CHAPTER IV

SUMMARY
The Angami is one of the various Naga tribes inhabiting Nagaland, a northeastern most state of India. Several Naga tribes were studied by different workers at different times from the social anthropological point of view, but none of the Naga tribes have yet been studied fully from the physical anthropological point of view. Therefore, in the
present work an attempt has been made to study some of the physical anthropological characters of the Angamis in order to provide a baseline information on this aspect. Secondly, the Angamis have been compared with the other Khas tribes to find out their relative ethnic position. Thirdly, the Angamis have been compared with certain broad tribal groups, namely, the Ako, the Khasi, the Lushai-Kuki, the Arunachal tribes and the other Mongoloids of north-east India to assess the ethnic position of the former in relation to the others. Fourthly, the Angamis have also been compared with some Asiatic Mongoloids with regard to certain physical anthropological traits.

For the purposes mentioned above, the Angamis were studied for the following characters:

A. Somatodocy: 100 males and 50 females.
B. Somatometry: 100 males and 50 females.
C. ABO blood groups: 220 individuals.
D. Taste sensitivity to PTC: 50 males and 50 females.
E. Colour blindness: 64 males and 50 females.
F. Dermatoglyphics: 50 males and 50 females.

Standard statistical methods were applied to analyse the data. However, it is regretted that multivariate analysis could not be done because of non-availability of facilities.
An analysis of the somatometric measurements of the Angami reveals that in average the males (163.6 cm.) are lower medium in stature, while the females (153.6 cm.) belong to upper medium. Both males and females have mesocephalic head (Males 78.1, Females 77.21). Acrocephalic and hypsicephalic form of head also predominates amongst the Angamis. The females have more leptoprosopic face than the males, but both the sexes are characterized by leptorhine type of nose (Males 65.71 and Females 61.53).

Somatoscopic observations reveal that both the sexes are characterized by different shades of light, dark and yellow brown skin colours. The liotrichous form of hair is predominant, which has fine texture and is medium in quantity. The eye slits are oblique with medium palpebral fissure and the eyes have marked epicanthic fold. Males show more malar prominence than females. Majority of the Angamis don't exhibit prognathism.

Percentage distribution of ABO blood group data of 220 Angami Nagas indicate that A blood group is more frequent than B. Non-tasters account for 16.0% in the Angami males, and 6.0% in the Angami females. 4.6% of the males are observed to be colour blind.
As regards the study of finger and palm prints it is observed that in males the percentage of whorls is more than the loops, while opposite picture is observed in case of females. In general, it is observed that in the Angamis the whorls and loops are present in the ratio of 1:1. As regards the occurrence of Wilder’s three main line formulas, the order is found to be 9.7.5 > 7.5.5 > 11.9.5 in males, while in females the order is 7.5.5 > 9.7.5 > 11.9.5.

The study of behavioural traits reveal that majority of the Angamis belong to R-type of hand cleaning, handedness and the dominant eye. But with regard to arm folding, L-type is predominant in the males and R-type in case of the females. Majority of the Angami males are unable to roll their tongue, but on the other hand, most of them can fold their tongue.

Comparative study of the present Angamis with the Angamis of the other workers reveal that in respect of stature there is not much variation except with that of Woodthrops. Cephalic index also does not show much deviation from the Angamis of the other workers. However, nasal index varies from lectorhinæ to mesorhinæ type.
Though in respect of AB blood groups in all the Angami, percentage of A is found to be higher than that of B. Yet the present sample differs significantly from the other Angami, and this variation may be accounted for difference in the sample size. With regard to colour blindness, also, difference occurs between the results of present study and that of Mukherjee (1963). This perhaps is because his sample was of different Kama tribes. But in respect to dermatoglyphics, the results of percentile occurrence of finger patterns and indices recorded by other workers are same as obtained by the present worker. However, in the distribution of Wilder's three main line formulae, some differences are observed.

Chapter three of the present study deals with the comparative study of the present Angami Nagas with those of the other Nagas, Mongoloid tribes and populations of northeast India and also with the Asiatic Mongoloids. The comparison is made in respect of somatometry, genetic traits including AB blood groups, taste sensitivity to PTC and dermatoglyphics. The other Nagas included for the comparison in the present study are the Chang, Konyak, Rongme, Ao, Sema and the Lotha. While the Mongoloid tribes comprise the Bora group including Boro, Naga,
Rajbanehl, Kachari, Mikir and the Lelung; the Khasi; the Lushei-Kuki and some of the Arunachal tribes such as Abor (Adi), Reota, Wencho and Salong.

The somatometric results of the present Angamis with those of the other Nagas reveal that the Angamis are significantly different from other Naga tribes in most of the traits both in dimension and proportion. The Angamis of the present study are significantly taller than the other Naga tribes. The head form varies from dolichocephalic to brachycephalic. Same is true in case of nasal index which varies from leptorrhinac to platyrhinac. The somatometric variabilities suggest wide range of variation among the Naga tribes and these variations also throw some light on the heterogenous nature of the Naga as suggested by Gos (1981).

With regard to percentage distribution of ABO blood groups, some similarities and dissimilarities are observed. Angamis are similar to but differ from Zelang and Konyak. In the frequency distribution of finger patterns and Wilder's three main line formulae, the Angamis of the present study cannot show significant difference from the other Naga tribes.
The comparative study of the Angami Naga with that of the Mongoloid populations of Northeast India with respect to somatometry revealed that the Angamis show more similarities to the other Mongoloids and to some extent to the Poro tribes in respect of stature, but differ from the Kuki, the Khasi and the Arunachal tribes. However, with regard to other somatometric traits included in the present study, the Angamis are more akin to the 'other Mongoloids' except Moran, than the other tribal groups.

When the Angami Nagas are compared with the Asiatic Mongoloids, it is observed that they are more similar to the people of southeast Asia but at the same time the Angamis have their own distinctiveness.

In respect of percentage distribution of ABO blood groups, it is observed that the Angamis differ significantly from all the Mongoloid tribes except the Khasi. Among the Asiatic Mongoloids the similarities with regard to this trait are restricted more to the Japanese and to some extent to the Chinese. The present findings support the views of Haddan (1924), Lune (1937), Chattabharjee (1957) and Mitra (1936) who commented racial affinities of the Angamis with the people of South China.
As regards taste sensitivity to

AFC there is no significant difference between the
Anami Nagas and each of the other populations
except the Ahom and Bauri—belonging to the 'other
Mongoloids'. With this trait also the Angamis fall
very much within the Mongolian range. Similar results
are obtained in case of frequency distribution of
finger patterns and finger's three main line formulae.

Thus, the present study gives a
comprehensive account of the physical characteristics
of the Angamis, one of the least known Naga tribe,
from the physical anthropological point of view. The
comparison with regard to physical traits of the
Angamis with other Naga tribes and the major tribal
groups of northeast India as well as some of the
Asiatic Mongoloids throws some light on the ethnic
position of the Angamis. Further studies on other
Naga tribes will no doubt project clearer picture
of the situation and help in understanding certain
facts of population variation at microlevel.