

## BIO-ANTHROPOLOGY OF GARO HILLS

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The Garo Hills were connected with the rest of the sub-continent during the later part of miocene period. Reports of vertebrate fossils from Garo Hills as well as from the neighbouring areas i.e. Kanchanpur (Sylhet district) and Tripura support this view. In fact, the first report of the "Siwalik fossil" was from Karbari area of Garo Hills (Pentland, 1828). It suggests that the ecology of this area was conducive for ancestral forms of humans to thrive.

There is also evidence of the activities of pre-historic man in this area. Archaeologists have found stone tools and related artefacts from sites in Garo Hills and neighbouring areas. Selbalgiri in the Rongram Valley has yielded stone tools. Discoveries have also been made at Waramgiri, Mokbol Abri, Chitra Abri, Michimagiri and Watri Abri (Sharma, 1971). The detailed discussion of geology, palaeoecology and archaeology of Garo Hills is given elsewhere in this volume. This is the tangible evidence of early man in Garo Hills. The migration of people from eastern Asia to this region has been suggested. Probably this region served as a corridor through which celt-making technique entered India. The neolithic culture must have flourished in this area about 2000 years ago. Later migrations from north, east and west brought new strains to this region and got mixed with the local people, who are ancestors of modern inhabitants of this region.

Present day inhabitants of Garo Hills speak a language of Tibeto-Burman family. They belong to the Bado group. Their

original home was somewhere in the upper courses of Yangtse and the Hoang-ho in north west China and the eastern Tibet. They migrated southwards and after reaching north-eastern Burma, one of the waves proceeded towards Assam. They might have entered north-east long before 1000 B.C. (Chatterjee, 1951). Bodo in their dialects means Tibet. The tradition and folklore is rich in tales about the exploits and adventures of their ancestors when they migrated from Tibet and spread out over large tracts of north-east India. Many landmarks of distant places are recounted by elders of these tribes which were left behind by their forefathers.

### *Population*

The Garo Hills constitute western part of the state of Meghalaya with an area of 8,084 sq. km. It was a disirict of Assam and later of Meghalaya till its bifurcation into two districts i.e. west Garo Hills and east Garo Hills. The population of Garo Hills is 406,615 with a density of 50 persons per sq. km. (Census of India, 1971). Out of this 208,498 are males and 198, 117 females with a sex ratio of 950 females per 1000 males. Population is mainly concentrated in the rural areas with 321,126 persons residing in 2,458 villages. The only urban centre, Tura, has a population of 15,489 persons. The decennial growth rate of 1961-71 was higher for Garo Hills (32.35) when compared with Meghalaya as a whole (31.50). Literacy rate of Garo Hills is 23.57 and the mainstay of its population is agriculture with 84.25 per cent of total workers engaged in cultivation. The population of Garo Hills is predominantly tribal with 80.14 per cent people belonging to Scheduled Tribes. There is a sizeable Bengali immigrant population from the adjoining areas of Bangladesh.

The dominant group in Garo Hills is the Garo with a population of 2,39,747, followed by the Hajong with 21,597 souls. The Rabha population is 10,133 and the Koch number 6,684. The Boro Kachari are confined to few villages with 1,320 population (Sharma and Majumdar, 1980). These four populations are also found in the neighbouring territories. There is a large concentration of the Garo in adjoining districts of Bangladesh, Assam has a sizeable population of the Garo,

the Hajong, the Rabha and the Boro Kachari. They also spill over to West Bengal. The Kachari settlements in Garo Hills are extension of its populace from the Assam valley. The Garo, the Hajong and the Boro Kachari are scheduled as tribes in Meghalaya, whereas the Rabha and the Koch are listed among other backward classes. In Assam, the Garo, the Rabha and the Boro Kachari are Scheduled tribes, whereas the Hajong and the Koch have been declared to be other backward classes. In West Bengal, the Garo, the Hajong, the Rabha and the Boro Kachari are listed as Scheduled tribes and the Koch as Scheduled Caste.

#### *Anthropometric Characters*

Das (1970) has discussed the anthropometric characters of the Garo, the Rabha and the Kachari on the basis of his field investigations and the data reported by Phookan. He found tribals of Bodo stock to have smooth and flat wavy hair with course texture. The beard and moustache are scanty. Table 1 shows these people to have below medium stature.

TABLE 1  
STATURE, CEPHALIC INDEX AND NASAL INDEX OF THREE  
POPULATIONS OF GARO HILLS

	<i>Garo</i>	<i>Rabha</i>	<i>Kachari</i>
Stature (mm)	1607.0	1612.5	1632.7
Cephalic index	75.45	75.40	78.97
Nasal index	83.34	81.52	74.44

The Kachari have the broadest head and the mesocephalic, whereas the Garo and the Rabha are dolichocephalic. The Kachari have narrower nose than the Garo and the Rabha. Das (1964) is of the opinion that the process of detribalization and ecological influence have set in micro-evolutionary trends so that the Hill Garo, the Plains Garo, the Kachari and the Rabha can be represented on a linear scale with regards to physical features. A large number of Garo have migrated out of their hilly niche to the plains of Assam. Because of prolonged separation, the plains Garo as a group have become

TABLE 2  
ABO BLOOD GROUPS:

Population	n	o	A	B	AB	p	q	r
Garó (Meghalaya)	125	24.0	23.2	34.4	18.4	.191	.280	.519
Garó (Bangladesh)	142	26.6	22.5	40.8	9.8	.178	.299	.523
Hajong	125	17.6	43.2	24.8	14.4	.358	.230	.412
Rabha	108	19.4	40.7	27.8	12.1	.331	.244	.425
Koch	111	27.0	29.7	33.3	10.0	.233	.249	.518

taller than the hill Garó. The plains Garó have longer and narrower face and nose. Their heads are rounder than the hill Garó.

### Serology

The two series of data on blood groups; one from Bengladesh (erstwhile East Pakistan) tested by Majumdar in 1950 and the other from Garó Hills, India tested by Deka in 1977 show very close relationship between the two test populations. The Garó show a higher frequency of blood group B over A, whereas the Hajong and the Rabha residents in Garó Hills exhibit a higher incidence of blood group A than B (Table 2). All the tribes of Garó Hills show preponderance of CDe ( $R_1$ ) gene complex over the other gene complexes. This is in conformity with observations of Indian mongoloids. CDe ( $R_1$ ) is followed by DE ( $R_2$ ), De (Ro) and CDE (Rz) with decreasing incidence in all the four populations (Table 3). Table 4 shows that the incidence of M gene is very high in all the populations of Garó Hills. Table 5 shows genetic distance between the Garó, the Hajong, the Rabha and the Koch (Deka, Personal Communication). The Garó and the Koch come nearer on this scale whereas the Rabha and the Hajong show similarities with each other.

TABLE 3  
RH BLOOD GROUPS

Population	n	CDe ( $R_1$ )	CDE ( $R_2$ )	CDO (RO)	CDE (Rz)
Garó	125	.7038	.1757	.0963	.0243
Hajong	125	.7538	.1338	.0902	.0222
Rabha	108	.7528	.1602	.0805	.0065
Koch	111	.6857	.1542	.1251	.0350

### Dermatoglyphics

Table 6 shows the percentage distribution of finger patterns in the Garó and the neighbouring tribal groups of Bodo stock (Das, 1959). The Kachari show the highest.

Frequency of whorl (54.66%). They are followed by the

TABLE 4  
MN BLOOD GROUPS

<i>Population</i>	<i>No Tested</i>	<i>N</i>	<i>MN</i>	<i>N</i>	<i>m</i>	<i>n</i>
Garó	124	54.8	41.1	4.1	.75	.25
Hajong	125	55.2	40.8	4.0	.76	.24
Rabha	108	72.2	24.1	3.7	.84	.16
Koch	110	75.5	21.8	2.7	.86	.14

TABLE 5  
GENETIC DISTANCE BETWEEN GARO,  
HAJONG, RABHA AND KOCH

	<i>Garó</i>	<i>Hajong</i>	<i>Rabha</i>	<i>Koch</i>
Garó	—	3.750	3.647	2.167
Hajong		—	2.496	3.704
Rabha			—	3.569

TABLE 6  
DERMSTOGLYPHICS

<i>Finger Patterns &amp; indices</i>	<i>Hill Garó</i>	<i>Plains Garó</i>	<i>Rabha</i>	<i>Kachari</i>	<i>Hajong</i>
	76	94	295	109	75
Whorl	50.76	47.96	50.66	54.66	44.68
Ulnar Loop	46.55	47.57	46.24	42.86	51.96
Radial Loop	0.93	1.99	1.55	0.55	1.73
Loops	47.48	48.96	47.79	43.41	53.69
Arch	1.74	2.98	1.55	1.84	1.63
Arch-Whorl					
Index	3.42	6.21	3.05	2.36	3.64
Pattern Intensity					
Index	14.90	14.48	14.91	15.27	14.30
Furuhatta's					
Index	106.90	97.99	105.63	125.91	83.21

Hill Garó (50.76%) and the Rabha (50.66%). The plains Garó show it in 47.96% while it occurs with lowest frequency among the Hajong (44.68%). With respect to ulnar loops the Hajong display highest frequency (51.96%), followed by the plains Garó (47.57%), the Hill Garó (46.55%), and the Rabha

(46.24%). The Kachari exhibit lowest frequency of ulnar loops. The plains Garó and the Hajong show relatively high frequency of radial loops followed by the Rabha. The Hill Garó and the Kachari display comparatively low frequencies of radial loops. The plains Garó stand apart from other groups in showing the highest frequency of Arches (2.98). While the other populations show relatively low incidence. The Arch-whorl index varies between the maximum of 6.21 for the plains Garó to the minimum of 3.05 for the Rabha. Comparing for the pattern intensity index little variation is observed among these groups. The highest incidence is 15.27 among the Kachari followed by the Hill Garó and the Rabha. The plain Garó and the Hajong exhibit low values with 14.48 and 14.30 respectively. As regards Furu-hata's index, the Hajong display the minimum value of 83.21. The hill Garó and the Rabha show similar values of Furu-hata's index (106.90 and 106.63). The values for the Kachari and the plains Garó are 125.91 and 97.91 respectively. On the basis of these dermatoglyphic features, the Hill Garó show close resemblance with the Rabha, while the plains Garó appear to be closer to the Hajong rather than to the Kachari.

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