Bengaluru Urban

Rainfall:

During 2022, Bengaluru Urban district as a whole recorded an actual rainfall of 1455.6 mm as against its normal value of 846 mm with percentage departure from normal being (+) 72% and the district is classified under Large Excess category. Among the taluks, 4 taluk recorded Large Excess rainfall, 2 and Taluks recorded Excess rainfall.

The talukwise percentage departure of rainfall from Normal was (+) 58% in Anekal, (+)38% in Bengaluru North, (+)82% in Bengaluru South, (+)75% in Bengaluru East, (+)105% in Yelahanka taluk.

DISTRICT / TALUK / HOBLI – ANNUAL 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.

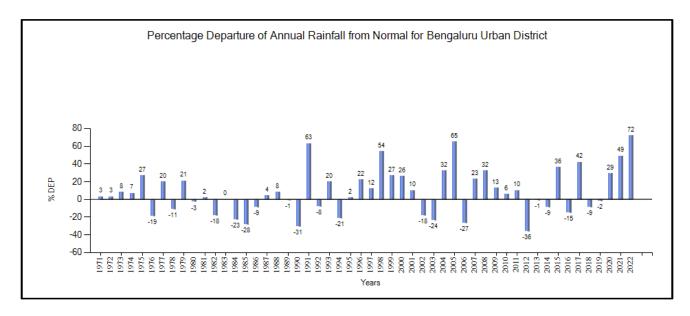
Large Excess (LE) : (+60% and above), Excess (E) : (+20 to +59%), Normal (N): (+19% to -19%), Deficient (D): (-20 to -59%), Large Deficit (LD) : (-60 or less %), NR: No Rainfall (-100%)

	Annual Rainfall 2022 (1st January to 31st December)						
District/Taluk/Hobli	Normal (mm)	Actual (mm)	%DEP	Class			
BENGALURU URBAN	846	1456	72	LE			
Anekal	902	1427	58	\boldsymbol{E}			
Anekal_1	902	1387	54	\boldsymbol{E}			
Attibele_1	824	1215	48	\boldsymbol{E}			
Jigani_1	845	1445	71	LE			
Sarjapura_1	748	1438	92	LE			
Anekal_2	881	1473	67	LE			
Jigani_2	865	1625	88	LE			
Attibele_2	857	1418	66	LE			
Sarjapura_1	855	1507	76	LE			
Sarjapura_3	814	1225	51	E			
Bengaluru North	1004	1383	38	\boldsymbol{E}			
Bengaluru North_1	1004	1401	39	\boldsymbol{E}			
Dasanapura_1	896	1407	57	\boldsymbol{E}			
Yashavantapura_1	819	1249	53	\boldsymbol{E}			
Bengaluru North_2	854	1254	47	\boldsymbol{E}			
Yashavantapura_2	866	1369	58	\boldsymbol{E}			
Dasanapura_2	872	1443	65	LE			
Dasanapura_3	900	1428	59	E			
Bengaluru South	820	1495	82	LE			
Beguru_3	820	1477	80	LE			
Kengeri_1	905	1581	75	LE			
Tavarekere_1	734	1586	116	LE			
Uttarahalli_4	905	1608	78	LE			

	Annual Rainfall 2022 (1st January to 31st December)						
District/Taluk/Hobli	Normal (mm)	Actual (mm)	%DEP	Class			
Uttarahalli_1	886	1349	52	\boldsymbol{E}			
Uttarahalli_2	872	1531	76	LE			
Uttarahalli_3	863	1628	89	LE			
Uttarahalli_5	941	1331	41	\boldsymbol{E}			
Beguru_1	912	1438	58	\boldsymbol{E}			
Beguru_2	875	1371	57	\boldsymbol{E}			
Kengeri_2	878	1580	80	<i>LE</i>			
Kengeri_3	860	1434	67	<i>LE</i>			
Kengeri_4	852	1547	82	<i>LE</i>			
Tavarekere_2	961	1336	39	\boldsymbol{E}			
Tavarekere_3	871	1555	79	LE			
Bengaluru East	815	1424	75	LE			
Mahadevpura_1	815	1104	35	\boldsymbol{E}			
Bidarahalli_2	828	1320	59	\boldsymbol{E}			
Varturu_1	818	1589	94	LE			
K R Pura_2	855	1229	44	\boldsymbol{E}			
K R Pura_3	827	1407	70	<i>LE</i>			
Varturu_2	881	1398	59	\boldsymbol{E}			
Bidarahalli_1	821	1450	77	LE			
Mahadevapura_2	882	1134	29	E			
Marathahalli	891	1839	106	LE			
Bidharahalli_3	799	1612	102	LE			
Yelahanka	752	1543	105	LE			

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.

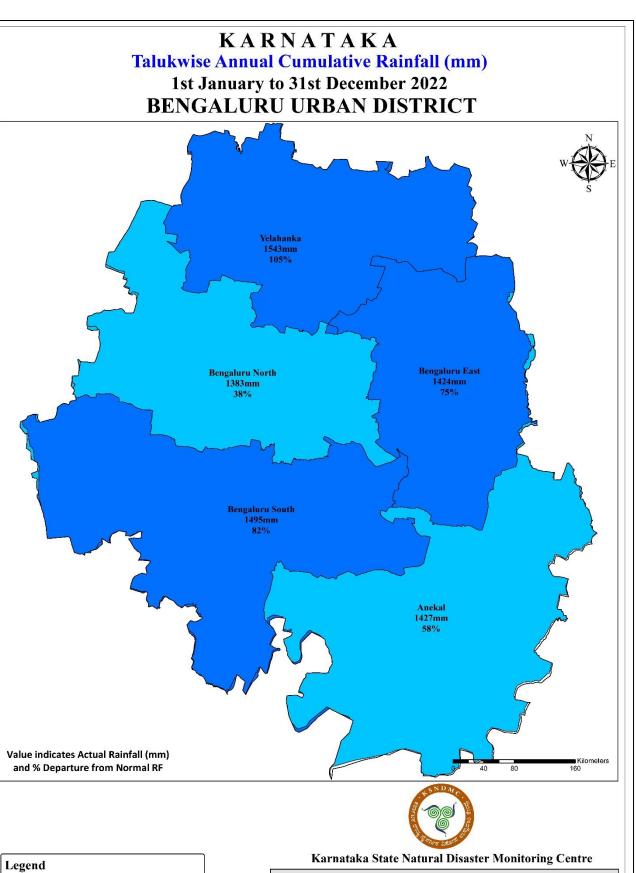


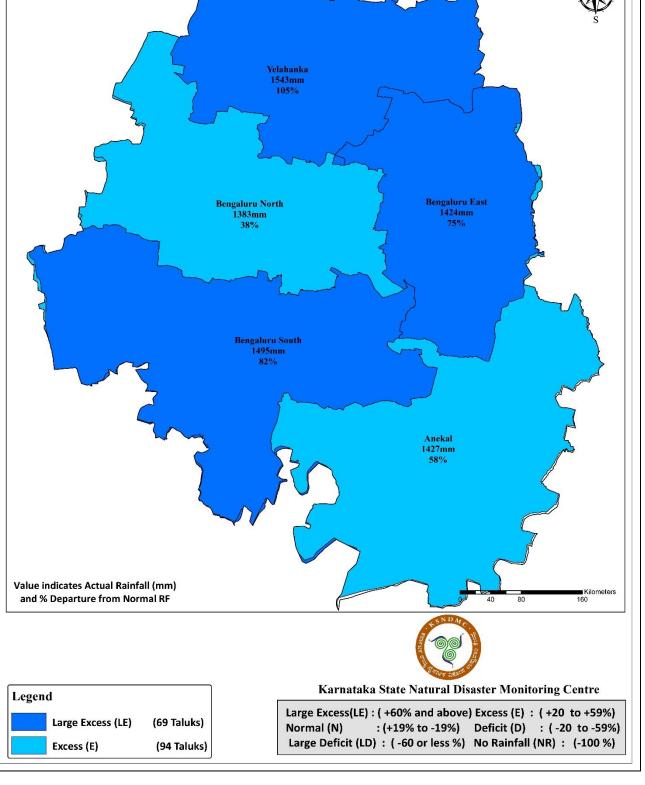
The amount of annual rainfall recorded during 2022 is **more** when compared to the corresponding period of last 2 years.

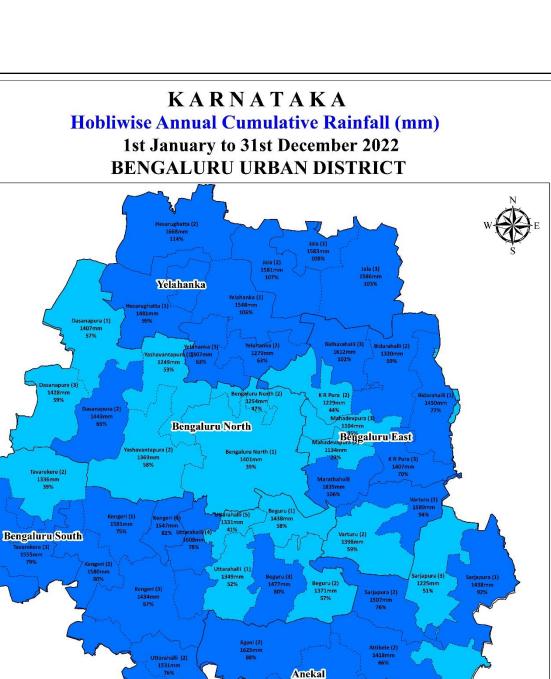
Hobli-wise Rainfall Category based on rainfall pattern is given below:

District/Taluk	Total No. of Hoblies	_	Excess	Normal	Deficit	Large Deficit	No Rainfall
BENGALURU URBAN	49	30	19	0	0	0	0
Anekal	9	6	3	0	0	0	0
Bengaluru North	7	1	6	0	0	0	0
Bengaluru South	15	10	5	0	0	0	0
Bengaluru East	10	5	5	0	0	0	0
Yelahanka	8	8	0	0	0	0	0

Hobli wise rainfall indicates Out of **49** hoblis in the district rainfall was **Large Excess** in **30** hoblis abd **Excess** in **19** Hoblis









Kilometers 160

Large Excess(LE): (+60% and above) Excess (E) : (+20 to +59%)

Normal (N) : (+19% to -19%) Deficit (D) : (-20 to -59%)

Large Deficit (LD): (-60 or less %) No Rainfall (NR): (-100 %)

Karnataka State Natural Disaster Monitoring Centre

Seasonal Rainfall pattern during 2022:

Pre-Monsoon Season:

During **Pre-Monsoon** season, the district as a whole recorded actual rainfall of **326 mm**, which is **109% more** than the weighted average normal of **156 mm** and being classified under **Large Excess** category.

In Bengaluru Urban district, rainfall during Pre-Monsoon was Large Excess in all taluks.

DISTRICT / TALUK / HOBLI – PRE-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 %)

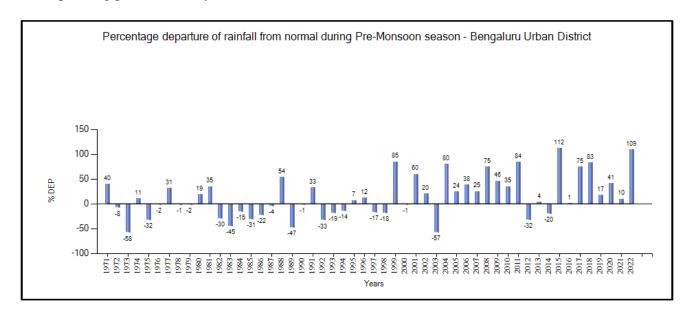
District/Taluk/Hobli	Pre-monsoon 2022 (1 st Jan to 31 st May 2022)					
	Normal (mm)	Actual (mm)	%DEP	Class		
BENGALURU URBAN	156	326	109	LE		
Anekal	180	307	70	LE		
Anekal_1	180	268	49	\boldsymbol{E}		
Attibele_1	154	278	80	LE		
Jigani_1	159	291	83	LE		
Sarjapura_1	129	347	168	LE		
Anekal_2	172	329	91	LE		
Jigani_2	164	321	96	LE		
Attibele_2	161	326	102	LE		
Sarjapura_1	155	366	136	LE		
Sarjapura_3	142	271	91	LE		
Bengaluru North	183	311	70	LE		
Bengaluru North_1	183	325	78	LE		
Dasanapura_1	177	292	65	LE		
Yashavantapura_1	155	288	85	LE		
Bengaluru North_2	159	264	66	LE		
Yashavantapura_2	163	344	110	LE		
Dasanapura_2	167	314	88	LE		
Dasanapura_3	167	286	71	LE		
Bengaluru South	159	369	133	LE		
Beguru_3	159	341	115	LE		
Kengeri_1	169	422	150	LE		
Tavarekere_1	153	371	143	LE		
Uttarahalli_4	170	410	141	LE		
Uttarahalli_1	168	322	92	LE		
Uttarahalli_2	166	323	95	LE		
Uttarahalli_3	165	372	125	LE		
Uttarahalli_5	175	347	98	LE		

District/Taluk/Hobli	Pre-monsoon 2022 (1 st Jan to 31 st May 2022)					
	Normal (mm)	Actual (mm)	%DEP	Class		
Beguru_1	171	340	98	LE		
Beguru_2	162	351	117	LE		
Kengeri_2	164	437	167	LE		
Kengeri_3	164	370	125	LE		
Kengeri_4	162	397	144	LE		
Tavarekere_2	168	322	92	LE		
Tavarekere_3	165	393	139	LE		
Bengaluru East	119	292	146	LE		
Mahadevpura_1	119	258	117	LE		
Bidarahalli_2	140	231	65	LE		
Varturu_1	133	343	157	LE		
K R Pura_2	152	277	82	LE		
K R Pura_3	133	283	113	LE		
Varturu_2	160	342	114	LE		
Bidarahalli_1	127	242	90	LE		
Mahadevapura_2	159	254	60	LE		
Marathahalli	162	402	147	LE		
Bidharahalli_3	143	307	114	LE		
Yelahanka	147	336	129	LE		

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-2022** is **more** when compared to the corresponding period of last year.

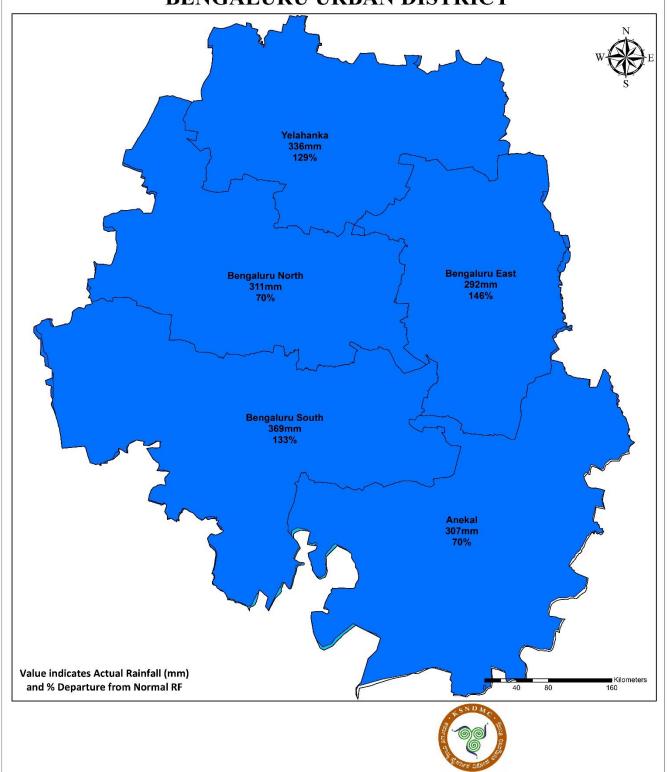


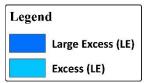
KARNATAKA

Talukwise Cumulative Rainfall (mm)

1st January to 31st May 2022

BENGALURU URBAN DISTRICT





Karnataka State Natural Disaster Monitoring Centre

Large Excess(LE): (+60% and above) Excess (E): (+20 to +59%)

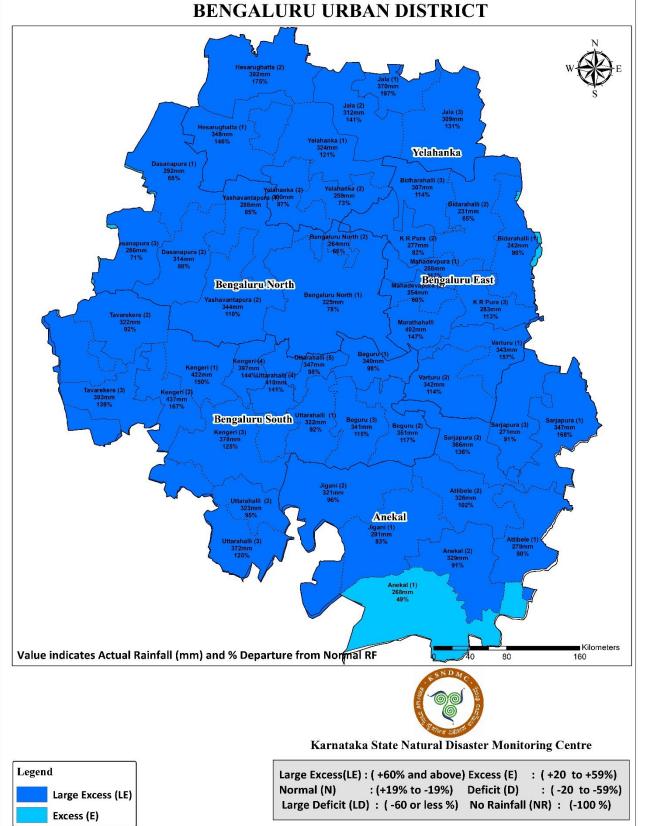
Normal (N): (+19% to -19%) Deficit (D): (-20 to -59%)

Large Deficit (LD): (-60 or less %) No Rainfall (NR): (-100 %)

KARNATAKA

Hobliwise Cumulative Rainfall (mm)

1st January to 31st May 2022 BENGALURU URBAN DISTRICT



South-West Season:

During **South-West monsoon** season the district as a whole recorded actual rainfall of **790 mm**, which is **68% more** than the normal of **471 mm** and being classified under **Large Excess** category.

In Bengaluru Urban district, rainfall during South-West monsoon was Large Excess in Bengaluru South, Bengaluru East and Yelahanka taluk, Excess in Anekal and Bengaluru North and 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.

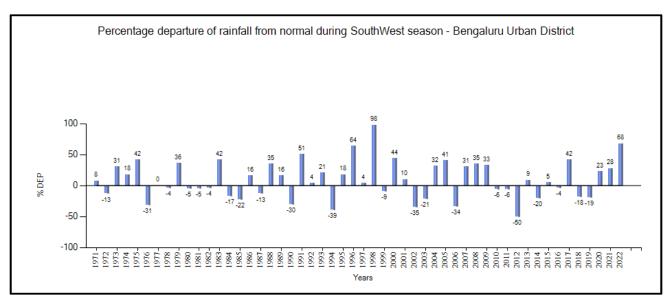
Large Excess (LE) : (+60% and above), Excess (E) : (+20 to +59%), Normal (N): (+19% to -19%), Deficient (D): (-20 to -59%), Large Deficit (LD) : (-60 or less %), NR: No Rainfall (-100%)

	Southwest Monsoon 2022 (1st June to 30th September)					
District/Taluk/Hobli	Normal (mm)	Actual (mm)	%DEP	Class		
BENGALURU URBAN	471	790	68	LE		
Anekal	477	761	59	E		
Anekal 1	477	681	43	E		
Attibele_1	445	573	29	E		
Jigani_1	464	790	70	LE		
Sarjapura_1	411	801	95	LE		
Anekal_2	472	735	56	E		
Jigani_2	482	960	99	LE		
Attibele_2	469	745	59	E		
Sarjapura_1	474	809	71	LE		
Sarjapura_3	453	676	49	E		
Bengaluru North	574	759	32	E		
Bengaluru North_1	574	757	32	E		
Dasanapura_1	490	767	56	E		
Yashavantapura_1	451	638	41	E		
Bengaluru North_2	472	682	45	E		
Yashavantapura_2	493	728	48	E		
Dasanapura_2	488	836	71	LE		
Dasanapura_3	511	862	69	LE		
Bengaluru South	478	827	73	LE		
Beguru_3	478	800	67	LE		
Kengeri_1	505	836	65	LE		
Tavarekere_1	417	924	122	LE		
Uttarahalli_4	514	838	63	LE		
Uttarahalli_1	499	730	46	E		
Uttarahalli_2	495	927	87	LE		
Uttarahalli_3	478	914	91	LE		
Uttarahalli_5	531	664	25	E		
Beguru_1	503	792	58	E		
Beguru_2	484	737	52	E		

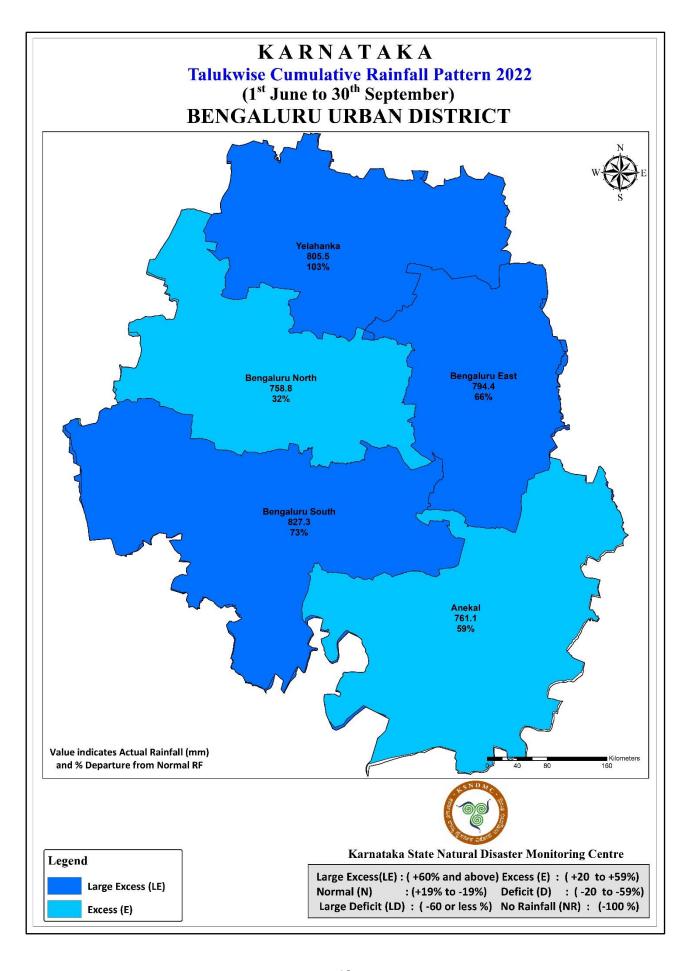
	Southwest Monsoon 2022 (1st June to 30th September)					
	Normal	Actual				
District/Taluk/Hobli	(mm)	(mm)	%DEP	Class		
Kengeri_2	503	874	74	LE		
Kengeri_3	491	798	62	LE		
Kengeri_4	492	788	60	LE		
Tavarekere_2	553	752	36	E		
Tavarekere_3	496	866	74	LE		
Bengaluru East	479	794	66	LE		
Mahadevpura_1	479	578	21	E		
Bidarahalli_2	458	756	65	LE		
Varturu_1	465	904	94	LE		
K R Pura_2	475	668	41	E		
K R Pura_3	472	773	64	LE		
Varturu_2	490	759	55	E		
Bidarahalli_1	469	823	75	LE		
Mahadevapura_2	491	658	34	E		
Marathahalli	495	1042	110	LE		
Bidharahalli_3	436	886	103	LE		
Yelahanka	397	806	103	LE		

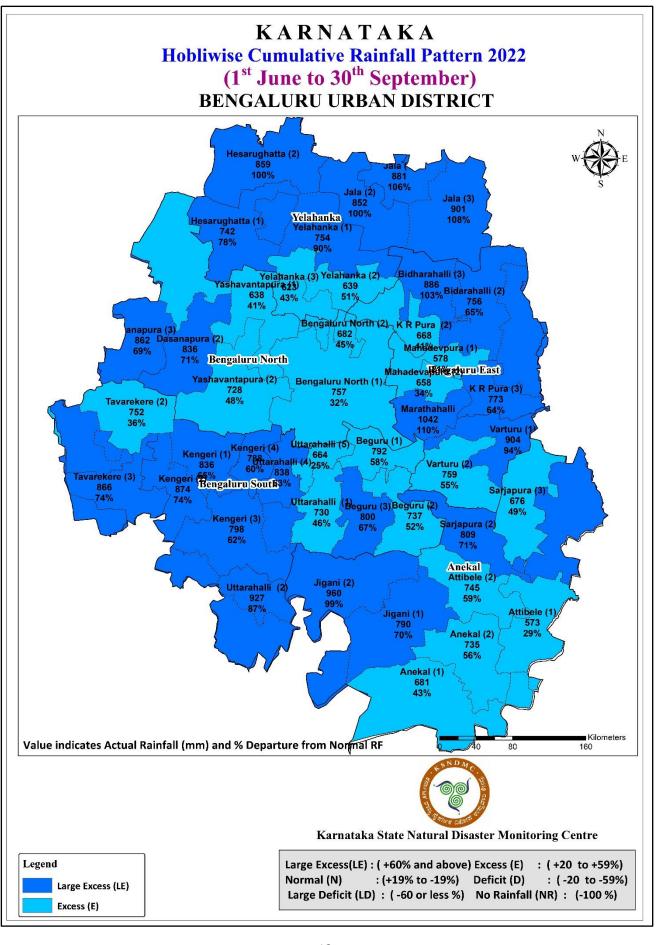
SOUTH-WEST MONSOON RAINFALL TIME SERIES GRAPH

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-2022** is the **More** 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 **340 mm**, which is **56% more** than the normal of **219 mm** and being classified under **Excess** category.

In Bengaluru Urban district rainfall during North-East monsoon was Large Excess in Bengaluru South and Yelahanka taluks. Ecxess in Bengaluru North, Anekal and Bengaluru East taluks.

DISTRICT / TALUK / HOBLI – NORTH-EAST 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.

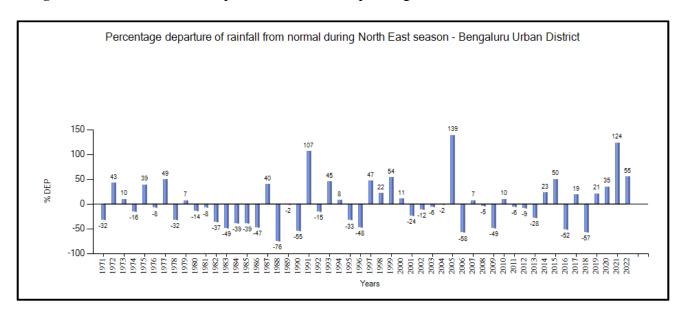
Large Excess (LE) : (+60% and above), Excess (E) : (+20 to +59%), Normal (N): (+19% to -19%), Deficient (D): (-20 to -59%), Large Deficit (LD) : (-60 or less %), NR: No Rainfall (-100 %)

	North East Monsoon Rainfall 2022 (1st October to 31st December)					
District/Taluk/Hobli	Normal (mm)	Actual (mm)	%DEP	Class		
BENGALURU URBAN	219	340	56	E		
Anekal	244	359	47	E		
Anekal_1	244	438	79	LE		
Attibele_1	224	364	62	LE		
Jigani_1	222	364	64	LE		
Sarjapura_1	208	290	39	\boldsymbol{E}		
Anekal_2	237	409	73	LE		
Jigani_2	220	344	57	E		
Attibele_2	227	347	53	E		
Sarjapura_1	226	332	47	\boldsymbol{E}		
Sarjapura_3	219	279	27	\boldsymbol{E}		
Bengaluru North	248	313	26	\boldsymbol{E}		
Bengaluru North_1	248	318	29	\boldsymbol{E}		
Dasanapura_1	228	348	53	\boldsymbol{E}		
Yashavantapura_1	213	323	52	\boldsymbol{E}		
Bengaluru North_2	223	308	38	E		
Yashavantapura_2	209	298	43	E		
Dasanapura_2	217	293	35	\boldsymbol{E}		
Dasanapura_3	222	280	26	\boldsymbol{E}		
Bengaluru South	183	299	63	LE		
Beguru_3	183	336	84	LE		
Kengeri_1	232	324	40	E		
Tavarekere_1	164	291	77	LE		
Uttarahalli_4	220	360	64	LE		
Uttarahalli_1	219	298	36	E		
Uttarahalli_2	210	281	33	E		

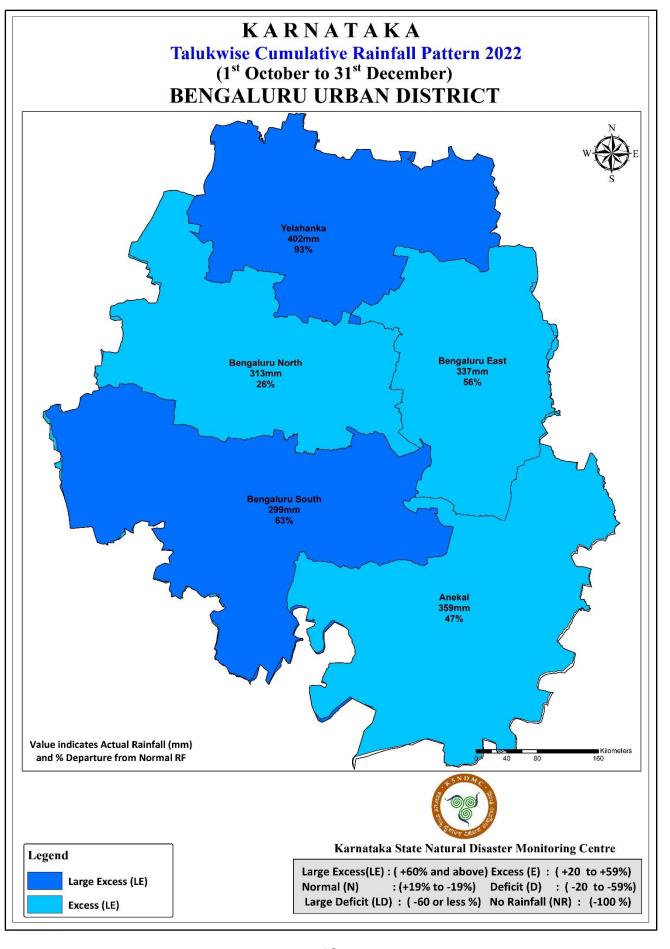
	1	ı	1	
Uttarahalli_3	219	342	56	E
Uttarahalli_5	235	320	36	\boldsymbol{E}
Beguru_1	238	306	29	\boldsymbol{E}
Beguru_2	229	283	24	E
Kengeri_2	211	269	27	E
Kengeri_3	205	267	30	E
Kengeri_4	197	362	84	LE
Tavarekere_2	240	263	10	N
Tavarekere_3	210	297	41	E
Bengaluru East	217	337	56	E
Mahadevpura_1	217	268	24	E
Bidarahalli_2	231	333	44	E
Varturu_1	219	342	56	E
K R Pura_2	228	284	25	E
K R Pura_3	223	350	57	E
Varturu_2	231	297	28	E
Bidarahalli_1	224	385	72	LE
Mahadevapura_2	233	222	-4	N
Marathahalli	234	395	69	LE
Bidharahalli_3	219	418	91	LE
Yelahanka	208	402	93	LE

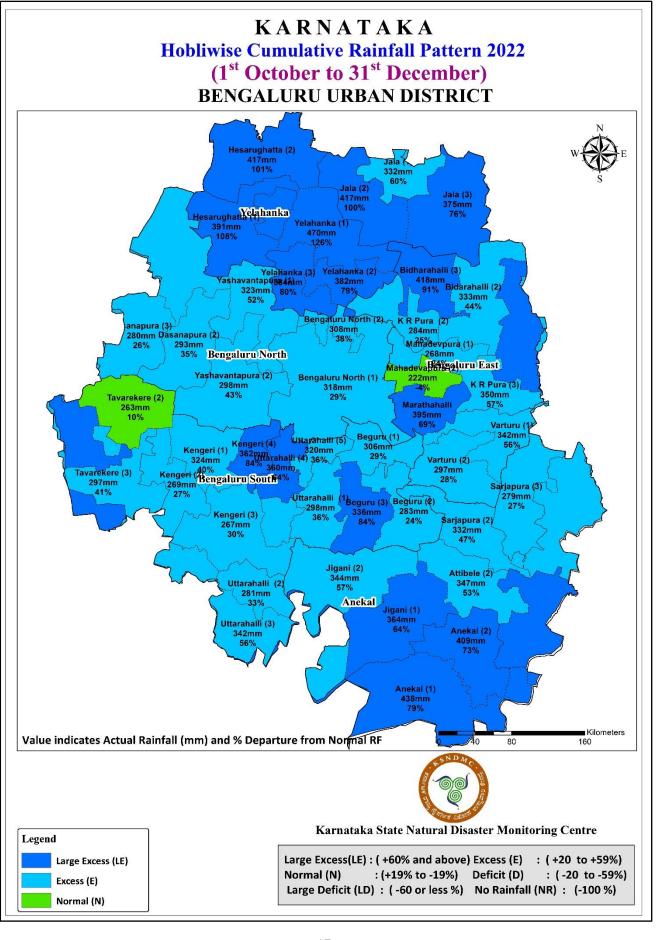
NORTH-EAST MONSOON RAINFALL TIME SERIES GRAPH

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-2022** 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 **Bangalore Urban district** is presented in the table given below. The table provides annual normal sown area, seasonwise actual area covered during 2022 for all the crops and compared with the cropwise area sown for 2021.

(Area in hectares)

	Annual			2022			202	21	
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			l .	•					
Rice	199	78	0	31	109	55	147	74	
Ragi	14618	18693	21	25	18739	128	17569	120	
Maize	876	848	25	32	905	103	783	89	
Minor Millets	36	10	0	0	10	28	27	75	
Total Cereals	15729	19629	46	88	19763	126	18526	118	
PULSES									
Tur	559	442	0	0	442	79	662	118	
Bengalgram	0	0	2	0	2	0	0	0	
Horsegram	333	7	216	0	223	67	322	97	
Blackgram	11	4	0	0	4	36	15	136	
Greengram	15	9	0	0	9	60	8	53	
Other Pulses**	1089	725	0	0	725	67	1051	97	
Total Pulses	2007	1187	218	0	1405	70	2061	103	
Total Foodgrains	17736	20816	264	88	21168	119	20587	116	
OILSEEDS									
Groundnut	119	84	0	0	84	71	120	101	
Sesamum	43	19	0	0	19	44	53	123	
Sunflower	1	1	0	0	1	100	1	100	
Other Oilseeds***	64	18	0	0	18	28	50	78	
Total Oilseeds	244	127	0	0	122	50	224	92	
CASHCROPS	CASHCROPS								
Sugarcane	17	6	0		6	35	16	94	
Total Cashcrops	17	6	0	0	6	35	16	94	
Grand Total	17997	20949	264	88	21296	118	20827	116	

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

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

During 2022, the seasonwise area sown as percentage of the total sown area for the year was:-

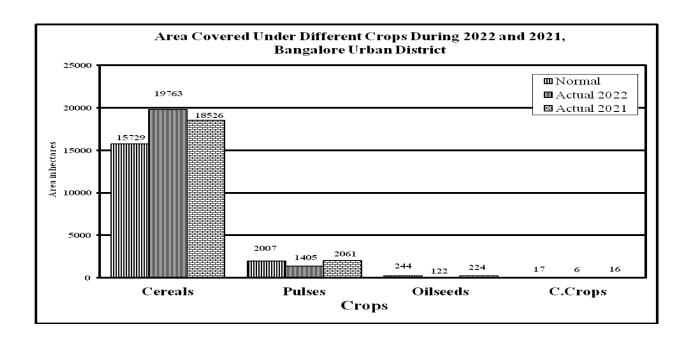
Kharif : 98% Rabi : 1% Summer : 1%

During 2022, the area under total cereals was 126% (118%) of the normal. The area covered under cereal crops are: Rice - 55%; Ragi - 128%; Maize - 103% and Minor Millets – 28% of the normal.

In case of pulses, the area sown was 70% (103%) of the normal. The area covered under pulses are: Tur -79%, Horsegram -67%; Blackgram -36%; Greengram -60% and Other Pulses -67% of the normal.

In case of oilseeds, the area sown was 50% (92%) of the normal. The area covered under oilseeds are: Groundnut – 71%; Sesamum – 44%; Sunflower – 100% and Other Oilseeds – 28% of the normal.

In case of cashcrops, the coverage was 35% (94%) of the normal.



Status of Minor Irrigation Tanks as on 31.12.2022:

Total No	No. OF TANKS FILLED UP TO THE LEVEL OF							
Of Tanks		30%	31-50%	51-99%	100%			
46	0 (%)	0 (%)	24 (%)	35 (%)	41 (%)			

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

Conclusion:

- Bengaluru Urban district recorded **Large Excess** rainfall during 2022.
- Rainfall was Large Excess during Pre-Monsoon and South-West monsoon, Excess during North-East monsoon.
- During 2022, **21296 ha.** was sown which constitutes **118%** 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 tanks, 31% to 50% storage in 24 tanks, above 50% storage in 76 tanks.