

The mountain Kanchenjunga and its sister peaks: A view from Darjeeling.



Survey and specimen collection at Phalut (3600m), the border between Darjeeling and Sikkim.

CHAPTER I

"The most eloquent description I have read fail to convey to my mind's eye the forms and colours of snowy mountains or to my imagination the sensations and impressions that rivet my attention to these sublime phenomena when they are present in reality, and shall not therefore, obtrude any attempt of the kind upon my reader"

-Joseph Dalton Hooker in *Himalayan Journals*(1854), on a scenic description from Darjeeling (present Ghoom Town).

1. INTRODUCTION

1.1 General Note

The economy of a country largely depends on the vegetational wealth of the same and a complete knowledge of its flora and vegetation finds an immense use and applicability, both scientifically and commercially, in the progress and development of a nation. In fact, the availability of different natural and plant resources themselves determine the mode and status of living of a man, in the earth as a whole.

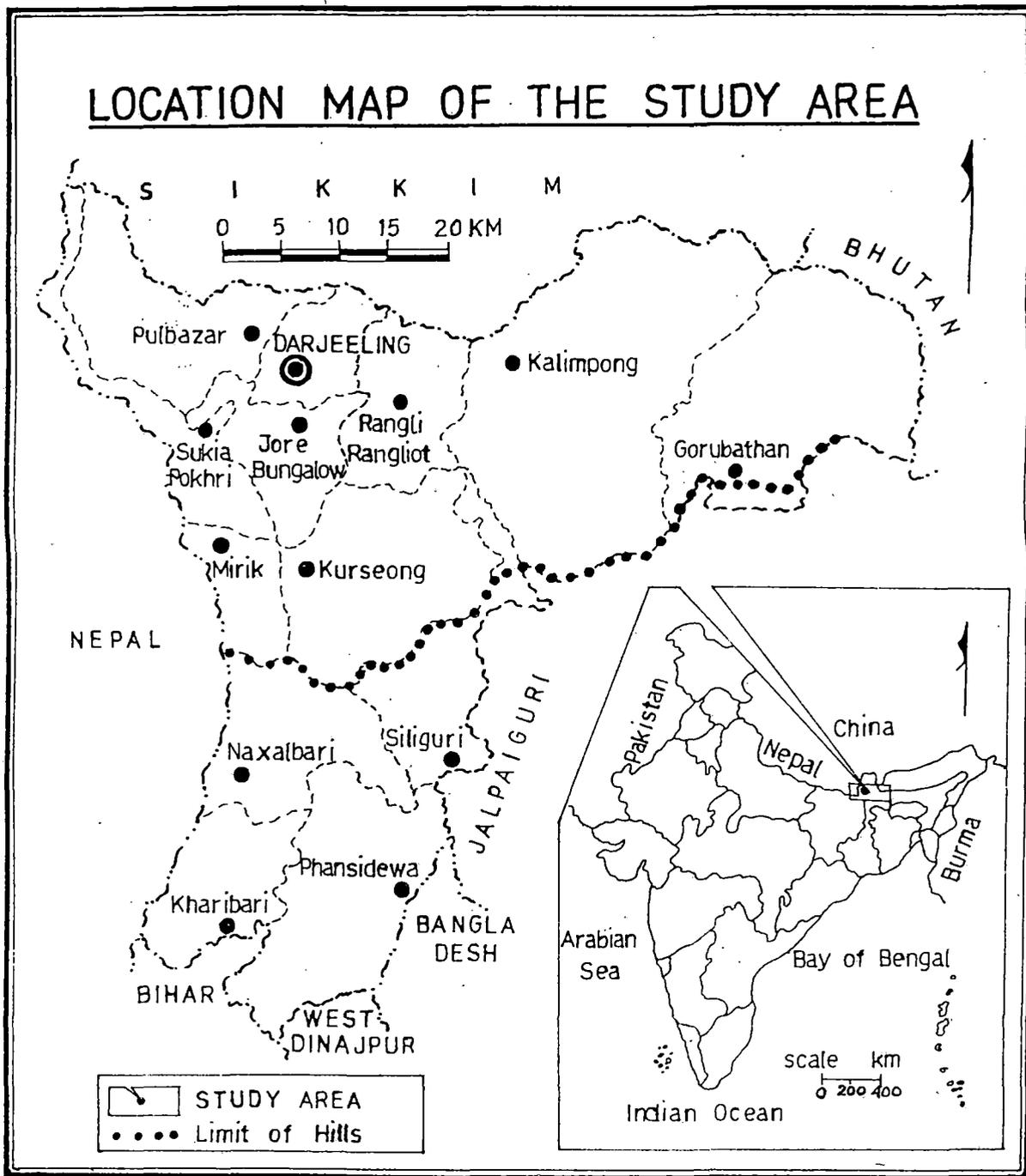
The vast spreading area and varying geographical and environmental structures has led the *Indian subcontinent* to harbour a wide range of vegetational types (Champion & Seth 1968, Puri *et al.* 1983). India represents a very rich flora including a large number of endemic elements (Chatterjee 1940, Nair 1980). The flora of this country is more varied than that of any other country of an equal area, in eastern hemisphere, if not in the globe (Hooker 1907).

The *Himalayas* have been effected by tertiary and quarternary glaciation bringing changes into climatic and geographical variation. Various ancient elements have survived while some have differentiated to different races (Hara *et al.* 1966).

The *Eastern Himalayas* show a distinctive richness in the flora of the region. The region has been influenced by a wide spectra of climate, and, ecology represents a unique floristic diversity (Das 1995), a full assessment of which cannot be made until external distributions of all taxa in Eastern Himalayas are worked out and analysed on non selective basis (Grierson & Long 1983). *Darjeeling* is an important constituent of Eastern Himalayas, falling in Northern Bengal of Eastern India and a well known place of tourist interest for its colourful natural greenery and paramount glistening background of snow peak, the *Mountain Kanchanjunga*, the silvery and shining slopes of which shall tempt one forget the rest of the world behind, when standing in reality. at the Phalut summit at 3600 m altitude (Bhujel 1992). The region is well known for its diverse range of vegetation and as 'one of the richest

MAP 1

LOCATION MAP OF THE STUDY AREA



in India' (Yonzon 1976, Bhujel 1986, Das 1995).

The concept of all developmental plans and programmes in the Indian scenario standardises a district as the unit to the nation. In this respect, the survey, compilation and documentation of flora at the district and regional levels will find its basic importance in the preparation of *Flora of India*. The *Dicotyledonous Flora of Darjeeling District* produced here, is only an attempt to provide a similar unit to the flora of India.

1.2 Location

The district of Darjeeling is located between 26°31'05'' and 26° 27' 10'' North latitude and between 88° 53' 00'' and 87°59'30" East longitude. The plains area of the district lies between 26°30' and 26°45' North and between 88 and 88°30' East. The total area of the district is 3254.7 sq km, while the hilly region alone covers an area of 2320 sq km. The district occupies 3.68 percent of the total area of West Bengal state. Out of 934.6 sq km area falling in the terai and plains, 837.4 sq km is counted under Siliguri subdivision. Among the four subdivisions, the other three have their area as follows: Darjeeling- 935.5 sq km, Kurseong- 425.3 sq km, and the largest subdivision Kalimpong- 1056.5 sq km.

Of all the frontier districts of India Darjeeling has the most complicated boundaries. It shares its boundaries with international frontiers, with Nepal in the west and Bhutan in the east. The state of Sikkim separated by River Teesta forms the north boundary and the districts of Jalpaiguri and Purnea of Bihar state in south. The boundaries of Nepal, Sikkim and Darjeeling meet at the peak of Phalut (3600m) forming a trijunction. Another similar trijunction is formed at Rachela (at Tinsimana, 3100m) by the boundaries of Bhutan, Kalimpong subdivision and Sikkim, from where down runs the river Jaldhaka separating the countries of Bhutan and India.

The accessibility to Darjeeling is offered from the southern part only, through the districts of Jalpaiguri, North Dinajpur and Purnea (Bihar state) and plains of Nepal, across River Mechi.

1.3 Historical Note on the Region

The present district of Darjeeling is a creation of 19th century and is a result of almost accidental involvement of British India Government in the affairs of neighbourhood Himalayan States (Banerjee 1980). Darjeeling attained its present dimensions in 1866 A.D.

Prior to 1789 A.D., Darjeeling was under the sovereign state of Sikkim. During 1788-89, the Gorkha army, headed by General Jaharsingh and Commandant Damodar Panday won over and incorporated the land area of Sikkim falling west to River Teesta to Nepal, defeating the then king, Tenzing Namgyal (Dhamala 1983). The present Kalimpong subdivision was in Sikkim till 1706 A.D. The Bhutanese king won over this portion including some part of terai and plains in the same year incorporating all the areas of Sikkim falling east to River Teesta to Bhutan. In 1816 A.D. the treaty of Sugauli was signed between the two countries and as a result Nepal handed over the terai area and Darjeeling part of its possession to the British India Government. Shortly followed the treaty of Titalia and on 10th February 1817, this region (Darjeeling , its terai and plains) was restored to the King of Sikkim by the British, making it a buffer state between Tibet and India.

At this stage Darjeeling (proper) was a small and about spreading village under the administration of Kazi (minister) of Sikkim. The inhabitants were Lepchas, Mangars and Chongs (Limboo). One can go back as far as upto this point about the history of Darjeeling, through records.

In 1827 Captain Lloyd and Mr. Grant visited Darjeeling and discovered the hygienic climate. As a result of their proposal and persuasion, Lord Bentinck initiated the dialogue with the then king of Sikkim who handed over this area, as a token of friendship, to the British Government on 1st February 1835, with a view to enabling them establish civil sanatorium and summer capital, and to whom what was a worthless piece of uninhabited mountain. This unconditional cession was later converted to a rental system (1841-1846). The first motorable road to Darjeeling was made in 1840, through Pankhabari. At this stage the Gorkhas were the major inhabitants in Darjeeling. Kalimpong was ceded to the British Empire in 1865 by Sinchula treaty (10th November 1865), from the Government of Bhutan, on lease and was notified then, as a subdivision of Dooars but finally transferred to Darjeeling in 1866.

The district has retained its geographical dimensions since then but, administrative placements still kept on changing. Darjeeling was annexed to Rajshahi (now in Bangladesh) after 1850. In 1905 the region was placed in Bhagalpur district of Bihar (Bengal, Bihar and Orissa then being undivided) but to be taken back to Rajshahi again in 1912. The final annexure to West Bengal was an automatic incident in 1947 when India got its independence, and the present structure since then remains unaltered.

Darjeeling derives its name from *Darjyu Lyang* meaning land of God or heaven earth. It is also said to be named after *Dorjee Ling*, the Buddhist monastery that once stood on the observatory hill of present Chowrasta. The word *Dorjee* also means the Celestial sceptre of double headed thunderbolt of the Lamaist faith and a common emblem associated with priestly power. The present town of Darjeeling was a small market of few mat roofed houses till 1886 known with the name *Goondri Bazar* (Bhujel 1992).

1.4 Administrative Divisions of Darjeeling

The District has been divided into four subdivisions on the viewpoint of administrative convenience. They are Darjeeling, Kurseong, Siliguri and Kalimpong. The district has 591 villages, of which 55 are uninhabited. This is the lowest figure in all the districts of West Bengal. There are 17 police stations and 11 blocks under developmental plans. Darjeeling occupies only 3.68 percent of total area of the state and ranks 13th areawise.

The total population of the district is 1,335,618 (Census 1991) which happens to be 0.13 percent of the total population of India. The Census 1971 shows the population of the district to be 7,81,777.

There are four major towns (municipalities) viz., Darjeeling, Kurseong, Kalimpong and Mirik and a city at Siliguri. Areawise the largest subdivision is Kalimpong (1056.5 sq km)

MAP 2

MAP SHOWING CONTOUR LINES OF DARJEELING DISTRICT

