

TOPOGRAPHY AND AGRO CLIMATIC CHARACTERISTICS

Soil type:

The soils of the district vary in texture generally from clay loam to sandy loam except along the Sutlej River and *choes* where some sandy patches may be found in Nawanshahr, Aur and Balachaur blocks of the district. Some area in the Kandi region of the district is hilly and prone to soil erosion.

Climate:

Balachaur and Saroya blocks of the district falls in Zone I B (Sub-Mountain Undulating Region) and the rest falls under zone II (Undulating Plain Region).

Rainfall:

The average annual rainfall in the district is 887 mm (average of last six years). The total rainfall received in 2008 was 1094 mm. The data on rainfall pertaining to different years is presented in Table 2.3. The rainfall in the district in general increases from the south-west towards the north-east. About 70 percent of the annual normal rainfall in the district is received during the period July to September, July being the rainiest month. Some rainfall is received mostly as thunder showers in June and in association with passing western disturbances in the cold season.

Table 2.3: Rainfall Data of District Shahid Bhagat Singh Nagar for Years 2003-2008.

Name of Month	Year						
	2003	2004	2005	2006	2007	2008	Average
January	30.5	117.5	46.8	29.8	1.2	34.8	43.4
February	49.0	6.7	73.6	0.0	112.8	42.1	47.4
March	20.5	0.0	37.2	66.6	105.6	30.2	43.4
April	21.1	36.4	8.0	4.0	47.8	20.7	23.0
May	1.3	10.3	29.3	62.1	11.2	34.6	24.8

June	108.4	42.4	51.5	22.5	131.4	105.0	76.9
July	295.4	178.0	241.1	167.2	209.8	295.6	231.2
August	145.7	354.3	159.3	305.6	152.3	306.2	237.2
September	67.2	10.6	115.3	80.4	154.4	162.2	98.4
October	0.0	229.0	0.0	5.5	0.0	29.3	44.0
November	7.8	1.3	0.0	5.0	4.2	7.1	4.2
December	6.6	20.2	0.0	14.3	13.2	26.3	13.4
Total	753.5	1006.7	762.1	763.0	943.9	1094.1	887.3

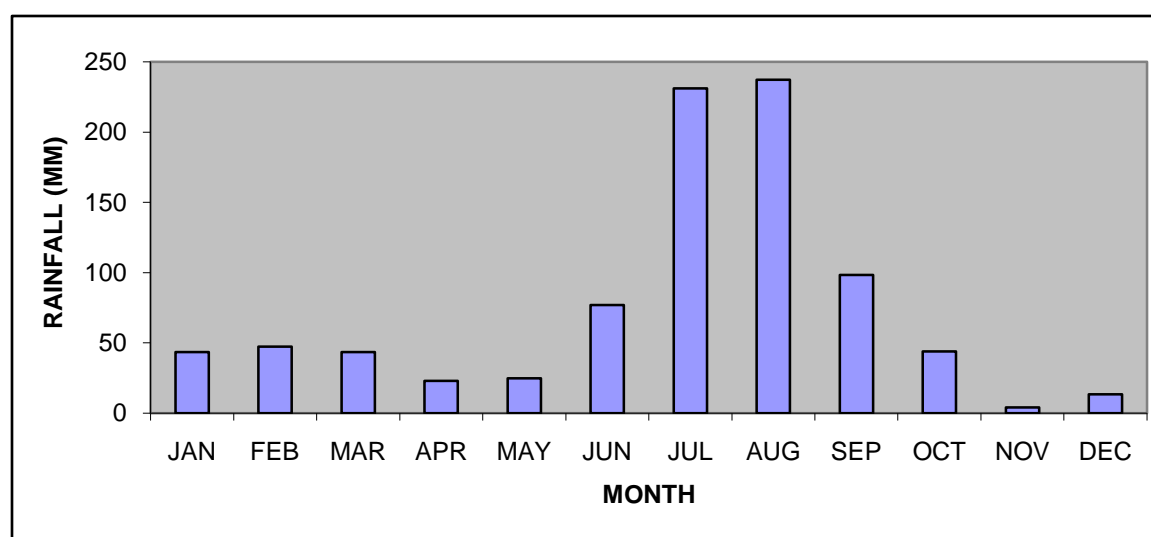


Fig 2.3: Average Rainfall (2003 - 2008) Data of the District

Temperature:

After February, temperature begins to rise rapidly. June is generally the hottest month. Scorching dust laden winds blow on many days in the summer season and the day temperatures on individual days may reach above 45°C. Afternoon thundershowers which occur on some days during the summer bring welcome relief though only temporarily. With the onset of monsoon by about the end of June or early in July, the day temperature drops down appreciably. But the nights continue to be a warm during the summer. Due to increase moisture in the air during rainy season, the weather is often sultry and uncomfortable. After mid-September when the monsoon withdraws, temperature starts decreasing and with the drop in the night temperature being rapid.

January is generally the coldest month with the mean daily maximum temperature at about 19°C and the mean daily minimum at about 4°C. The lowest minimum temperature during 2008 was -3°C in the month of January and maximum of 46°C. The maximum and minimum temperature for the year 2008 is given in

Table 2.4

Table 2.4 Month Wise Average Maximum and Minimum Temperature (°C) of the district for the year 2008.

Name of Month	Temperature(°C)	
	Maximum	Minimum
January	18.9	4.0
February	21.8	6.5
March	31.6	13.7
April	35.0	17.4
May	37.1	22.0
June	34.0	24.7
July	33.1	25.0
August	32.7	24.7
September	32.0	21.2
October	31.4	17.6
November	27.8	11.1
December	22.6	8.1

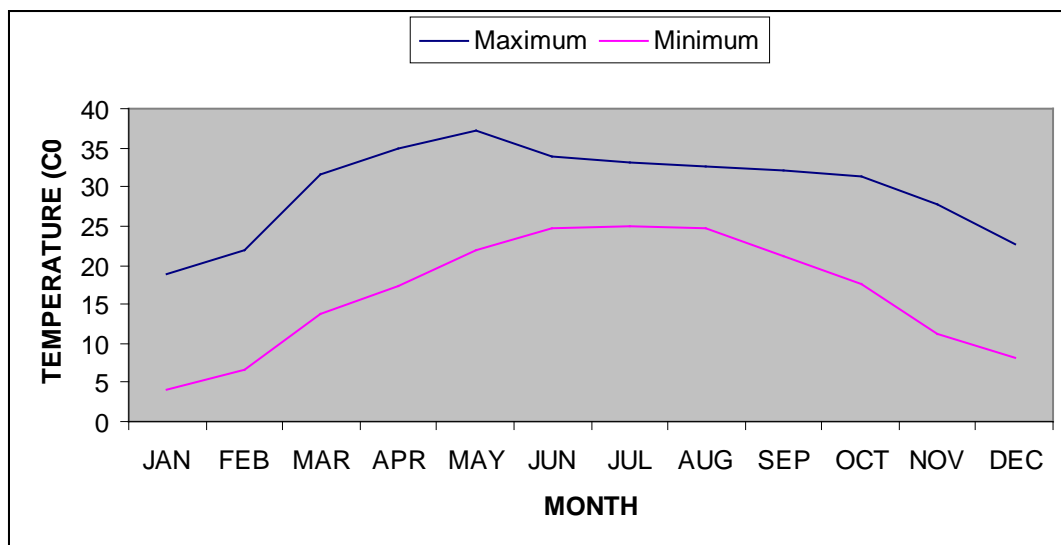


Fig 2.4: Minimum and Maximum Temperature during 2008

Humidity:

During the brief south-west monsoon months and for spells of a day or two in association with the passing western disturbances, high humidity prevails in the district. In the rest of the year, the humidity is low. The driest part of the year is the summer season, when in the afternoons the relative humidity is even below 30 percent.