

# GRAPHICAL PRESENTATION OF AGRO-CLIMATIC DATA

Mirza Hasanuzzaman, PhD  
Assistant Professor  
Department of Agronomy  
Sher-e-Bangla Agricultural University

There are different types of graph are used to present the agroclimatic data which are viz. (i) Line graph or linear graph, (ii) Bar graph, (iii) Histogram and (iv) Pie graph or pie chart. Graphical presentation of data helps to understand a set of information more easily and clearly.

**Table 1. Month wise average maximum and minimum temperature in Dhaka, Bangladesh**

Month	Maximum temperature (°C)	Minimum temperature (°C)
January	24.52	13.84
February	29.69	15.76
March	34.74	22.52
April	36.43	24.27
May	37.48	26.42
June	36.37	27.33
July	33.81	26.48
August	33.52	26.23
September	33.60	26.10
October	32.90	23.42
November	29.60	19.17
December	25.32	13.81

Source: AccuWeather (2013)

### Comments:

The temperature of is greatly varied in different months. From the linear graph (Fig. 1), it is observed that highest and lowest maximum temperature was recorded in the month of May (37.48°C) and January (24.52°C), respectively. The highest and lowest minimum temperature was recorded in the month of June (27.33°C) and December (13.81°C), respectively.

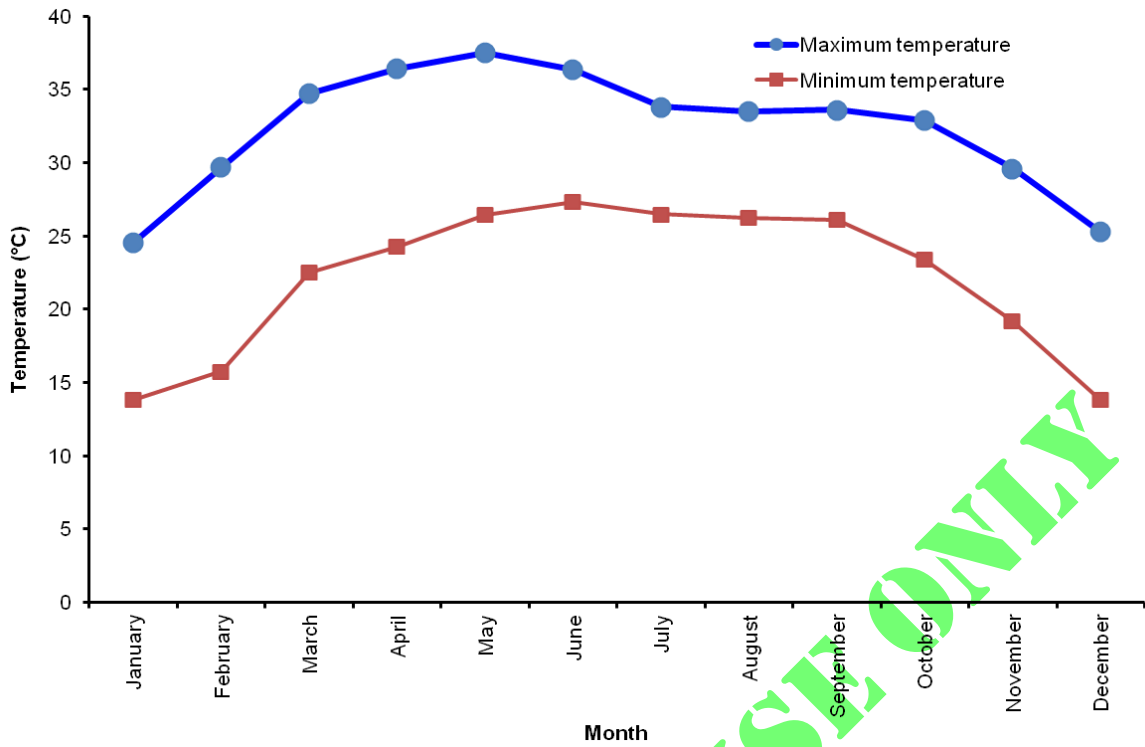


Fig. 1 Linear graph showing month wise average maximum and minimum temperature

FOR STUDENTS USE ONLY

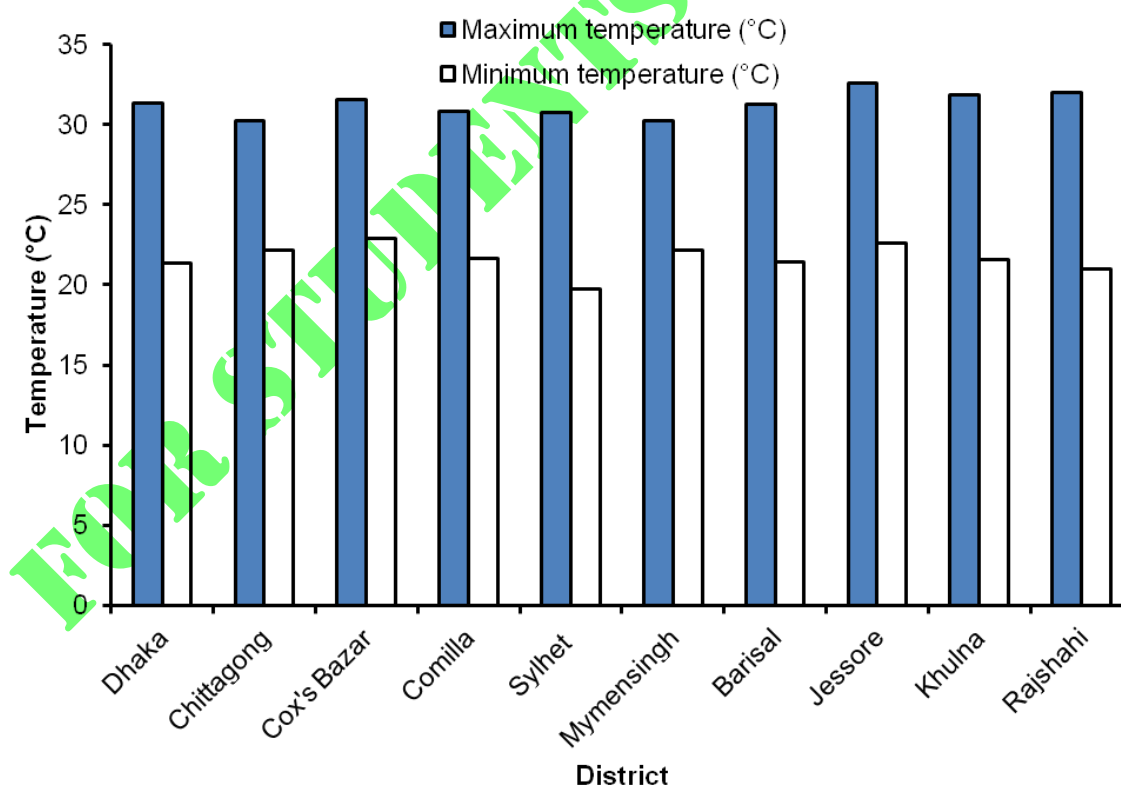
**Table 2. District wise maximum and minimum temperature in Bangladesh**

District	Maximum temperature (°C)	Minimum temperature (°C)
Dhaka	31.38	21.34
Chittagong	30.25	22.18
Cox's Bazar	31.56	22.90
Comilla	30.86	21.66
Sylhet	30.76	19.71
Mymensingh	30.25	22.14
Barisal	31.25	21.40
Jessore	32.58	22.62
Khulna	31.85	21.60
Rajshahi	32.00	20.98

Source: Bangladesh Meteorological Department (2010)

**Comments:**

From the Multiple Bar graph (Fig. 2), a little variation in temperatures were observed among the different districts. From the graph, the district of Jessore (32.58°C) showed the highest maximum temperature, while the lowest maximum temperature was observed in Chittagong and Mymensingh (30.25°C). In contrary, the highest minimum temperature was observed in Cox's Bazar (22.9°C), while the lowest was observed in Sylhet (19.71°C).



**Fig. 2 Multiple Bar graph showing district wise maximum and minimum temperature**

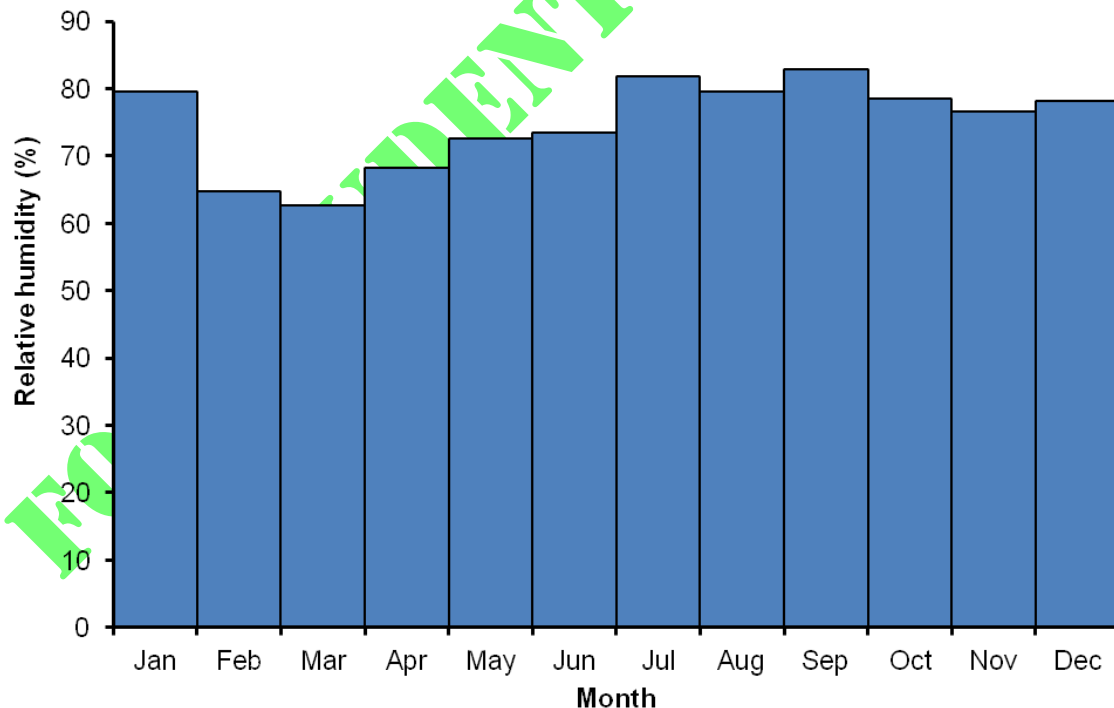
**Table 3. Month wise average relative humidity in Bangladesh**

Month	Relative Humidity (%)
January	79.61
February	64.77
March	62.67
April	68.17
May	72.66
June	73.55
July	81.78
August	79.50
September	82.88
October	78.50
November	76.61
December	78.11

**Source:** Bangladesh Bureau of Statistics (2009)

**Comments:**

From the histogram (Fig. 3), it is observed that maximum relative humidity was recorded in the month of September (82.88%), while the minimum relative humidity was recorded in the month of March (62.67%).



**Fig. 3 Histogram showing month wise average relative humidity**

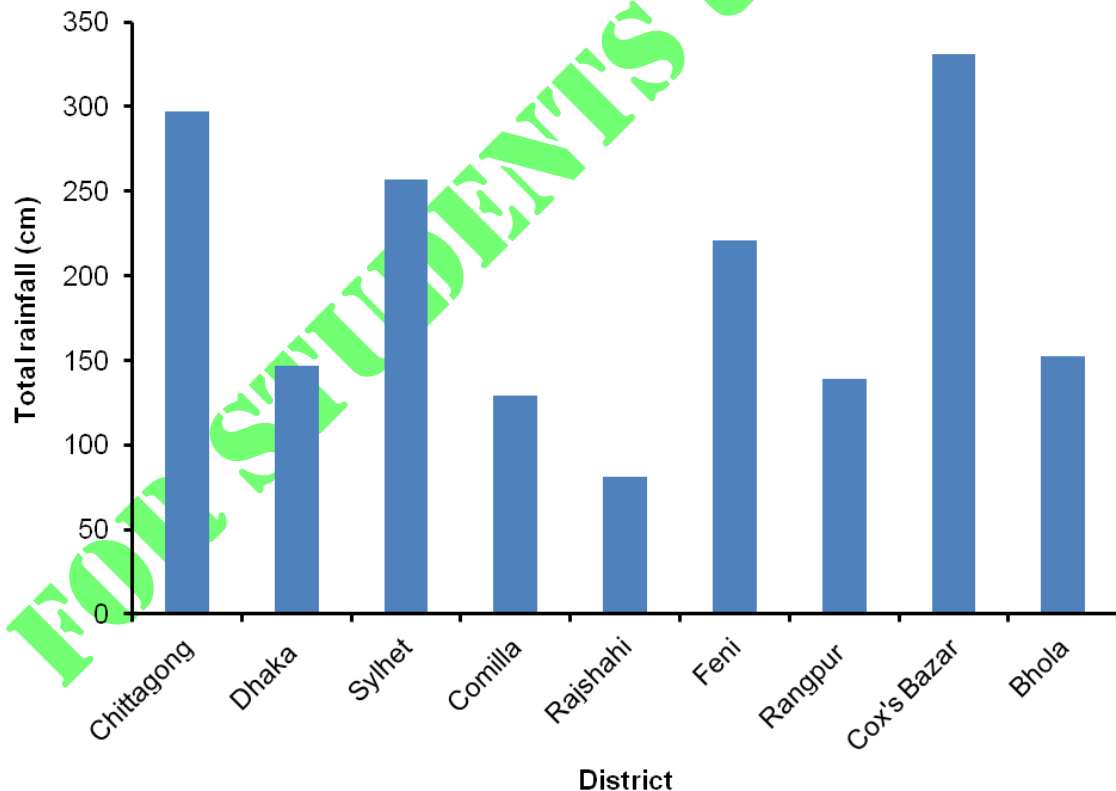
**Table 4. District wise total rainfall in Bangladesh**

District	Total rainfall (cm)
Chittagong	297.2
Dhaka	146.6
Sylhet	256.8
Comilla	128.8
Rajshahi	81.3
Feni	221.1
Rangpur	138.9
Cox's Bazar	330.8
Bhola	152.7

**Source:** Bangladesh Bureau of Statistics (2009)

**Comments:**

From the line graph (Fig. 4), it is observed that the highest total rainfall was occurred in the district of Cox's Bazar (330.8 cm), while the lowest rainfall was occurred in the district of Rajshahi (81.3 cm).



**Fig. 4 Bar graph showing district wise total rainfall**

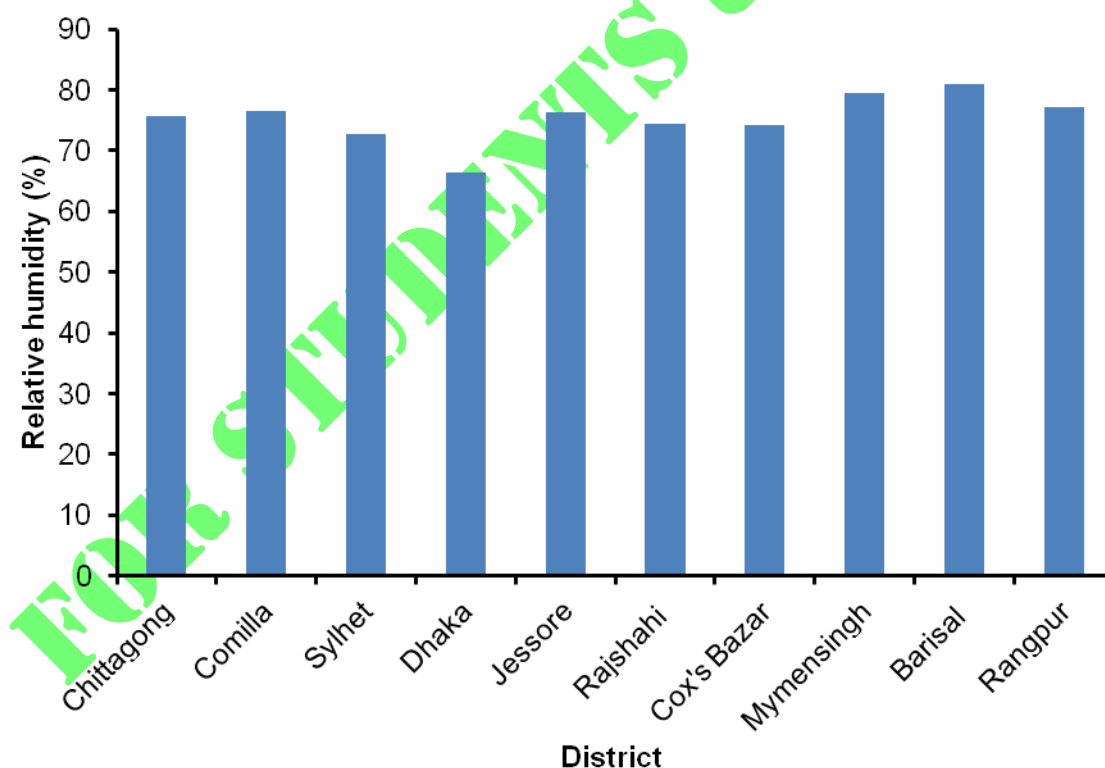
**Table 5. District wise average relative humidity in Bangladesh**

District	Relative humidity (%)
Chittagong	75.67
Comilla	76.50
Sylhet	72.65
Dhaka	66.32
Jessore	76.33
Rajshahi	74.33
Cox's Bazar	74.25
Mymensingh	79.50
Barisal	80.88
Rangpur	77.08

**Source:** Bangladesh Bureau of Statistics (2009)

**Comments:**

From the bar graph (Fig. 5), it is observed that the maximum relative humidity was recorded in the district of Barisal (80.88%), while the minimum relative humidity was recorded in the district of Dhaka (66.32%).



**Fig. 5 Bar graph showing district wise average relative humidity**

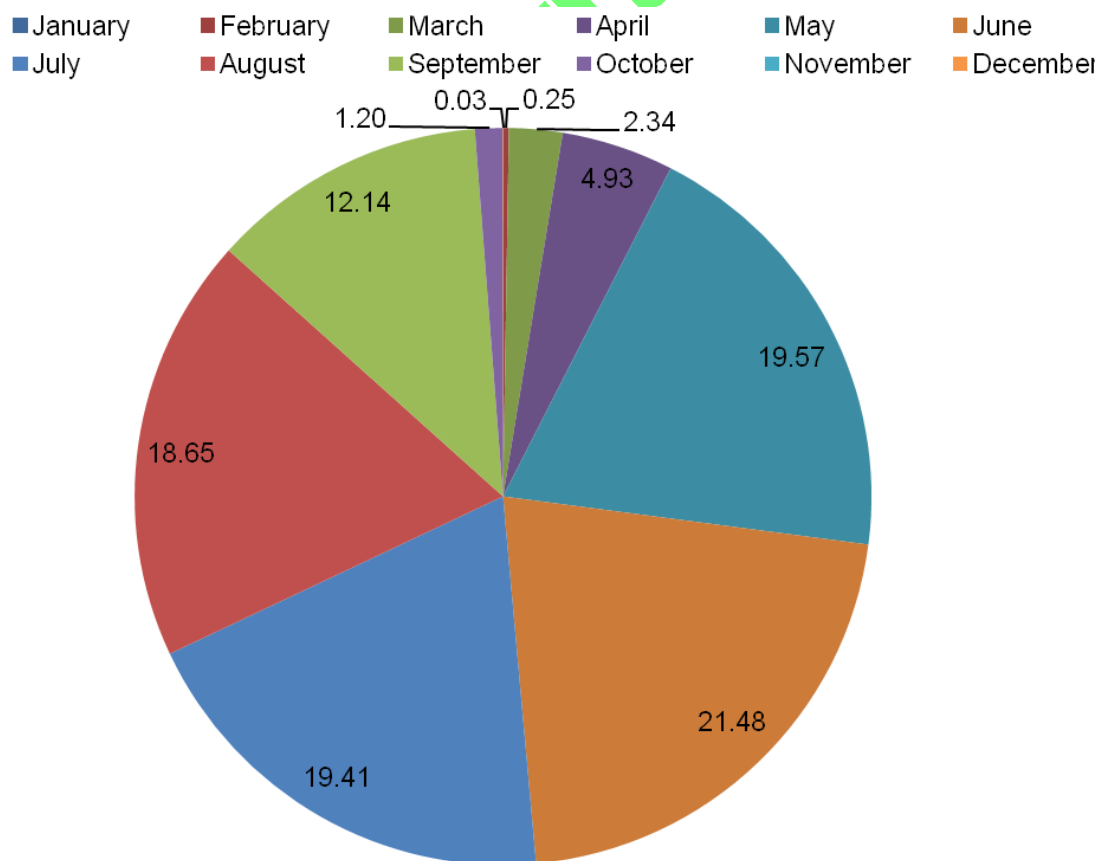
**Table 6. Month wise total rainfall in Bangladesh**

Month	Total Rainfall (cm)	Rainfall (%)	Degree (°)
January	0	0.00	0.00
February	10.2	0.25	0.92
March	93.5	2.34	8.41
April	197.1	4.93	17.74
May	782.8	19.57	70.44
June	859.4	21.48	77.33
July	776.7	19.41	69.89
August	746.2	18.65	67.15
September	485.6	12.14	43.70
October	48.0	1.20	4.32
November	0	0.00	0.00
December	1.1	0.03	0.10
<b>Total</b>	<b>4000.6</b>	<b>100.00</b>	<b>360.00</b>

Source: Bangladesh Bureau of Statistics (2009)

**Comments:**

From the Pie chart, it is observed that the highest total rainfall was recorded in the month of June (21.48%) and the lowest total rainfall was recorded in the month of December (0.10%). Importantly, there was no rainfall occurred in the month of January and November.



**Fig. 6 Pie chart showing month wise total rainfall in millimeter**