

# **PROFILE OF KARAIKAL DISTRICT**

## **GEOGRAPHICAL PROFILE**

The Union Territory of Puducherry spread in an area of 490 Sq. Km. comprises of four erstwhile French establishments of Puducherry, Karaikal, Mahe and Yanam. Karaikal District occupies an area of 157 square kilometres (61 sq miles approx.). Karaikal town which is situated 16 km. north of Nagappattinam and 12 km. south of Tharangambadi is the regional headquarters. Karaikal region is made up of the Municipality of Karaikal, and Communes of Neravy, Tirumalairajanpattinam, Thirunallar, Nedungadu and Kottucherry.

## **LOCATION**

The Union Territory of Puducherry consists of two districts, viz., Puducherry and Karaikal, situated at different geographical locations isolated from one another. Puducherry District comprises Puducherry, Mahe and Yanam regions. Karaikal region forms the Karaikal District. Karaikal region is about 130 Km. south of Puducherry and is sandwiched by Nagappattinam District of Tamil Nadu. It is located between 10° 49' and 11° 01' N, and 79° 43' and 79° 52' E.

## **CLIMATE**

Karaikal is situated on the east coast of India, near latitude 11 N in the deltaic region of the Cauvery, experiences tropical maritime type of climate with small daily range of temperature and moderate rainfall. Karaikal has an annual average rainfall of about 126 cm. 68 percent of which occurs during October to December. The amount of rainfall during the south-west monsoon period is small, being less than 20 per cent of the annual. November is the rainiest month, accounting for about a third of the annual total. The range of variation of annual rainfall is wide.

December and January are the coolest months with the maximum of about 28°C and the minimum of about 23°C. In Karaikal; the minimum temperature as low as 16°C has been recorded. The diurnal ranges of temperature are generally small throughout the year, being highest (about 10°C) in May and June, and the least (about 5°C) during November to February.

**Rainfall :** Karaikal has an annual average rainfall of about 126 cm. 68 percent of which occurs during October to December. The amount of rainfall during the south-west monsoon period is small, being less than 20 per cent of the annual. November is the rainiest month, accounting for about a third of the annual total. The range of variation of annual rainfall is wide. Variability of annual rain fall is fairly large, so that significant variations in rain fall from year to year may be expected. Drought conditions with the annual rainfall of less than 75 per cent of the normal may be expected once in three years on an average.

In a year there are on an average about 55 rainy days, i.e. days with rainfall of 2.5 mm. or more.

**Temperature, humidity, cloudiness and surface winds :** The level of temperatures in Karaikal is about the same as in Pondicherry. December and January are the coolest months with the maximum at about 28° C and the minimum at about 23°C. Minimum temperature as low as 16°C may sometimes be recorded. The diurnal ranges of temperature are generally small throughout the year, being highest (about 10°C) in May and June, and the least (about 5°C) during November to February.

The level of humidity and the pattern of cloudiness and surface winds are the same as in Pondicherry. Although slight variations in the month wise occurrence of depressions and storms are noticeable, thunder-storms generally occur during April to November, particularly in April, September and October.

## **TOPOGRAPHY**

Forming part of fertile delta, the Karaikal region is completely covered by the distributaries of Cauvery River. Covered completely by a thick mantle of alluvium of variable thickness, the region is flat having gentle slope towards Bay of Bengal in the east. It is limited on the north by the Nandalar and on the south east by the Vettar. The group of rocks known as Cuddalore formations is contiguous to along with those in the Tanjore District.

## **DISTRICT ADMINISTRATION**

The District Collector is not only the representative of the District Administration in the Karaikal region but also the Chief Executive responsible for the smooth functioning of every branch of administration in the District.

The Collector, being the official representative of the Lieutenant-Governor, is used to stay at Headquarters in the GOVERNMENT HOUSE. As the Chief Executive of the region, he exercises control over all Government establishments in the region. The District Collector is vested with the financial powers to issue sanctions towards the works related to Plan and Non-Plan Schemes. He is the head of department in respect of the Office of the Collector, Karaikal District and can exercise the financial power of the head of the department for other offices in Karaikal District.

## **AGRICULTURE**

The total geographical rural area of the district is 14035.56 hectares. The classification of area by different types of land use is indicated below:

The percentage of cultivable area to total area and percentage of irrigated area to total cultivable area are 84.92, 82.81 respectively. This shows that Karaikal is predominantly an agricultural area. Agriculture is the most important economic activity in the district, both in terms of employment and output. Higher production is due to the existence of the coastal alluvium soil very suitable for the cultivation of paddy and pulses.

In the early days, agriculturists in Karaikal district had to depend on inundation following floods in Cauveri or local rainfall. The main branches of Cauveri below the grand anicut are the Kodamurutti, Arasalar, Virasolanar and Vikramanar. They break again into a number of distributaries and some flow across Karaikal district before entering the Bay of Bengal. Canals are the exclusive means for carrying out irrigation in Karaikal.

The following are the main sources of water for agricultural purposes.

1. **Arasalar**

2. **Noolar** - an irrigation supply carrier receiving its supply from Arasalar.

3. **Vanjiar** - an irrigation cum-drainage carrier fed by Arasalar.
4. **Nattar** - an irrigation supply carrier fed by Arasalar
5. **Nandalar** - This receives supply from Virasolanar.
6. **Pravadayanar** – This is fed by Kodamurutti.
7. **Tirumalarajanar** – This is irrigation cum drainage carrier receiving supply from Kodamurutti.

There are a few shallow tube wells mainly in Thirunallar commune and partly in Neravy and Nedungadu communes for agricultural activities.

Pulses, cotton, chillies, coconuts, groundnuts, vegetables and sunflower are the other popular items grown in the district. The paddy growing seasons are popularly known as kuruvai, (June-Oct), Samba (Aug-Feb.) and thaladi (Nov- March). Soon after the closure of the southwest monsoon, groundnut is cultivated utilizing available moisture. The major groundnut-growing centre is Kottucherry commune. Pulses are grown in summer following harvest of samba paddy.

## **CULTURE**

Located 130 km south of the city of Pondicherry, 300 km south of Chennai and 125 km east of Trichy. Karaikal is known for its rich religious heritage, and is a destination for those seeking leisure and serenity. The town consists of a harmonious society made up of Hindus, Muslims and Christians. Tamil is the predominant native language of the people. As the area was formerly under the French rule, French Language is also being spoken among the older generation of people.

Karaikal is known all over the country for its unique and the only temple devoted to the Lord Saneeswara (Lord Saturn) at Thirunallar. Karaikal is the Gateway to various places of worship in the eastern coast of Tamil Nadu. Two famous shrines, Velankanni for Christians and Nagore for Muslims are nearby Karaikal. The French flavor still persists in the peaceful land of Karaikal. Also, in Tirumalairayanpattinam, there is a famous temple called Ayirankaliamman temple, wherein prayers are offered to this Goddess once in 5 years only.

## **ECONOMY**

Karaikal Port is a new deep sea water port being constructed in Vanjore village, Karaikal. More than 600 acres (2.4 km<sup>2</sup>) of land was leased out to MARG Corporation in the year 2005 for 30 years and can be renewed for every 10 years thereafter. The port will have a total of nine berths and is constructed for primary transport of coal, textile and cement. The Karaikal port is intended to primarily handle cement and coal to serve the hinterland in Ariyalur, Perambalur and Trichy. The port is also expected to provide an alternative to the Chennai and Tuticorin ports, which are the major ports in the coastline but are separated by long distance. Further, Karaikal is in the middle of the Tamil Nadu coast, midway between the two deepwater ports of Chennai and Tuticorin.

Karaikal Port is poised to be a multi-cargo handling terminal. So far the port has handled cargoes such as Coal, Pet coke, Raw sugar, Fertilizer, Cement, Project Cargo and construction materials. Containers and liquid cargo are soon to follow. On completion, the port will be capable of handling all types of cargo. Karaikal Port is also a hub for oil exploration activities and OSV/PSVs belonging to companies such as Hindustan Oil Exploration Company (HOEC) and Reliance Petroleum regularly call at the port.

Oil and Natural Gas Corporation Limited (ONGC)'s, Cauvery Basin is at Karaikal. The prominent source of income to the district is from agriculture. It is one of the towns in South India with high cost of living due to the presence of NRIs.

## **AGRO-CLIMATE CLASSIFICATION OF THE KARAIKAL AREA**

Climatic classification is made according to the Thornthwaite's technique using Potential Evapo-transpiration values computed as Thornthwaite's formula. As per the above technique, this region falls under "**C1: Dry sub-humid Region**" region. The technical data of Karaikal region is furnished below;

Details		Technical data on Evapo-Transpiration
Potential Evapo-transpiration	:	1776 mm
Summer concentration	:	509 mm
Mean annual precipitation	:	1335 mm
water surplus	:	No surplus
Water deficiency	:	441 mm
Humidity index	:	Nil, since there is no water surplus
Aridity index	:	24.8 ( $s_2 / w_2$ ) Large summer/winter deficit
Moisture index	:	-25 ( $C_1$ : Dry sub-humid region)

(Ref: Prasad Rao, G.S.L.H.V. 2014. Agricultural Meteorology. p.no. 244-245. pub. New Delhi)

To sum up, the Karaikal and its neighborhood falls under rainfall surplus category and the temperatures are high in the months of May and June. The areas are chiefly benefited from the Northeast monsoon recording to 62 percent of the total amount of rainfall. It is also located close to the cyclone prone zone of the East coast namely Cuddalore. The maximum temperature varies from 28.2°C to 36.6°C and monthly potential Evapo-transpiration varies from 92 to 183 mm.

