CHAPTER – II
Physical and Socio-economic Environments of Sikkim

2.1 Location and Administrative setup

Sikkim covers a part in the Eastern Himalaya spreading over a considerable mountainous terrain below the Mount Kanchenjunga (8,586 m), the third highest Mountain peak in the world and respected by the Sikkimese as their protective Deity. This small state, bigger only than Goa and Delhi and India’s least populated, lies in between Nepal and Bhutan in the eastern part of the country.

Sikkim, the former Himalayan kingdom was annexed with India and became the 22nd state of Indian republic which came into existence with effect from 16th May, 1975. The state has a political and a strategic importance because of its particular location beside proportion of its size. The state has been bordered by three international boundaries and the state of West Bengal. In the north and northeast it is bounded by vast stretches of Tibetan plateau, on the east by the Chumbi valley of Tibet and Bhutan, Nepal on the west and on the south by the Darjeeling district of West Bengal, India.

Sikkim has an impressive scenic beauty with exotic natural wealth including the vast forest area, deep blue mountain lakes, gorgeous Buddhist monasteries and hillsides ablaze with rhododendrons against a backdrop of snow-clad mountains. The State is located 27°00'46” to 28°07'48” North latitude and 88°00'58” to 88°55’25” East longitudes. It has a total area of 7,096 sq. km, measuring approximately 115 km from north to south and 64 km from east to west. The state has a present population of 6,10,577 persons with a density of population 76 per sq.km. Population growth for the last 10 years decadal during 2001-2011 was 32.98 per cent. This region covers an area of 2,62,500 sq.km, representing approximately 8 per cent of the total area of the country and has a population of 39.0 million that is around 3.8 per cent of the country’s population (Census of India, 2001).

The region covered by Sikkim has a unique geographical configuration, surrounded by vast stretches of Tibetan Plateau (China) in the North, Chumbi Valley of Tibet and the kingdom of Bhutan in the east, Darjeeling district of West Bengal in the south and the kingdom in Nepal in the west. The entire state is mountainous and being a part of inner ranges of the Himalayas it has no open valley and no plain land but is remarkable for its
altitudes ranging from 300 to 8,586m above the mean sea level consisting of lower hills, middle and higher hills, alpine zones and snow bound land. In 8th May 1998, Sikkim was made a full-fledged member of the North-Eastern Council. A Mini Planning Commission for the region during the meeting of the Chief Ministers of North eastern states held under the chairmanship of the then Prime Minister, A.B. Vajpayee. Later on it was included on north east states and today this state is obtaining all the facilities of being one of the eight members of the north-eastern states (Chettri, 2010).

Figure 2.1: Location map of Sikkim and the study area
The State of Sikkim has been divided into four administrative zones, nine subdivisions, 453 revenue blocks and 9 towns. Mangan is the Headquarter of North Sikkim District which is largest in size but sparsely populated as compared to the other three districts. Gangtok, the capital of the State situated at an altitude of about 1,800m, is the head quarter of the East district, which is an attractive and well developed place as well as the most populous among all districts. The south and west districts have headquarters at Namchi and Gyalshing respectively. The nine sub-divisions are Mangan, Chungthang, Gangtok, Pakyong, Rongli, Namchi, Soreng and Ravangla. Each administrative zone and subdivisions is under the supervision of District Magistrate and Sub-Divisional Magistrate.

2.2 Physical environment

Geology: The physical configuration of Sikkim encircles the Lesser Himalaya, Central Himalaya, and the Tethys Himalaya. It is essentially a mountainous state without flat piece of land of any extent anywhere. It mainly consists of gneissose and schistose rocks, producing generally poor and shallow brown clay soils. The soil is coarse, with large concentrations of iron oxide; it ranges from neutral to acidic and is poor in organic and mineral nutrients. This type of soil tends to support evergreen coniferous and deciduous forests. Most of Sikkim is covered by Precambrian rocks, which are much younger in age than the hills. The rocks consisting of Phyllite and Schist are highly susceptible to weathering and erosion(Chettri,2010). This combined with the state's heavy rainfall, causes extensive soil erosion and the loss of soil nutrients through leaching. As a result, landslides are frequent, often isolating rural towns and villages from the major urban centres.

Topography: The physical environment of Sikkim a diverse range of topographic features characterized by great variations in elevation. It is bounded on the north east and west by high ridges, and looks like an amphitheatre (Choudhury, 2006). The Tibetan plateau demarcates the northern border of Sikkim with Tibet. The eastern boundary with Tibet is represented by Chola Range whereas the border with Bhutan is constituted by the Pangolalia Range. Along the western margin the Singalila Range forms the watershed as well as the border between Nepal and Sikkim. Parts of the rivers Rangit, Teesta, Ramam and Rangpo-chu combine to define the border of Sikkim with West Bengal.
Figure 2.2: Physical environment of Sikkim

**Geomorphology:** Geomorphologically, Sikkim falls within the upper part of the Teesta Basin. The work of River Teesta owns much to the physical topography of the state. The structural slope of the land is from north to south resulting the flow of all the major rivers of the state southward. From almost every corner rivulets and streams appear and runs to all possible directions. The north western part of the state is highly elevated and remains under
snow cover almost throughout the year. Therefore, the Geomorphological pattern is characterized with glaciated features as cirques, aretes, glacial trough and moraines. There are numbers of glacial lakes that freeze during the winter. Presently, Sikkim is in the rapid evolution state with the ongoing glacial, periglacial, Glacio-fluvial, fluvial and pluvial activities, which are continuously reshaping the face of this young mountain topography.

Plate 2.1: Rugged terrain around Kanchenjunga in West Sikkim

The highest portion of Sikkim lies in its north west direction. A large number of mountains having altitudes of about seven thousand meters stands here with - Kanchendzonga (8,586 m.), the third highest peak in the world. The high carved snow capped spurs and peaks of Kanchenjunga look attractive consisting of other peaks like Kabru (7,338m), Panhauri (7,125mts) Siniolchu (6,888 mts) Simvo (6,811m), Pandim (6691m), Rathong (6,087m), Narsingh (5,825m), Talung (6,147m) etc.

**Rivers:** A number of glaciers descend from eastern slopes of Kanchenjunga into Sikkim where the perpetual snow-line is found above 5,300m, among which the important ones are Zemu Glacier. Teesta is the main river with its source from Cholamu Lake and its tributaries are Rangit, Zemu, Lhonark, Lachung, Talung, Rongi, Rangpo and Bakeku. River Rangit originates from Rathong Glaciers is the second biggest river of sikkim with tributaries i.e. Rammam, Reshi, Rothak and Kalej. All the rivers form the main channel of drainage from the north to the south with tributaries.
Mountain Passes: The mountain ranges have a number of passes. On the eastern Chola range, the most important passes are the Nathu La and Jelep La, both at an altitude of 4,572m, leading to Tibet. On the western border, the most important pass is Chiwabhangjang with Nepal at an altitude of 3,139m.

Glaciers, Lakes and Springs: Numerous glaciers exist in Sikkim, among which the important ones are Zemu Glacier, Rathong Glacier, Onglaktang Glacier, Tista Khangse Glacier and the Lhonark Glacier. Almost all the glaciers, particularly the ones which descend from the southeast-facing slopes of Kanchenjunga are now retreating rapidly.
A number of lakes as well occur in Sikkim and most of them are of glacial origin and hence are confined to the high altitude area. The northern part of Sikkim has a number of fresh water lakes, majority of them are too small in size and most of the lakes are unnamed. The major lakes in north Sikkim are Gurudongmar Lake, Cholamu Lake and Green Lake all located above 5,000m. The east district too has a number of high altitude lakes out of which important are Tsomgo lake (Changu), Memencho Lake and Bidan Cho lake (Elephant Lake). In West Sikkim Khecheolpelri Lake is considered as one of the sacred lakes of the state by both Buddhists and the Hindus. Others lakes like Lam pokhari, Dudh pokhari, Samiti lake and Ram-Laxman (twin lake) are also worth mentioning.
Sikkim has also a number of hot springs, well known for their medicinal value. The water oozes out from beneath the surface having strong sulphur odour and have medicinal potency. The most important ones are located at Reshi, Yumthang and Ralang.

**Soils:** In accordance with the physiographic sequence of the terrain features, 78 soil families were identified in Sikkim State and mapped into 69 mapping units. It revealed that soils of Sikkim belong to 3 orders, 7 suborders, 12 great groups and 26 subgroups. It is observed that Inceptisols are dominant (42.84%) followed by Entisols and Mollisols occupying 42.52% and 14.64% respectively. It comprises moderately deep, well-drained loamy skeletal soil with dark brown to dark reddish brown colour. The texture of soil varies between loamy sand to silty clay loam. They have been developed on mica schist. The depth of the soil ranges from a few inches to several feet depending upon the weathering process it has undergone. This soil occurs on strongly sloping (10-15%) hill top with moderate to severe erosion. Soils are under moderately dense forest and pasture land.

### 2.3 Climatic condition

Climate and weather conditions in Sikkim are controlled mainly by the factor of altitude variation across the state. The climate ranges from sub-tropical in the south to tundra and arctic in the northern parts (Choudhury, 2006). The climate of Sikkim has been classified in six broad types. They are as follows:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Climatic type</th>
<th>Elevation at which occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sub Tropical Humid</td>
<td>Up to 1500m</td>
</tr>
<tr>
<td>2.</td>
<td>Semi Temperate</td>
<td>1500 to 2000m</td>
</tr>
<tr>
<td>3.</td>
<td>Temperate</td>
<td>2000 to 3000m</td>
</tr>
<tr>
<td>4.</td>
<td>Alpine Snow Forest</td>
<td>3000 to 4000m</td>
</tr>
<tr>
<td>5.</td>
<td>Alpine Meadow or Tundra</td>
<td>4000 to 6000m</td>
</tr>
<tr>
<td>6.</td>
<td>Arctic</td>
<td>above 6000m</td>
</tr>
</tbody>
</table>

The Tundra-type region in the north remains covered with snow for four months in the year, and the temperature remains below 0°C almost in every night. The peaks of north-
western Sikkim are constantly frozen. The inhabited parts of Sikkim experiences a temperate climate, with the temperatures rarely exceeding 28°C in summer and dropping below 0°C in winter. The average annual temperature for most of Sikkim is around 18°C. As temperature varies with altitude and slope, the mean temperature in the lower altitudinal zones varies from 4.5°C to 18.5°C, whereas at higher altitudinal zones, it varies from 1.5°C to 9.5°C. The maximum temperature is recorded usually during July-August and minimum during December-January. During May to September, Fog with low cloud condition is a common feature in the entire state. In high altitude region the winter months are fed with snowfall experiencing Chilled weather with biting cold with temperatures dropping below −40°C. The state has five seasons: winter, summer, spring, autumn and monsoon season. The monsoon season extends through late May to September. Alpine meadow landscape extends from 3,500m up to the snowline which extends from above 6,000m. The relative humidity remains above 70 per cent throughout the year in most parts. The temperature varies with altitude and the slope (generally 6 °C to 10°C).

Relief features such as high mountains act as barriers for the movement of the monsoon winds. Low temperature, high rainfall on windward slopes, comparatively dry on the leeward side and heavy precipitation in the form of snow at the mountain tops are the main features of the climate. Long term, reliable meteorological data is available only for two stations – Gangtok and Tadong (Meteorological Report, Government of India). In other 17 stations in Sikkim, the rainfall data is measured by rain gauges, but data series are not continuous for assessing the changing patterns of climate for a substantial period.

Table 2.2: The average daily mean maximum, minimum temperature and mean annual rainfall for the period based on 2000-2009 at the selected stations in Sikkim.

<table>
<thead>
<tr>
<th>Station</th>
<th>Maximum Temperature</th>
<th>Minimum Temperature</th>
<th>Rainfall(mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gangtok</td>
<td>18.8</td>
<td>12.7</td>
<td>3589.5</td>
</tr>
<tr>
<td>Mangan</td>
<td>25.4</td>
<td>15.3</td>
<td>3244.1</td>
</tr>
<tr>
<td>Mazitar</td>
<td>29.4</td>
<td>17.3</td>
<td>1620.2</td>
</tr>
<tr>
<td>Namthang</td>
<td>23.1</td>
<td>14.0</td>
<td>1972.0</td>
</tr>
</tbody>
</table>

Source: Meteorological Centre, Gangtok
The area experiences a heavy rainfall due to its proximity to the Bay of Bengal. The rainfall in North District is comparatively less than that of the other Districts. Pre-monsoon rain occurs in April-May and monsoon (South-West) operates normally from the month of May and continues up to early October. Sikkim is one of the few states in India to receive regular snowfall. The snow-line ranges from 6,100m (20,000 ft) in the north of the state to 4,900m (16,100 ft) in the south. During the monsoon, heavy rains increase the risk of landslides. The record for the longest period of continuous rain in Sikkim is 11 days. Fog affects many parts of the state during winter and the monsoons, making transportation difficult.

The mean annual rainfall varies from 2000 mm. to 4000 mm. with intensity of rain from drizzling showers in lower altitude to torrential rains in higher altitude. There are two maximum rainfall areas (i) South-East region and (ii) South-West region. There is an area in the North-West region which gets very little rainfall. The greater part of rain fall is received during May to September. The annual rainfall of Sikkim is 2739 mm.

2.4 Flora and Fauna

Flora: Sikkim is well known for its exotic flora and fauna situated in an ecological hotspot of the lower Himalayas. This is one of the only three among the Eco-regions of India. A diverse range of fauna and flora is found in the forested regions of the state. Sikkim, bound by the altitudinal breaching, has a wide variety of plants, from tropical species to temperate, alpine and tundra ones, and is perhaps one of the few regions to exhibit such diversity within such a small area.

Nearly 81 per cent of the area of Sikkim comes under the administration of its forest department. On this basis the vegetation of Sikkim can be broadly classified into the tropical, sub-tropical, temperate and alpine types (Lama, 2004). They are as follows:

• **Tropical Vegetation:** The vegetation of this zone ranging up to 800m consists mainly of tropical moist deciduous to semi-evergreen species with Sal (*Shorea Robusta Gaertn.*) as the dominant species. The Sal and other trees form forests at low altitude bordering with West Bengal in Teesta and Rangit valleys.
Sub-tropical Vegetation: This is confined to elevation ranging from 800 to 1,500m especially along the Teesta and Rangit rivers and their tributaries. It consists mainly of mixed forest comprising *Adina Cordifolia*, *Alangium Chinese*, *Bischofia javanica*, *Callicarpa arborea* etc. As such no single species can be said to be dominant in these forests.

Temperate vegetation: One of the distinctive characteristics of temperate vegetation is the occurrence of broad-leaved and coniferous forest lying between 1,500m and 3,500m elevation. The broad leaved forests comprise *Alnus nepalensis*, *Acer campbelli* etc. The predominant varieties of the coniferous forest include *Abies densa*, *Griffithiana*, *Picea spinulosa* etc. These forests are common in the valleys of Lachen, Zemu, Lachung, and Yumthang. At some places in North and West Sikkim pure stands of *Taxus wallichiana* can also be seen.

Alpine Vegetation: This zone ranges from 3,500-5,000m comprising dry and moist Alpine vegetation. The lower altitudes of this zone support shrubby species of *Rhododendron*, *Berberis*, *Cotoneaster*, *Diapensia himalaica*, *Euonymus*, *Gaultheria*, etc. Among the herbaceous flora, species of *Aconitum*, *Arenaria*, *Anaphalis*, *Astragalus*, etc. are conspicuous. Besides, the plants of great medicinal value viz., *Aconitum heterophyllum Royle*, *Gammie Bisma* etc. are common in Zemu valley, from Lachen to Thangu and Yumthang to Yomesamdong in Lachen Valley. At higher altitudes of the Alpine zone, as in areas above Thangu in Lachen Valley and Yume-samdong in Lachung Valley, the vegetation is of the typical Alpine moorland type where tree growth is completely arrested. The stunted bushy growth along these slopes consists of tough clumps of *Juniperus squamata*, *Rhododendron*...
lepidotum, *R. anthropogon*, etc. *Rhododendron nivale* is the most commonly found alpine woody plant in the Himalaya growing up to an altitude of 5,400m. Among the grasses and sedges, species of *Carex, Kobresia, Eleocharis, Elymus, Festuca, Stipa* etc. are commonly seen in the area.

The Alpine meadow area is taken by the high altitude shipyards as their main seasonal grazing land mainly for grazing of the herds of Yak. Due to strong wind action the grassland and mats of herbs in some parts of the Alpine meadow have been found to have partially stripped off.

Sikkim is the home of around 5,000 species of flowering plants, 515 rare orchids, 60 primula species, 36 Rhododendron species, 11 oak varieties, 23 bamboo varieties, 16 conifer species, 362 types of ferns, 8 tree ferns, and over 424 medicinal plants. A variant of the Poinsettia, locally known as "Christmas Flower", is found in the state. The official flower of Sikkim is Nobile Dendrobium an orchid, while the rhododendron is the state tree.
Orchids, figs, laurel, bananas, Sal trees and bamboo grow in the Himalayan subtropical broadleaf forests of the lower altitudes. In the temperate elevations above 1,500m there are Eastern Himalayan broadleaf forests, where oaks, chestnuts, maples, birches, alders, and magnolias grow in large numbers, as well as Himalayan subtropical pine forests, dominated by Chir pine. Alpine-type vegetation is typically found between altitudes of 3,500 to 5,000m. In lower elevations are found juniper, pine, firs, cypresses and rhododendrons from the Eastern Himalayan sub-alpine conifer forests. Higher up are Eastern Himalayan alpine shrub and meadows, home to a broad variety of rhododendrons and wildflowers.

**Fauna:** Sikkim is equally famous for a variety of fauna which include wild animals, birds, butterflies and moths. The Red Panda is the state animal and the Blood Pheasant is the State bird. The Himalayan black bear, the panther, the snow leopard, barking deer, musk deer, Himalayan Tahr, red panda, Himalayan marmot, Himalayan goral, common langur, Tibetan wolf, wild boar, Himalayan jungle cat, squirrel are found in different altitudes. Among the animals more commonly found in the alpine zone are yaks, mainly reared for their milk, meat, and as a beast of burden.

![Plate 2.13: State Animal Red Panda](image1) ![Plate 2.14: State Bird Blood Pheasant](image2)

There are 5 to 6 hundred species of birds including the pheasant, crimson horned pheasant, snow partridge, Tibetan snowcock, bearded vulture and griffon vulture, as well as golden eagles, quails, plovers, woodcocks, sandpipers, pigeons, Old World flycatchers, babblers and robins. Sikkim has more than 550 species of birds, some of which have been declared endangered. Sikkim also has a rich diversity of arthropods (insects), many of which remain unstudied; the most studied Sikkim’s arthropods are butterflies. Of the approximately...
1,438 butterfly species found in the Indian subcontinent, 695 have been recorded in Sikkim. These include the endangered Kaiser-i-hind, the Yellow Gorgon and the Bhutan Glory.

2.5 Demography, Society and Culture

Sikkim is one of the least populated states with 6,07,688 inhabitants with density of population of only 86 persons per square kilometer. Population of Sikkim is growing steadily, when compared the data of 2001 with 5,40,000 population against that of 2011 having 6,07,688 population it shows a high population growth rate of average 12.36% per cent. The sex ratio of Sikkim is much lower with (889 females) than the national average (933 females). A total of 321,661 males and 286,027 females has been recorded in 2011. District-wise comparison of the population distribution shows that East district with Gangtok as the state capital is the most populated accounting almost 50% (281,293) of the total population. South (146,850) and West District (136,435) occupy second and third positions respectively. North District has the lowest population (43,354) housing only 7.58% of the state population. As per the 2011 census decadal growth rate between 2001-2011 is highest in case of East District (14.80%) and lowest in case of north District (5.67%).

Sikkim is a multi-ethnic state with different groups of people categorized mainly into three groups: the Lepchas, the Bhutias and the Nepalese. "All these three ethnic groups have their own language, culture and social practices, and have a strong socio-cultural bond among themselves" (Risley, 1894). The history states that the Lepchas are the original inhabitants of Sikkim. Since 12-13\textsuperscript{th} centuries the account of Limbus and Magars settling in Sikkim have been found, followed by the Bhutias around 14\textsuperscript{th} centuries and the Nepalese around who came in the 19\textsuperscript{th} century to settle down permanently in Sikkim. In the year 1975 after the annexation of Sikkim with India, a noticeable migration of different castes, classes and races from the plains took place for the purpose of business, commerce, employment and livelihood. Sikkim has been bestowed with the different cultures, customs, norms, dogmas and languages together with the migrants. From the passage of time itself, Sikkim has the distinct qualities of its culture, social, religious diversities but after the merger it also shares a unique place within the Indian democracy. The Indian parliament in the year 1977 under Article 345 declared Bhutia, Lepcha and Nepali as the three major languages of Sikkim which in fact carries an authentic proof of Sikkim being a multilingual state since then (Lama, 2004).
The linguistic diversity of India itself is a well acclaimed in which Sikkim adds a more commendable multilingual diversity. Further, the population is divided into Tribal and Non-Tribal groups. The Tribal group comprises Lepcha, Bhutia, Sherpa, Tamang and Subba. Compared to other ethnic groups, the Lepchas maintain more methodically many of their traditional customs. The dominant ethnic group in the state is Nepalese with over 70% of the present population. Nepali is the most widely spoken and accepted language to all communities making it a *lingua franca* in the state. Around 3,38,606 population communicate in this language as their mother language in Sikkim. Bhutia with 41,825 populations is the second largest community to speak in their mother tongue. In addition to this, other languages like Lepcha, Rai, Gurung, Magar, Limbu, Newar, Bengali, Malayalam, Hindi, Tibetan, Urdu, Sunuwar, Punjabi; Sherpa etc. too share a sizeable population (Manger, 2014). Among them Nepali, Bhutia, Lepcha, Rai, Sherpa, Magar, Newar, Limbu, Sunuwar and Tamang are the indigenous languages and Punjabi, Bengali, Malayalam, Hindi and Urdu are the other migrated languages from the other parts of India together with the business, commerce, employments etc. Scheduled Caste and Scheduled Tribe population is 5.93% and 22.36% respectively with North district as the tribal district having 55.38% tribal population of the state living in this part.

The people of Sikkim are cordial in behaviour, simple in lifestyle and peaceful and fun loving in philosophy. Among the ethnic groups, the customs and rituals of Sikkim are also diverse.

Plate 2.15: A three ethnic group of people on their traditional attire
A formidable part of population is the business community from the plains. The grandeur of their festivals and dances show the expression of the colourful lifestyle of the hill people. The Hindu Nepalese observes Dusshera and Diwali and for the Buddhist there are two important festivals one dedicated to the mountain deity Kangchendzonga and other in celebration of the New Year. The warrior dances are performed during the celebration of the Snowy Range and is a dance very much local only in Sikkim. Although it is a multi-religion state a certain harmony is always maintained among the religious groups of Hinduism, Buddhism, and Christianity; the people pay respect to the values of each other and acknowledge the diversity. There are vibrant festivities throughout the year which reflect the rich cultural heritage of the state. A rich blend of beliefs, legends and rituals find expression in the most colourful celebrations and traditional dances. Folk Dances and songs are an integral part of Sikkimese culture. Many of the musical instruments that accompany the dances are unique to Sikkimese culture. Many of the musical instruments that accompany the dances are unique to Sikkimese culture.

2.6 Economy

Since, the merger of Sikkim with the Indian Union in 1975, it has made enormous progress in planned economic development. Establishment of large scale industries is not possible because of the Mountainous terrain and lack of reliable transportation and infrastructure facilities. The society of a region, its culture, social institutions, beliefs and social structure are also sensitive to the development process. In other words, economic parameters of a region are the best indicators of the development. According to Choudhury (2006) Sikkim’s economy can be presented under three broad heads namely: (1) Agriculture and allied activities, (2) Industries and (3) Services

1. Agriculture and allied activities in Sikkim include crop culture, horticulture, sericulture and animal husbandry.

(a) Crop Culture: According to the provisional land utilization statistics of Sikkim (2005-06), the total area under agriculture is 1,21,384 ha, out of which the net sown area is 62,043 ha.

(b) Animal Husbandry: Next to agriculture, animal husbandry is the most important economic activity of the people of Sikkim. The settled agriculturalist rear livestock
in large numbers, most of which are stall fed. The animals reared in Sikkim include, cattle, yak, sheep, goat, pig, horse, pony, mule, dog, poultry and apiculture.

2. Industries: Compared to the agricultural sector, the industrial sector of the state is still weak and underdeveloped. The industries of Sikkim can be classified as cottage, small and medium scale industries. There are very limited large scale industries in the state. The location factors are not yet conducive for the establishment of large scale industries in Sikkim. The mountainous terrain and geographical isolation, small and scattered domestic market, and limited mineral resources make large scale industry non-viable. Therefore, industrial development in Sikkim is restricted to small scale, cottage industries and a few medium scale units. There is only one tea factory in Sikkim and it is located in Temi and is called Temi Tea Estate. Many people residing near Temi and Tarku area also earns their livelihood by working in this tea garden.

3. Services: The geographical isolation and difficult terrain of Sikkim has restricted the scope of agricultural and industrial expansion. However, today, many Sikkimese are working in public sectors as teachers, engineers, lawyers, doctors, police, military, bureaucrats, diplomats and so on. Presently there are numbers of pharmaceutical companies in Sikkim and many people find employment in the National Hydro Power corporations as well. The Central Government’s socio-economic policy of National Rural Employment Guarantee Act
is also very much well implemented in the state, which provides the unemployed citizens one hundred days employment (NREGA).

As it is observed people of Sikkim are engage in different economic activities out of which Agriculture, dairy farming and cottage industries have limited scope of expansion where as Hydro-electricity generation, pharmaceutical, tourism and tea appear to be promising and fastest growing economic sectors presently Mishra and Jha(2014). The Gross State Domestic Product (GSDP) at constant prices recorded a growth rate of 7.62 per cent in 2012-13. The per capita income of the state, which was Rs.30727 in 2004-05, has increased substantially to Rs.168100 in 2012-13 at current. Despite the state's minimal industrial infrastructure, Sikkim's economy has been among the fastest-growing in India since 2000, with the state's GDP expanding by over 13 per cent in 2007 alone. Sikkim has announced plans to become the first state in India to transition its agriculture to entirely organic cultivation by 2015.

2.7 Sikkim as a Tourist Paradise

Nestled in the Lap of the Himalaya, Sikkim is bound by grandeur of mountain peaks, spectacular terrain, pristine lakes, luxuriant forests, fast flowing cascading rivers and gentle streams, it is a veritable paradise and destination for all seasons. Sikkim has emerged over the years as a pleasant and peaceful place for both domestic and foreign tourists. It takes about 4 to 5 hours to reach Gangtok, the capital from the rail or road-head of New Jalpaiguri or Siliguri, or from the Bagdogra Airport (West Bengal) by road. Government and private taxis are readily available to ply, also a helicopter service from Bagdogra to Gangtok has become operational now. The Teesta river, rippling either on the right or left side of the national highway makes the journey enjoyable. The state has now gained much popularity as nature and cultural tourism destination in Eastern India. The attractive ethnic cultural patterns of the three communities the Lepchas, the Bhutias and the Nepalese are well projected in a numbers of festivals organized at district and state programmes. A variety of cuisine and the drinks adds the extra ambience to the visitors to visit the place again and again. As we know Sikkim as the biodiversity Hotspot, it is the retreat to the nature lovers offering adventure tourism like trekking, rafting, boating, mountaineering, mountain biking and recently paragliding is also a popular sport to experience.
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