

**PHYSICAL
ANTHROPOLOGY
OF THE
KOCH POPULATIONS
IN INDIA**

Sarthak Sengupta

The study of human evolution and also of human variation are two major focuses of Anthropology. Spatio-temporal variation among human population due to genetic and environmental causative factors is an important objective of physical anthropology.

The present treatise is probably the first attempt to write on the biological variation at micro-level among the Koch population, a detribalized caste population. The author's attempt is to trace any significant regional variation in their physical characters and to reveal any definite clustering pattern. The author's concern is also to examine if the results of the genetic investigation support the conclusions drawn from metric data or not. The book provides a biocultural perception of population dynamics in Koch of Assam. The author discusses in details the on-going micro-evolutionary trend in the Koch and deals with the statistical deviation of detribalized descendant Koch population from their ancestral tribal populations. The present volume is an extremely valuable addition to the subject of physical anthropology which intersects allied disciplines at several points.

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Dr. Sarthak Sengupta (b.1955) currently teaches physical anthropology at the Dibrugarh University. He was educated at Dibrugarh University where he got his M.Sc. Degree in Anthropology in 1977, securing First Class First position. Eversince he has been active in research and teaching. He was awarded Ph.D. degree in Anthropology by the Gauhati University in 1983.

He also worked with the Anthropological Survey of India and conducted field studies among diverse tribes and castes in Arunachal Pradesh, Assam, Meghalaya and Uttar Pradesh. A Visiting Lecturer for some time at the Anthropology Department of North Eastern Hill University, he has authored about seventy research papers in different journals of India and abroad and is an active member of a number of professional organisations. A project on diet and nutrition and indigenous health practices in some tribal populations of Assam is one of Dr. Sengupta's current research interest.

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(A Study from Assam)

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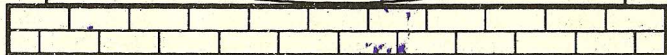
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To
My Teacher
Professor Dr. B. M. Das



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Preface

Assam with its large number of tribal and non-tribal population presents a unique situation for both physical anthropologists and human population geneticists to understand the mechanism of biological variation. Spatio-temporal variations among human populations due to genetic (intrinsic) and environmental (extrinsic) causative factors is an important objective of physical anthropology. But unfortunately this geographical area has not been fully explored by the anthropologists, more particularly by physical anthropologists.

The present treatise is substantially based on my doctoral dissertation, submitted to the Gauhati University in 1983. The present work is based on the material collected during my tenure as one of the two Junior Research Fellows under the University Grants Commission sponsored research scheme entitled 'A study of certain anthropological variables in the population of North-East India.' I take the opportunity to express my sincere thanks to Professor Dr. B. M. Das of Gauhati University, the Principal Investigator of the Project, for kindly permitting me to use a part of the material collected in the said research project. The analysis of the data have been accomplished with the financial assistance from the Anthropological Survey of India, Government of India. I am thankful to Mr. H. K. Rakshit, the then Director, Anthropological Survey of India for the award of Fellowship to carry out the research work.

I express my sincere gratitude to my kind and revered teacher and research guide Professor Dr. B. M. Das, Ph.D., D.Sc. (Calcutta), Head of the Department of Anthropology (1978-1984) and Dean of the Faculty of Science, Gauhati University under whose direct supervision and personal care I had the opportunity to carry on my research work. Professor Das was the constant source of inspiration to me. I am deeply indebted to him. I would like to thank especially Dr. (Miss) Renuka Das, Reader; Dr. Shankar Kumar Roy,

Museum Curator and Birinchi Kumar Medhi, Lecturer, Gauhati University; Miss S. Das of Arya Vidyapeeth College, Guwahati, Mr. Parvis Ahmed, Guwahati and Mr. P. K. Guha of Shillong for their alround help.

It is high time if not late, to offer my sincere thanks to my Koch brothers and sisters; my beloved subjects to study, whose active support and co-operation made it possible to carry out anthropological investigation among them.

My thanks are also reserved for Mr. Rati Kanta Das, who has ungrudgingly given me his spare time in patiently typing the manuscript.

Lastly, I wish to acknowledge my debt to my mother and my wife for their keen interest, untiring assistance and constant inspiration not only during the writing of this memoir but throughout my anthropological studies.

— S. Sengupta

CHAPTER - I

Introduction

A tribe in the Indian context cannot be considered as a fixed or static category for the simple reason that there are many instances of change from tribal to a non-tribal status. In Assam also there is a gradual process of detribalization and Hinduization which has been continuing for a considerably long period. Thus, the Assamese Hindu society is assimilating gradually bio-cultural elements from the tribal communities in it.

In Assam a tribal person can be converted to Hinduism and be made a member of a caste called the Koch. Thereby the person's position in the Hindu social complex is changed. This is, however, one of the processes of transformation from tribe to caste. By this process many tribal people have become members of the Koch, an Assamese caste. Now the Koch constitute one of the largest caste group of Assam within the Hindu social order. Today they are widely distributed over most of the plains districts of Assam. However, a heavy concentration is observed in the districts of Kamrup and Goalpara. They possess many striking features both from biological as well as socio-cultural points of view.

Gait (1905) comments, ". . . In Assam proper, it (the word Koch) has become the name of a Hindu caste, into which are received the converts to Hinduism from the ranks of the Kachari, Lalung, Mikir and other tribes; and as the process of conversion is still continuing the number of persons described as Koch are increasing rapidly." It is to be noted that all the above mentioned populations belong to the mongoloid stock.

According to the Waddell (1901) "the term Koch has become more of a caste title than a tribal appellation, so that individuals of

the Kachari, Garo, Rabha, Lalung and allied Indo-Chinese tribes are admitted as members; . . . thus any one of these tribes can become a Koch by establishing a Brahmanical priest and giving up eating beef, though he need not necessarily adjure animal food altogether. In this stage he is called 'Saraniya' usually pronounced in the Assamese fashion 'Haroniya' which means a 'refugee' implying that he has taken refuge in Hinduism. The more advance stage can be gained by leaving off beef and swine's flesh, strong drink together, when he assumes the full external status of Hindu."

Therefore, in the present context of Assam, "the term Koch is applied in various senses to indicate various groups of Assam, some of the Hindu society, even raising themselves to a high status in the caste hierarchy" (Majumdar 1972). They have been described as one of the "race castes" (Allen 1905) of Assam who generally claim to be an "outlying branch of the Kshatriyas" (Risley 1915).

The physical features of the Koch as described by Dalton (1872) are "face flat, giving rather appearance of squareness, eyes black and oblique, hair black and straight in some curling, nose flat and short, cheek bones prominent, beard and whisker rather deficient. Colour of the skin in most instances black, side of head rather flattened, forehead retreating."

Das (1962) speaking of physical features asserted that "the Koch are of medium stature. Dolichocephalic head occurs predominantly. They possess skin colour varying between dark brown and light brown. Colour of head hair is dark and form is smooth in the majority, while the texture and the quantity of hair is medium. Mongolian fold of the eye is absent in majority. Earlobe is free."

There has always been enough controversy over as to whether the Koch and the Rajbansi belong to one and single stock. Earlier ethnographers have mostly argued in favour of considering the two as one but none has made his observation based on a thorough ethnographical data on both the groups.

Opinions regarding the above question vary from author to author. Ultimately instead of simplifying they have added more complexity to the problem. In 1901 Census Report categorically

mentioned the Rajbansi and the Koch as distinctly separate groups without inferring about their origin.

It has been a popular belief, that the Koch tribe itself, as and when completed Hinduization, took to the more honorific and dignified appellation of 'Rajbansi' or 'men of their royal race' to denote their 'royal lineage' and to validate their claim of 'Kshatriya status.'

Risley (1891b) considered the term 'Rajbansi' as Hinduised synonym of the word 'Koch and he appears to be somewhat sanguine of the singular character of the Koch and Rajbansi. Hunter (1879) writes, "... word (Rajbansi) literally means 'of royal kindred' and is a little assumed by those Koches who followed the example of the Koch Raja at Hajo and became converted to Hinduism." According to Das (1962) the word Rajbansi appears to be a blanket term like the 'Rajput' or 'Rajputra' of Rajasthan. He believes that the Koch and the Rajbansi are the same people. There is also clear historical evidence to show the ancestry of the Cooch Behar royal lineage as springing up of Koch and Mech (Bodo) parenthood (Bhuyan 1958).

It seems that there is no difference of opinion that the Koch and Rajbansi came out from the same stock. The Rajbansi started moving apart socially from Koch as soon as they adopted 'Kshatriya like surname' and accepted the 'sacred thread.'

Regarding ethnicity of this group Gait (1905) comments, "the ethnic characters of the group has been a matter of some controversy." According to Dalton (1872) "they belong to the Dravidian stock", his opinion being based on their colour and the thickness of their lips and their angular facial line. Risley (1891b) also identified them as representative of the "Dravidian stock". However, he opines that in the eastern region the population were brought into contact with the Mongoloid races of the Lower Himalayas and Assam border. In 1905 Allen writes, "they appear to be of mixed lineage." He continues, "on the east their affinities are with Mongoloid." Hodgson also classed them as such. Waddell (1901) was of the opinion that they are "distinctly Mongoloid though somewhat heterogeneous." Haddon (1924) identified it as "Southern Mongoloid." "Somewhat heterogeneous make-up with some dis-

tinctly Mongoloid traits in the physical features" have from the past been eking out their competitive existence along with the local Rabha, Kachari, Plains Garo and Hindu castes."

But whatever may have been the racial affinities of the original Koch tribe, there can be no doubt that the present Koch of Assam belong to the 'Mongolian' rather than to the 'Dravidian' stock.

From the above discussion there hardly remains any doubt of the fact that the Koch (Rajbansi) form a major detribalized group. It is not known from which time the process of conversion started, but it has not stopped. It is a continuative one i.e. ongoing process. It is a fact that a major part of the conversion took place following the preaching of Vaisnavite cult by Srimanta Sankardeva, a socio-cultural reformer and a religious preacher of the 15th century.

Among the Koch residence is patrilocal. Monogamy is the usual practice and frequency of polygyny is rare. Widow remarriage is nowadays practised. Occupationally, they claim to be agriculturists. Apart from agriculture there are other types of vocations like carpentry, tailoring, teaching, petty business etc., which are also pursued by the Koch. Like other caste groups of Assam the Koch are living in a close socio-economic articulation with many other neighbouring groups.

Earlier Studies on Physical Anthropology of Koch

In Assam Waddell (1901) was the pioneer to take a few measurements on 88 Koch individuals of the Brahmaputra Valley of Assam. He published only the raw data with brief ethnographic notes. However, as regards the analytical parts there were no reference of the technique followed. The data collected by the aforesaid author were further statistically reduced by Das (1962). After a long interval of 56 years (i.e. in 1957) Das measured 100 Rajbansi males from Goalpara districts of Assam and the same with detailed statistical analysis was published in the year 1962. Koch blood samples from Gauhati were tested for ABO blood grouping by Das and Phookan in 1959. In time perspective the study is valuable, but had its limitations as the number of individuals were very few. Recently Das (1981) reported ABO blood group gene

frequency of 166 Koch Rajbansi of Assam. He also studied the palm prints (1965-1966) and occipital hair whorls (1959a) of the Koch-Rajbansi of Assam.

In fact, in all the above mentioned works, we find mostly description of physical features of the group and comparison of one group with others to reveal ethnic composition and relations. Das (1962) also studied the ethnic affinities of the Rajbansi (Koch) of Goalpara district of Assam. He assessed their ethnic position among other Mongoloid (Bodo) tribes of Assam in respect of anthropometry and finger print patterns. The study reveals that the Rajbansi are more similar to the Suri, a lower caste group of Assam than the tribes like the Garo, Kachari and Rabha who form the parental stock. However, Das (1964) has made a significant deviation from this general trend and his important contribution to the study of Koch-Rajbansi is mainly observed in his attempt to look at the changes in physical characters among the people involved in the process of detribalization in a small area, namely, South Goalpara of Assam. While analysing the anthropometric data on some of the tribes of the Bodo group of Assam, he arranged the tribes somewhat in an evolutionary order on the basis of variation in their somatic traits. The study reveals a gradual change or an evolutionary trend from the the base line — the Hill Garo, to the end product — the Rajbansi, through the Plains Garo, Rabha and Kachari. The study offers some new information on micro-evolution (Das 1981).

Special mention must be made of the publications of Das *et al.* (1979a and 1980d) where the Koch were examined for the determination of Haemoglobin percentage and Haemoglobin E (HbE) type. It was shown that the Rajbansi living in the tribal area are maintaining a high frequency of the gene (i.e. HbE), while Rajbansi living in the area of Hindu caste show 'dilution' of HbE frequency.

Objective

The first objective of the present study is to collect adequate somatometric, somatoscopic, genetic, behavioural and dermatoglyphic data from the Koch population of different areas of Assam and to do properly their statistical analysis of the same for interpretation from the point of view of micro-variation. Attempt

has been made to find out if there exists significant regional variations and also to find out how each of the samples is related to the Koch population as a whole.

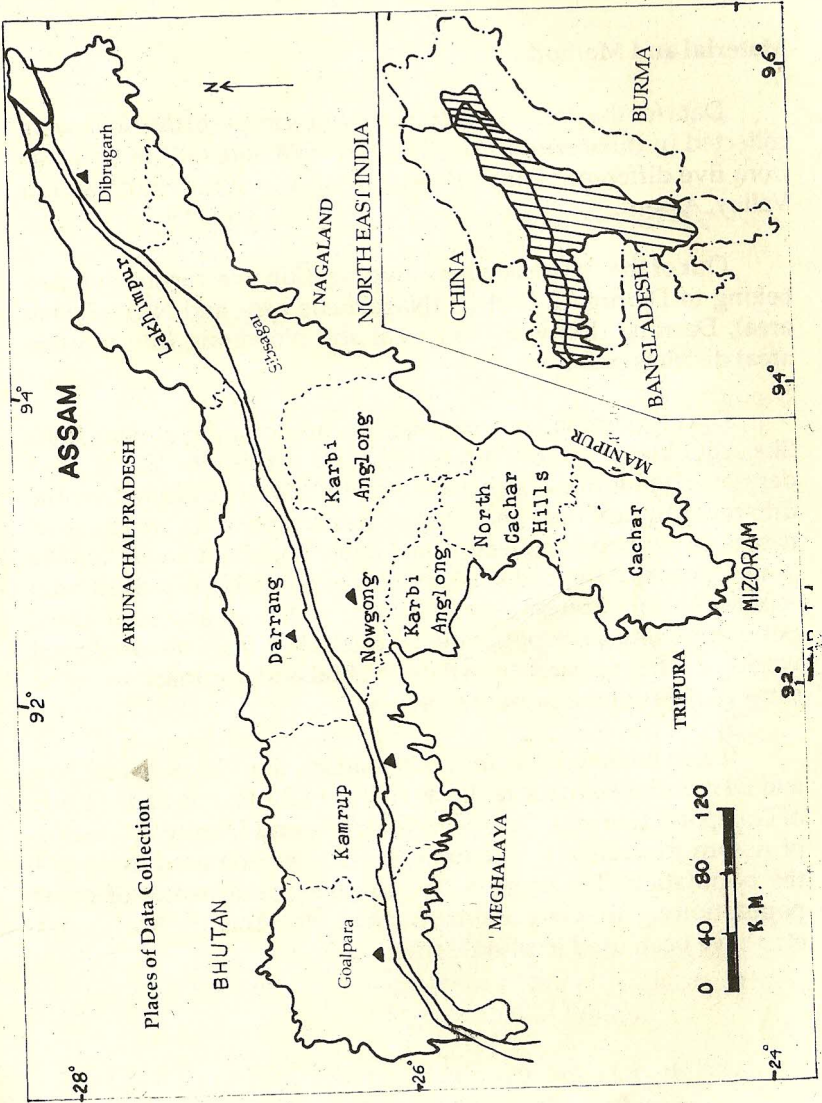
In the past most of the authors studied the populations on the basis of a few metric characters or genetic traits like ABO blood group gene frequency. But in studying human variation one should not concentrate on a single pair of traits only. Therefore in the present study varied and large number of morphological and genetic characters have been included.

To test the validity of the results obtained on analysis of the anthropometric characteristics, data on ABO blood groups, Rh factor, PTC taste sensitivity, behavioural traits and finger and palm prints were also analysed in the same direction. An important task will, therefore, be to examine if the results of the genetic investigation support the conclusions drawn from metric data or not.

As has already been mentioned that the different groups of tribal population being converted to Hinduism are enlarging the Koch caste. These converts are in fact the descendants of either the Garo, the Rabha, the Kachari, the Lalung or the Mikir (Gait 1905). They show considerable variation in their physical make-up and also in cultural heritages. Does this fact has anything to do to bring about differences among the present day Koch population living in different parts of Assam? The second objective of the present study is designed towards this direction.

There remains no doubt of the fact that the Koch form a major detribalized group of Assam. It is observed almost everywhere that when a tribal community is assimilated, it is usually ranked below the lower caste. After some lapse of time it comes at par with the lower caste section of the Hindu society. The third main concern of the present study is to identify the biological relationship between the different Koch samples and the pooled Assamese caste groups who occupy the same hierarchical position like that of the Koch.

Finally, some broader question like the relative positions of the Koch with regard to tribal populations, who form their parental stock and caste groups having same hierarchical positions like that



MAP-I.1
MAP SHOWING THE PLACES OF INVESTIGATION

of the Koch have been examined in the light of both morphological and genetical characters.

Material and Method

Data for the present study on the five sample of the Koch were collected in three winter trips in 1977, 1978 and 1979 in six areas from five different plains districts* (Map I.1) of the Brahmaputra Valley, Assam.

Out of the six areas where investigation was carried out, two belong to Dibrugarh District (Nagakhelia area and Nirmaligaon area), Darrang (Konwar Para area) and Nowgong (Moriposotia area) districts of Assam.

Data on certain anthropometric, somatoscopic, genetic traits like ABO blood groups, Rh factor, taste sensitivity to PTC and dermatoglyphic and also behavioural traits were collected. As the different physical traits included in the present study are of varied nature of method of collecting and analysing the data are not the same in each of the cases. Hence this aspect has been dealt with separately in different chapters. The data on ancestral tribal population and caste populations were taken from the published works of other researchers whose method and approach were the same as those of the present workers.

It is to be noted that the abbreviations like GO, KA, DA, NO and DI mentioned in the tables as well as in the text mean the Koch of Goalpara, Kamrup, Darrang, Nowgong and Dibrugarh district of Assam respectively. The term 'Koch' has been used to denote the population. The same is true in case of the names of other population e.g. the Garo, Rabha, Kachari, etc. Thus, the Koch, Garo etc., have been used in plural sense.

* In 1983 more districts were carved out from the same geographical area and hence districts boundaries have changed.