Bengaluru Urban

Rainfall:

During 2023, Bengaluru Urban district as a whole recorded an actual rainfall of 689 mm as against its normal value of 846 mm with percentage departure from normal being (-) 19% and the district is classified under Normal category. Among the taluks, 2 taluk recorded Normal rainfall, 3 and Taluks recorded Deficit rainfall.

The talukwise percentage departure of rainfall from Normal was (-) 17% in Bengaluru East, (+)7% in Yelahanka, (-) 20% in Bengaluru South, (-) 32% in Bengaluru North, , (-) 29% in Anekal taluk.

DISTRICT / TALUK / HOBLI – ANNUAL RAINFALL PATTERN -2023

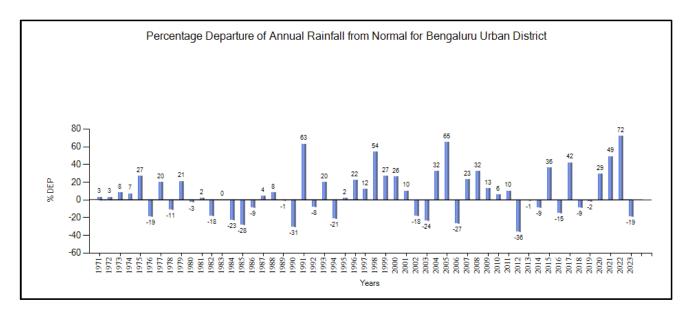
Large Excess (LE) : (+60% and above), Excess (E) : (+20 to +59%), Normal (N): (+19% to -19%), Deficient (D): (-20 to -59%), Large Deficit (LD) : (-60 or less %), NR: No Rainfall (-100 %)

District/Taluk/Hobli	(1st Ja	Annual 2023 (1st January to 31st December)			
	Normal (mm)	Actual (mm)	%DEP		
BENGALURU URBAN	846	689	-19		
Anekal	902	640	-29		
Anekal_1	902	671	-26		
Attibele_1	824	522	-37		
Jigani_1	845	671	-21		
Sarjapura_1	748	626	-16		
Anekal_2	881	606	-31		
Jigani_2	865	756	-13		
Attibele_2	857	634	-26		
Sarjapura_1	829	754	-9		
Sarjapura_3	814	490	-40		
Bengaluru North	1004	683	-32		
Bengaluru North_1	1004	715	-29		
Dasanapura_1	896	687	-23		
Yashavantapura_1	819	739	-10		
Bengaluru North_2	854	633	-26		
Yashavantapura_2	866	673	-22		
Dasanapura_2	872	656	-25		
Dasanapura_3	900	583	-35		
Bengaluru South	820	657	-20		

District/Taluk/Hobli	Annual 2023 (1st January to 31st December)			
	Normal (mm)	Actual (mm)	%DEP	
Beguru_3	820	660	-20	
Kengeri_1	905	802	-11	
Tavarekere_1	734	618	-16	
Uttarahalli_4	905	881	-3	
Uttarahalli_1	886	630	-29	
Uttarahalli_2	872	647	-26	
Uttarahalli_3	863	547	-37	
Uttarahalli_5	941	773	-18	
Beguru_1	912	711	-22	
Beguru_2	875	706	-19	
Kengeri_2	878	603	-31	
Kengeri_3	860	628	-27	
Kengeri_4	852	903	6	
Tavarekere_2	961	578	-40	
Tavarekere_3	871	547	-37	
Bengaluru East	815	678	-17	
Mahadevpura_1	815	542	-33	
Bidarahalli_2	828	727	-12	
Varturu_1	818	777	-5	
K R Pura_2	855	614	-28	
K R Pura_3	827	559	-32	
Varturu_2	881	721	-18	
Bidarahalli_1	821	693	-16	
Mahadevapura_2	882	460	-48	
Marathahalli	891	700	-21	
Bidharahalli_3	799	770	-4	
Yelahanka	752	805	7	
Yelahanka_1	752	848	13	
Yelahanka_2	785	675	-14	
Yelahanka_3	801	824	3	
Jala_1	760	888	17	
Jala_2	763	896	17	
Jala_3	781	699	-11	
Hesarughatta_1	746	807	8	
Hesarughatta_2	781	816	5	

ANNUAL RAINFALL TIME SERIES GRAPH

The below Graph depicts percentage departure of **Annual rainfall** from normal in the **Bengaluru Urban** District, compared with the corresponding season since 1971.

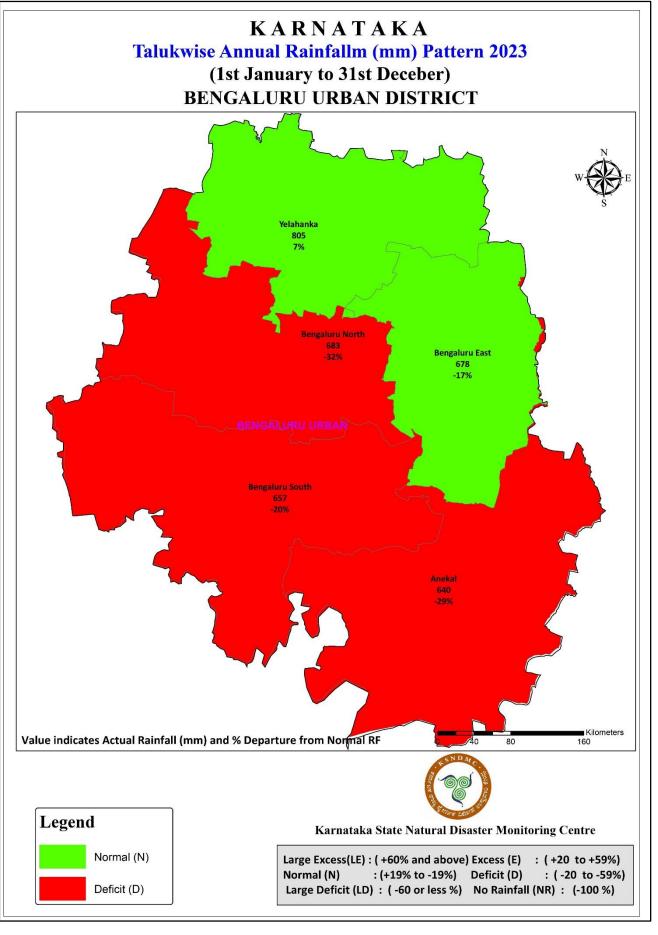


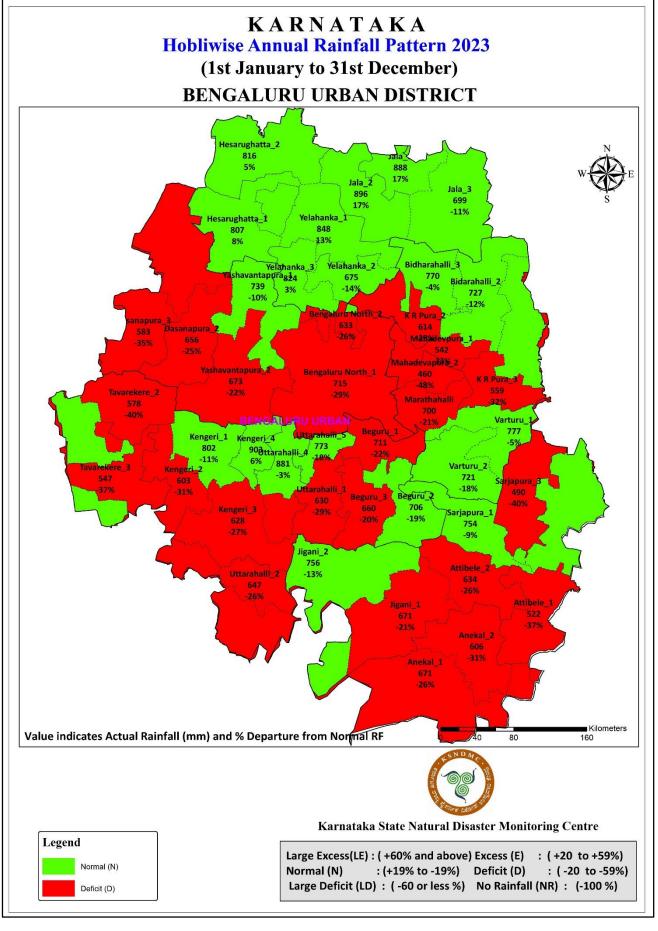
The amount of annual rainfall recorded during 2023 is less when compared to the corresponding period of last year.

Hobli-wise Rainfall Category based on rainfall pattern is given below:

District/Taluk	Total No. of Hoblies	_	Excess	Normal	Deficit	Large Deficit	No Rainfall
BENGALURU URBAN	49	0	0	23	26	0	0
Anekal	9	0	0	3	6	0	0
Bengaluru North	7	0	0	1	6	0	0
Bengaluru South	15	0	0	6	9	0	0
Bengaluru East	10	0	0	5	5	0	0
Yelahanka	8	0	0	8	0	0	0

Hobli wise rainfall indicates Out of **49** hoblis in the district rainfall was **Normal** in **23** hoblis abd **Deficit** in **26** Hoblis





Seasonal Rainfall pattern during 2023:

Pre-Monsoon Season:

During **Pre-Monsoon** season, the district as a whole recorded actual rainfall of **212.6 mm**, which is (+) **36% more** than the weighted average normal of **156 mm** and being classified under **Excess** category.

In **Bengaluru Urban** district, rainfall during **Pre-Monsoon** was Excess in Bengaluru East, Anekal, Bengaluru South and Yelahank Taluks **Normal** in Bengaluru North taluks.

DISTRICT / TALUK / HOBLI – PRE-MONSOON RAINFALL PATTERN -2023

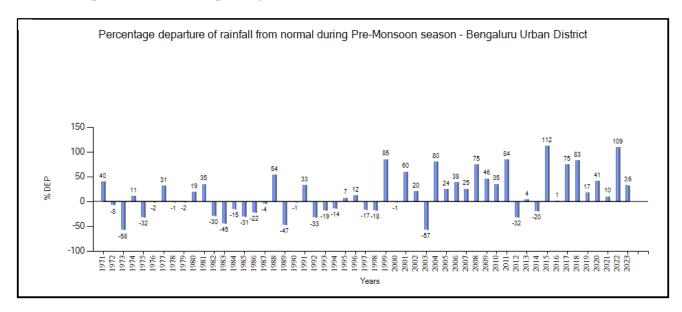
Large Excess (LE): (+60% and above), Excess (E): (+20 to +59%), Normal (N): (+19% to -19%), Deficient (D): (-20 to -59%), Large Deficit (LD): (-60 or less %), NR: No Rainfall (-100 %)

District/Taluk/Hobli	Pre-Monsoon 2023 Rainfall pattern (1 st January to 31st May)					
	Normal (mm)	Actual (mm)	%DEP			
BENGALURU URBAN	156.1	212.6	36			
Anekal	180.0	224.2	25			
Anekal_1	180.0	267.8	49			
Attibele_1	154.3	187.5	21			
Jigani_1	159.2	254.8	60			
Sarjapura_1	129.2	220.0	70			
Anekal_2	172.3	240.4	40			
Jigani_2	163.9	248.4	52			
Attibele_2	160.9	218.0	36			
Sarjapura_1	155.2	232.5	50			
Sarjapura_3	142.0	164.4	16			
Bengaluru North	183.1	195.9	7			
Bengaluru North_1	183.1	218.2	19			
Dasanapura_1	177.2	178.7	1			
Yashavantapura_1	155.4	196.0	26			
Bengaluru North_2	159.0	190.8	20			
Yashavantapura_2	163.4	204.1	25			
Dasanapura_2	167.1	176.3	6			
Dasanapura_3	166.9	167.0	0			
Bengaluru South	158.6	223.1	41			
Beguru_3	158.6	207.9	31			
Kengeri_1	168.5	256.2	52			
Tavarekere_1	153.0	199.7	31			
Uttarahalli_4	170.3	316.7	86			
Uttarahalli_1	167.8	186.2	11			

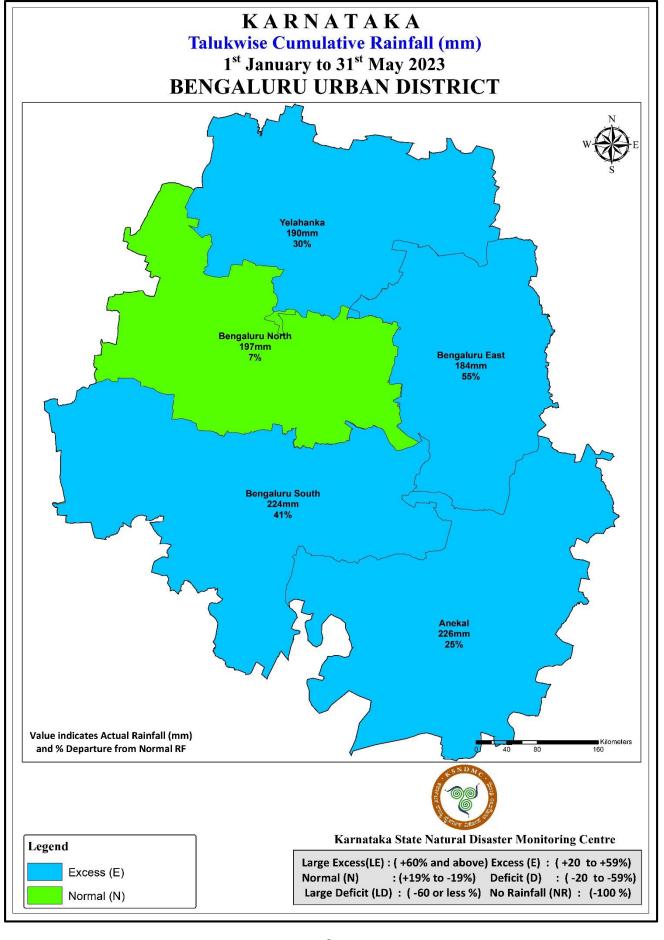
District/Taluk/Hobli	Pre-Monsoon 2023 Rainfall pattern (1 st January to 31st May)						
	Normal (mm)	Actual (mm)	%DEP				
Uttarahalli_2	166.2	239.8	44				
Uttarahalli_3	165.0	213.0	29				
Uttarahalli_5	175.0	247.5	41				
Beguru_1	171.4	228.0	33				
Beguru_2	161.7	265.2	64				
Kengeri_2	163.8	185.3	13				
Kengeri_3	164.1	245.9	50				
Kengeri_4	162.3	317.8	96				
Tavarekere_2	167.9	195.8	17				
Tavarekere_3	164.5	159.8	-3				
Bengaluru East	119.0	184.6	55				
Mahadevpura_1	119.0	174.4	47				
Bidarahalli_2	139.7	182.3	30				
Varturu_1	133.3	229.7	72				
K R Pura_2	152.0	181.1	19				
K R Pura_3	133.0	176.6	33				
Varturu_2	159.9	187.4	17				
Bidarahalli_1	127.3	189.5	49				
Mahadevapura_2	158.5	131.2	-17				
Marathahalli	162.4	201.0	24				
Bidharahalli_3	143.4	176.2	23				
Yelahanka	146.6	188.9	29				
Yelahanka_1	146.6	184.4	26				
Yelahanka_2	149.5	176.6	18				
Yelahanka_3	152.2	226.8	49				
Jala_1	124.8	229.7	84				
Jala_2	129.1	232.9	80				
Jala_3	133.6	184.2	38				
Hesarughatta_1	141.7	188.1	33				
Hesarughatta_2	142.5	149.7	5				

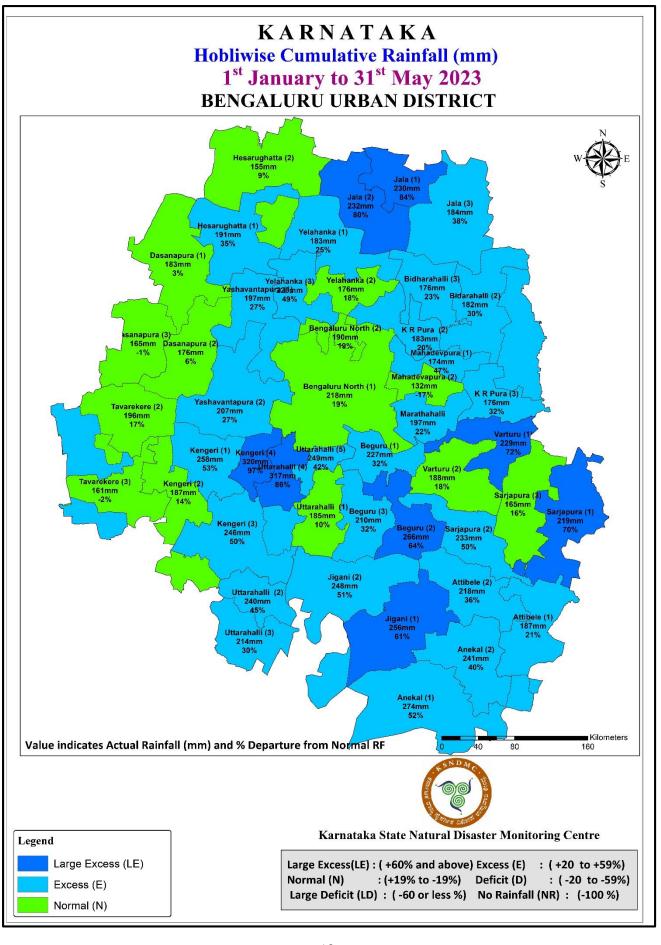
PRE-MONSOON RAINFALL TIME SERIES GRAPH

The below Graph depicts percentage departure of **Pre-Monsoon** rainfall from normal in the **Bengaluru Urban** District, compared with the corresponding season since 1971.



The amount of rainfall recorded during **Pre-Monsoon-2023** is **less** when compared to the corresponding period of **last** year.





South-West Season:

During **South-West monsoon** season the district as a whole recorded actual rainfall of **324 mm**, which is (-) **32% less** than the normal of **471 mm** and being classified under **Deficit** category.

In Bengaluru Urban district, rainfall during South-West monsoon was Deficit in all taluk.

DISTRICT / TALUK / HOBLI – SOUTH-WEST MONSOON RAINFALL PATTERN -2022

Note: weighted average rainfall is computed using Thiessen Polygon method. The long period normal rainfall data is available for Taluk headquarters stations. The normal rainfall for other stations is estimated through interpolations.

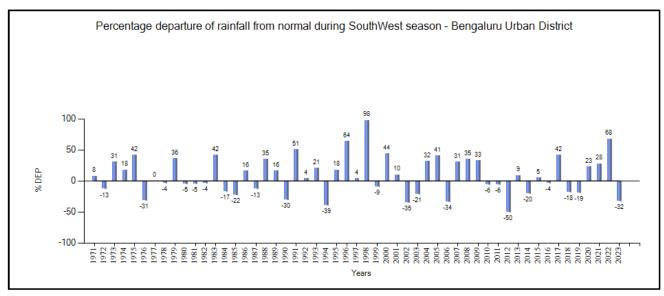
Large Excess (LE) : (+60% and above), Excess (E) : (+20 to +59%), Normal (N): (+19% to -19%), Deficient (D): (-20 to -59%), Large Deficit (LD) : (-60 or less %), NR: No Rainfall (-100 %)

District/Taluk/Hobli		Southwest-Monsoon 2023 Rainfall pattern (1st June to 30th September)			
	Normal (mm)	Actual (mm)	%DEP		
BENGALURU URBAN	471	324	-32		
Anekal	477	269	-44		
Anekal_1	477	255	-47		
Attibele_1	445	240	-46		
Jigani_1	464	260	-44		
Sarjapura_1	411	287	-30		
Anekal_2	472	249	-47		
Jigani_2	482	310	-36		
Attibele_2	469	272	-42		
Sarjapura_1	474	311	-34		
Sarjapura_3	453	224	-51		
Bengaluru North	574	339	-41		
Bengaluru North_1	574	346	-40		
Dasanapura_1	490	374	-24		
Yashavantapura_1	451	374	-17		
Bengaluru North_2	472	298	-37		
Yashavantapura_2	493	309	-37		
Dasanapura_2	488	325	-33		
Dasanapura_3	511	304	-40		
Bengaluru South	478	295	-38		
Beguru_3	478	262	-45		
Kengeri_1	505	359	-29		
Tavarekere_1	417	291	-30		
Uttarahalli_4	514	407	-21		

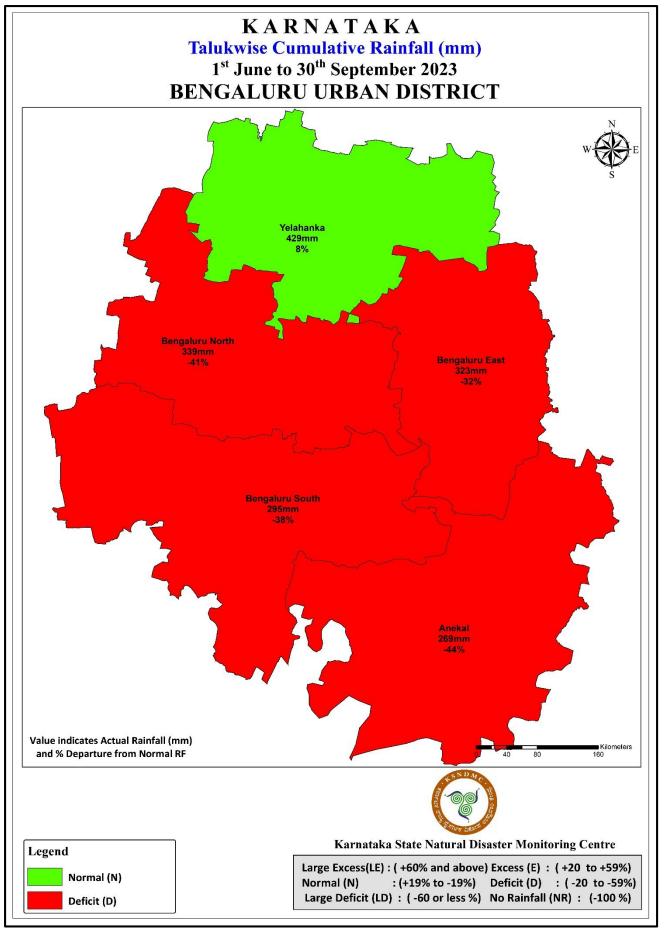
District/Taluk/Hobli	nsoon 2023 attern September)		
	Normal (mm)	Actual (mm)	%DEP
Uttarahalli_1	499	304	-39
Uttarahalli_2	495	281	-43
Uttarahalli_3	478	237	-50
Uttarahalli_5	531	403	-24
Beguru_1	503	333	-34
Beguru_2	484	279	-42
Kengeri_2	503	286	-43
Kengeri_3	491	260	-47
Kengeri_4	492	406	-17
Tavarekere_2	553	266	-52
Tavarekere_3	496	270	-46
Bengaluru East	479	323	-32
Mahadevpura_1	479	261	-45
Bidarahalli_2	458	374	-18
Varturu_1	465	356	-24
K R Pura_2	475	276	-42
K R Pura_3	472	252	-47
Varturu_2	490	316	-36
Bidarahalli_1	469	338	-28
Mahadevapura_2	491	240	-51
Marathahalli	495	357	-28
Bidharahalli_3	436	358	-18
Yelahanka	397	429	8
Yelahanka_1	397	451	14
Yelahanka_2	423	314	-26
Yelahanka_3	435	413	-5
Jala_1	427	451	5
Jala_2	426	471	11
Jala_3	434	317	-27
Hesarughatta_1	416	452	8
Hesarughatta_2	430	500	16

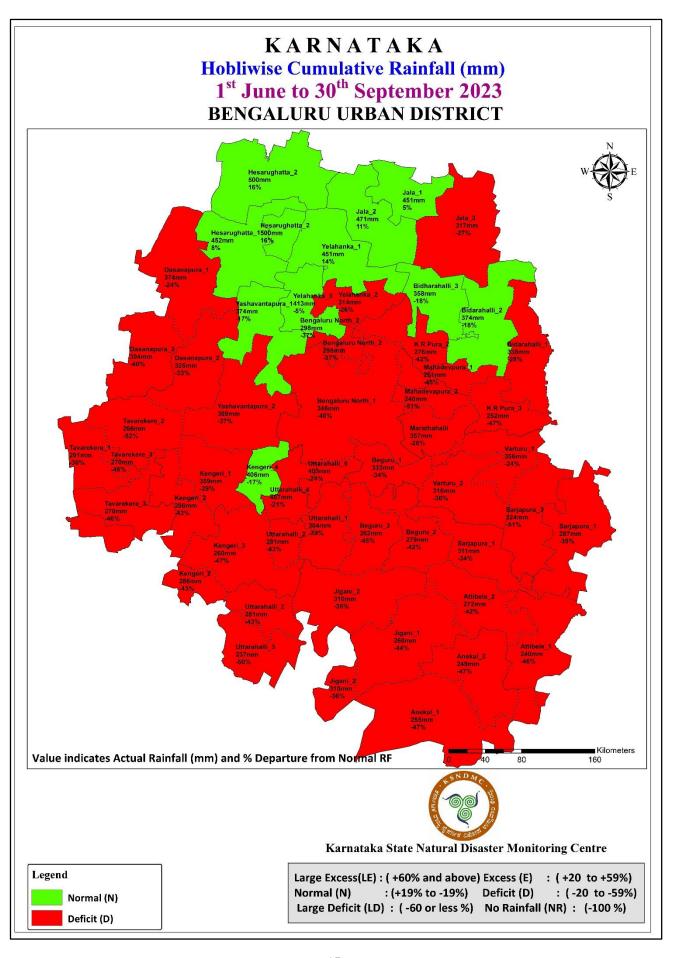
SOUTH-WEST MONSOON RAINFALL TIME SERIES GRAPH

The below Graph depicts percentage departure of **South-West Monsoon** rainfall from normal in the **Bengaluru Urban** District, compared with the corresponding season since 1971.



The amount of rainfall recorded during **South-West monsoon-2023** is the **less** when compared to the corresponding period of **last** year.





North-East Season:

During **North-East monsoon** season the district as a whole recorded actual rainfall of **156 mm**, which is (-) **28% less** than the normal of **219 mm** and being classified under **Deficit** category.

In Bengaluru Urban district rainfall during North-East monsoon was Deficit in Bengaluru South, Bengaluru North, Bengaluru East and Anekal taluks. Normal in Yelahanka taluk.

DISTRICT / TALUK / HOBLI – NORTH-EAST MONSOON RAINFALL PATTERN -2023

Note: weighted average rainfall is computed using Thiessen Polygon method. The long period normal rainfall data is available for Taluk headquarters stations. The normal rainfall for other stations is estimated through interpolations.

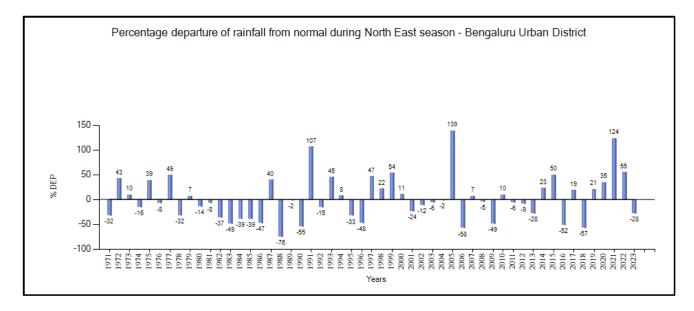
Large Excess (LE) : (+60% and above), Excess (E) : (+20 to +59%), Normal (N): (+19% to -19%), Deficient (D): (-20 to -59%), Large Deficit (LD) : (-60 or less %), NR: No Rainfall (-100 %)

District/Taluk/Hobli		Northeast Monsoon 2023 (1st October to 31st December)				
	Normal (mm)	Actual (mm)	%DEP			
BENGALURU URBAN	219	156	-28			
Anekal	244	146	-40			
Anekal_1	244	142	-42			
Attibele_1	224	94	-58			
Jigani_1	222	155	-30			
Sarjapura_1	208	120	-42			
Anekal_2	237	116	-51			
Jigani_2	220	198	-10			
Attibele_2	227	144	-36			
Sarjapura_1	226	224	-1			
Sarjapura_3	219	102	-54			
Bengaluru North	248	147	-41			
Bengaluru North_1	248	152	-39			
Dasanapura_1	228	130	-43			
Yashavantapura_1	213	168	-21			
Bengaluru North_2	223	146	-35			
Yashavantapura_2	209	157	-25			
Dasanapura_2	217	154	-29			
Dasanapura_3	222	114	-49			
Bengaluru South	183	138	-25			
Beguru_3	183	188	3			
Kengeri_1	232	185	-20			

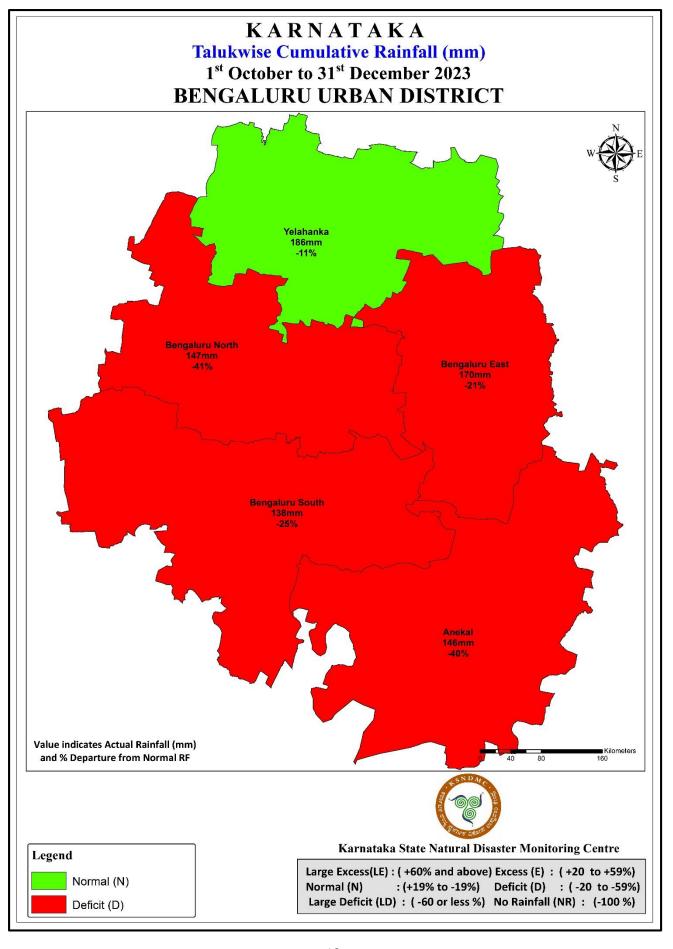
District/Taluk/Hobli		Northeast Monsoon 2023 (1st October to 31st December)				
	Normal (mm)	Actual (mm)	%DEP			
Tavarekere_1	164	127	-22			
Uttarahalli_4	220	158	-28			
Uttarahalli_1	219	141	-36			
Uttarahalli_2	210	126	-40			
Uttarahalli_3	219	96	-56			
Uttarahalli_5	235	122	-48			
Beguru_1	238	151	-37			
Beguru_2	229	162	-29			
Kengeri_2	211	130	-38			
Kengeri_3	205	121	-41			
Kengeri_4	197	177	-10			
Tavarekere_2	240	116	-52			
Tavarekere_3	210	117	-44			
Bengaluru East	217	170	-21			
Mahadevpura_1	217	107	-51			
Bidarahalli_2	231	171	-26			
Varturu_1	219	193	-12			
K R Pura_2	228	155	-32			
K R Pura_3	223	132	-41			
Varturu_2	231	217	-6			
Bidarahalli_1	224	166	-26			
Mahadevapura_2	233	88	-62			
Marathahalli	234	146	-38			
Bidharahalli_3	219	236	8			
Yelahanka	208	186	-11			
Yelahanka_1	208	214	3			
Yelahanka_2	213	185	-13			
Yelahanka_3	214	185	-14			
Jala_1	208	208	0			
Jala_2	208	193	-7			
Jala_3	214	198	-7			
Hesarughatta_1	188	164	-13			
Hesarughatta_2	208	161	-23			

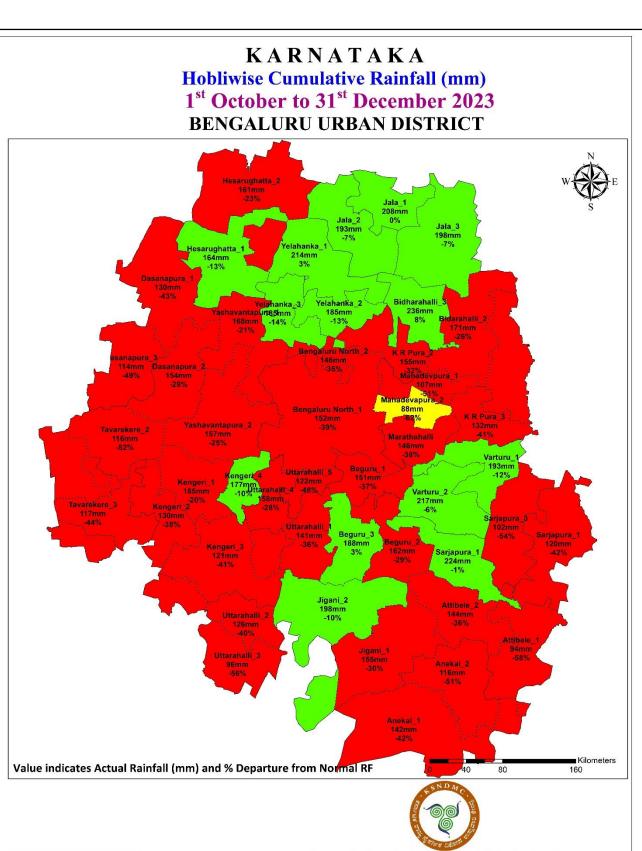
NORTH-EAST MONSOON RAINFALL TIME SERIES GRAPH

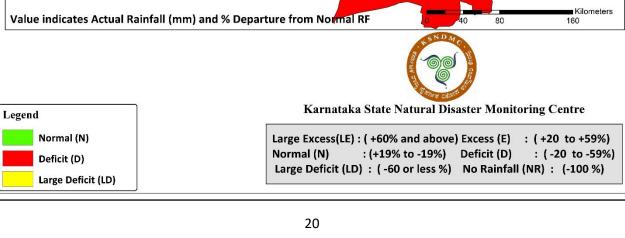
The below Graph depicts percentage departure of **North-East Monsoon** rainfall from normal in the **Bengaluru Urban** District, compared with the corresponding season since 1971.



The amount of rainfall recorded during **North-East monsoon-2023** is **less** when compared to the corresponding period of last year.







Agriculture Situation:

The normal and actual coverage of individual as well as the total crops in <u>Bangalore Urban</u> <u>district</u> is presented in the table given below. The table provides annual normal sown area, seasonwise actual area covered during 2023 for all the crops and compared with the cropwise area sown for 2022.

(Area in hectares)

	Annual			2023		·	202	22
Crops	Normal * (Kharif+ Rabi+ Summer)	Kharif	Rabi	Summer	Total Area (Col.3+ 4+5)	Col.6 as % of Col.2	Total Area sown (K+R+S)	Col.8 as % of Col.2
1	2	3	4	5	6	7	8	9
CEREALS								
Rice	199	146	0	10	156	78	109	55
Ragi	14618	18832	73	19	18924	129	18739	128
Maize	876	682	20	21	723	83	905	103
Minor Millets	36	25	0	0	25	69	10	28
Total Cereals	15729	19685	93	50	19828	126	19763	126
PULSES								
Tur	559	380	0	0	380	68	442	79
Horsegram	333	11	193	0	204	61	223	67
Blackgram	11	4	0	0	4	36	4	36
Greengram	15	10	0	0	10	67	9	60
Other Pulses	1089	896	0	0	896	82	725	67
Total Pulses	2007	1301	193	0	1494	74	1405	70
Total Foodgrains	17736	20986	286	50	21322	120	21168	119
OILSEEDS								
Groundnut	119	97	0	0	97	82	84	71
Sesamum	43	57	0	0	57	133	19	44
Sunflower	1	1	0	0	1	100	1	100
Other Oilseeds	64	54	0	0	54	84	18	28
Total Oilseeds	244	243	0	0	209	86	122	50
CASHCROPS								
Sugarcane	17	5	0		5	29	6	35
Total Cashcrops	17	5	0	0	5	29	6	35
Grand Total	17997	21234	286	50	21536	120	21296	118

(Source: Directorate of Agriculture, GoK,) * Normal - 5 years average 2017 – 2021

^{**} Other Pulses include cowpea & avare; *** Other Oilseeds include- mustard, castor, niger

During 2023, the seasonwise area sown as percentage of the total sown area for the year was:-

 Kharif
 : 99%

 Rabi
 : 1%

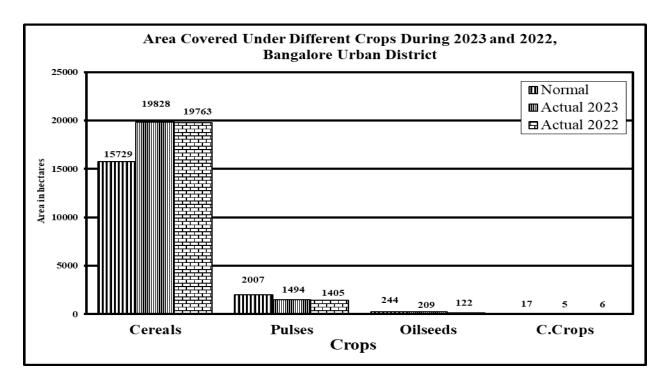
 Summer
 : 0%

During 2023, the area under total cereals was **126%** (**126%**) of the normal. The area covered under different cereal crops are: Rice - 78%; Ragi - 129%; Maize - 83% and Minor Millets – 69% of the normal.

In case of pulses, the area sown was 74% (70%) of the normal. The area covered under different pulses crops are: Tur – 68%, Horsegram - 61%; Blackgram – 36%; Greengram – 67% and Other Pulses – 82% of the normal.

In case of oilseeds, the area sown was 86% (50%) of the normal. The area covered under different oilseeds crops are: Groundnut – 82%; Sesamum – 133%; Sunflower – 100% and Other Oilseeds – 84% of the normal.

In case of cashcrops, the coverage was 29% (35%) of the normal.



Status of Minor Irrigation Tanks as on 31.12.2023:

Total No	No. OF TANKS FILLED UP TO THE LEVEL OF							
Of Tanks	Not filled	30%	31-50%	51-99%	100%			
46	0	0	24	35	41			
40	(%)	(%)	(%)	(%)	(%)			

(The figs in bracket percentage of total Minor Irrigation tanks)

Conclusion:

- Bengaluru Urban district recorded **Normal** rainfall during 2023.
- Rainfall was Excess during Pre-Monsoon, Deficit during South-West monsoon and North-East monsoon.
- During 2023, **21536 ha.** was sown which constitutes **120%** of the normal area.
- Status of minor irrigation tanks indicate that out of 46 M.I tanks, as many as < 30% storage in 0 tanks, 30% storage in 0 tank, 31% to 50% storage in 24 tanks, above 51% storage in 76 tanks.