

# **CHAPTER-5**

## **CLIMATE**

**Table 5.1- Climate in Assam, 2016**

<b>Seasonwise Rainfall (all seasons)</b>	
Actual (in mm.)	2042.20
Normal (in mm.)	2195.80
Departure from Normal (in %)	(-) 7.00
<b>Winter Season</b>	
Actual (in mm.)	39.40
Normal (in mm.)	48.20
Departure from Normal (in %)	(-) 18.00
<b>Summer Season</b>	
Actual (in mm.)	719.20
Normal (in mm.)	555.20
Departure from Normal (in %)	30.00
<b>Monsoon Season</b>	
Actual (in mm.)	1137.60
Normal (in mm.)	1423.90
Departure from Normal (in %)	(-) 20.00
<b>Post Monsoon</b>	
Actual (in mm.)	146.00
Normal (in mm.)	168.50
Departure from Normal (in %)	(-) 13.00

Source: RMC,IMD,LGBI Airport, Guwahati through Directorate of Agriculture, Assam

**Table 5.2- District-wise average Rainfall in Assam, 2016**

(Rainfall in mm)

District	January		February		March		April		May		June	
	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal
Kokrajhar	11.4	10.9	0	27.9	117.6	45.8	246.3	216.4	452.9	461.1	756.6	822.2
Dhubri	8.4	10.3	0.3	11.7	102.6	46.6	235.5	147.5	444.3	391.6	596.6	603.0
Goalpara	5.2	12.7	0.5	20.4	106.2	51.1	304.3	196.6	444.7	399.8	329.3	567.8
Barpeta	7.8	10.3	0.5	26.9	52.0	54.0	356.3	175.7	340.7	391.5	581.1	694.3
Morigaon	1.6	18.7	0	24.4	35.4	51.6	164.9	116.8	223.6	169.1	236.8	310.1
Nagaon	19.2	12.0	16.3	22.5	25.9	48.1	154.2	128.9	153.1	171.3	221.6	285.9
Sonitpur	45.7	19.4	14.9	23.1	42.1	50.0	227.5	144.3	295.8	284.1	158.4	363.1
Lakhimpur	26.8	27.7	57.0	48.6	98.7	76.7	269.9	165.5	260.3	331.9	490.3	528.3
Dhemaji	12.0	27.7	-	48.6	32.0	76.7	2.0	165.5	0.0	331.9	0.0	528.3
Tinsukia	11.0	26.6	74.2	58.4	151.0	131.2	543.2	215.9	300.4	272.7	233.9	388.3
Dibrugarh	22.5	30.6	61.6	53.1	116.3	119.8	456.1	229.9	293.7	292.4	311.5	401.0
Sivasagar	22.6	20.1	25.6	33.2	137.6	78.3	452.6	126.5	334.3	257.1	218.7	255.5
Jorhat	28.8	22.2	11.7	36.7	64.0	80.1	422.7	204.6	312.7	277.4	285.2	288.8
Golaghat	21.8	16.9	1.7	29.5	51.3	65.2	277.9	135.9	258.3	245.6	262.5	254.2
Karbi Anglong	17.7	12.8	6.1	24.1	31.7	53.8	143.5	106.3	135.8	139.4	115.8	224.9
Dima Hasao	17.7	16.7	36.0	47.5	32.2	158.9	550.6	207.9	774.6	308.0	166.5	328.1
Cachar	3.5	13.3	63.7	50.2	82.4	168.3	565.5	262.5	460.4	386.4	339.2	532.1
Karimganj	8.9	13.2	52.9	35.2	107.6	169.7	921.4	340.4	611.5	604.0	446.2	645.2
Hailakandi	10.0	7.3	69.2	42.0	54.6	123.8	805.9	239.0	725.0	416.2	383.4	470.4
Bongaigaon	7.0	10.0	0.0	31.2	63.6	57.5	372.8	183.4	397.4	442.0	722.2	626.3
Chirang	23.2	10.0	19.4	31.2	53.2	57.5	370.0	183.4	570.3	442.0	748.0	626.3
Kamrup	21.3	12.0	4.5	20.8	25.0	58.6	205.8	151.7	239.3	293.4	377.6	365.5
Kamrup Metro	1.7	12.0	5.9	20.8	58.3	58.6	537.9	151.7	316.9	293.4	276.6	365.5
Nalbari	32.1	14.9	2.8	18.6	89.8	56.7	418.9	184.6	292.7	380.7	372.0	551.2
Baksa	48.7	10.3	2.5	26.9	77.1	54.0	245.7	175.7	349.5	391.5	367.6	694.3
Darrang	-	13.1	-	21.4	-	53.5	0.0	168.8	-	320.0	-	419.7
Udalguri	33.7	13.1	3.9	21.4	40.8	53.5	413.1	168.8	285.3	320.0	156.3	419.7
<b>Assam</b>	<b>18.6</b>	<b>16.2</b>	<b>20.8</b>	<b>32.0</b>	<b>67.1</b>	<b>78.1</b>	<b>325.9</b>	<b>172.9</b>	<b>326.2</b>	<b>304.2</b>	<b>300.8</b>	<b>427.3</b>

Source: RMC,IMD,LGBI Airport, Guwahati through Directorate of Agriculture, Assam

TABLE 5.02 CONTD.

District	July		August		September		October		November		December	
	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal
Kokrajhar	581.8	864.2	106.1	677.1	367.4	462.9	166.8	159.5	0.0	18.1	0.3	6.1
Dhubri	418.1	554.7	190.9	418.7	231.0	340.1	171.8	155.1	0.0	19.2	1.4	4.1
Goalpara	631.2	502.8	188.1	334.6	281.6	304.9	137.9	157.7	0.1	21.7	0.8	5.2
Barpeta	712.8	757.3	122.7	527.3	363.0	462.1	112.7	142.1	0.0	20.4	0.0	12.7
Morigaon	298.4	374.8	102.8	309.2	377.2	221.4	218.7	119.3	2.8	19.9	9.2	8.2
Nagaon	221.8	326.3	153.3	294.1	160.2	218.6	69.6	120.0	62.8	21.6	10.1	10.8
Sonitpur	264.9	384.2	156.2	337.9	175.9	229.2	81.7	109.7	0.1	20.9	2.4	12.6
Lakhimpur	853.1	605.2	221.5	467.6	471.0	424.1	181.9	140.3	3.1	23.0	0.9	20.4
Dhemaji	-	605.2	-	467.6	-	424.1	154.0	140.3	3.0	23.0	9.0	20.4
Tinsukia	450.5	515.3	268.7	387.2	354.7	327.0	141.0	118.7	17.5	25.1	3.6	18.9
Dibrugarh	384.7	519.4	212.1	405.1	290.0	325.9	101.9	136.9	14.8	24.0	4.2	18.5
Sivasagar	329.7	374.8	228.8	342.3	304.7	196.9	76.1	96.3	19.7	20.3	10.2	10.3
Jorhat	423.3	390.7	114.3	346.9	286.7	272.7	63.6	121.7	15.8	25.6	32.9	15.6
Golaghat	388.1	314.7	156.2	271.4	238.7	209.3	39.6	103.7	35.7	19.6	3.1	14.7
Karbi Anglong	248.0	238.7	163.2	220.5	202.6	182.9	59.0	100.1	85.0	26.3	0.0	11.2
Dima Hasao	107.1	270.3	65.8	201.3	187.8	189.1	22.1	196.4	180.7	42.1	4.4	11.2
Cachar	451.5	526.2	346.6	470.8	526.7	360.8	186.5	182.4	65.3	34.8	10.8	11.4
Karimganj	490.4	646.0	365.8	438.0	487.8	418.7	211.9	240.4	241.8	86.8	17.6	13.2
Hailakandi	366.7	426.8	261.7	406.9	430.2	317.0	117.7	150.6	98.0	36.5	8.6	9.1
Bongaigaon	720.2	776.6	116.4	486.8	299.3	406.4	106.2	168.2	0.0	18.7	0.0	11.6
Chirang	1227.0	776.6	135.4	486.8	377.6	406.4	102.0	168.2	0.0	18.7	0.0	11.6
Kamrup	292.5	345.1	102.6	248.7	67.7	188.4	74.0	106.6	0.2	15.1	1.6	7.5
Kamrup Metro	348.5	345.1	105.8	248.7	142.5	188.4	34.5	106.6	0.0	15.1	0.0	7.5
Nalbari	513.3	470.9	149.7	322.0	233.1	220.2	52.5	110.4	0.0	21.6	1.4	4.8
Baksa	511.1	757.3	108.8	527.3	187.5	462.1	86.1	142.1	0.0	20.4	11.6	12.7
Darrang	-	345.8	-	272.1	-	221.5	-	95.4	-	17.2	-	9.3
Udalguri	342.7	345.8	97.4	272.1	231.9	221.5	82.1	95.4	2.9	17.2	11.1	9.3
<b>Assam</b>	<b>396.0</b>	<b>454.2</b>	<b>168.5</b>	<b>356.7</b>	<b>272.3</b>	<b>285.7</b>	<b>100.3</b>	<b>131.8</b>	<b>40.3</b>	<b>24.9</b>	<b>5.4</b>	<b>11.8</b>

Source: RMC,IMD,LGBI Airport, Guwahati through Directorate of Agriculture, Assam

**Table 5.3- Month-wise and Agro-climatic Zone-wise Rainfall in Assam, 2016**

Agro-Climatic Zone	Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Yearly Average
Lower Brahmaputra	Actual	16.7	3.6	74.5	329.4	384.9	512.8	595.7	132.7	255.1	104.5	0	1.7	201.0
	Normal	11.3	23.6	50.0	176.7	388.7	591.6	615.1	427.8	344.2	141.7	18.9	8.4	233.2
North Bank Plain Zone	Actual	23.6	15.2	42.7	228.1	210.4	201.3	486.9	154.4	878.7	124.7	2.3	5.9	197.9
	Normal	20.2	32.6	62.1	161.0	317.0	459.9	445.1	359.2	324.7	121.4	21.0	15.7	195.0
Central Brahmaputra	Actual	10.4	8.2	30.7	159.6	188.4	229.2	260.1	128.1	268.7	144.2	32.8	9.7	122.5
	Normal	15.4	23.5	49.9	122.9	170.2	198.0	350.6	301.7	220.0	119.7	20.8	9.5	133.5
Upper Brahmaputra	Actual	21.3	35.0	104.0	430.5	299.9	262.4	77.6	196.0	295.0	84.4	20.7	10.8	153.1
	Normal	23.3	42.2	94.9	182.6	269.0	317.6	62.9	350.6	266.4	115.5	22.9	15.6	147.0
Barak Valley Zone	Actual	7.5	61.9	81.5	764.3	599.0	389.6	436.2	324.7	481.6	172.0	135.0	12.3	288.8
	Normal	11.3	42.5	153.9	280.6	468.9	549.2	533.0	438.6	365.5	191.1	52.7	11.2	258.2
Hills Zone	Actual	17.7	21.1	32.0	347.1	455.2	141.2	177.6	114.5	195.2	40.6	132.9	2.2	139.8
	Normal	14.8	35.8	106.4	157.1	223.7	276.5	254.5	210.9	186.0	148.3	34.2	11.2	138.3
	Deviation(%)	20	-41	-70	121	104	-49	-30	-46	5	-73	289	-80	1
State Average	Actual	18.6	20.8	67.1	325.9	326.2	300.8	396.0	168.5	272.3	100.3	40.3	5.4	170.2
	Normal	16.2	32.0	78.1	172.9	304.2	427.3	454.2	356.7	285.7	131.8	24.9	11.8	191.3

**Table 5.4- Month-wise Rainfall pattern in Assam, 2016**

Month	Normal	Actual	Departure from Normal(%)	Status
January	16.2	18.6	15	Normal
February	32.0	20.8	(-)35	Deficient
March	78.1	67.1	(-)14	Normal
April	172.9	325.9	88	Excess
May	304.2	326.2	7	Normal
June	427.3	300.8	(-)30	Deficient
July	454.2	396.0	(-)13	Normal
August	356.7	168.5	(-)53	Deficient
September	285.7	272.3	(-)5	Normal
October	131.8	100.3	(-)24	Deficient
November	24.9	40.3	62	Excess
December	11.8	5.4	(-)54	Deficient
<b>Total</b>	<b>2295.8</b>	<b>2042.2</b>	<b>(-)11</b>	<b>Normal</b>

Source: RMC,IMD,LGBI Airport, Guwahati through Directorate of Agriculture, Assam

**Table 5.5- Season-wise rainfall pattern in Assam during 2014- 2016**

Season	Type	2014	2015	2016
Winter (Jan. & Feb.)	Actual	31.00	25.10	39.40
	Normal	48.20	48.20	48.20
Summer (March-May)	Actual	402.10	558.50	719.20
	Normal	555.20	555.20	555.20
Monsoon (June-Sept.)	Actual	1400.00	1404.20	1137.60
	Normal	1523.90	1523.90	1423.90
Post Monsoon (Oct.-Dec.)	Actual	28.50	90.00	146.00
	Normal	168.50	168.50	168.50
All Seasons (Jan.-Dec.)	Actual	1861.60	2077.80	2042.20
	Normal	2295.80	2295.80	2195.80

Source: RMC,IMD,LGBI Airport, Guwahati through Directorate of Agriculture, Assam