been able to solve the unemployment problem. The timber economy required the break provided by the Supreme Court 'ban': otherwise, the excessive deforestation would have killed it.

The languages of the region are classified into the Tibeto-Burman, Indo-Aryan, and Mon-Khmer families, with poor mutual intelligibility even between two languages of the same family. Religion-wise, Hindus and Christians are the two major religious groups in the region, with minor exceptions, in the valleys and hills, respectively. Other religious groups like the Buddhists, Muslims, and indigenous groups are also important in certain states such as the Buddhists and indigenous peoples in Arunachal Pradesh, and Muslims in Assam. Racially, they are broadly divided into Mongoloid and Caucasoid groups, which are again ecologically divided with the former being found mostly in the hills and the latter in the plains or valleys.

It is also important to note about this region that its state or national boundaries are not effective in controlling the movement of people across such borders and the people, languages, cultures, religions, etc., of this region have extensions towards all directions beyond the region from very ancient times. It is also interesting that despite ethnic, cultural and linguistic differences, most people of the North-East see themselves as a group, share a sense of a fraternity and see themselves as distinct from the rest of India. Such a feeling is finding a broader base now and is acquiring a stronger character within the region. This is evident from the North-East students' organisations that have come up in the recent past.

If there is anything that binds this region, it is a sense of deprivation. On the other hand, the feeling of those from outside this region is that the latter are over-pampered, at the cost of development in other parts of India. Propagation of such theories or precipitation of such feelings is not difficult because both the sides are correct to some extent but that would mean indulgence in witchcraft and not the sign of a mature citizen.

The identity of a region or community is important but it need not be pushed against the identity of a nation. The various identities—ethnic, regional and national—can very well coexist.

We now briefly present the 15 contributions to this volume. These are divided into four sections. Section I deals with the prehistoric archaeology of the region. The paper written by Harish Sharma, discusses the status of archaeological research in all the seven states of the region and shows how the pottery excavations show a remarkable continuity of the present with the prehistoric past. But Professor Sharma also shows how the archaeological finds from the region do not give us sufficient data to reconstruct the cultural history of the people of this region, although this is the aim of prehistoric archaeologists.

Section II deals with the colonial period of the region. The first article in this section is by P.K. Misra. In the first part of his article, he traces the colonial context by discussing the socio-economic scenario in the country in general and the region in particular, the evolution of various colonial policies towards the tribes of the region, and Hutton's own perceptions of the people of India. A brief biographical sketch of Hutton and a critical reading of his ethnography of the Nagas follows this. The other article in this section is on J.P. Mills and is by B.R. Rizvi. His article begins with an exposition of the colonial context and the works of Mills' predecessors who served in the region. Then there is a brief biography of Mills followed by a detailed ethnography. The critical appreciation in this section of both Hutton and Mills is useful for understanding their contribution to the ethnography of region in general and of Naga tribes in particular.

Section III deals with the Biological Anthropology of the region. The opening paper by Amitabha Basu is an effort to define a framework for Biological Anthropology on the basis of a review of the extant studies. The paper does not deal specifically with the region, except towards the end. However, an article giving an all-India picture would certainly benefit the students of the region, particularly when such a broad canvas is often missing in anthropological literature. While the students

are well informed about specific tribes, they often miss the overarching theoretical situation.

Bapukan Choudhury and Gulrukh Begum's paper is a comprehensive survey of the literature on concepts, parameters, methods, and theories in the field of growth studies, in general. Again, the wide-ranging perspective offered is useful in situating the specific case of the North-East. The third article, also related to these issues, is prepared by Farida Ahmed Das.

The paper by Romendro Khongsdier deals with the study of genetic drift in natural populations. Besides a detailed discussion on the methods of studying genetic drift, the article cites instances from several such populations in the region, like the Khasi of Meghalaya, and the Semsá of Assam. An effort has also been made here to speculate on demographic and cultural consequences of a genetic drift.

The last article in this section is on dermatoglyphics. In this article, Saarthak Sengupta reviews the status of dermatoglyphic research in the region and identifies the gaps. The dermatoglyphic data on various tribes of the region have been compared on the basis of standard indices, which do not clearly establish the population affinity of those tribes. In fact, the physical affinities based on certain dermatoglyphic indices are not always supported by other such indices and it is extremely difficult to generalise on population affinities. Differences in such data between males and females belonging to the same population create further difficulties in this respect.

The last section is on the Social Anthropology of the region. The first article in this section deals with 'tribal social organisation', an expression with which many anthropologists and sociologists are not comfortable. However, R.K. Kar has been able to delineate, with the help of a comparative framework and fairly detailed ethnography of each tribe discussed, some pattern in the way the various tribes of the region organise themselves. He also shows how an individual member of a tribe combine in him/her a number of roles simultaneously.

The second article deals with agrarian relations, which are admittedly one of the most complex in the region. In this article,

Satyabrata Chakrabarti gives a brief historical background of the agrarian history of the region dealing mainly with the colonial period, which is followed by an account of agrarian relations in the various states of the region. He also brings out some of the major hurdles in engineering agrarian transformation in the region.

The third article by Jayanta Kumar Sarkar is about the contribution of the Anthropological Survey of India, one of the largest government-controlled research institutions in India, to the Social Anthropology of the region. The main objective of this article is to highlight the various methods that this institution adopted since its inception in order to understand the various cultures of the region. Hence, instead of presenting the account in a time series, it has been done on the basis of themes and methods. This article also provides information on the aims and objectives of this institution, its brief history, and a detailed account of the particular tribes and communities studied by the technical staff of this institution. What this institution has missed has been pointed out in the next article by Sarit Kumar Chaudhuri on the lesser-known tribes of the region.

The fifth article is on the tribal women of the region written by Lucy Vashum Zehol. This article is not only an effort to grapple with the conceptual problems related to women and their status but also an attempt to contextualise the same with the experiences of Naga women in general and Tangkhul women in particular.

R.P. Athparia's paper deals with the Karbis who have recently attracted a lot of state attention due to the violence unleashed by some of their militant organisation in the Karbi Anglong district of Assam. The case of the Karbis is interesting for the way they have used their folklore to construct their identity. Dr Athparia discussed this issue by looking at the historical context. The significance of land, in view of their declining control over it, is also analysed in the context of their negotiation for a more meaningful identity.

Finally, we present an article written jointly by Anungla Aier and Sapu Changkija. This is a detailed account of the indigenous



knowledge of various tribes of the region regarding the management of their natural resources. This explains why the North-East is one of the eighteen important regions for biodiversity.

The present volume would not have been possible without the cooperation of our contributors, many of whom are retired or very senior teachers or researchers in the discipline. We thank them for sharing our dream of gifting something worthwhile to the next generation of anthropologists and sociologists. We also thank Dr Ranajit Kumar Bhattacharya, Director, Anthropological Survey of India, and Late Professor B. Pakem, the then Vice-Chancellor of North-Eastern Hill University for supporting our project. V. Murali deserves special appreciation for doing most of the typing.

# Prehistoric Archaeology of the North-East

H.C. SHARMA

## Introduction

Seven states, viz., Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura represent the North-East of India. This region lies between  $22^{\circ}$  and  $29^{\circ}8'$  North Latitude and  $89^{\circ}40'$  and  $97^{\circ}22'$  East Longitude. It has the following five broad geophysical divisions:

- (a) The hilly areas with high mountains to the north with the east-west ranges formed basically by the rocks of the tertiary period.
- (b) The Meghalaya or Shillong plateau on the south composed of Archaean and Precambrian sediments and above which the younger sediments of tertiaries and quaternaries are deposited.
- (c) The Cachar plains which basically constitute Neogene fold ridges comprising sub-flysch and molasse sediments of the Mio-Pliocene age.
- (d) The Brahmaputra valley in the middle, which is formed of recent alluvium intercepted occasionally by archaean sediments exposed in the form of denuded hillocks.
- (e) Lastly, the Mizo hills, which continue up to the Arakan Yoma of Burma, composed mainly of the tertiary formations.

Prehistoric studies were a major interest in the pre-Independence era but no explicit cultural structure was visualised. By far, the region was ignored even by archaeologists. In his survey, Lord Cunningham, the founder of Indian Archaeology, covered almost the entire length of India but did not venture to set foot on the formidable forest-clad hilly terrain of North-East India. Therefore, the archaeological research in this part of India remained at the level of antiquarians. If one looks at the archaeological map of India of that time, one will be surprised to see that the whole of North-East India was a blank. And though the geographical location, geo-archaeological features, ethnic composition and many other such considerations of the North-East did attract archaeological and anthropological researchers, archaeological evidence from this vast and extremely strategic region of India is still meagre. Therefore, any attempt to trace the development of human history of the unrecorded past is a difficult task. In this regard, Dhavalikar states that archaeologically, Assam is still terra incognita. He further points out that the post-Independence era witnessed remarkable archaeological activities in different parts of the country, but Assam has not yet received the attention it merits (Dhavalikar 1973: 137).

Until now, very little has been done in the area of archaeological research though the prehistoric sites that have been discovered so far in this region would justify this. However, what research has been done in this field can broadly be divided into Pre-Independence and Post-Independence periods.

### Pre-Independence Period

In the pre-Independence period, prehistoric antiquities were acquired from the houses of tribal people inhabiting different states of North-East India. The tribal people of the region, living particularly in the hilly areas, still collect and preserve ground stone axes considering these as the axes of the Thunder God (*Indra*), and which are supposed to possess supernatural power.



They use these for various magico-medicinal purposes even now (Goswami 1961: 17-24).

Research into the prehistoric past of this part of India was initiated by British administrators/scholars. The first collection was made in 1867. Sir John Lubbock of the University of London reported the evidence of prehistoric culture from this region in the *Athenaeum* of London, under the heading 'The Stone Age Tools in Upper Assam' in its June 22 issue (Lubbock 1867: 822). Since then, reports of sporadic finds of polished stone tools from different parts of North-East India found place in journals and periodicals published in India and abroad. E.H. Steel (1870: 267-68), Lt Barron (1872: 61-62), and Hutton (1924: 20-22, 1926: 133) from Nagaland, Cockburn (1970: 133-43) and Godwin Austen (1875: 158) from Khasi Hills, Anderson (1871: 410-15) and Banerjee (1924-25: 102) from Arunachal Pradesh, Dasgupta (1913: 291-93) and Coggin Brown (1914: 107-9) from Assam, G.D. Walker (1931) from Garo Hills, etc., were the early collectors of stone tools. During this period, the first systematic attempt to study the prehistoric cultures of North-East India was made by J.H. Hutton (1928: 233-32). His report titled *Prehistory of Assam* brought to light the Neolithic cultural patterns of this region.

K.L. Barua (1939), a reputed historian, made an attempt to systematise the available data of the prehistoric past of Assam. However, in none of the reports, is there any reference to systematic explorations and excavations.

Till now, we are completely in the dark about the geology, paleontology and archaeology of the Pleistocene period of Assam. In 1875, Godwin Austen is reported to have observed features of a glaciated topography over the tertiary ranges in south-eastern Assam (Godwin Austen 1875). Since then, no study has been made even to examine his information. This important aspect of Pleistocene geology has been completely neglected. The geologist too paid no heed to such an important era of geology, which is concerned with the growth and development of man and his cultures.

P.C. Choudhury (1944: 41-47), in his article 'Neolithic



Culture in Kamarupa', has focussed on the Neolithic cultural development in ancient Kamarupa. E.C. Worman (1949: 181-200) of the Washington Academy of Sciences, in his brilliant essay on 'The Neolithic Problem in the Prehistory of India' paid special attention to the Neolithic cultures of Assam with a view to support his theory of Eastern-Asiatic origin of Neolithic celt-making tradition in India.

Almost all the prehistoric antiquities collected by British scholars/explorers from different parts of North-East India are preserved in the Pitt-Rivers Museum of Oxford University.

### Post-Independence Period

Prehistoric studies were not taken up by any institution/organisation until the establishment of the University of Gauhati. There were a few monographs and research articles but Anthropology in its true sense was started only after the establishment of the Department of Anthropology at Gauhati University. The University introduced Anthropology in 1948 but a post-graduate course of study started only in 1956. The founder head of the Department, M.C. Goswami, made a rich collection of ground stone tools from different parts of North-East India. His greatest contributions were the discoveries of a Stone Age site near village Rengchanggre in the Garo Hills, Meghalaya and a Neolithic site at Daojali Hading in the North Cachar Hills, Assam. Both the sites were explored and excavated, the latter twice (Goswami and Bhagabati 1959a, 1959b, Goswami and Sharma 1963). All these collections are now preserved in the Anthropological Museum of Gauhati University. T.C. Sharma (1966) studied some of these collections for his Ph.D. thesis titled *Prehistoric Archaeology of Assam: A Study of Neolithic Culture* awarded by the University of London.

Systematic exploration and research into the prehistoric archaeology of North-East India began with the introduction of Prehistoric Archaeology in the Department in 1966. The launching of this specialised sub-discipline of Anthropology

offered an opportunity for conducting regular explorations and excavations by students as well as teachers of the department. Despite intensive and strenuous explorations by the archaeological exploration team of the department covering the entire North-East (except Mizoram and Tripura), only the Garo Hills of Meghalaya proved to be a fertile field in terms of prehistoric cultural heritage. In the following pages, I shall try to review the works done so far in the region.

### Assam

After the reorganisation of states, Assam became much smaller in area covering mainly the Brahmaputra and Barak valleys. However, the available data on Assam show that the cultural relics of the Paleolithic and Mesolithic periods are yet to be discovered. The most remarkable discovery site so far made in Assam is Daojali Hading of the North Cachar Hills district (*Indian Archaeology* 1962-63: 3). This was the first prehistoric site excavated in the North-East India. M.C. Goswami excavated the site in 1963 with the assistance of T.C. Sharma. The excavators found stone tools, mullers, pestles, grinding stone or hewns, cord-marked pottery, bone fragments and a piece of tortoise shell. Later, T.C. Sharma made an elaborate study of the materials and linked Assam with South-East Asia in the Neolithic period (Goswami and Sharma 1962, 1963). Further, he stated that Daojali Hading contained a single phase of cultural deposition of Neolithic period characterised by ground and polished stone tools, shouldered celts and cord-marked pottery. He also remarked that Daojali Neolithic in particular was influenced by Eastern Asiatic neolithic traditions (Sharma 1979: 279-294, Sharma 1980: 41-52). But the present writer with his team of explorers dug out a small trench at the site in 1990. This excavation yielded a different result. In contrast to T.C. Sharma's single-layer deposits, there were three different layers of depositions—layer 1 ( $L_1 = 0-31$  cm), layer 2 ( $L_2 = 31-54$  cm) and layer 3 ( $L_3 = 54-65$  cm), respectively. These are

segregated on the basis of colour of the soil, contents and geo-archaeological characteristics. These layers contain cultural materials like stone tools and cord-impressed potteries. But bones were not found either on the surface or in the trench.

Another site, Sarutaru, located in the south-eastern corner of Kamrup district, Assam was discovered and excavated by the Department of Anthropology, Dibrugarh University, in 1973. Rao (1973) reported the collection of many ground and polished stone tools and cord-marked pottery. Though he claimed that this site belonged to the Neolithic period, the only sample tested for radio-carbon dating by the Tata Institute of Fundamental Research earmarked the site as modern (Possehl 1988: 178). Later, Sarutaru and Marakdola in the same area had been thoroughly explored by the present writer. Except late medieval potteries, no celts and cord-impressed potteries were found. P.C. Saikia of the Department of Anthropology, Dibrugarh University, also conducted an exploration in the Dibru river valley in 1988. He claimed to have collected a number of Neolithic tools from there. He declared that he found a few choppers too (Saikia 1988: 1-45).

Recently, a few ethnoarchaeological works have been done in Assam. Roy (1977) has made a doctoral study of the ceramics from Neolithic to Medieval periods of Assam, taking Daojali Hading, Garo Hills potteries of the Neolithic period, and Ambari (Gauhati) pottery of the Medieval period under consideration. The present author also conducted a typotechnological study of pottery in an Assamese village near Nalbari town.

Medhi (1992) made an elaborate study of the ceramic tradition of Assam. She also evaluated the ceramic traditions of Ambari and Daojali Hading. She successfully reconstructed the ceramic tradition and its evolution in Assam from the prehistoric period to the present day. According to her, the contemporary pottery tradition of Assam owes its origin to the Neolithic period, passing through a flourishing stage in the Medieval period and still continuing among the Hira potters (hand potters) and the Kumhars (the wheel potters), with

reasonable technological dexterities. The Neolithic celts and potteries have been collected from different parts of Gauhati and the hill areas. Now a research student of the Department of Anthropology, Gauhati University, has found a number of Neoliths in the Maligaon (Nilachal) hills, Basistha, Kahilipara, Pamohi and adjacent areas.

### Arunachal Pradesh

Arunachal Pradesh is in the extreme north-east of the Indian sub-continent, and adjoins China and Burma. Through the mountain passes of the Arunachal hills, India has maintained contact with Tibet, China, Burma and other South Asian countries over the ages. The eastern Himalayan states, therefore, hold the key to the South Asian cultural contact that is known to have existed since prehistoric times.

In the pre-Independence period, only a few stray Neolithic finds from different parts of Arunachal Pradesh had been reported. Like other parts of North-East India, research on the prehistoric archaeology of this state was initiated by British scholars/administrators. For instance, John Anderson reported presence of stone tools in Arunachal Pradesh (erstwhile NEFA) for the first time in 1871. In 1924, R.D. Banerji found a stone adze on the left bank of the river Dibong in a village called Mebo in Siang district. J.P. Mills and J.H. Grace made a good collection during 1933-35, which is now preserved in the Pitt-Rivers Museum.

Sharma (1966) made a scientific analysis of the materials preserved there and reviewed Dani's observations. Sharma et. al. (1972) reported on the collection of Neoliths from Kameng district. Bopardikar (1972: 1-8) of the Archaeological Survey of India brought to light a discovery of Palaeoliths for the first time in Daphabum area of Lohit district. Sarkar (1982: 11-15) also reported a few Neolithic celts from various parts of Arunachal Pradesh. Duarah (1979) reported three Neolithic celts from Parsi-Parlo in the lower Subansiri district. A.A. Ashraf, then Assistant Director of Research, Arunachal Pradesh, carried out a



thorough and systematic survey of the Kamala river valley. He opened four trenches at Parsi-Parlo in 1982–83. In his excavations, four cultural layers were identified at Parsi-Parlo of which the upper two layers contained ceramics and lower two were pre-ceramics belonging to the Neolithic culture. Interestingly, Palaeoliths in Neolithic context have been discovered at Parsi-Parlo (Ashraf 1990: 1–154). The discovery of this stratified Neolithic site at Parsi-Parlo gives a new dimension to the unrecorded prehistoric past of Arunachal Pradesh.

### Manipur

Manipur is a crucial area as far as archaeological research is concerned. Yumjao Singh, who collected some copper objects and other antiquities from an old palace area in Imphal, discovered the first cultural relics of Manipur (Singh 1935). The next attempt to dig up the past cultural heritage of Manipur was made by him in 1969, when he collected a series of limestone caves at Khang Khui Khullen in the Ukhrul area of Manipur near the Burma border. He argued that the bone tools found there are similar to those found in the Kurnool cave in Andhra Pradesh and chronologically placed these to the late Pleistocene age. T.C. Sharma, a noted archaeologist, was quite excited about this find (Sharma and Singh 1969: 36–48) but later doubted the authenticity of the Ukhrul collection. Later, Singh discovered two other stone age sites in Manipur, one of which is Napachik located on the right bank of the Manipur river. Typo-technologically, the cultural materials from Napachik can be divided into two phases: (i) Edge-ground knife of the Hoabinhian character, and (ii) The fully-ground celts and hand-made cord-marked pottery and tripod wares of the Neolithic period (Singh 1983: 1–26). The other site is located at Nongpok Keithelmonbi on the left bank of the Thoubal river. The archaeological remains discovered from three locations in Nongpok Keithelmonbi are divisible into Palaeolithic, Hoabinhian, corded ware and curved paddle-impressed ware cultures (Singh 1986: 1–86).

## Meghalaya

It has already been mentioned that prehistoric archaeological research in Meghalaya started after the establishment of the Prehistoric Archaeology branch at the Anthropology Department of Gauhati University in 1956. Several attempts were thenceforth made to discover many more Stone Age sites and antiquities from this area. Teachers and students of prehistoric archaeology carried out investigations in the Garo Hills every year and discovered a large number of Stone Age sites. A part of this collection was reported jointly by Sharma and Sharma (1968: 73–84). Another report was published jointly by Sharma and Singh (1968: 36–50) in the *Journal of the Assam Science Society*, Gauhati. In 1967, another important discovery was made by them and was reported in the *Indian Archaeology—A Review* (1967–68).

T.C. Sharma, in his article titled 'Assam in Prehistoric Times', published in *Kamarupa*, has mentioned two implements which seemingly have some Paleolithic characteristics (Sharma 1967: 830). The first report of the discovery of Paleolithic stone tools in the Garo Hills was made jointly by Sharma and Sharma in the *Journal of Assam Science Society* in 1971 (Sharma and Sharma 1971: 18–24).

The Stone Age sites discovered after 1966 in the Garo Hills are mainly concentrated in the valleys of Rongram, Ganol and Simsang rivers. About 19 sites—one in the East Garo Hills, 17 in the West Garo Hills and one in the Khasi Hills district of Meghalaya—have been discovered so far.

Several eminent Indian and foreign scholars/archaeologists visited most of these sites. Some of them who carried out geomorphological and archaeological investigations jointly with the Department of Anthropology, Gauhati University, are K.B. Codrington of London University, and H.D. Sankalia, V.N. Misra, R.V. Joshi, R.S. Pappu and S.N. Rajaguru of Deccan College, Pune.

The present author studied stone tools collected from the Garo Hills and belonging to the Paleolithic and Mesolithic



periods. He incorporated these materials in his thesis titled 'Prehistoric Archaeology: Stone Age Cultures of Garo Hills, Meghalaya'. He also, for the first time, brought to light various quaternary formations developed in different river valleys of the Garo Hills and gave firm stratigraphic support to the Paleolithic cultures (Sharma 1972: 77-93). Rajaguru et al (1978) conducted a survey of quaternary formations in the Garo Hills jointly with the Department of Anthropology, Gauhati University, with a view to foster quaternary geological background for the Stone Age culture reported earlier. They took keen interest in the work done by the research team of the department and made their expert knowledge available for working out chronological sequences of the prehistoric cultures of North-East India. Reports regarding two Pleistocene mammalian fauna helped in establishing the above chronologies (Badam 1974: 75-78).

The Stone Age sites discovered so far in Meghalaya yielded cultural materials of different phases of this age. Earlier, the Neolithic cultural phase was considered to be the only culture of the prehistoric period. Sankalia, who visited the Garo Hills in 1969-70, was convinced that some of the sites discovered there earlier had yielded Palaeoliths. He included all these materials in his book *Prehistory and Protohistory of India and Pakistan* (1974).

Another interesting and important tool tradition—the Chopper tradition—was discovered in 1978 by the present author at Nangalbibra in Simsang-Nangal Valley of East Garo Hills district. In the same environmental situation, another lithic tradition, with flake tools and a few microliths on chert and jasper, was found, which justified the presence of Levalloisian and Microlithic traditions. Sonowal, on the other hand, studied some of the sites discovered in the river valleys of Rongram, Ganol and Didami of the West Garo Hills. Her study was mainly based on typo-technology of the stone tools of Palaeolithic periods. She included these materials in her Ph.D. thesis titled 'Studies on the Flake and Blade Industries of the Garo Hills, Meghalaya' (1987).

Sharma reported another microlithic industry at Selbalggre-II

in West Garo Hills district. A trial excavation at the site revealed that there was a clear Microlithic horizon below the Neolithic level. These microliths were predominantly non-geometric in character consisting of micro-scrapers, points, with plain hand-made pottery. He also reported the *Hoabinhian* (*Sumatraliths* of Mesolithic period) from the Rongram Valley of West Garo Hills (Sharma 1979: 289). Hoabinhian tools were found at Bibragre, Matchakhlogre and Ganolgre of West Garo Hills district. Hoabinhians of Bibragre comprise varieties of flake tools, which were also scantily found earlier at the Rongram Hoabinhian site. Sharma et al discovered a number of stone age sites around Selbal river valley of the West Garo Hills and identified Palaeolithic, Mesolithic and Neolithic traditions in different contexts (Sharma and Mahanta 1993(a): 61–72; 1993(b): 49–57).

The archaeological exploration conducted by the Department of Anthropology, Gauhati University, since 1968 resulted in the discovery of a number of stratified as well as surface Neolithic sites in Meghalaya. Noteworthy among them are Selbalgre, Rongram-Alagre, Chitra-Abri, Ganolgre and Rengchengre in the West Garo Hills. Among these, the Selbalgre and Rongram-Alagre sites were also tested by trial digging. Excavation revealed that Selbalgre had two cultural layers:

- (a) Neolithic layer, which yielded both chipped and ground stone axes, one scraper and plain hand-made grey pottery; and
- (b) Microlithic layer, which yielded a large quantity of microliths, fluted core, hammer stones and a large number of micro-flakes. The site at Rongram is a typical one as it yielded a stratification, viz., Neolithic above and Hoabinhian below. Chitra-Abri yielded a large quantity of shouldered celts—a typical characteristic of Asiatic Neolithic complex.

The Barapani site discovered by the present author yielded cultural relics consisting of typical axes, flakes and blade tools made on phyllite, which were found exposed on the surface (Sharma 1983: 41–49).



Roy, who attempted to correlate the salient features of material cultural elements of the past and present by studying the shifting cultivation of the Garo Hills, made another significant attempt. He tried to trace the Neolithic agricultural patterns (Roy 1981: 193-219).

The present author also propagated a broad-based ethno-archaeological study on the basis of present-day material, cultural, settlement-subsistence patterns, and lifestyle of the Garo people to trace the present-past continuum.

### Mizoram

In Mizoram, archaeological investigation is yet to start. Only one stone axe has been found till now in this state. It is a broad and thin axe made of slate. At the butt-end, it has three broad holes probably for facilitating the hafting of the tool.

### Nagaland

Nagaland appears to be a potential area of prehistoric research due to its strategic geographical location but except for the British, no one has explored this. Hutton reported the first evidence of prehistoric antiquities in 1924. No survey has been conducted thereafter by anyone.

In the pre-Independence period, however, Neolithic celts were collected from the Nagas without any reference to sites or contexts where they originally might have occurred. These are now preserved in the Pitt-Rivers Museum of Oxford University, Museum of Archaeology and Ethnology, Cambridge University, State Museum, Gauhati and Anthropological Museum, Gauhati University. These are the only source materials on the prehistory of Nagaland.

### Tripura

Tripura, the south-eastern-most border-state of North-East

India, is another potential area for archaeological research. Recently, two geologists B.C. Poddar and N.R. Ramesh of Geological Survey of India (Poddar and Ramesh 1983: 1-4) made important archaeological discoveries. They found several Stone Age sites in the valleys of Hoara and Khowai rivers near Agartala. The important sites identified by them are Teliamara in Khowai valley, Sonai Bazar, Bairagibari, Sonaram and Agartala in Hoara valley. The Stone Age implements they found exposed on the eroded surfaces of the river terraces locally called *tillas* which have been dated by  $C_{14}$  method to the late Pleistocene Age, i.e. B.C.  $35690 \pm 3050$ . They opine that this date has enabled us to establish firmly, for the first time, the chronology of the Paleolithic period of North-East India (Ramesh 1989: 321). This has not only established the presence of Paleolithic culture but also helped set aside all doubts expressed about Paleolithic man and his cultures in the region.

The Tripura assemblages contain all phases of prehistoric cultures from Paleolithic to Neolithic periods. The most remarkable feature of the Stone Age industries is the utilisation of silicified fossil wood for manufacturing tools, as in the Anyathian culture of Myanmar. The sites have also yielded microliths. The Neolithic cultural phase has been dated to B.C.  $3450 \pm 110$  by  $C_{14}$  method (Poddar and Ramesh 1983: 1-4). Regretfully, after such a remarkable discovery, no further work has been taken up.

### Prehistoric Cultural Sequence in the North-East

T.C. Sharma (1966: 403), while presenting a thesis on 'The Neolithic Culture of Assam', proposed a prehistoric cultural sequence for North-East India starting with the Early Holocene Hoabinhian period which was succeeded by the Neolithic which might be seen as having two distinct phases:

- (i) the Early Neolithic
- (ii) the Late Neolithic



Sankalia (1974: 298) corroborated this. However, the present author, in his thesis titled 'Prehistoric Archaeology: Stone Age Cultures of Garo Hills, Meghalaya' (1972), has proposed a different cultural chronology, viz., Early Stone Age; Early Middle Stone Age; Late Middle Stone Age; Late Stone Age, considering the Stone Age cultural chronology for North-East India on stratigraphical and typo-technological bases. According to him, there is a continuous Stone Age cultural sequence starting from lower Paleolithic and middle Paleolithic upper Pleistocene cultures—Hoabinhian—Mesolithic Cultural phase—Early Neolithic and late Neolithic—Early Holocene. Evidences of Copper—Bronze and early Iron Age cultures in the North-East are still lacking.

During the last decade, research on the Stone Age archaeology of North-East India has registered a significant advance after the visit of a team of geo-morphologists/archaeologists from Deccan College Post-Graduate and Research Institute, Pune. Deccan College and the Department of Anthropology, Gauhati University, jointly carried out systematic geomorphological studies in different river valleys of the Garo Hills (Rajaguru 1981: 5). On the basis of stratigraphical evidences provided by Rajaguru et al, and typo-technological evidences of the Stone Age tools from the Garo Hills and other places of North-East India, Sankalia proposed the following Stone Age cultural sequence (1981: 5):

Stone Age Cultural Sequence: Meghalaya

Early Paleolithic	C	200000 – 50000 B.C.
Middle Paleolithic	C	50000 – 20000 B.C.
Late Paleolithic	C	20000 – 10000 B.C.
Mesolithic	C	10000 – 5000 B.C.
New Stone Age (A)	C	5000 – 2000 B.C.
New Stone Age (B)	C	2000 – 1000 B.C.

The first chronometric dating of prehistoric cultures of the region by  $C_{14}$  method was related to Tripura (Ramesh 1989: 224). On the basis of available stratigraphic data and typo-technological evidences, corroborated by radio-carbon dates as

well as comparative study of identical materials from adjacent regions, Ramesh proposed a chronological scheme for Tripura prehistoric cultures as follows:

#### Chronology of Prehistoric Cultures in Tripura

Modern	165 ± 80 B.P.
Medieval Pottery	1430 ± 90 B.P.
Holocene – Evolved Tripurian = Upper	3450 ± 110 B.P.
Palaeolithic – Early Neolithic	
Late Pleistocene – Late Tripurian =	35690 ± 3050 B.P.
Late Middle Palaeolithic	

### Discussion

Several Stone Age sites that yielded Palaeolithic, Mesolithic (Microlithic and Hoabinhian) and Neolithic cultural relics have been discovered in different parts of this region, but scholars are as yet unable to demonstrate a congruous chrono-cultural sequence. Despite considerable research done by scholars like T.C. Sharma, H.C. Sharma, H.D. Sankalia, S.N. Rajaguru, R.S. Pappu, R.V. Joshi, V.N. Misra, O.K. Singh, B.C. Podder and N.R. Ramesh, M. Sonowal, B.P. Bopardikar, A.A. Ashraf, etc., an acceptable cultural sequence and chronology for the prehistory of North-East India is yet to develop. Absolute chronology in terms of radiometric dating of the prehistoric sites was not there till the discovery of the Stone Age cultures in Tripura. In the absence of this, it is not possible to draw a clear picture of the prehistoric man and his culture in this part of India. However, future researchers may be able to generate some datable materials from this spectacular region.

Considering the  $C_{14}$  dates of the Tripurian culture, we have now confirmed that the prehistoric man started living in North-East India from the late Pleistocene time, if not earlier. The joint exploration team of Deccan College, Pune and the Department of Anthropology, Gauhati University, under the leadership of Rajaguru, proposed the same date for the beginning of the prehistoric cultures in Meghalaya on the basis of



geo-morphological and geo-archaeological data on the Garo Hills. Therefore, those  $C_{14}$  dates of Tripura not only confirmed our earlier proposition but also provided a firm ground for Paleolithic cultures of North-East India and the Garo Hills in particular. This, however, does not preclude the necessity of more systematic archaeological work in future.

It is also important to remember in connection with archaeological research in future that some effort should be made to connect the Stone Age culture with the contemporary cultures of the region and also try and solve the question of ancient and medieval period migrations of people in the region. The question of their original habitat is important for the various tribes of the region but there is virtually no scientific basis to their claims of aboriginality as well as nomadism almost until the colonisation of this region by the British. The linguistic research in the region is also not developed enough to answer any of the questions that the people of the region have in their minds. Archaeological analysis should also try and go beyond the tools they have dug out to tell the scientific community the stories of cultural continuities as well as discontinuities and the implications of both for contemporary societies. Archaeologists might also try and answer why there are so few archaeological sites available for excavation in the North-East. Such efforts will certainly make archaeology relevant and help it grow beyond the confines of museums.

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# Human Growth and Development

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## Growth and Development

Physical growth and development are the most important and basic characteristics of living organisms. They also indicate, in quite objective terms, the social and cultural development of a society. The terms 'growth' and 'development' are generally used synonymously but in the biological sense, they are not the same. Growth refers to increase in size and weight of the body. Development refers to the changes that take place in the structure of the body during growth. Thus growth brings changes in the size of an organism while development brings changes in the form and structure of the body. Growth is a progressive increase in volume, weight and a number of other measurable attributes. It is not just an increase in any part of the body but increase in proportion to age. It is a harmonious development of all the organs. Therefore, growth and development are considered together because the child grows as well as develops simultaneously.

Different scholars have given different definitions of growth. According to Garn (1952):

The term growth and development as used in physical studies refer to the processes common to all living organism, processes intimately linked in time but partially independent,

unquestionably genetically determined yet uniquely susceptible to environmental modifications.

Montagu (1960) defines it as the increase in physical size of the whole body or any of its parts, while development is the increase in its complexity.

In both growth and development, several forces interact with each other. Growth is predestined by hereditary components whereas environmental conditions influence its manifestation. Likewise, development of different organs may have a genetic base but it is influenced by environmental factors. Therefore the study of growth and development unravels the interplay between genetic and environmental factors.

The human body begins its development as a fertilised egg within the mother's womb. Development takes place by the production of specialised tissues from unspecialised ones and growth happens by repeated cell division. At birth, differentiation becomes almost complete, further development being mainly a matter of growth.

Physical growth can be classified into two distinct stages: pre-natal and post-natal. The development of the embryo from the stage of zygote till the birth of the baby is known as pre-natal or embryonic development. The growth or increase in size that takes place from birth to physical maturity is known as post-natal growth. The term 'involution' or 'senescence' is used for describing the process of aging in late adulthood.

Growth is not a steady process of increment in which all parts of the body increase at the same rate. There are periods when growth is particularly rapid and at times it is slow. Again, all the parts of the body may not grow at the same rate. Some parts of the body may increase rapidly for a period while others may not. Thus, on the basis of the types and rates of growth, a pattern may be obtained. According to Tanner (1962):

Human growth is not a steady and uniform process of acceleration in which all parts of the body increase at the same rate and the increment of one year be equal to that of the preceding and succeeding year.



Thus, growth rate and pattern are different at different stages of life. The levels or phases of growth are divided as infancy, early childhood, late childhood, adolescence and maturity or adulthood.

Anthropometric measurements form the basis of any study on human growth. Anthropometric data are used for evaluating the type and magnitude of growth. These are usually two ways to show the increment of a measurable trait from one age to another. One is expressed as the total increment at successive years and the other is to show the rate of growth per year. If we consider growth as a form of motion, the first shows the distance travelled and the second indicates the speed or velocity of growth at different ages. The velocity or rate of growth may not be the same during all stages of growth. Again, the rate of increment of the different segments of the body is not uniform. The growth of the head is relatively more than that of the trunk. Again, the trunk completes its growth earlier than the limbs. Growth is relatively faster during infancy and early childhood. At school-going age, it is slow and steady. Adolescence is characterised by rapid growth—known as adolescent growth spurt—and by a series of developmental changes, like voice change in boys and menarche in girls. Sexual maturation takes place during this period.

There are several factors that influence growth, which may broadly be categorised as hereditary and environmental.

### **Hereditary Factors**

The genetic control of growth is indicated by the variations found in the total magnitude and rate of growth between children and adults of different populations living in more or less similar environments. Many scholars (Levine 1972, Garn et al 1973, Hiernaux 1959, Tanner 1960, Ashcroft et al 1966) have reported ethnic variation in growth patterns. Twin studies provide the most reliable evidence of hereditary control over growth. It has been found that the difference between monozygotic twins in respect of stature is relatively less than that

of dizygotic twins. Again, age at attaining puberty is more or less the same in monozygotic twins while a marked difference is observed between dizygotic twin sisters. Hereditary factors are clearly of immense importance as the basic plan of growth is laid down by heredity.

Hormones or secretions of the endocrine glands are of great importance in the control of growth and development. The most important hormone that controls growth from birth to maturity is somatotropin or growth hormone. Other important hormones that play a major role in regulating growth and development are thyroid hormone and steroid hormone.

### **Environmental Factors**

Environment is a broad term that includes a large number of interacting variables. It is a complex condition and each condition influences the organisms differently at different phases of growth.

There are many studies that demonstrate the influence of environmental factors on growth. Climate, altitude, nutrition, socio-economic status, family size, psychological disturbances, generation changes, migration, and urbanisation are some important non-genetic factors that influence growth.

#### *Climate*

Heat, cold and relative humidity are associated with variation in body size, proportion and composition. People living in different climatic conditions tend to show differences in their body size. Usually, people living in a hot-dry climate tend to have a taller and lighter body in comparison to people living in a cold climate.

#### *Altitude*

The 'thin air' at high altitude creates environmental stress among the people living there. The prevailing conditions at high altitude

have an impact on the growth and maturation of children. Growth and skeletal maturation are more retarded in mountain-dwellers than in coastal dwellers because of environmental stress.

### *Nutrition*

Of all the environmental factors affecting growth, nutrition seems to be the most important. Nutrition influences both growth and development during pre-natal as well as post-natal phases. A required amount of food and nutrition is essential at different ages for proper growth and development. Undernutrition during childhood results in slow skeletal growth and malnutrition before adolescence delays appearance of the adolescent spurt (Tanner 1962). In fact, retardation of growth rate is an indication of malnutrition and the condition is improved by supplementing the diet. During the post-war period, various investigations were made in different parts of the world to assess the effect of supplementation of nutritious food to undernourished children. Studies revealed that proper food supply helped restore normal growth in children who might otherwise have suffered. Worldwide observations have established the fact that inadequate diet and malnutrition may produce stunted growth of body and mind. But if adverse conditions prevail only for a short period, children can regain normal growth.

### *Culture*

Culture too influences nutritional conditions. Nutrition not only depends on the availability of food or the socio-economic condition of the person or population concerned but also on the utilisation of food resources. The kind of food eaten, meal time, food restriction, food habits, styles of life, etc. are culturally determined. Thus, cultural behaviour influences nutrition, and thereby growth and development.

### *Socio-economic Status*

The impact of socio-economic differences on the height and



weight of children is well known. Several studies have shown that children belonging to a high socio-economic group grow faster than those belonging to a low socio-economic group. The causes of such differences are multiple, as socio-economic condition is associated with the standard of living, education, occupation, nutrition, health care practices, family size, hygiene condition, etc.

### *Family Size*

The size of a family also influences the rate of growth of children, especially in the lower socio-economic class. Children do not get adequate care and food in a poor and large family. As such, the rate of their growth in such families is found to be relatively more retarded than in big families belonging to a higher socio-economic class.

### *Psychological Disturbances*

Parental love, care and proper parent-child relationship can influence the social, emotional and mental development of children. Adverse psychological conditions can affect the functioning of the endocrine system, which may in turn cause retardation in growth.

### *Generation Changes*

Studies conducted during the last one hundred years in different parts of the globe reveal a marked tendency in children to become progressively larger—taller and heavier—besides maturing more rapidly. Factors like better nutrition, improved hygienic conditions, control of infectious diseases, reduced family size, improved and widespread medical facilities, etc. might have been responsible for the occurrence of an increase in height and weight. This trend has been termed as the 'secular trend'. This phenomenon has also been noted as regards the age at menarche. It has been found that the average menarcheal age of girls is gradually going down.

### *Migration and Urbanisation*

The impact of migration and change of environment on physical characteristics has been reported by Shapiro (1939) in his classic study on the growth of Japanese children in Japan and Hawaii. Rural-urban differences in growth and development of children have also been reported by many. According to Tanner (1964):

There are racial differences in rate and pattern of growth leading to the differences seen in the adult build. Some of these are clearly genetically determined, while others depend, perhaps, on climatic differences.

Various studies have shown that there are differences in growth rate in many ethnic groups but how far these are due to heredity or ecology is still not clear. Hereditary factors are clearly of immense importance as they lay down the basic plan of growth. But environmental factors constantly condition and modify the expression of genetic potentials. Many authors have reported that the pattern of physical growth and development, though genetically determined, is strongly influenced by different environmental conditions (Tanner 1966, Eveleth and Tanner 1976, Johnston et al 1976, Garn 1980, Eveleth 1985). Jelliffe (1966) is of the opinion that environmental influences, especially nutrition, have a greater importance than genetic background.

The growth of a child to an adult is the result of both genetic and environmental forces acting together. Genetic factors set the limits of growth and environmental factors help to reach the limit.

There are two main approaches to studying growth in human beings and they are (a) longitudinal studies, and (b) cross-sectional studies.

A longitudinal study is done by measuring the same set of children at regular intervals during their growth. A cross-sectional study is done by measuring different children at different phases of their growth. In a cross-sectional study, each child is measured only once. Thus children of one age group are different from those of other age groups. The term 'mixed

longitudinal' or 'semi-longitudinal' is applied to a study in which some of the children that have been measured for some time could not be measured throughout the period of study and had to be replaced by other children of the same age-groups.

Longitudinal data are essential for the study of growth and for the accurate assessment of growth increments. But a longitudinal study is by nature time-consuming, expensive and dependent upon the continuous cooperation of the subjects. The cross-sectional method has the advantage of covering the whole growth period within a short span of time. As such, for studying average growth performance of a group of people, the cross-sectional method is more practical.

Anthropometric measurement forms the basis of studying human growth and it has always been used in growth studies. Recording the correct age of the individuals under study is also important in the study of growth.

Growth studies have recently assumed considerable significance in understanding the health and nutritional status of children. Nutritional status of an individual or a community may be assessed in a number of ways—clinical examination, dietary survey, and anthropometric investigation.

Anthropometric data have varied uses in assessing the health status of a population. The main aim of the nutritional assessment of a community is to know the magnitude and geographical distribution of malnutrition as a public health problem and to find out the environmental factors that are responsible for the same. Anthropometric data collected from children are useful for monitoring social and economic conditions in society.

Environmental stress is another important agent that influences weight and stature during growth. As such, the bodily growth of children indicates population health. Body measurements like height, weight, head, chest and arm circumferences, and skin-fold thickness are considered important evaluative tools for assessment of health and nutritional status. Among them, the most widely used global measurements are height and weight. The indices that are used for assessment of



nutritional status may be identified as age-dependent and age-neutral.

WHO (1986) recommended two indices for detection of malnutrition in children:

1. Weight for height, indicate wasting or thinness, and
2. Height for age, indicating to stunting or shortness.

Wasting indicates deficiency in tissue and fat mass compared to the amount expected in a child of the same height and may have resulted either from failure to gain weight or from actual weight loss. Stunting indicates slowing in skeletal growth.

For the evaluation of protein calorie malnutrition, the commonly-used-age neutral anthropometric indices are:

A. Body mass index:  $\text{weight/height}^2$

B. Ponderal index:  $\frac{100 \times 3/\text{weight (gm)}}{\text{Stature (cm)}}$

C. The ratio of mid-arm circumference/head circumference

In comparison to clinical and biochemical techniques for the assessment of nutritional status, anthropometric indicators may be less accurate but are very useful in detecting mild and moderate forms of malnutrition. Malnutrition cannot be quantified on the basis of clinical signs. Biochemical tests are also time-consuming and expensive. They cannot be applied on a large scale. So anthropometric techniques are more practical. It is one of the most simple and reliable means to evaluate the progress of a normal child. However, different parameters that are used for detection of malnutrition do not give similar results and there is no correlation between the different parameters in the detection of malnutrition.

### Growth Studies in the North-East

Studies on the growth and development of children started in the West long ago but in India, such studies are relatively of

recent origin. The Indian Council of Medical Research, New Delhi, did the first systematic study on growth and development of Indian children from 1956 to 1965. It tried to provide a growth standard for Indian children on a regional basis. In recent times, growth studies are gaining popularity and many scholars have conducted such studies on different populations of India.

In comparison to other parts of India, growth studies are quite recent and limited in the North-East. They were initiated in the region in the late sixties. Das (1967) studied the somatometric traits of Kalita boys and girls belonging to 6 to 21 years and noted the sexual variation in growth pattern in some of the traits. Das and Das (1969-71) have reported some aspects of growth pattern of Assamese boys belonging to the age group 6 to 16 years. Das (1973) reported the growth pattern of Kaibarta boys of Assam in respect of height and weight. She (1974) also made a comparative study of growth with respect to height, weight and chest circumference among four Hindu castes of Assam, viz., Brahmin, Kalita, Baishya and Kaibarta and observed similar growth trends in the four castes. All the caste groups exhibit adolescent spurts between 12 and 13 years. Ahmed Hazarika (1978) reported the growth pattern of head, face, trunk and limb of Ahom boys of Dibrugarh, Assam. Duarah and Das (1978) made a growth study on Khamti boys of Arunachal Pradesh. Choudhury (1978) studied the growth pattern of Rabha boys of Assam and found that they were taller and heavier than Hindu children in early age whereas adult Rabhas were shorter and lighter. Das (1982) also made a comparative study of growth and body build of Rajasthani and Assamese children of Dibrugarh. It was observed that Assamese boys were taller, heavier and larger in all the traits under consideration than Rajasthani boys upto 9 years of age but this uniformity was not maintained later. Devi (1985) studied the growth pattern of Meitei and Muslim girls of Imphal and noted similar growth trend in the two groups. Duarah (1985) worked among the Monpas of Arunachal Pradesh living in varying altitudes and observed that besides altitude, socio-economic factors played an important role in the rate of growth.

# The Anthropological Survey of India and Social Anthropology in the North-East

JAYANTA SARKAR

## Background

Anthropological studies were first initiated and patronised in India by the Asiatic Society of Bengal from the date of its establishment in 1774. Some administrator-scholars contributed greatly to the body of anthropological knowledge by reporting on the tribes and castes of the country. Most of those who wrote ethnographic accounts on the people of India had no formal training in Anthropology. The teaching of Anthropology began with the establishment of the Department of Anthropology at the University of Calcutta in 1920. In the same year, S.C. Roy, who is often referred to as the father of Indian Anthropology, established an institution in Ranchi and started publishing the first ever anthropological journal in India called *Man in India*. The journal provided administrator-scholars and anthropologists with a suitable platform to disseminate their ideas. It contributed enormously to the development of Anthropology and anthropological research in India.

Intensive field-based research by professional anthropologists got a firm footing with the establishment of the Anthropological Survey of India (henceforth AnSI) in December, 1945. This

institution further enlarged the scope of research in Anthropology and allied disciplines.

In fact, an Anthropology Section had first been set up under the Zoological Survey of India as early as 1927. The researchers associated with the section were the first professional anthropologists employed in the public sector. However, as the total number of professionals in the section was only six, it was impossible to unveil the diverse bio-cultural situation of India. There was a strong need to have a separate institution where trained anthropologists could conduct bio-cultural research among the people of India living under varied ecological, linguistic and cultural situations. Hence the AnSI was established on December 1, 1945, in Benaras, with the staff of six taken from the Anthropological Section of the Zoological Survey of India. The AnSI started functioning under the leadership of Dr B.S. Guha as Officer on Special Duty. He was subsequently appointed Director on August 1, 1947. The office was shifted from Benaras to Calcutta in 1948 and was housed in the premises of the Indian Museum, Calcutta. It subsequently had a significant impact on the growth and development of Anthropology in the country. The present paper is an attempt to assess its impact on the Social Anthropology of the North-East, with particular reference to various methods applied for undertaking researches in the region.

## Objectives

The AnSI was established with the following objectives:

- (1) To study tribes and other communities that form the population of India both from the biological and cultural points of view
- (2) To study and preserve human skeletal remains
- (3) To collect samples of arts and crafts of the tribes of India
- (4) To function as a training centre for advanced students of Anthropology and for administrators
- (5) To publish the results of research.



The objectives of the AnSI were reoriented in 1970 and again in 1984 to meet the demands of the plan objectives of the Government of India. Among other things, the newly framed objectives were:

- (1) To take up anthropological study of the people of India
- (2) To continue with studies of the scheduled tribes and other weaker sections
- (3) To reflect in its research programmes, the priorities set by the Government of India with regard to conservation of environment, welfare of women and children, mother and child care, development of weaker sections, physical fitness and nutritional status and poverty alleviation
- (4) To take steps to salvage and preserve cultural artifacts faced with the threat of extinction and those which otherwise need to be preserved
- (5) To study and promote awareness of the rich and composite culture of the country and the contribution of each community to this heritage.

The AnSI has the following sub-divisions: Cultural Anthropology, Physical Anthropology, Pre-historic Archaeology, Palaeoanthropology, Linguistics, Human Ecology, Psychology, etc. and they coordinate with each other in their effort to understand the biological and cultural aspects of the human society. The AnSI also uses audio-visual aids in this effort.

### Major Projects Undertaken

During the last 55 years of its dedicated service to the nation and the discipline, the AnSI has completed more than 700 research projects covering almost all the major aspects of bio-cultural studies on the people of India. To begin with, it organised expeditions to remote areas of Arunachal Pradesh, Andaman and Nicobar Islands, and the Cochin forests. It also took up studies on the skeletal material remains unearthed from Harappa, Mohenjodaro and Rupkund. Another major area was

the study of Indian culture in terms of its unity and diversity. This was done through an all-India project on Material Trait Survey, which revealed the threads binding Indian culture. The findings of this survey received international attention. This was followed by another all-India project to generate anthropometric data on Indian population in a systematic and scientific manner. The findings of this study showed that there were more intra-group variations than inter-group variations, which further established the oneness of the Indian culture.

Yet another important all-India project undertaken and successfully completed by the AnSI was the Bio-anthropological Survey, which provided data on the health profile, demographic pattern, and food habits of the Indian population. The AnSI also successfully conducted a number of other very important studies on subjects like tribal solidarity movements, fishing communities of India, complex religious institutions, nomadic societies, weaker sections, border societies, impact of urbanisation and industrialisation, agrarian structure, endangered populations of the Andaman and Nicobar Islands, etc. One of the largest ever projects completed by it is known as the People of India Project that covered 4,635 communities spread all over the country, about which more details are given below. The AnSI is currently focussing on nutritional status, health and health care issues, scheduled castes and transformation, management of environment and natural resources, documentation of folk art, folk music, folk craft, and DNA polymorphism. Some of these emphases are obviously reflected in its activities and achievements in the region concerned.

### Early Encounter with the North-East

North-East India drew the attention of the AnSI at a very early stage of its establishment. Keeping in true tradition of holistic study of the discipline, multi-disciplinary teams undertook field investigations among the Adi tribes of Arunachal Pradesh, which was then known as the North-East Frontier Agency. It was an

integrated approach of a group of scholars drawn from Cultural and Physical Anthropology, Psychology, Biochemistry and Linguistics. As per the tradition of anthropological fieldwork, the team lived with the people and undertook prolonged investigation. This resulted in a number of scholarly publications on social organisation, anthropometry, blood groups, nutrition, folklore, and so on.

In order to further promote the objectives of the AnSI, a regional centre of the AnSI was established in Shillong in 1953. The researchers at the Centre not only initiated a number of projects but also interacted closely with those involved in the scientific understanding of the people of this region.

### Later Works

Many scholars serving in AnSI later focussed on the study of lesser-known tribes. In this context, the work of Shyam Choudhury and Das (1973) on the Lalungs of Assam, a tribe living in a transitional stage of matriliney to patriliney, deserves a special mention. On the basis of prolonged fieldwork, they critically examined the clan organisation and the institution of Bachelors' Dormitory. They have compared their data with those on the Khasis, Pnars and the Garos to trace the elements of matriliney of the Lalungs and also to delineate similarities and affinities, if any. One of the important observations made in this work was that the Lalungs, though transformed to a considerable extent from matriliney to patriliney and from tribe to peasantry, have successfully retained the Bachelors' Dormitory as an important element of their social organisation.

The study on the War Khasis by Dasgupta (1984) has filled a vital gap in the anthropological literature on Meghalaya as most available writings on the Khasis then were based on the upland (or Khyrniam) Khasis. The general ethnographic account of the tribe is supplemented with a description of the changed situation observed after twenty-six years by the same scholar.

Mazumdar's work (1978) on two Garo villages of Meghalaya

has also delineated the changes noticed in this matrilineal society. This comprehensive account of the adoption of settled cultivation and its impact on various social institutions of the Garos reveals that despite large-scale adoption of Christianity, the institution of property has not changed much.

Other important studies on the region by the AnSI scholars are on the Dimasas (Danda 1978), the Semsas (Danda and Ghatak 1985), the Gallongs (Lal and Dasgupta 1979), the Khamtis, Padams and the Kaman Mishmis (Sarkar 1987), the Lishus (Moitra 1988), the Southern Angamis (Das 1993), etc.

It is important to note that each of these works has its own analytical frame. Whereas the Dimasas have been observed from their unique system of double descent, the Semsas have been examined against their adaptive strategies for bio-cultural survival. Among the Semsas, who live in a single village and observe village endogamy, human sentiments and superstitions still play a vital role in designing their socio-cultural life. Ecology is an important analytical framework for understanding the Gallong society, which has traces of fraternal polyandry. Studies on the Semsas and the Gallongs also show influences of ecological factors on settlement patterns and economic and socio-ritual lives of peoples. The Khamtis, Padams and the Kaman Mishmis have also been viewed in the context of their immediate ecological settings. Their ethnographic accounts highlight the adaptation of these tribes to different ecological conditions in terms of material culture, economy, social organisation, cycle of festivals, political organisation and their contact with outsiders. The detailed ethnographic study of the Southern Angamis (Zounuo-Keyhonuo) of Nagaland provides a jural and political view of their social structure. It examines the principle of descent and its politico-jural implications. Through the study of lineage/clan organisation, Das's work perceives and articulates political relations in terms of the descent principle. The study suggests that:

[I]nternal mechanism of kinship, such as the formation of groups based on unilineal descent, and their external relations generally set up and involve political and jural relations (Das 1993).



## Studies on Social Structure

Social structure is apparently another important focus of study for the scholars of the AnSI. For instance, Banerjee (1968) studied the social structure of the Pnars, a matrilineal tribe of the Jaintia hills, and found it to be based on female ultimogeniture, which, according to him, plays an important role in bringing about a stable relationship between various matrilineal segments and facilitates coordination among their territorial units. He found their lineage to have three orders of varying sizes:

- (i) The smallest unit which corresponds to the domicile group in the minimal segment of a lineage.
- (ii) A group of such households forms another matrilineal segment, referred to by the local Pnars as *Chi-blei*.
- (iii) Finally the respective *Chi-blei* units build up the maximal segment of a lineage (Banerjee 1968).

The domestic unit where the youngest daughter holds ownership occupies the base of the Pnar serial structure. Even when an elder sister establishes a separate household, the authority remains with her natal family where the male members reside throughout their life. The family deity is retained in the natal house and therefore the units established by the elder sisters continue their relation with it. For this purpose, they have complete economic security from the resources in possession of the youngest daughter. The discrete units headed by the elder sisters, remain in a subservient position for the rituals are to be conducted in the natal house.

An important aspect of the Pnar matriliney is that the husband enjoys a special position though he maintains a duo-local residence. However, those who follow Christianity have changed over to an uxorilocal residence as followed by the Khasis (Banerjee 1968).

Researchers at the AnSI have made a significant contribution towards resolving the theoretical controversies over the data presented by T.C. Das of the University of Calcutta on the

Purum tribe of Manipur. Das's monograph titled *The Purums: An Old Kuki Tribe of Manipur* (1945) invited criticism from many scholars regarding his analysis of the system of marriage prevailing among them. The data on the practice of unilateral cross-cousin marriage attracted the attention of scholars like Needham (1950, 1960, 1962), Homans and Schneider (1955), Ackerman (1964), White (1963), Cowgill (1964), Muller (1964), and many others. Most of them tried to explain unilateral cross-cousin marriage and the prescriptive exchange system in structural and psychological terms. However, White attempted to explain the system statistically by applying graph theory. Needham also formulated his hypothesis by looking at the social structure through symbols and sentiments.

The AnSI scholars undertook a study in 1975 with the aim of assessing the mechanism of social and biological factors responsible for the dwindling population of the Purums. They found that the Purum tribe had taken a new identity, calling themselves 'Chote'. On the basis of contemporary demographic data collected from all the nine villages inhabited by the Purums (Chotes), the researchers proposed a theoretical division of the population into Purum I and Purum II in terms of spouse selection. The Purum I could be considered as well-defined inbreeding population while Purum II had established marital relations with the neighbouring Naga tribes. The demographic data suggested that through drift and hybridisation, the genetic composition of the Purum II population was gradually losing its Purum (Chote) identity.

Data on socio-cultural aspects suggest that in spite of several changes that have encompassed the Purum (Chote) life since T.C. Das studied them, their society still reflects dualism in explaining anything and they classify everything in terms of antithetical pairs. They perceive things around them as entities existing as a pair of binary opposites. So they conceive of everything as superior/inferior, high/low, good/bad, etc. The most important observation of the study is that the prescriptive system of marriage has remained stable among them.

On the basis of this study, Needham and others examined

aspects of dualism and prescriptive alliance to conclude that the present anomalous cases of marriage alliances speak of laxity in adhering to prescriptive marriage rules (Dasgupta et al 1985).

A number of scholars at the AnSI (Goswami 1960, Sarkar 1977, 1987a, 1988, 1996, Danda 1978, 1988) have worked on the social structure of tribes living in Mizoram, Arunachal Pradesh and the North Cachar Hills District of Assam. Goswami's analysis of the kinship terms of the Lushais led him to believe that the Lushais had a system of asymmetrical marriage as among the Purum tribe of Manipur. The Lushais had a number of wife-giver (*pu*) and wife-taker (*tu*) groups and there was a system of circulation of brides within a prohibited category of lineages. They had preferential and prescribed marriages with mother's brother's daughters and accordingly, the society was clearly divided into two groups: those who were eligible to take brides from certain identified prescribed lineages and those who were debarred from practising such marriage alliances. Direct exchange of brides was prohibited by custom. He further noted that there was circulation of masculine gifts associated with such marriages—the mother's brother and his kin members were supposed to receive such gifts during the marriage and on some other important social occasions. Presentation of such gifts to a particular kin category of the wife's lineage, according to him, clearly indicated a higher status, position and prestige enjoyed by the wife-giver group.

Sarkar (1977, 1987a) reported a similar marriage alliance among the Khamtis of Arunachal Pradesh. In some Khamti areas, he found the prevalence of asymmetrical marriages. This tribe prohibited direct exchange of brides between the two lineages, and marriage with mother's brother's daughter was considered to be the preferred alliance. Like the Lushais, the Khamtis consisted of a number of wife-giver (*Lungta*) and wife-taker (*Khuitow*) groups. Their kinship terms *Jao* and *Khui* also reflected the existence of wife-giver and wife-taker groups in this tribe. He also observed the circulation of some masculine gifts and their importance in considering the wife-giver group as

a higher and more prestigious lineage group than the wife-takers' group within the society.

Another study by Sarkar (1988) on the pattern of marriage alliance among the Wanchos of Arunachal Pradesh revealed that they are divided into three major social categories: (i) the chief and his clan members (Wangham), (ii) the commoners (Wangpen), and (iii) the category of Wangsas, a group between the chief and the commoners. In some villages, there existed a fourth category called Wangsu. The tribe prohibited marriage of a girl of the aristocrat category with a commoner male but permitted a male of aristocrat category to marry a woman from the latter category. The marriage alliance between an aristocrat male and a commoner female resulted in the formation of the third category. Practice of village endogamy and the existence of three social divisions could be understood against the backdrop of their sentiments and the beliefs associated with head-hunting. Their social structure, according to Sarkar, is primarily based on five basic principles of marriage. They are:

- (a) The commoners of the village should provide wives to all the other three social divisions namely the Wangham Wangsa and Wangsu.
- (b) The Wangsus are also allowed to provide brides to the Wangsa and Wangpen of the same village.
- (c) Females cannot be exchanged between the Wanghams and Wangsas of the same village.
- (d) Wangham females cannot be given as brides to any social category within the village.
- (e) Exchange of brides between the Wangpen and Wangsas is most favoured and accepted.

From the marriage system prevalent among them it is discernible that village endogamy is a result of the preventive measures adopted to keep enemies away. These five principles of marriage seem to have provided the society with a chief who could effectively control and manage headhunting and related activities, which were once believed to be associated with the fertility and prosperity of the society.



Danda (1978) made a significant contribution to the understanding of the Dimasa social structure. On the basis of her fieldwork, she showed that the Dimasa social structure was based on the principle of double descent. The male members of this society traced their descent from father as well as mother. Females considered descent through the mother to be primary. Thus, secondary patri-clan affiliation changed with their marriage. The primary affiliation of an individual remained unaltered throughout his/her life. The double descent system of the Dimasas also revealed the important role of mother's sister. Similarly, the social structure of the Semsas was based on the system of double descent (Danda 1988). They are confined to a single village of the North Cachar Hills District, Assam and have evolved a mechanism of village endogamy. Danda observes the following about the Semsas:

- (i) Sema must marry within the village
- (ii) A Sema must not marry a girl from his father's patriclan and mother's matriclan
- (iii) A Sema ought to avoid marriage with a cross-cousin
- (iv) Village endogamy as a rule has sentimental value for them
- (v) Descent plays an important role in regulating marriage in the society.

Das (1988) has studied the social structure of the Southern Angamis, who are also known as Zounuo-Keyhonuo. He has discussed two aspects of their matrification: (i) the role of maternal filiation in the domestic family, and (ii) the role of maternal filiation in the formation of cognatic groups. Matrification provides an alternative framework for recruitment of cognates into the patrilineage. Though the Southern Angamis have both patrilineal and matrilineal systems of inheriting immovable and movable properties, Das prefers to describe their society as patrilineal rather than as one having a dual descent system. This, according to him, is because there do not exist named groups based on both the alternative methods of reckoning unilineal descent.

## Tribe-caste and Tribe-peasant Continuum

Surajit Sinha (1965) made a significant contribution to concepts like tribe-caste and tribe-peasant continuums on the basis of his fieldwork among the Bhumijis. In the North-East a similar process was reported from the Rongdani Rabhas of the Garo Hills District (Mazumdar 1968). Mazumdar found the existence of all aspects of traditional Hinduism among the Kochs, Dalus and the Hajongs but the Rongdani Rabhas living in the adjacent areas had not adopted any traits of Hinduism. He compared the religious practices as well as the social framework of the Rongdanis with those of the Kochs and the Hajongs and observed that from Rongdanis to Hajongs, there is a gradual infusion of more and more aspects of traditional Hinduism as well as traditional Hindu social framework characterised by absence of matrilineal clans, and adoption of the Indo-Aryan kinship system. The Rongdanis were in their 'pure tribal' form, while the Hajongs were emerging as a Hindu caste, though at the lower end of the hierarchy, and the Kochs were occupying an intermediate position. The Kochs manifested a blend of traditional Hinduism, a sanskritised social framework, and the prevalence of matrilineal clan organisation.

## Political Anthropology

Regretfully studies in the political anthropology of the northeastern region have received very little attention of the scholars at the AnSI. The only well-known study in this respect is that of Goswami (1977) on the Mizo unrest.

## Urban Anthropology

The AnSI, under the guidance of N K Bose, initiated a study on the city of Calcutta in 1963-64 to see to what extent people of Calcutta remained socially segregated in terms of language, religion, occupation and voluntary associations. Both anthropologists and

geographers collaborated on this study. While the anthropologists collected data from different communities, occupational groups, voluntary associations, etc. the geographers made cartographic representations of the same.

During the 1970s, the AnSI, under the stewardship of Surajit Sinha, adopted a different approach to unveil the complex pattern of urban centres. This approach took the views of specialists in various fields of cultural creativity. Four seminars were organised, one each in Calcutta, Mysore, Varanasi, and Shillong. This was an attempt to make the social scientists in general, and anthropologists in particular, aware of the problems involved in systematic understanding of the complex social and cultural reality of the city.

The effort to understand the cultural matrix of Shillong was made with the help of professionals drawn from administration, education, performing arts, politics and anthropology. Sinha (1979) highlighted the most significant features of Shillong that emerged through this effort.

### Studies on Social Stratification

Studies on social stratification in the tribal milieu of the North-East also drew the attention of some scholars at the AnSI. For instance, Saha (1994) studied the nature of stratification in the Imphal valley with a view to understanding how a caste-like system of stratification emerged and operated in a frontier area of Indian civilisation. He carried out an in-depth field investigation to see to what extent the system of inter-ethnic hierarchy in Manipur valley conformed to the *varna-jati* model in the rest of India. The study revealed that the inter-group hierarchy in Manipur Valley did not fulfil certain basic requisites of the *varna-jati* hierarchy. It was indigenously developed as an inter-lineage hierarchy, which was further strengthened by the institution of kinship. The notion of ritual hierarchy, which the Vaishnavite Brahmins in the valley have, has added further complexity into the system.

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The study further revealed that there was an emphasis on inter-lineage hierarchy for gaining control over the most fertile lands as well as women of other lineages. When certain clans gained firm control over the choicest and most populated portions of the valley land, there emerged a hierarchy of clans and ultimately of ethnic groups, not at the local village level, but at the level of the valley, if not the state as a whole.

### Studies on Himalayan Tribes

The AnSI undertook a project titled 'Society and Culture among the People of the Himalayan Border Area: Structure and Change' in 1972 in order to generate anthropological data from a number of Himalayan tribes on whom there was little or no anthropological information. It was felt that the Himalayan tribes should be thoroughly studied so that relevant information on their social and economic aspects and trends of change would be available. Besides collecting data on their traditions, special emphasis was given to the following aspects:

- (1) Ecological adaptation of the people to the peculiar Himalayan environment.
- (2) Socio-cultural implications of the locations. Himalayan villages are not only located at the frontiers of Indian civilisation, but often also between nations and civilisations. One of the objectives of the present project was to look into the linkages of the Himalayan people with those living beyond the international border.
- (3) Trends of socio-economic changes since Independence. The study, with 1947 as the base line, proposed to go into details of the process and mechanism of change and its impact on the traditional life of the people.

As a part of the project, studies were initiated on tribes like the Khamti, Singpho, Kaman Mishmi, Wancho, Tangsa, Apatanis, Nishi, Hill Miri and the Adi. The results of these studies culminated in the publication of a number of scholarly

papers, including a book on three tribes of Arunachal Pradesh (Sarkar 1987). Studies showed the important roles played by a few tribes as bridge and buffer communities (Roy Burman 1966). The tribes of Upper Subansiri Valley had played the role of both bridge and buffer between the people living beyond and within the international border. It was revealed that a tribe could function as a bridge community between two other tribes and as a buffer community in respect of some other tribes. The strategic locations of the villages in the border areas were found to have played an important role as bridge or buffer communities (Sarkar 1996a).

### **Ethnic Movements**

North-East India has witnessed a number of ethnic movements since Independence. These movements are quite different from movements in other parts of India primarily because of the region's unique geographical location, socio-cultural diversity, and history.

Till recently, the people of this region were relatively isolated from the rest of the country. Consequent upon notable increase in their interaction with people from other parts of the country, there was a crisis in their identities. This crisis caused the emergence of a number of political movements, with goals ranging from relative autonomy to complete independence, and the means to achieve these goals ranging from constitutional measures to armed insurgency.

Scholars at the AnSI, through a quick short-term survey, generated information on such movements by employing conventional tools of field investigation. They made a notable contribution towards understanding the various ethnic movements in the North-East like the Naga movement, Zeliangrong movement, ethnic and script movements in Manipur Valley, the Mizo political movement, the Seng Khasi movement and the All Party Hill Leaders Conference movement in Meghalaya, evolution of identity in Arunachal Pradesh,

political movements among the Bodos of Assam, Ahom movement, and tribal movements in Tripura.

As a part of this programme, the scholars at AnSI generated valuable data on the tribal societies in North-East India in respect of shifting cultivation, economic and social change in Arunachal Pradesh, and agrarian structure and change in Nagaland. The studies also brought out diverse customary laws related to land tenure systems of the tribes living in this region. Data on the customary laws were collected from the Khamtis, Angami Nagas, Khasis, Karbis, Tangkhuls and the Noctes (Singh 1993).

### The People of India (POI) Project

In course of formulating research programmes for the 7th Plan period, the AnSI observed that there was a lack of information on a large number of communities in India. In order to overcome this, it initiated in 1985 a mega project titled 'People of India' to generate descriptive anthropological data on all the communities of India, the impact of change and development process and the linkages between them. Information on cultural, biological and linguistic dimensions was generated through a well-planned short-term survey. The traditional anthropological requirements of prolonged fieldwork were not applied, as the objective was different from that of a usual anthropological research. The project employed a method in which the knowledgeable informants in each community could be approached to get information on it within a short span of time. Such informants were believed to be in a position to communicate the insider's view and also to furnish anthropological information in a more systematic manner. This was a major methodological departure in generating anthropological data from the earlier practice known to anthropologists at the AnSI.

With the involvement of all research personnel of the AnSI and scholars of various universities and tribal research institutes,

the first ever survey of the entire human surface of this country was completed. For the first time, it was possible to identify, locate and study 4,635 communities in all the states and Union Territories of India. In North-East India, 345 communities were identified and studied. These included 172 scheduled tribes, 31 scheduled castes, 34 OBCs and 108 general communities.

It is obvious from the present survey of researches done by the AnSI in the north-east region that it has taken an active interest in this region, which is an anthropologist's mine. It is also obvious that this organisation provides enough scope to its scholars to study societies and cultures according to their own theoretical interests. In the course of last 50 years, the AnSI has initiated both micro and macro studies and used research methods deemed most suitable for such researches. The understanding of human societies is a continuous process in which scholars at the AnSI have been playing no small role.

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