Chapter-III
AREA OF STUDY

3.1. Topography

Kanyakumari district, the second smallest district in Tamilnadu is the Southern-
most district of the peninsular India. It is situated between $77^\circ \ 15' \ and \ 77^\circ \ 36'$ eastern
longitude and $8^\circ \ 03' \ and \ 8^\circ \ 35'$ of the Northern latitude, occupying a total area of
1672 sq. km (Plate 1). It has a varied topography with sea, the Western Ghats bordering
on the northern side, Tirunelveli district on the North and Northeast, Kerala in the
Northwest and by the Indian Ocean and the Bay of Bengal in the South and Western
sides respectively. The district is surrounded by majestic hills and patches of red cliffs
with undulating valleys and plains between the mountain terrain and the sea coast closely
interwoven. Kanyakumari district has varied ecosystems – forests, wetlands and
freshwater resources. The district includes four taluks: Thovalai, Agastheeswaram,
Kalkulam and Vilavancode. The major rivers of the district are Kuzhithuraiar, Kodayar
and Paralayar.

3.2. People and Occupation

According to 2011 census, the district had a total population of 18,70,374 which
comprises about 9,26,345 males and 9,44,029 females. The density of population was
1119 per sq. km. Hindus, Christians and Muslims are the major communities residing in
this district. Nadar’ is the major community of this area. Some of the other communities
are Vellalars, Paravas, Mukthavars, Brahmins, etc. Tamil and Malayalam are the two
languages spoken in this district, although Tamil is the official language. Most of the
people were literate. Rice (*Oryza sativa*) is the staple food of the rich and poor alike in
the area.
The rural communities of Kanyakumari district are heavily dependent on plant parts for their primary health care and treatment of diseases. They collect the medicinal plants from various natural habitats such as, forests, grasslands, cultivated fields and use these plant materials as raw drugs. These communities have acquired good knowledge on the useful and harmful properties of the plant resources. Most of the homegardens bear the most common medicinal plants like *Ocimum tenuiflorum*, *Piper longum*, *Piper nigrum* etc. around their homesteads for easy availability.

**3.3. Soil**

The Soil of the district is broadly classified into two major groups namely red and alluvial soil. Red Soil is further classified into red loam and sandy Soils. Alluvial soil is divided into coastal and riverine alluvial soils. These soils are highly nutritive and are helpful in the growth of abundant medicinal plants.

**3.4. Climate and Rainfall**

The climate of the district is favorably warm and humid. Both the south-west and north-east monsoon winds bring rain. Both the proximity of the sea and the dwindling heights of Western ghats greatly influence the climate. In Kanyakumari district rainfall is distributed over four seasons, (a) south-west monsoon (June-Sept) 37 % and 33.7 rainy days (b) northeastmonsoon (Oct- Dec) 37.9% and 26.5 rainy days, (c) winter (Jan, Feb) 2.7% and 2.7 rainy days and (d) the hot weather summer seasons 21.7 % and 16.8 rainy days. In the hill region the rainfall is uniformly distributed in both monsoons and maximum rainfall occurs during October and November. On the whole this district gets an average annual rainfall of 1369.5 mm with 79.7 rainy days.
3.5. Vegetation

Kanyakumari district comes under traditional agroforestry system with integrated farming practices. In the hilly tracks of Western Ghats plantation crops like rubber, coffee, tea, spices, coconut, tapioca and horticultural crops like mango, pineapple and jack fruits are raised, whereas in the plain lands, paddy, banana, coconut and vegetables are grown. Paddy is the most essential food crop of the District and it’s extensively cultivated in 13175 (Gross) hectares. Among the commercial crops, rubber, coconut cashew and pepper occupy the major area.
Plate 1. Map showing the study area