PART - III

SYNTHESES AND CONCLUSION
CHAPTER VIII
ETHNIC AND POPULATION ZONES

ETHNIC ZONES

From the foregoing discussions it becomes evident that the three ethnic groups of Sikkim, viz., the Lepchas, the Bhutias and the Nepalese are concentrated in different parts of the State. Because of diverse ethnic roots, characterised by distinctly different modes of living and because of varied environmental backgrounds the groups have occupied separate altitudinal and climatic zones, which suit them. In any case, it is already mentioned in Chapter IV that more than 90 per cent of the total population of the State is rural and the groups occupy specific rural areas. Only in the urban centres the groups are highly inter-mixed. Therefore, on the basis of the habitable rural areas their unit being the revenue blocks or villages by the groups, the ethnic zones have been identified. Broadly, the zones may be designated as follows:

i) Upper Himalayan Bhutia Zone.

ii) Central Himalayan Lepcha Zone.

iii) Southern Himalayan Nepali Zone.

Upper Himalayan Bhutia Zone

The Bhutia people came here from neighbouring high hills of Tibet. They preferred to live in the cool and dry highlands because they originally lived in such environmental conditions in Tibet. This zone includes the whole of Chungthang sub-division of North district and highlands of the Mangan (North district), Gangtok, Pakyong (East district), Ravong ((South district) and Gyalshing (West district) sub-divisions. This zones stretches from the middle altitude to high Himalayan zone where height varies from 1,500 metres to 3,800 metres. This zone is characterised by rugged topography with limited agricultural land, cool and dry climate. Uneven relief causes lots of hurdle in the accessibility.
The northern and eastern boundaries of the zone are covered by thick forests and snowclad mountains, which lie near the Chinese occupied Tibet and Bhutan border respectively. In the West lies the Singalila range separating the zone from Nepal. The north-western part of the zone is covered by the Lepcha reserve 'Dzongu' (Lepcha zone) and the entire southern part of the main zone is occupied by the Nepalese.

As expected, the largest number of Bhutias of the State is concentrated in this zone. However, the spatial distribution of the Bhutias within the zone varies from North to South. The most distinguishing feature is that, in the northern part of this zone (North district) more than 90 per cent of the permanent inhabitants are Bhutias. As mentioned earlier, in the extreme north, which lies in the high to medium Himalayan zone, two sub-groups of Bhutia tribe, viz., Lachenpa and Lachungpas, who are living in separate areas, i.e., in Lachen and Lachung revenue blocks respectively. The separate entity of the two groups exists in the fact that they follow clan territorial occupancy system. These groups are originally from the ‘Ha Valley’ of northern Bhutan. The other revenue blocks of the northern part of the zone (North district) is occupied by the Bhutia coming from different parts of Tibet. A small number of Limboos, Sherpas and Tibetan refugees are also found in this part of the zone. On the other hand, in the southern part of the zone, Bhutias live together with the Nepalese, the Lepchas and the plainsmen. The exclusive majority of the Bhutias in the northern part of the zone is due to mainly to the adoption of innerline policy in order to restrict the Nepali settlement to this part. Besides, because of the frontier location of the zone, free movement of outsiders without a permit is also not allowed within it. However, in the southern half of the zone, a large concentration of Bhutias is also noticed in the eastern part.

The Bhutias of this zone speak language of Sino-Tibetan (Tibeto-Burman) origin (Bhutia language). They also speak Nepali, which has over the times become a sort of 'lingua franca'. Many of them speak Hindi and those who are educated, converse in English.
The total population of this zone is 44,093 (male: 23,795; female: 20,248) and its area is 319 square kilometers. It is found that with 19.29 per cent of the total habitable rural area of the State this zone accommodates 11.93 per cent of the total rural population (1991). Again, out of the State’s total population (Rural and Urban) this zone constitutes 10.84 per cent. It is found that Gangtok subdivision of this zone has the highest proportion of population (23.84 per cent) next to which come Gyalshing (21.27 per cent) and Mangan (19.47 per cent) subdivisions. Tribal population constitutes 39.37 per cent of the total population of the zone (Appendix XIV).

It is observed that the Bhutia zone is characterised by relatively less percentage of people engaged in primary sector (60.37). The proportion of Bhutias in the secondary and tertiary sectors is considerably high (Appendix XIV).

In respect of social characteristics it may be found that Bhutias are the follower of Buddhism or Lamaism, a combination of Mahayana Buddhism, Tantrism and Tibetan Bon religion. In their religion the monastery or gumpa plays an important role. Most of the villages in the zone have their own gumpas, which are looked after by the Lamas. It is observed that some Bhutias of the zone adhere to two religions, viz., Buddhism (Lamaism) and Shamanism. For example in Lachen and Lachung revenue blocks religious functions are performed by the Lamas, Paus and Nejohums (Shamanism). The primary function of the Pau (male priest) is to cure illness and the Nejohum (a female priest) is at the time of marriage, naming or funeral ceremonies, etc. The most distinctive feature of this zone is that the Bhutia females are allowed to become Lamas. The female Lama is called ‘Anne’. The important festivals of the Bhutias (Sikkimese) are the Sagadawa, the Pang-Lhabsol, the Losoong, the Lhabab-Duchen, etc.

The Bhutias cremate the dead body in their own cremation ground. Before disposal, the body is kept for a period of 3 to 49 days depending on the Status of the deceased in the society. The Lamas conducts all the necessary rites from the beginning to the end. Like the Hindus, the Bhutias have no restriction in taking
food, in the matter of dress or cutting of hair during the death of parents or relatives.

In the Bhutia society three systems of marriages are prevalent, they are monogamy, polygamy and polyandry. Now, the latter two systems of marriage are rarely practised by them. In this zone, till very recently, polyandry system was followed on a wide scale by the people of Lachen and Lachung, but now it is declining.

Among the Bhutias, mode of acquiring mates is by negotiation and service. The boy's party offers bride-price to the girls parents before the negotiation of the marriage. They generally have matrimonial relation with the Lepchas, the Sherpas and the Tamangs, otherwise, it is endogamous at the community level. The Bhutias generally marry at a late age. Divorcee is permitted only with the approval of the society. Remarriage is common among them.

Like the Nepalese and the Lepchas, the Staple food of the people of this zone is rice. Their traditional food comprises 'tsampa' (barley flour), buck wheat, thukpa (Noodles in soup), momos, etc. They are mostly non-vegetarian and eat chiefly beef and pork. Dried beef is considered as a delicacy. They chew 'Churpi' pieces of dried cheese made out of Yak or Cow milk. During festivals they prepare various types of snacks, such as Khabtse, fongui - amcho, etc. Like the Lepchas they are also fond of drinking home-brewed alcohol called 'Chhang' (the Chi of the Lepchas) made of millet.

The Bhutia dress of both the males and females is called 'kho' 'Po-Kho' for the male and Mo-kho for the female, commonly known as Bo-kho for both the genders. Under the kho, a man wears a double breasted high-necked shirt (tsontta-ti and a pant (gya-ton). A woman wears a long loose sleeved blouse (honju) under the kho. The kho is held at the waist by a long piece of cloth called kera.
Central Himalayan Lepcha Zone

This zone is located on the valley slopes of the left bank of the river Tista. It stretches from Chungthang sub-division in the north (Bhutia zone) to the Ravong and Gangtok sub-divisions in the south, covering in total 22 revenue blocks. There are two approaches to the Western part of this zone. One from the Mangan town in the east and the other from Dikchu market area in the South. The southern approach is unmetalled and as such it remains closed due to landslide during the rainy season. The western part of this zone is covered by thick forest, above which lies the Kanchanjunga group of peaks. It is found that more than half of the villages (revenue blocks) of this zone is located within Dzongu area, the Lepcha reserve. Being in the direct path of the monsoon, this zone receives heavy rainfall during the monsoon season. Climate differs from sub-tropical to temperate type. Because of the remote location and rugged topography, population here is sparse. The settlements of this zone are scattered from middle to lower slopes. The average height of this zone is about 4,000 ft. Due to steep slope there is scarcity of agricultural land here. The villages which are located on the right bank of the river Tista are fairly thickly populated and relatively prosperous than those located on the left bank valley slopes. It is mainly because the location of the right bank villages is on the State highway and also their nearness to Mangan town. The sizes of the villages of this zone are medium to small. About 50 per cent of the villages have population between 500-1,999 persons.

This zone covers an area of 193 km² and has a total population of 15,041 persons (male: 8196; female: 6845), i.e. 4.02 per cent of the total population of the State. It is found that more than 50 per cent of the total population of the zone are tribals. Lepcha is the predominant group in the zone. The rest are floating population who are either engaged in government job or work as agricultural labourer. Most of these labourers are seasonal migrators coming mostly from Nepal. Lepcha is spoken by majority of the people of this zone, however, Nepali and Hindi languages are also spoken by some people.
In this zone the primary source of livelihood of the people is the land hence, most of them are engaged in primary occupation (Appendix XIV). The percentage of Lepchas engaged in tertiary sector is relatively higher (24.40 per cent) than the other two zones, but in the secondary sector proportion of workers is negligible.

Like the other hill tribes of North-East, the Lepchas earlier used to practise their traditional religion (Shamanism). They were converted to Buddhism by the Bhutias from seventeenth century onward. At present, their religion is a mixture of Lamaist Buddhism and many rituals from their original 'Mun' practices. Like the Bhutias, the importance of gumpas and Lamas are significant in the lives of the Lepchas. In their traditional religion the Chief function is to ward off misfortunes and illness. Its observance is necessary in all occasions, like birth, marriage, death of the commoners, etc. Mun (either male or female) and Bongthing are their traditional priests. All their traditional rites and rituals are performed by their traditional priests, in some cases by the Lamas too. With the gradual changes in their occupational pattern and life style, the practice of shamanistic ritual among the Lepchas is declining. The Lepchas worship different deities, for the family, clan, village and region. Their clan deities are named after the names of peaks or rivers. Their most important festival is Namsoong (Bhutia's Losoong) which is the festival of harvest and new year. Tendong Hlo Rum Fat is their another important festival. They also observe other Sikkimese Buddhist festivals. Traditionally, Lepchas used to dispose the dead bodies in three different ways - by cremation, burial and throwing into the river. The method adopted depends on the condition of the deceased and on the advice of their priests and Lamas. But with the increasing influence of Buddhism, cremation of dead has become a common practice. Like the Bhutias, they also keep the dead bodies in the house for a period ranging between one to forty-nine days, according to the advice of Lamas. They do not observe particular restrictions on foods. The length of the death ceremony called Sanglian depends on the economic status of the deceased.

Unlike the Bhutias and the Nepalese, the negotiation of Lepcha marriage is not done by the parents but by two go between (Bek-bo) representing each party. (Basin, V., 1989). Before the marriage is held the boys party has to carry presents
like a load of Chi (alcohol brewed from millet), pigs, copper pots, cloths, etc., as bride-price. For them social norms are quite flexible. Although some of the Lepchas are found to be polygamous but now monogamy is in vogue. As for marriage they follow community endogamy and clan exogamy. They have matrimonial relations with the Bhutias also. Divorce is regulated by the customary laws. Remarriage is permissible among the Lepchas too.

The traditional staple food of the Lepchas is rice. They also take maize, barley and wheat. Like the Bhutias, they too prefer pork and beef. Lepchas are known as born botanists and possess the knowledge of various edible plants and tubers. The bamboo shoots, ‘Nakeema’, a local vegetable product and various types of mushrooms are their favourite delicacy. They also have the tradition of taking fermented and preserved food, such as ‘Kinema’ (fermented soya bean), ‘Chi’, home brewed millet alcohol, etc.

The traditional dress of the Lepcha men is called ‘gada’ which is a stripped cloth loosely worn down upto the knee and ‘Phomu’ a trouser up to the calf. A woman dress is called ‘dumdyan’, a full length robe, held at shoulders by a pair of broaches and tied at the waist by a hand woven strip of cloth known as ‘namrek’. Over the dumdyan a loose coat called the ‘Pago’ is worn.

**Southern Himalayan Nepali Zone**

This zone covers the southern slope of the Sikkim Himalaya. This is, in fact, the largest zone with 1,147 km², i.e., about 69.35 per cent of the total area of the State. It also contains the highest number of population, i.e., 3,10,537 persons, or 84 per cent of the State’s total population. The tribal people constitute only 18.28 per cent of the zone’s total population. Among all the zones Nepali zone has the lowest proportion of tribal population. This zone stretches from the Donkya range in the east to the Singalila range in the West. It is dissected by the river Tista and its tributaries. The valleys are comparatively broad and flat with moderate slopes. The direction of the gradient of this zone is from east to west, hence, eastern part are more accessible and habitable than the western. Here, climate varies from sub-tropical to temperate type depending on the altitude. The settlements are
mostly confined within 300 metres to 2,000 metres. However, maximum concentration is noticed below 1,800 metres. The population of this zone is unevenly distributed over 322 revenue blocks. The average size of the villages (revenue blocks) is medium. About 52.38 per cent of the villages have population between 500-1,999 persons.

This zone is predominantly inhabited by the Nepalese. Like the Bhutia zone, here also different part is inhabited by the sub-groups of Nepali people. For instance, the western and the central parts of the zone are predominantly inhabited by the Kirati Nepalese, viz., the Limboos, the Rais respectively and in the eastern part by the Brahmans, Chettris and Newars (Pradhans), as stated earlier. The higher slopes of the zone is mostly occupied by the Gurungs, Tamangs and also by the Bhutias, Sherpas and the Lepchas.

This zone is characterised by relatively large percentage of workers in the primary sector (77) and lower percentage in the secondary and tertiary sectors. The majority of the people under this zone are Hindus. Among them some follow their indigenous ritualistic practices in combination with the religion they have adopted. For instance, the Rais, the Limboos, the Sunuwars, the Yakhas, etc., adhere to both Hinduism and their traditional practice (Shamanism). As mentioned earlier, their traditional religion ceremonies are performed by their own priests, viz., the ‘Bijuwa’ of the Rais, ‘Phedangba’ of the Limboos and the ‘Dhamis’ and ‘Jhankris’ amongst the rest. The Chettris and the Thakuris known to be descendants of the ‘Khas’ tribe distinctly worship their clan deities ‘Kul devta’. Community worship of ‘Kul devta’ on a assigned day is called ‘Dewali’. There are a number of rituals practised by the different sub-groups of Nepalese. They are Nwaran (naming ceremony), Bhatkhowai or Annaprashan, Chewar (hair cutting of sons), etc.

Among the Nepali sub groups, as mentioned above, some are Buddhists. A good number of people of these groups who adopted ‘Hinduism’, earlier, have in the recent years taken up Christianity.
The important festivals of the Hindu Nepalese are Dasain (Dussehra), Tihar (Diwali) and Maghe (Makar) Sangkranti. During Dasain, the goddess Durga is worshipped. On this day, the elders of the family put tika on the foreheads of the younger people with their blessings. During Tihar (Diwali) the orthodox Hindus like Bahun and Chettris worship goddess Laxmi in the form of cows (Gai Tihar). On different days offerings of specially prepared food is given to the ox, the dog and the cows. The boys and girls visit houses singing traditional songs (Deosi and Bhailani) and offering prayers for the prosperity of the families. In Maghe Sankranti prayers are offered at the confluence of rivers. The most distinctive point is that, except for certain orthodox rituals, all the sub-groups including the Buddhist Nepalese celebrate these festivals.

The people of Nepali zone dispose of dead body by both cremation and burial methods. The death pollution is observed for a period ranging between three to thirteen days. Unlike among the Bhutias and the Lepchas, there is restriction in food and dress among the Nepalese. Many of them also clean shave their hair during that period.

In marriage, the Nepalese follow exogamy at the clan level and endogamy at the community level. The age at marriage is relatively lower than the Bhutia and the Lepchas. Marriage takes place by negotiation, however, by and large elopement is also permissible. The polygamy use to be a common practice in the past but at present it is rare. The practice of dowry is not prevalent among the Nepalese. The bride is given ornaments, dresses and other gifts by the groom’s family. Divorce is not allowed unless there is a genuine cause behind it. Except among the Bahuns, remarriage is allowed among the Nepalese of this zone.

The staple diet of the Nepalese of this zone is rice, chapati, pulses and vegetable. The Brahmins are vegetarians and donot drink. Other groups generally are non-vegetarians. Some sub-groups take pork, beef and buffalo. Like the Lepchas, Nepalese also take fermented and dried food like Gundruk and Sinki made of vegetable leaf and radish.
The traditional costume of Nepali men consist of the ‘daura’, a knee length double breasted shirt and ‘suruwal’, a trouser. They wear a sleeveless coat on top of the ‘daura’ and a cap. Women wear ‘Choubandhi’, a double breasted blouse and ‘gunue’, which is worn at the waist by a long strip of cloth (Patuka). They use a shawl made of cotton or silk to cover the upper part of the body known as pharia. Most of the men, however, wear pant shirt and women sarees, salowar, kameej or other modern dresses.

It is already stated that the people of the three ethnic groups are concentrated in different zones. Nevertheless, with rapid changes in the political and socio-economic scenario, particularly after the merger of the State with the main stream, the ethnic concentration is gradually breaking down. People have started settling in more convenient location in the urban areas and society is fast becoming pluralistic. The influence of the customs and traditions of each group on the other is apparent on their cultural activities. It is observed that, the influence of the Bhutia culture is more on the Lepchas than on the Nepalese. The influence of the plainsmen on the three ethnic groups cannot also be undermined. The cultural identity of the people of Dzongu, in Lepcha zone and Lachen and, Lachung revenue blocks of the Bhutia zone are found intact.

It is found that, the present day Sikkimese society, while retaining their indigenous ethnic characteristics on the whole, displays a significant socio-cultural integration. As mentioned before, the advent of Bhutias to Sikkim had the most significant influence on the Lepchas. The Lepchas later embraced Buddhism and with the inter-community marriages, a kind of new social order got established in the State. The Bhutias introduced new customs, traditions and food habits, these are influencing even the present day Nepali community.

The coming of Nepalese into the erstwhile kingdom not only changed its demographic profile but also brought changes in the socio-economic condition of the people. They introduced their indigenous farming techniques, viz., terraced cultivation and several commercial crops like cardamom, ginger, etc., which are still in practice in the State. The Nepali language eventually became a kind of
lingua-franca for different ethnic groups and sub-groups. The Newars of Nepali who had come to Sikkim primarily to mine metals and mint-coins, have made significant contribution in the metal craftsmanship of the State. They are good businessmen and have been helping in the development of trade and commerce in the State. The art of paper making from a locally available plant called ‘Argyelli’ was introduced by the kagate community (Nepali), who also played an important role in furthering traditional learning particularly in the monastries.

The Bhutia and Lepcha communities, on the other hand, influenced the Nepali society indirectly to a great extent. The caste system that was so strict in the place of their origin became less rigid and inter-caste marriages among the Nepalese gradually became more acceptable. The rigid caste system followed by the Newars of Nepal also became almost non-existent in Sikkim. They now commonly call themselves as ‘Pradhans’ and inter-caste marriage is quite common among them.

It is observed that both the Buddhists and the Hindus pay equal reverence to each others religions. They take part in their religious ceremonies and functions freely. The practice of offering the sacred scarf (Khada) of the Bhutias has become common among all the communities residing in Sikkim. Thus, the Sikkimese society as found today has evolved through an unconscious socio-economic and cultural contact between the different groups amidst its historical and political developments.

**POPULATION ZONE**

From the foregoing discussion in Chapter IV, V and VI the spatio-temporal pattern of the demographic and socio-economic characteristics of the various parts of the State clearly emerges. In the present Chapter a synthesis of these traits are done to divide the State into different population zones. Among the demographic and socio-economic variables, density, literacy rate, tribal population and the occupational categories, i.e., primary, secondary and tertiary are taken into consideration so that the level of socio-economic development of an area could be foundout. To examine the average standard condition of different variables, Z-
score values are calculated and then ranks are given to the Z-Score values. The average of Z-Score ranks shows the position of the zone in terms of demographic and socio-economic level of the sub-divisions of the State.

Table 8.1: Z-Score Values at the Sub-Divisional Level

<table>
<thead>
<tr>
<th>Sub-division</th>
<th>Density</th>
<th>Literacy</th>
<th>Tribal Population</th>
<th>OCCUPATION</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chungthang</td>
<td>-1.12</td>
<td>-0.54</td>
<td>+1.65</td>
<td>-1.92</td>
<td>-2.40</td>
</tr>
<tr>
<td>Mangan</td>
<td>-0.83</td>
<td>+0.17</td>
<td>+1.57</td>
<td>+0.25</td>
<td>-0.45</td>
</tr>
<tr>
<td>Gangtok</td>
<td>+1.76</td>
<td>+2.10</td>
<td>+0.13</td>
<td>-1.44</td>
<td>0.69</td>
</tr>
<tr>
<td>Pakyong</td>
<td>+0.32</td>
<td>+0.36</td>
<td>-1.08</td>
<td>+0.48</td>
<td>-0.40</td>
</tr>
<tr>
<td>Namchi</td>
<td>+1.34</td>
<td>+0.69</td>
<td>-0.97</td>
<td>+0.30</td>
<td>-0.25</td>
</tr>
<tr>
<td>Ravong</td>
<td>-0.11</td>
<td>-0.79</td>
<td>-0.22</td>
<td>+0.65</td>
<td>-0.81</td>
</tr>
<tr>
<td>Gyalshing</td>
<td>-0.41</td>
<td>-0.93</td>
<td>-0.42</td>
<td>+0.75</td>
<td>-0.55</td>
</tr>
<tr>
<td>Soreng</td>
<td>-0.94</td>
<td>-1.07</td>
<td>-0.67</td>
<td>+0.94</td>
<td>-0.64</td>
</tr>
</tbody>
</table>


Table 8.2: Z-Score Ranks at the Sub-Divisional Level

<table>
<thead>
<tr>
<th>Sub-division</th>
<th>Density</th>
<th>Literacy</th>
<th>Tribal Population</th>
<th>OCCUPATION</th>
<th>Rank of Z-Score values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chungthang</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>8</td>
<td>1 2 4</td>
</tr>
<tr>
<td>Mangan</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>5 3 4</td>
</tr>
<tr>
<td>Gangtok</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>2 1 2</td>
</tr>
<tr>
<td>Pakyong</td>
<td>3</td>
<td>3</td>
<td>8</td>
<td>4</td>
<td>4 5 3</td>
</tr>
<tr>
<td>Namchi</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>5</td>
<td>3 4 3</td>
</tr>
<tr>
<td>Ravong</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>8 7 5</td>
</tr>
<tr>
<td>Gyalshing</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>6 6 5</td>
</tr>
<tr>
<td>Soreng</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>1</td>
<td>7 8 6</td>
</tr>
</tbody>
</table>

\[ Z = \frac{x - \bar{x}}{\sigma} \]

Where \( x \) represents the variable, \( \bar{x} \) represents the mean of the variables, \( \sigma \) represents the Sd. deviations of the variable.
SIKKIM
POPULATION ZONES

NAMCHI-PAKYONG
ZONE
CHUN THANG-MANGAN
ZONE
GVALSHING-SORENG-
RAVONG ZONE

FIG. 7'3
On this basis the sub-divisions have been grouped in four zones following an interval of 1 unit of rank. On this basis Gangtok sub-division occupies the top position, Namchi-Pakyong second position, Chungthang-Mangan third position and Ravong - Gyalshing - Soreng the fourth position. Thus, four population zones in the State have been identified:

i) Gangtok Zone.

ii) Namchi - Pakyong Zone.

iii) Chungthang - Mangan Zone.

iv) Ravong - Gyalshing- Soreng Zone.

Gangtok Zone

This zone covers whole of Gangtok sub-division of East district. It stretches from the Donkya range, bordering Tibet (China), and Bhutan in the East to South districts. The altitude of the zone varies from 300 metres to 3,800 metres. The general slope of the zone increases from West to East and South to North. The western part of the zone is dissected by the river Tista and some of its tributaries. The slopes of the southern and western part of this zone is gentle in nature and valleys are open. Hence, this part of Gangtok zone is more accessible than the other parts. The settlement of this zone is mostly concentrated in the river valleys of Tista and its tributaries, viz., Dikchu, Rongni chu and Rangpo chu. Gangtok, the capital of the State is located on the spur in the northern reach of the river Rongni chu. The eastern part of the zone has rugged terrain and snowclad mountains. This part is not suitable for habitation. For being close to the eastern border, large part of this zone is a restricted area. Hence, this side is mostly occupied by the army people and the animal rearers, belonging to, Bhutia, Sherpa communities and also a few Tibetan refugees. The southern and the western part of this zone is inhabited by the Nepalese. The northern and eastern highlands, and around the Buddhist monasteries of this zone are inhabited by the Bhutias. People coming from other states of the country, the Tibetan refugees, and also people from the
neighbouring countries are concentrated in the urban areas and near the important monastries. The southwestern part, i.e., Singtan-Rangpo belt is mostly occupied by the scheduled caste people (Nepali). On the whole, this zone if predominantly inhabited by the Nepalese. Due to lack of data it is difficult to tell the exact number of Nepalese, but approximately it is more than 70 per cent of the total rural population of the zone. Hence, the lingua-franca of this zone is Nepali.

The total population of the zone is 1,37,070 persons (male: 74,223 persons; female: 62,847 persons). With 8.43 per cent of the total area it supports 76.81 per cent of the total population. The total tribal population is 30,238 persons (male: 15,971 persons; female: 14,262 persons) constituting 22.06 per cent of the total population of the zone. The most distinctive point is that, this zone has the largest proportion of population and smallest percentage of the land in the State. As expected, arithmetic density of population is 229 persons per km², but its physiological density goes up to 647 persons. This clearly shows that there is a heavy pressure of population on its cultivated land. Agricultural density is 97 which also shows that the pressure of agricultural population on the limited cultivable land is high. The population of this zone is unevenly distributed over 87 revenue blocks (villages) and three urban centres. The size of the villages varies from medium to large. Out of the total, 41 revenue blocks have a class size of population of 500 to 900 persons and 21 revenue blocks (24.14 per cent) have 2,000-4,999 persons. Among the zones Gangtok has the largest size revenue blocks (2) with a class size of 5,000 to 9,999 persons. They are Central Pendam (5,809) and West Pendam (5,011). About 58 per cent of the total revenue block has more than 500 persons. The average inter-village distance is about 2.92 kms. Again, 23.25 per cent of the total population of the zone is urban. Among all the zones, it has highest proportion of urban population. With a population of 25,024 persons, Gangtok (1951) is the oldest and the most important town of the State. Its administrative and educational characteristics have intensely influenced the pattern of population characteristics as well as the socio-economic development of the zone.
The growth of population of the zone is 28.50 per cent during 1981-91, which is at par the State's average (28.47 per cent). High population growth is related to in-migration rather than natural increase. Here, maximum in-migration is noticed in the urban areas and in the surrounding rural areas. Sex ratio of the zone is found to be 846 per 1000 males (Appendix XV). Comparatively low sex ratio is indicative of male selective in-migration to the zone. Here, tribal sex ratio (893) is relatively higher than the general which shows that the in-migration of population is predominated by the non-tribal population.

The most distinctive feature of this zone is its high literacy rate (68.02 per cent, excluding 0-6 years). This zone has the highest percentage of literacy among the zones, which is higher than the State's average (56.94 per cent) in 1991. However, including 0-6 years age group, the literacy rate of the zone is 58.58 per cent in 1991 as against 43.78 per cent in 1981. Increase of literacy is mainly due to expansion of educational facilities to the remote areas and improvement of transport and communication facilities in this zone. Gangtok town is the base for higher and better education facilities in the State. Besides, in-migration of non-tribal literates to the zone also contributing in the progress of literacy rate in this zone. The first school of the State was established at Gangtok when it was the capital of Chogyal's Kingdom. Hence, some people of this zone had the privilege to have school education from the beginning of 20th Century. But maximum growth in literacy is observed only after the State had joined the main stream of development (in 1975). The male literacy rate is 52.77 per cent and the female is 32.13 per cent. This clearly indicates the existence of sex disparity in literacy in the zone.

The work participation rate (37.26 per cent) of this zone is the second lowest among the zones. The most distinguishing feature of this zone is its low female work participation rate (21.80 per cent) which is also the lowest among the zones. This shows that the socio-economic condition of the zone is much better than other zones. Enrolment of female child in the school is high. Here, large proportion of educated females is engaged in government services, schools and in other non-government establishments. The overall pattern of work participation
rate of both male and female of the zone is changing due to expansion of education facilities and people's awareness towards the importance of education for a better prospect. However, this zone has the lowest proportion of population engaged in primary occupation (42.12 per cent). Out of this 31 per cent are cultivators and 0.64 per cent are agricultural labourers. Again, proportion of workers engaged in tertiary sector is 37.14 per cent. Out of this 22.69 per cent is engaged in other services. This is mainly because of impact of urbanization, relatively high literacy rate, availability of higher education facilities, vocational training facilities and in-migration of educated workers. As industrial development of the zone is in infancy stage hence, only 20.75 per cent is engaged in secondary occupation. Out of this 12.26 per cent is occupied in construction work and only 1.01 per cent in household industries.

There are a number of government and private small scale industries which provides employment opportunities in this zone. According to the statistical profile of Sikkim published by Bureau of economics, there are 155 small scale industrial units registered with the department of industries, but out of that some of them have already closed down. Sikkim time corporation, Sikkim Jewels limited, tea corporation, fruit preservation are some of the small industries under public sector which are in operation. There is one LPG bottling plant (recently established), 3 distilleries (2 recently established) and other small industries located in the Singtam - Rangpo (industrial)belt of this zone. Besides that, there are also 3 hydel power stations in this zone. Because of presence of these industries, this zone has comparatively high proportion of workers engaged in secondary occupation.

In regard to the availability of social facilities, this zone is in a better position than the other three zones. If the education facilities are considered, it has 166 primary schools, 15 middle, 14 secondary and 5 higher secondary schools. Besides, there is one public school and numbers of private schools in this zone. For higher education it has one degree college, one law college and one Sheda (college). This area also has one pharmaceutical institute and a number of vocational training centres. Recently, one medical and engineering institute were started by the Manipal group of industrialists.
However, here almost all the revenue blocks have electricity and 77 blocks have supply of drinking water. The zone has 30 post offices. Most of the villages are connected by roads of different status. About 60.83 per cent of the rural population of this zone is served by pucca road. Here, proportion and frequency of passenger and goods carrying vehicles are satisfactory. Further, this zone is directly connected with Siliguri by National Highway 31(A). There are also two helipads in this area. On the whole, this zone have experienced socio-economic development much earlier than any other zones. It is observed that, most of the better socio-economic facilities are confined within the urban areas, particularly in Gangtok town. As a consequence, rate of in-migration from the rural areas of the State, as well as outside, led to over crowding in this urban area. Hence, a proper planning is absolutely necessary for the expansion of developmental activity, to other market centres and also to rural areas, so that an equal distribution of socio-economic facilities could be made possible to avoid over crowding in one place.

NAMCHI-PAKYONG ZONE

Stretching from Donkya range in the (Tibet-China) east to the Soreng subdivision of West district, this zone covers two sub-divisions, viz., Namchi and Pakyong of South and East districts respectively. Although these sub-divisions are separated by a part of Gangtok sub-division and river Tista but because of some similarities in socio-economic and demographic characteristics they are taken as one zone. The southern part of this zone is bordered by West Bengal and a part of Bhutan. However, the northern part is covered by Gangtok and Ravong subdivisions of East and South districts respectively. The central and western part of this zone have comparatively open valleys and gentle slopes hence, these parts of the zone are most thickly populated. The altitude varies from 300 metres to 3,000 metres (approximately). This zone lies in the mid-Himalayan range of the State. The Eastern part of the zone receives higher rainfall than that of the West. Namchi Sub-division in the western part is considered as one of the driest parts of the State. Climate of the zone varies from sub-tropical hot humid to alpine type. This zone is predominantly inhabited by the Nepali people. The distinctive feature of this zone is that the western part, i.e., Namchi sub-division is predominantly
occupied by the Rai people (Kirati Nepali) and the eastern part by the Brahmins and Pradhans of Nepali group. The highland areas of the eastern part of this zone is inhabited by the Sikkimese Bhutias, Bhutias from Bhutan, Sherpas and the Gurungs. In the western part, the number of tribal people is very less. There are a few revenue blocks which have Lepcha people. For instance, Kanamtek revenue block (Namchi Sub-division) has more than 60 per cent Lepcha people. Besides, a small number of Tamangs, Mangars, Chettris, Sherpas, etc., also lives in this zone.

The total population of this zone is 1,04,909 (males : 55,128; female : 49,781). With 14.12 per cent of the total area, it supports 25.81 per cent of the total population. The most distinctive feature of population of this zone is its lowest proportion (6.23 of tribal population among the zones. The total tribal population is 6,541 (males : 3,327; females : 3,214 ). Except in the high altitudinal areas and around the monastries, this zone is predominantly inhabited by non-tribal Nepalese.

The population of this zone is unevenly distributed over 130 revenue blocks and 10 forest blocks. The size of the villages varies from medium to small. Out of the total villages 54.29 per cent (76 villages) have their population size between 500-1,999 persons and 29.29 per cent (41 villages) with 200-499 persons. The inter-village distance is 3.25 kms. in the east and gradually decreases towards the West (2.02 kms). It is mainly because of the rugged terrain in the eastern part of this zone. The average inter-village distance of the zone is 2.64 km. There are two urban centres in this zone, they are Namchi (district headquarters) and Jorethang, which are located in the southwestern corner of the zone. Towards the east there are three small market centres, viz., Pakyong (sub-division headquarters), Rhenok and Rongli towns. The latter two are the oldest centres and they were important since there was a trade route from Kalimpong (W.B.) to Chumbi valley through Jelep-la (Pas). After the closure of India and Tibet border (1962) the importance of these market centres have declined. For the people of the eastern part of this zone, Gangtok and Kalimpong (W.B.) are the nearest towns. However, Siliguri is the closest city of the zone. The total urban population is 2,569 persons (males :
1517; females: 1052) constituting 2.45 per cent of the State's total urban population (1991).

The arithmetic density of the zone is 154 persons per km². Density is comparatively high towards the west of the zone (196 persons/km²). It is mainly due to availability of agricultural land, development of urban centres, accessibility, etc. The physiological density is 289 which indicates a high pressure of population on the available habitable land. Again, agricultural density is 90 which shows that pressure of farming population over the agricultural land is high. From the above analysis it is clear that large proportion of people of this zone are dependent upon limited farm land. As mentioned earlier, the western part of this zone has comparatively less rainfall than the eastern part. Hence, in this part of the zone (Namchi Sub-division), people cultivate mainly pulses, vegetables and fruits. However, towards the east (Pakyong sub-division) paddy is cultivated, livestock keeping is a part and parcel of the farming economy of the people of this zone.

The growth rate of population is 29.16 per cent during 1981-91, which is the second highest in rank among the zones. High growth rate is attributed to both natural increase and in-migration of population to the zone. From different sources of information and observations it is found that fertility rate of the Nepali people is higher than any other ethnic groups of the State. The most distinctive feature of this zone is high sex ratio (903), which is found to be highest of all the zones. On the other hand, tribal sex ratio (966) is much higher than the general. This clearly indicates that male selective in-migration especially tribal to this zone is low.

The literacy rate of the zone is 56.90 per cent (male literacy: 65.6; female literacy: 47.08) excluding 0-6 years. The rate of literacy increases from 35.53 per cent in 1981 to 46.60 per cent in 1991 (including 0-6 years). This is mainly due to expansion of education facilities in this zone. However, the disparity between male and female literacy is still high in this zone.

The total working force is 42.5 per cent (male: 50.49; female: 38.64). Out of the total workforce 74.9 per cent are engaged in primary sector, 7.38 per cent in the secondary and 14.98 per cent in the tertiary sectors. It is observed that the
participation of female workers is higher than the males in the primary sector (male: 70 per cent; female: 83 per cent). This is mainly due to low female literacy rate in this zone. If the working categories are considered it is found that, largest proportion of population in the primary sector is cultivators (65 per cent) and only 8.35 per cent is agricultural labourers. On the other hand, in the secondary sector, large proportion of workers (11.56 per cent) is engaged in construction work. In the tertiary sector proportion of workers in the other services is 13.25 per cent. This shows that economically the zone is still backward in comparison to the Gangtok zone.

Regarding the availability of social facilities, this zone is slightly in a better position than the other, (except Gangtok zone). There are 216 primary, 60 middle, 13 secondary and 4 higher secondary schools in the zone. There is one degree college and one B.Ed. college in this zone. These colleges are located in the western part of the zone. People of the eastern part mostly attends the colleges located in Gangtok. Besides, there are a number of private schools in both eastern and western parts of the zone. In respect of medical facilities, this zone has 2 hospitals, 5 dispensaries and 17 public health centres. For better treatment people go to Siliguri. There are 34 post offices in this zone. Out of the total, 129 villages have drinking water facility and 118 villages have electricity. Further, 60 per cent of the total rural population is served by pucca road. There are 44 bus stops in this zone. A number of government buses and private jeeps ply every day.

It is worth mentioning that socio-economic development of the zone is clearly reflected in the changes in the living style, shifting of occupation, type of the house, etc., of the people of this zone. Impact of education on the social value and attitude is noticed in the revenue blocks located around the headquarters and the towns. The people of the eastern part of the zone was acquainted with education and a better culture due to its closeness to Kalimpong (W.B.). It is worth mentioning that, due to its nearness to the plains, presence of wide valleys and gentle slopes, this zone has a better scope for socio-economic development in future.
CHUNGTHANG-MANGAN ZONE

This zone covers both the sub-divisions of North district. It stretches from the Donkya range in the east, i.e., Tibetan border to the Singallia range in the west, i.e., Nepal border. The northern part is covered by the watershed of the river Tista, and the southern part by rest of the districts of the State. A large part of this zone is covered by thick forests and snowclad mountains. This zone is characterised by rugged terrain and harsh climate. Here, relief causes lots of hurdle in the accessibility. The height of the zone varies from 1200 metres to 5484 metres. Gradient of slope decreases from north to south. The central part is dissected by the river Tista and its tributaries. Most of the settlements of the zone are concentrated within the river valleys. Although the settlements is found up to 2,100 metres, but nucleus of settlement consisting of army and animal herders' camps are found up to 4,000 metres., which are temporary in nature. Due to steep slope and scarcity of habitable land settlement pattern of the villages are compact in nature in the northern part of this zone. On the others hand, it is dispersed in the southern part. The northern part of the zone is predominantly inhabited by the Bhutias and the southern part by the Lepchas. However, a good number of revenue blocks in the eastern Valley slopes of the river Tista in the southern part is inhabited by the Bhutias and, a small number of Limboos and Sherpas. On the basis of the voter's list (18 years and above ) it is found that 42 per cent of the total population of the zone is Lepcha and 29 per cent Bhutias.

The total population of this zone is 31,240 persons (males : 17,090; female : 14,150) and the total area is 4,226 km². It is worth mentioning that, this zone with highest proportion of land area (59.55 per cent) has the smallest percentage (7.90) of population of the State. This is because only 9.23 per cent of the total area of the zone is habitable. The total tribal population is 17,301 persons (male : 9004; female : 8,297) which constitutes 55.38 per cent of the total population of the zone.

The population of this zone is scattered over 45 revenue blocks (villages) and 8 forest blocks. The size of the villages varies from medium to small. The
northern part, i.e., Chungthang sub-division has the largest proportion of small size villages with size class of population less than 200 persons. On the other hand, southern part, i.e., Mangan sub-division has the largest number of medium size villages (44 per cent) with size class of 500-1,999 persons. It is worth-noting that the largest size village of the State is located in the northern part of this zone (Lachen revenue block).

On the whole, it has the highest number of revenue blocks (39.62 per cent) with a size class of 500-1,999 persons and lowest number of large size revenue blocks (3.78 per cent) with a population of 2,000-4,999 persons among the zones. The inter-village distance is 5.21 kms. in the southern part and abruptly increases towards the north (27.55 km). High inter-village distance is one of the cause of slow socio-economic development of the zone. The total urban population is 2.57 per cent (803 persons), because there is only one urban centre at Mangan. Here, sparseness of population is related to rugged terrain, inaccessibility, scarcity of agricultural land, innerline policy to restrict the movement of the people, etc.

The arithmetic density of population is extremely low (7 persons per km²). Physiological density is 150 persons per km² and agricultural density is 42 persons per km². - these indicate that pressure of population on the available agricultural land is relatively low. It is mainly because of multifarious economy by the people of especially northern part.

This zone has experienced a low rate of population growth (18.09 per cent) during 1981-91 as against 103.28 per cent in 1971-81. Decline in the growth rate is due to the stagnation in job and other opportunities. In-migration of population is solely responsible for the growth of population in this zone. Contribution of natural increase is negligible. About 41.42 per cent of the total population of the zone is found to be in-migrants (1991).

The overall sex ratio is 827 females per 1000 males, which is the lowest among the zones. Tribal sex ratio is 921. Like the other zones here, also male selective in-migration of non-tribals to the zone is high.
The literacy rate is 53.54 per cent (male literacy : 63.05; female literacy : 41.60). Development of literacy in this zone is mainly because of establishment of the first school in this zone (Lachen R.B.) in the beginning of this century and later, expansion of primary schools in the remote villages. This is an indication of social awakenings of the people towards education. However, disparity between male and female literacy is quite high. This is attributable to the type of occupation practised by the people of the northern part of the zone (Chungthang S.D.) Varied type of occupations, viz., animal rearing, trading, agriculture to a small extent, household industries and household works, all these require engagement of a large number of females. As a consequence, female literacy rate is lagging behind the male literacy despite having no restriction in female education among these Bhutias. Secondly, migration of educated males to the zone is responsible for such disparity. It is worth noting that literacy rate is high among the Lepchas living in the southern part of this zone than the Bhutias of the northern part. Sex disparity in literacy is also found to be relatively less. It is because here, sedentary agriculture is the mainstay of the people. Besides that, closeness of the area to Gangtok town and comparatively low rate of in-migration of educated males to this part of the zone are some of the important causes.

Another distinguishing feature of the zone is its high work participation rate, i.e., 44.13 per cent (male : 53.86; female : 32.38), which is the highest among all the zones. Out of the total workforce 62.79 per cent are engaged in primary sector, 14.28 per cent in secondary and 25.77 per cent in tertiary sectors. It is observed that in the secondary and the tertiary sectors, this zone ranks second next to Gangtok zone. High proportion of workforce in the secondary sector is mainly caused by engagement of large number of workers (12 per cent) in the construction work and in the household industries (1.17 per cent). Similarly, in the tertiary sector large proportion of workers are engaged in other services (13.25 per cent). It is found that participation of female workers in the primary (68.14 per cent) and secondary (12.37 per cent) sectors are found to be higher than the males (primary sector : 50.35 per cent; secondary sector : 6.16 per cent). On the other hand, it is low in the tertiary sector. This is mainly due to low literacy rate of the females. In the northern part of this zone, agriculture is done at a very small
scale. In the higher altitudinal areas barley, buck wheat, millet and vegetables like potato for seed, turning and radish are cultivated. In the lower altitude cardamom, maize, wheat, millet and vegetables are grown. In the lower valley slopes paddy is also cultivated.

During the last two decades though the region witnessed development of many social facilities, but because of remote location, inaccessibility and nature of occupation of the people in certain areas, viz., Dzougu (the Lepcha reserve) of Mangan sub-division and, Lachen and Lachung of Chungthang sub-division - this zone is still socio-economically backward in comparison to other zones. Almost all the revenue blocks of this zone have primary schools. There are 80 primary schools, 20 middle schools, 6 secondary and 1 higher secondary schools. For college education students go to either Gangtok or Namchi towns. Regarding medical facilities, it has 6 public health centres. There is no hospital in this zone. Nearest hospital is at Gangtok. There are 12 post offices. Although drinking water and electricity is provided to almost all the villages but supply is irregular. There are a few micro hydal project for the supply of electricity. 65.18 per cent of the total rural population of the zone is served by pucca road. Here, roads are maintained by the border road organization (BRO). There are 31 bus stops. Frequency of movement of the buses and jeeps are less in this zone. People of the remote areas, in the higher altitude, especially near the border, use army vehicle for transportation.

Thus, Chungthang-Mangan zone can be considered as a distinct population zone because of its sparse population, clan territorial occupance of certain groups, mixed economy, low population growth, scarcity of agricultural land, inner line policies, high participation rate of females in the secondary and the tertiary sectors and lack of adequate socio-economic facilities.

Ravong - Gyalshing - Soreng Zone

This zone includes three sub-divisions, viz., Ravong of South district and Gyalshing and Soreng of West district. The northern part is covered by Mangan sub-division (North district). In the east and the south lie, the Gangtok sub-division
of East district and Namchi sub-division of South district respectively. In the extreme West is the snow clad Singalila range which stretches from north to south. On the west of this range is Nepal. This zone stretches from the high Himalayan zone in the northwest to middle Himalayan zone. Obviously, the gradient of the zone increases from east and south towards west and north. The altitude varies from 300 metres to 5,484 metres (approximately). Kanchenjunga peak is the highest point of this zone. A number of important peaks of the state are located in the western part of this zone. The ruggedness of the topography increases towards the west. The river Rangit and its tributaries have dissected the zone from northwest towards south. The climate varies from sub-tropical humid to Arctic types. The temperature varies with the height. Rainfall is relatively high towards northern and western parts.

The total area is 1593 km² covering 155 revenue blocks and 14 forest blocks of the State. Total population is 1,33,238 persons (males : 69986; females : 63252). It is found that with 22.45 per cent of the total area of the State it constitutes 32.78 per cent of the total population (1991). This zone has the second highest numbers of population in the State. It is observed that only 56 per cent of the total area of this zone is habitable. Tribal population constitutes 21.20 per cent (male : 21.10 per cent; female : 19.26 per cent) ranking second among all. Like the other zones, here also, most of the tribal people are concentrated in the high altitudinal areas and around the monastries. Gyalshing sub-division with all these characteristics has the highest proportion of tribal population in the zone. On the whole, Nepalese are the predominant inhabitant of the zone. As stated earlier, different sub-groups of Nepalese predominate the different parts of this zone. Among the tribes proportion of Lepchas are relatively less here. However, there are some religious spots in the west for instance, Khechoperi lake (Gyalshing sub-division), where a few Lepcha settlements are noticed. Some of them are also found in the northern part of the zone.

The arithmetic density of population is 84 persons per km². It is found to be higher in the east than in the western part. The physiological density is 109 persons per km²., which indicates a high pressure of population on the available
habitable land. However, among the zones it has the lowest. On the other hand, agricultural density is 300 persons per km², which is the highest among the zones. This clearly indicates that large proportion of people are dependent on the limited agricultural land. Rugged terrain and steep slopes are the main causes of small size of the landholdings. It is interesting to note that agricultural density is found to be higher towards south (Soreng sub-division). The main crops grown here are maize, millet, wheat and a number of vegetables, etc. Potato is grown in large scale in the southwestern part. In the lower slopes of the valley, paddy is cultivated. Cardamom is grown mostly in the damp western slopes. Livestock is a part of farming which supplements their income.

The settlements are sparsely distributed over the zone. The size of the villages varies from medium to small. It is found that 60.47 per cent of the total revenue blocks of this zone has population ranging between 500-1999 persons. Only 4.19 per cent blocks (villages) has large number of population (2,000-4,999 persons). About 26 per cent of the blocks has population ranging between 200-499 persons. The inter village distance is 2.71 kms. in the south (Soreng sub-division), which gradually increases from 3.35 to 3.96 kms. towards north and west respectively. On the whole, the inter-village distance of the zone is 3.34 kms. This is one of the hurdle of socio-economic development of the area.

There are two urban centres, they are, Gyalshing (also a district headquarters) and Nayabazar. The latter is located in the southeastern corner of the Soreng sub-division near Jorethang town. Besides, a number of market centre, viz., Ravong, Rimbi, Sombaria, etc., are found here. Most of these markets are collection centres of cardamom, potato, ginger, orange, etc. Among all Rimbi is the oldest market centre located on the bank of the river Rangit near the boundary between South and West districts. The total urban population of the zone is 1,762 persons (male : 1001; female : 761) constituting 1.30 per cent of the total of the State.

The most distinctive point is that this zone has the highest growth of population (30.58 per cent) among the zones. The growth rate is comparatively
higher in the southern part (Soreng Sub-division) than in other parts. As mentioned earlier, Nepalese, the predominant inhabitant of the zone has relatively high fertility rate than the other groups. Hence, here, high growth rate is related to both high natural growth and in-migration. This zone has the same proportion of sex ratio (903 females per 1000 males) like zone II. Sex ratio is found to be higher in those parts of the zone where in-migration is relatively low.

In respect of the literate persons it is seen that 46 per cent of the total population is literate (male literate : 55 per cent; female literate : 36 per cent), excluding below 7 years. Gyalshing sub-division of this zone has large proportion of literates and Soreng sub-division has the lowest. In this zone Limboos are found to be socio-economically backward than the other groups. Among all this zone has the lowest proportion of literates in the State. During the last decade (1981-1991) literacy rate has increased from 25 per cent to 37 per cent. It is worth mentioning that here sex disparity in literacy is the highest among the zones.

In regards to workers it is found that 43.49 per cent of the total population are workers. Out of the total, 85 per cent are engaged in primary sector, 4.76 per cent in secondary and 9.96 per cent in tertiary sectors. This clearly indicates that a large proportion of population live below poverty level. It is worth noting that this zone has the largest proportion of workers in the primary sector. Here, work participation rate of the females in the primary sector is found to be highest (92 per cent), which is indicative of the socio-economic backwardness. In the primary sector 76.36 per cent are cultivator and only 0.83 per cent are agricultural labourers. People engaged in household industry is negligible (0.83 per cent). The proportion of workers in the other services is also low (7.36 per cent), showing a deficiency of educated and skilled people in this zone.

Regarding the social facilities, there are 304 primary, 68 middle and 20 high schools. For college education students go to Gangtok or Namchi towns and also to West Bengal. This zone has a number of private schools too. Here, there are 2 hospitals, 6 dispensaries and 22 public health centres. For better treatment people go to Gangtok or Siliguri. Total number of post offices are 44. Although a large
number of revenue blocks have drinking water facilities, but supply is found to be very uncertain. More than 90 per cent of the revenue blocks have electricity. About 64 per cent of the total rural population is served by pucca road. There are 73 bus stops in this zone (1991). The number of buses and jeeps and, the frequency of movement gradually decreases, as expected, toward the higher altitude.

Slow economic development of this zone is directly related to the physical factor, social backwardness and poor economic condition of the people. But there is an exception in case of the southern part (Soreng sub-division) of this zone. This part, despite having comparatively gentle slope, better location, i.e., closeness to the Bengal plain, accessibility is found to be socio-economically relatively backward, than the rest.

Summary Statement

From the foregoing discussion, it is apparent that each population zone has distinct demographic and socio-economic characteristics. When considered the demographic aspects, it is seen that Gangtok zone, with an area of 8.43 per cent of the State's total, has the highest concentration of population (77 per cent) in the State. Tribal population constitutes 22 per cent of the total population of the zone. The arithmetic density is found to be quite high (229 persons/km²). Relatively high physiological density (647) in this zone shows a high pressure of population on its available agricultural land. Here, population growth and sex ratio are directly related more to in-migration, than natural growth. This zone is predominantly inhabited by the Nepalese next to which comes the Bhutias and the Lepchas. As expected, the urban areas have a mixed type of population. A good number of tribal people including Tibetan refugees is found in Gangtok town. Among the four zones, this with three urban centres also has the highest percentage of urban population (23.25).

The IIth zone, i.e., Namchi-Pakyong zone has 26 per cent of the population, which is almost double the proportion of its available land (Area : 14.12 per cent). Hence, pressure of population on the available land here is also high. (Appendix XV). In this zone population growth is affected by both natural increase and in-
migration. The most distinctive feature of this zone is that it has the lowest proportion of tribal people (6.23 per cent) in the State. Their concentration decreases towards western part. The predominant population of the zone is the Nepalese. The western part is inhabited by the Rais (Nepali) and the eastern part by the Brahmans and Pradhans (Nepali). Here, urbanization is still in the infancy (urban population: 2.45 per cent).

From the analysis it is observed that the demographic pattern of the IIIrd zone is somewhat different from those of other zones. This zone covers the largest proportion of the areas of the State (60 per cent) accommodating the smallest percentage of population (8 per cent). It is worth mentioning that 55 per cent of the total population of the zone is tribal belonging to Lepcha and Bhutia tribes. Among all this zone has the lowest growth of population (18 per cent). It is mainly due to migration of population as natural increase is less here. The pressure of population on the available land has not yet reached the optimum point. Urbanization is found to be very slow.

The IVth zone has an area of 22.45 per cent of the total, constituting 33 per cent of the total population of the State. Tribal people constitute 21.20 per cent of the total population of the zone. They are mostly concentrated in the northern and a small number in the south-western highlands of this zone. Here, population growth is the maximum (31 per cent) among the zones, which is mainly related to natural growth and to a less extent to in-migration. Because of high agricultural density (300), pressure of population on the available land is very high. It is worth mentioning that this zone has the lowest proportion of urban population (1.30 per cent), showing a very slow growth of urbanization.

In respect of social and economic characteristics, it is observed that 1st zone has the largest proportion of literates; (68 per cent) on the other hand, IVth zone has the lowest (46 per cent). Despite the expansion of primary education in the IVth zone, low percentage of literates is chiefly due to socio-economic backwardness of the people.
As regards work participation rate, it is found that the IIIrd zone has the highest proportion of workers (44.13 per cent) and I st zone the lowest (37.26 per cent) in the State. The high work participation rate in the IIIrd zone is mainly due to physical constraint prevalent in this zone and the practice of mixed economy which requires a good number of workers. On the contrary, enrolment of a large number of children in the school is the main cause of low work participation rate in zone I. When the occupational categories are considered it is found that, among all the zones, IVth zone has the maximum workers in the primary sector (85 per cent). Next to it comes the II nd zone with 75 per cent. It is worth noting that zone I has the lowest proportion of workers in the primary sector (42 per cent).

As expected, the number of workers engaged in the secondary sector is very less in the entire State. It is found that zone I has the highest percentage of workers (20.75) in this sector, next to which comes the IIIrd zone with 14.28 per cent. The lowest proportion of workers in this sector is found in zone IV (4.76 per cent). Relatively high proportion of workers in the secondary sector in zone I is due to the establishment of certain medium and small scale industries in Gangtok - Singtam-Rangpo belt. But in the III zone, considerably high percentage of workers in the secondary sector is for the fact that some people are found to be engaged in household industries, such as weaving, painting thankas, wood curving, etc.

In the tertiary sector, Zone I, obviously has the highest proportion of workers (37.14 per cent), next to which comes zone III with 25.77 per cent. The lowest number of workers in this sector is found in zone IV (9.96). In the case of zone I, high percentage of workers in this sector is due to generation of employment opportunity in the capital town Gangtok, especially after the merger of the State with the mainstream. In this respect urbanisation has played an important role. In both zone I and zone III, engagement of a good number of workers in other services, such as white collar job has contributed high participation of workers in the tertiary sector.

If the divisions of the occupational categories are considered, it is found that in the primary sector, IVth zone has the largest proportion of cultivators (76 per
The above discussion clearly shows the position of the zones in regard to their demographic and socio-economic characteristics. It is found that zone IV is the most backward one in respect of socio-economic development. Therefore, while planning and formulating policies for socio-economic development of different areas of this state, priority should be given to the problems of this zone. However, zone III also needs special attention in respect of development of transport and communication network. The backward communication system in this zone is because of rugged terrain, innerline policy and its strategic location near the border. To reduce the growing pressure of population in the urban areas of zone I especially in Gangtok town, decentralization of the socio-economic facilities are urgently required. On the other hand, the growing pressure of population on the available agricultural land in zone II is leading to out-migration of literate and educated people from the rural areas to the urban areas especially Gangtok town. To avoid this, development of small scale and medium scale industries are highly necessary in this zone.

It is observed that, the physiographic condition of the areas covered by the four zones is highly conducive to further development of the age old occupational tradition of animal rearing and cultivation of horticultural crops. This, on one hand, will ensure better economic gains to the people, while on the other, it will reduce the pressure of population on the limited land available for crop cultivation. Hence, development of animal husbandry along with horticulture in all the four zones would be the best possible economic activity for the people of the State.

It is worth noting, however, that the State Sikkim as a whole is one of the backward States of the country in so far as its socio-economic development is
concerned. Therefore, the State requires special attention for speedy socio-economic development, especially of the areas like Gyalshing, Soreng, Ravong, under zone IV and Chungthang, Mangan under zone III. Specifically better socio-economic facilities should be made available to the rural areas for proper utilization of potential resources and to maintain a balance between the growing population and available resources in all parts of the zones. In regard to demographic attributes it is worth recording that the State is facing the problem of in-migration of people from outside the State in large number over the last few decades. As a result of this, pressure of population is increasing on its available resources, socio-economic facilities, employment opportunities, etc. Therefore, necessary steps should be taken to check heavy in-migration of people from outside the State.